Please use this form to submit comments on the proposed IROL standards. Comments must be submitted by **February 15, 2007**. You may submit the completed form by e-mail to sarcomm@nerc.com with the acronym "IROL" in the subject line. If you have questions please contact Maureen Long at maureen.long@nerc.net or by telephone at 609-452-8060.

Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:		
Organization:		
Telephone:		
E-mail:		
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT** ☐ **FRCC** ☐ **MRO** ☐ **NPCC** ☐ **RFC** ☐ **SERC** ☐ **SPP** ☐ **WECC** ☐ **NA – Not Applicable**	☐	1 — Transmission Owners
	☐	2 — RTOs and ISOs
	☐	3 — Load-serving Entities
	☐	4 — Transmission-dependent Utilities
	☐	5 — Electric Generators
	☐	6 — Electricity Brokers, Aggregators, and Marketers
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	☐	10 - Regional Reliability Organizations; Regional Entities

Group Comments (Complete this page if comments are from a group.)

Group Name: IRC Standards Review Committee

Lead Contact: **Charles Yeung**

Contact Organization: **SPP**

Contact Segment: **2**

Contact Telephone: **832-724-6142**

Contact E-mail: **cyeung@spp.org**

Additional Member Name	Additional Member Organization	Region*	Segment*
Alicia Daugherty	PJM	RFC	2
Mike Calimano	NYISO	NPCC	2
Ron Falsetti	IESO	NPCC	2
Matt Goldberg	ISO-NE	NPCC	2
Brent Kingsford	CAISO	WECC	2
Anita Lee	AESO	WECC	2
Steve Myers	ERCOT	ERCOT	2
Bill Phillips	MISO	FRC+	2
		MRO	

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Background Information:

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IRO-009 — Reliability Coordinator Actions to Operate Within IROLs
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IRO-012 — Procedures, Processes or Plans for Preventing and Mitigating IROLs
IRO-013 — Reliability Coordinator Directives Relative to IROLs

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Conforming Changes to Bring Standards into Alignment with Reliability Standards Development Procedure V6 and ERO Rules of Procedure

A new version of the Reliability Standards Development Procedure was approved by the NERC Board of Trustees on November 1, 2006. The drafting team made the following changes to the standards to bring them into conformance with the revised manual or other changes needed to conform to the ERO Rules of Procedure:

1. **Modified the format of the "Proposed Effective Dates"**
   The drafting team modified the proposed effective dates to reflect that the standards cannot become effective until approved by applicable regulatory authorities. The drafting team estimated that it will take approximately three months following Board of Trustee adoption, to obtain regulatory approval from FERC and Canadian authorities.

2. **Added Violation Risk Factors to each requirement**
   Violation risk factors identify the potential impact to reliability when the associated requirement has been violated. The following categories of violation risk factors were approved with the latest version of the Reliability Standards Development Procedure:

   A High Risk Factor requirement:
   (a) is one that, if violated, could directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures, or could place the bulk power system at an unacceptable risk of instability, separation, or cascading failures; or

   (b) is a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures, or could place the bulk power system at an unacceptable risk of instability, separation, or cascading failures, or could hinder restoration to a normal condition.

   A Medium Risk Factor requirement
   (a) is a requirement that, if violated, could the ability to effectively monitor and control the bulk power system, but is unlikely to lead to bulk power system instability, separation, or cascading failures; or

(b) is a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly affect the electrical state or capability of the bulk power system, or the ability to effectively monitor, control, or restore the bulk power system, but is unlikely, under emergency, abnormal, or restoration conditions anticipated by the preparations, to lead to bulk power system instability, separation, or cascading failures, nor to hinder restoration to a normal condition.

A Lower Risk Factor requirement is administrative in nature and
(a) is a requirement that, if violated, would not be expected to affect the electrical state or capability of the bulk power system, or the ability to effectively monitor and control the bulk power system; or

(b) is a requirement in a planning time frame that, if violated, would not, under the emergency, abnormal, or restorative conditions anticipated by the preparations, be expected to affect the electrical state or capability of the bulk power system, or the ability to effectively monitor, control, or restore the bulk power system.

The drafting team added violation risk factors for each requirement. (For this set of BAL standards, the violation risk factors drafting team provided the violation risk factors already identified by stakeholders. If stakeholders indicate that some of the risk factors posted November 2 through December 1, 2006 need modification, the Balance Resources and Demand Standards Drafting Team will make conforming changes to the risk factors in these standards.)

3. Added a Mitigation Time Horizon to each requirement
The ERO Rules of Procedure include the use of Mitigation Time Horizons as one element used to determine the size of sanctions. The drafting team used the following guidelines in developing mitigation time horizons for each requirement:

- ***Long-term Planning:*** a planning horizon of one year or longer.
- ***Operations Planning****:* operating and resource plans from day-ahead up to and including seasonal.
- ***Same-day Operations****:* routine actions required within the timeframe of a day, but not real-time.
- ***Real-time Operations****:* actions required within one hour or less to preserve the reliability of the bulk electric system.
- ***Operations Assessment***: follow-up evaluations and reporting of real time operations.

4. Changed the identification of the Compliance Monitor
The drafting team modified all references to the Regional Reliability Organization as the Compliance Monitor, and replaced these references with, “Electric Reliability Organization.”

5. Deleted Levels of Non-compliance – Added Violation Severity Levels
The drafting team deleted “levels of non-compliance” and added “violation severity levels” to comply with the revised Reliability Standards Development Procedure. Compliance personnel assisted the drafting team in using the following criteria from the manual to establish violation severity levels:

- ***Lower:*** mostly compliant with minor exceptions — The responsible entity is mostly compliant with and meets the intent of the requirement but is deficient with respect to one or more minor details. Equivalent score: 95% to 99% compliant.
- ***Moderate:*** mostly compliant with significant exceptions — The responsible entity is mostly compliant with and meets the intent of the requirement but is deficient with respect to one or more significant elements. Equivalent score: 85% to 94% compliant.
- ***High:*** marginal performance or results — The responsible entity has only partially achieved the reliability objective of the requirement and is missing one or more significant elements. Equivalent score: 70% to 84% compliant.
- ***Severe:*** poor performance or results — The responsible entity has failed to meet the reliability objective of the requirement. Equivalent score: less than 70% compliant.

6. **Added 'Associated Documents' where applicable**
   The drafting team added a section "F" to the standard called, "Associated Documents" to list items such as forms, related standards, reports, etc.

On the following pages, the drafting team will ask for your feedback on the appropriateness of the changes it made to this set of standards. Because the changes made to the set of standards included a great deal of consolidation, a red line version will not be posted as it is not distinguish the content changes from the format changes when comparing the two versions.

You do not have to answer all questions.

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

1. The drafting team consolidated the requirements for *IRO-010— Reliability Coordinator Data Specification and Collection* and *IRO-011— Providing Data to the Reliability Coordinator* into a single standard to eliminate the cross-reference between the two standards. Do you agree with consolidating the requirements into a single standard? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

2. The drafting team consolidated the requirements for *IRO-009 — Reliability Coordinator Actions to Operate within IROLs* and *IRO-012— Procedures, Processes or Plans for Preventing and Mitigating IROLs* into a single standard to eliminate the cross-reference between the two standards. Do you agree with consolidating the requirements into a single standard? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

3. The drafting team recommends moving the requirements from *IRO-013 —Reliability Coordinator Directives Relative to IROLs* into the project that will address communication protocols so that all requirements related to directives will be comprehensively addressed under the single *Project 2007-02 – Operating Personnel Communication Protocols*. Do you agree with moving the requirements from IRO-013 into Project 2007-02? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

4. The drafting team is proposing that all standards and conforming changes become effective the first day of the first quarter, three months after regulatory approvals. Do you agree that the proposed effective date will give entities time to become fully compliant? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

5. The drafting team added a Violation Risk Factor for each requirement.

   Do you agree with the Violation Risk Factor for each requirement in the proposed standards? If not, please identify any requirement with a violation risk factor you feel is incorrect.

   ☐ I agree with the proposed Violation Risk Factors

   ☒ I do not agree with the following Violation Risk Factors:

   Comments:

   (i) We agree with the VRFs for IRO-008, IRO-009 and IRO-010.

   (ii) For IRO-007, the VRF for R1 should be HIGH. Real-time monitoring of system conditions to determine if system parameters are within IROLs is critical to ensuring interconnected system reliability. Lack of or insufficient monitoring would expose a system to unreliable operation.

6. The drafting team added a Mitigation Time Horizon for each requirement.

   Do you agree with the Mitigation Time Horizon for each requirement in the proposed standards? If not, please identify any requirement with a time horizon you feel is incorrect.

   ☐ I agree with the proposed Mitigation Time Horizons

   ☒ I do not agree with the following Mitigation Time Horizons:

   Comments:

   (i) We agree with the mitigation time horizons for IRO-007, -008 and -010.

   (ii) For IRO-009, however, R1 and R2 should also be assigned a Same Day Operation time horizon since "identified in advance of real time" may include day at hand assessments.

7. The latest version of the Reliability Standards Development Procedure requires that each standard include “violation severity levels” rather than “levels of non-compliance.” “Violation severity levels” identify how badly an entity violated each requirement, and are not linked to the reliability-related impact of violating a requirement. (The reliability-related impact of violating a requirement is now identified in the “Violation Risk Factor” appended to each requirement.) Note that these severity levels are “guidelines” and variations from the above categories are acceptable.

   Do you agree with the violation severity levels for each of the proposed standards? If you disagree with any of the violation severity levels for the proposed standards, please identify the standard and requirement you feel has an incorrect violation severity level.

   ☐ I agree with the violation severity levels

   ☒ I do not agree with the following violation severity levels:

   Comments:

   (i) We agree with the violation severity levels for IRO-007 and IRO-008.

(ii) For IRO-009, the violation level is subject to interpretation. For example, "Between 95% to 99% of the IROLs identified in advance of real-time have Operating Processes, Procedures, or Plans that identify actions to prevent or mitigate instances of exceeding those IROLs." Does the 95% to 99% range apply to the number of IROLs identified, or to the total time that any IROLs are identified? In other words, is it the percentage of time that for all IROLs identified, there are Operating Processes, Procedures, or Plans that identify actions to prevent or mitigate instances of exceeding any IROLs?

To put the violation severity level in a more proper context, the SDT may want to consider putting the range in a "negative sense", i.e., the percentage of time that the requirements are not met, whichever the base of the above interpreted measurements turn out to be.

Better still, we suggest the SDT consider adopting violation severity levels based on the number of times that R1 or R2 is not met, i.e. the number of times that, for any IROLs that are identified in advance of real-time, there lacks operating processes, procedures, or plans that identify actions to prevent or mitigatge instances of exceeding these IROLs. This way, assessment of violations can be made much more easily. Further, the severity level will be independent of the total number of IROLs identified, which can eliminate the skewed assessment due to a small of number of IROLs identified in an RC area. For example, under the as written % assessment structure, an RC could be found 0% compliant (and hence assessed a severe violation level) for just one incident of not meeting R1 or R2 if it had only one IROL identified.

(iii) For IRO-010, we agree with the measures as they are based on numbers, not a combination of number and duration. However, the same comment on "negative context" as provided for IRO-009 also apply here. In other words, we suggest turning the % meeting requirements to % failing to meet requirements (hence violation).

8. The implementation plan modifies several requirements in already approved standards because compliance with those requirements does not seem practical. Every facility in the Transmission Operator's area has a System Operating Limit, but the Reliability Coordinator isn't required to see all these limits and may not have information to determine the cause of instances of exceeding these limits — yet there are requirements that hold the Reliability Coordinator accountable for identifying the cause of any actual or potential SOL. The drafting team reviewed these requirements and made proposed modifications to limit the Reliability Coordinator's accountability for real-time actions relative to SOLs. Do you agree with the drafting team's approach?

   ☒ I agree the drafting team's approach

   ☐ I do not agree with the drafting team's approach

   Comments: There are a number of requirements in the posted IRO-005-3 that still hold the RC responsible for being aware of and directing actions when a SOL is being approached or violated. The drafting team's proposed approach would require that corresponding changes be made to IRO-005-3.

9. The drafting team is recommending that when IRO-007-1 is approved, conforming changes be made to the following standards:

   - IRO-002-1 — RC – Facilities; Retire R6
   - IRO-003-2 — RC – Wide Area View; Retire R1 and R2

- IRO-005-2 — RC – Current Day Operations; Retire R1; Convert R1.1 into a Reference; Modify R13 part 2
- TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control; Modify R2

Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

☒ I agree with the proposed conforming changes

☐ I do not agree with the following conforming changes:

Comments:

10. The Drafting Team is recommending that when IRO-008-1 is approved, conforming changes be made to the following standard:

- IRO-004-1 — RC – Operations Planning; Retire R1 and R2

Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

☒ I agree with the proposed conforming changes

☐ I do not agree with the following conforming changes:

Comments:

11. The Drafting Team is recommending that when IRO-009-1 is approved, conforming changes be made to the following standards:

- EOP-001-0 — Emergency Operations Planning; Retire R2
- IRO-004-1 — RC – Operations Planning; Retire R3 and R6
- IRO-005-2 — RC – Current Day Operations; Retire R3, R5, R9; Delete R13 part 1; Modify R14; Retire R16, R17

Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

☒ I agree with the proposed conforming changes

☒ I do not agree with the following conforming changes:

Comments:

(i) We agree that R3, R5 and R9 of IRO-005-2 can be retired. Note that R2 in IRO-009-1 stipulates that "..such that the IROL is relieved within the IROL's Tv." For consistency, we suggest that "within the IROL's Tv" be inserted in R4 to reiterate the time limit requirement of an IROL.

(ii) We agree that part 1 of R13, and R16 and R17 of IRO-005-2 can be deleted.

12. The drafting team is recommending that when IRO-010-1 is approved, conforming changes be made to the following standards:

- IRO-002-1 — RC – Facilities; Retire R2
- IRO-004-1 — RC – Operations Planning; Retire R4, R5

- IRO-005-2 — RC – Current Day Operations; Retire R2
- TOP-003-0 — Planned Outage Coordination; Modify R1.2
- TOP-005-1 — Operational Reliability Information; Retire R1, R1.1; Convert Attachment A to a Reference
- TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control; Modify R4

Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

☐ I agree with the proposed conforming changes

☒ I do not agree with the following conforming changes:

Comments:

(i) We agree with retiring R2 of IRO-002-1.

(ii) We do not agree with removing R1.2 from TOP-003-1. Prividing transmission outage information to the RC is essential for ensuring the RC is aware of system changes that may affect interconnected system reliability. There should not be any prejudgment as to which outage has an impact on SOL only.

(iii) We agree with the proposed deletions/changes to IRO-005-2, TOP-005-1 and TOP-006-1.

13. If you are aware of any conflicts between the proposed standard and any regulatory function, rule order, tariff, rate schedule, legislative requirement or agreement please identify the conflict here. Similarly, if you believe that any requirement in this set of standards has an unnecessary adverse impact on energy markets, please identify the requirement and its adverse impact here.

☒ No known conflicts or unnecessary adverse impacts

☐ Known conflict:

Unnecessary adverse impact on markets:

14. The drafting team is recommending that these standards be balloted with **four separate ballots**, according to the following table. There would be a single ballot for IRO-007-1 that would include approval of IRO-007-1 and approval of the retirement of IRO-002-1 R6, and approval of retirement of IRO-003-2 R1 and R2, etc.

Ballot for:	Includes Associated Changes to Already Approved Standards:
IRO-007	IRO-002-1 — RC – Facilities - Retire R6 IRO-003-2 — RC – Wide Area View - Retire R1 and R2 IRO-005-2 — RC – Current Day Operations - Retire R1; Convert R1.1 into a Reference; Modify R13 part 2 TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control - Modify R2
IRO-008	IRO-004-1 — RC – Operations Planning

	- Retire R1 and R2
IRO-009	EOP-001-0 — Emergency Operations Planning - Retire R2
	IRO-004-1 — RC – Operations Planning - Retire R3 and R6
	IRO-005-2 — RC – Current Day Operations Retire R3, R5, R9; Delete R13 part 1; Modify R14; Retire R16, R17
IRO-010	IRO-002-1 — RC – Facilities - Retire R2
	IRO-004-1 — RC – Operations Planning - Retire R4, R5
	IRO-005-2 — RC – Current Day Operations - Retire R2
	TOP-003-0 — Planned Outage Coordination Modify R1.2
	TOP-005-1 — Operational Reliability Information - Retire R1, R1.1; Convert Attachment A to a Reference
	TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control - Modify R4

☒ I agree with balloting these standards using four separate ballots

☐ I do not agree balloting these standards using four separate ballots:

Comments:

15. If you have any other comments on this set of standards or its implementation plan that you have not already submitted above, please provide them here.

☐ No additional comments

Comments:

(i) The requirement to monitor, or at least be aware of the impacts on, critical parameters in other RC's areas, as proposed for IRO-007 (M2.1) and IRO-008 (R1) in the previous draft set of standards posted on March 1, 2004, is missing. This monitoring capability is essential for identifying potential realiabilty impact on other RC areas due to operation plans and real-time operations in one RC area. Note that IRO-010 has this requirement (implicit in R3).

(ii) R2 of IRO-008 requires that Real-Time Assessments be performed at least every 30 minutes. The definition of Real-Time Assessment leaves open how far into the future the assessments must cover.

(iii) R3 of IRO-008 requires sharing of results to prevent or mitigate exceeding an IROL. We feel that this should also require an RC to direct taking necessary actions to prepare for correcting the situation. We therefore suggest that "and direct" be inserted after "...the Reliability Coordinator shall share its results with" in R3.

(iv) Two new terms are defined in IRO-009: Interconnection Reliability Operating Limit Event and Interconnection Reliability Operating Limit Event Duration. Neither are used in this standard; so what is the reason for having these terms defined?

(v) In IRO-009, Violation Severity Levels, Section 2.3.2 establishes a high violation severity if an IROL was actually exceeded and there was a delay before taking action. The term "delay" is not defined. This leaves this term open for interpretation and will result in inconsistent enforcement. The standard needs to define what is meant by delay.

(vi) In the previous draft standard IRO-009, there was a requirement (R1.4) for the RC to document and complete an IROL violation report for each instance of exceeding an IROL for time greater than that limit's Tv. This requirement is missing in the new version. We feel that this requirement should be stated in this standard.

(vii) We do not have any comments on the proposed measures. However, from a process viewpoint, none of the questions asked in this comment form seek concurrence or comments on any of the measures proposed. Since these measures did not exist in any of the current standards, and have been revised since the last draft versions (posted on March 1, 2004), the industry needs to have an opportunity to offer its view.

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Organization:		
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Group Comments (Complete this page if comments are from a group.)

Group Name: NPCC CP9 Reliability Standards Working Group

Lead Contact: **Guy V. Zito**

Contact Organization: **NPCC**

Contact Segment: **10**

Contact Telephone: **212-840-1070**

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Greg Campoli	NYISO	NPCC	2
Ron Falsetti	IESO	NPCC	2
Al Adamson	New York State Rel. Council	NPCC	2
David Kiguel	Hydro One	NPCC	1
Jerad Barnhart	NStar	NPCC	1
Ed Thompson	ConEdison	NPCC	1
Ralph Rufrano	New York Power Authority	NPCC	1
Roger Champagne	TransEnergie HydroQuebec	NPCC	1
Murale Gopinathan	Northeast Utilities	NPCC	1
Don Nelson	MA Dept. of Energy and Tele.	NPCC	9
Peter Yost	ConEdison	NPCC	1
John Mosier	NPCC	NPCC	10
James Harwell	NPCC	NPCC	10

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   The drafting team modified the proposed effective dates to reflect that the standards cannot become effective until approved by applicable regulatory authorities. The drafting team estimated that it will take approximately three months following Board of Trustee adoption, to obtain regulatory approval from FERC and Canadian authorities.

2. **Added Violation Risk Factors to each requirement**
   Violation risk factors identify the potential impact to reliability when the associated requirement has been violated. The following categories of violation risk factors were approved with the latest version of the Reliability Standards Development Procedure:

   A High Risk Factor requirement:
   (a) is one that, if violated, could directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures, or could place the bulk power system at an unacceptable risk of instability, separation, or cascading failures; or

   (b) is a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures, or could place the bulk power system at an unacceptable risk of instability, separation, or cascading failures, or could hinder restoration to a normal condition.

   A Medium Risk Factor requirement
   (a) is a requirement that, if violated, could the ability to effectively monitor and control the bulk power system, but is unlikely to lead to bulk power system instability, separation, or cascading failures; or

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A Lower Risk Factor requirement is administrative in nature and
(a) is a requirement that, if violated, would not be expected to affect the electrical state or capability of the bulk power system, or the ability to effectively monitor and control the bulk power system; or

(b) is a requirement in a planning time frame that, if violated, would not, under the emergency, abnormal, or restorative conditions anticipated by the preparations, be expected to affect the electrical state or capability of the bulk power system, or the ability to effectively monitor, control, or restore the bulk power system.

The drafting team added violation risk factors for each requirement. (For this set of BAL standards, the violation risk factors drafting team provided the violation risk factors already identified by stakeholders. If stakeholders indicate that some of the risk factors posted November 2 through December 1, 2006 need modification, the Balance Resources and Demand Standards Drafting Team will make conforming changes to the risk factors in these standards.)

3. Added a Mitigation Time Horizon to each requirement
The ERO Rules of Procedure include the use of Mitigation Time Horizons as one element used to determine the size of sanctions. The drafting team used the following guidelines in developing mitigation time horizons for each requirement:

- ***Long-term Planning:*** a planning horizon of one year or longer.
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The drafting team modified all references to the Regional Reliability Organization as the Compliance Monitor, and replaced these references with, “Electric Reliability Organization.”

5. Deleted Levels of Non-compliance – Added Violation Severity Levels
The drafting team deleted “levels of non-compliance” and added “violation severity levels” to comply with the revised Reliability Standards Development Procedure. Compliance personnel assisted the drafting team in using the following criteria from the manual to establish violation severity levels:

- ***Lower:*** mostly compliant with minor exceptions — The responsible entity is mostly compliant with and meets the intent of the requirement but is deficient with respect to one or more minor details. Equivalent score: 95% to 99% compliant.
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6. **Added 'Associated Documents' where applicable**
   The drafting team added a section "F" to the standard called, "Associated Documents" to list items such as forms, related standards, reports, etc.

On the following pages, the drafting team will ask for your feedback on the appropriateness of the changes it made to this set of standards. Because the changes made to the set of standards included a great deal of consolidation, a red line version will not be posted as it is not distinguish the content changes from the format changes when comparing the two versions.

You do not have to answer all questions.

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

1. The drafting team consolidated the requirements for *IRO-010— Reliability Coordinator Data Specification and Collection* and *IRO-011— Providing Data to the Reliability Coordinator* into a single standard to eliminate the cross-reference between the two standards. Do you agree with consolidating the requirements into a single standard? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

2. The drafting team consolidated the requirements for *IRO-009 — Reliability Coordinator Actions to Operate within IROLs* and *IRO-012— Procedures, Processes or Plans for Preventing and Mitigating IROLs* into a single standard to eliminate the cross-reference between the two standards. Do you agree with consolidating the requirements into a single standard? If not, please explain.

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   Comments:

3. The drafting team recommends moving the requirements from *IRO-013 —Reliability Coordinator Directives Relative to IROLs* into the project that will address communication protocols so that all requirements related to directives will be comprehensively addressed under the single *Project 2007-02 – Operating Personnel Communication Protocols*. Do you agree with moving the requirements from IRO-013 into Project 2007-02? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

4. The drafting team is proposing that all standards and conforming changes become effective the first day of the first quarter, three months after regulatory approvals. Do you agree that the proposed effective date will give entities time to become fully compliant? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

5. The drafting team added a Violation Risk Factor for each requirement.

   Do you agree with the Violation Risk Factor for each requirement in the proposed standards? If not, please identify any requirement with a violation risk factor you feel is incorrect.

   ☐ I agree with the proposed Violation Risk Factors

   ☒ I do not agree with the following Violation Risk Factors:

   Comments:

   NPCC Participating Members agree with the VRFs for IRO-008, IRO-009 and -010.

   NPCC Participating Members suggest that for IRO-007, the VRF for R1 should be HIGH. Real-time monitoring of system conditions to determine if system parameters are within IROLs is critical to ensuring interconnected system reliability. Lack of or insufficient monitoring would expose a system to potential unreliable operation.

6. The drafting team added a Mitigation Time Horizon for each requirement.

   Do you agree with the Mitigation Time Horizon for each requirement in the proposed standards? If not, please identify any requirement with a time horizon you feel is incorrect.

   ☐ I agree with the proposed Mitigation Time Horizons

   ☒ I do not agree with the following Mitigation Time Horizons:

   Comments:

   NPCC Participating members agree with the mitigation time horizons for IRO-007, -008 and -010.

   For IRO-009, however, R1 and R2 should also be assigned a Same Day Operation time horizon since "identified in advance of real time" may include day at hand assessments.

7. The latest version of the Reliability Standards Development Procedure requires that each standard include “violation severity levels” rather than “levels of non-compliance.” “Violation severity levels” identify how badly an entity violated each requirement, and are not linked to the reliability-related impact of violating a requirement. (The reliability-related impact of violating a requirement is now identified in the “Violation Risk Factor” appended to each requirement.) Note that these severity levels are “guidelines” and variations from the above categories are acceptable.

   Do you agree with the violation severity levels for each of the proposed standards? If you disagree with any of the violation severity levels for the proposed standards, please identify the standard and requirement you feel has an incorrect violation severity level.

   ☐ I agree with the violation severity levels

   ☒ I do not agree with the following violation severity levels:

   Comments:

   NPCC participating members agree with the violation severity levels for IRO-007 and -008.

For IRO-009, the violation level is subject to interpretation. For example, "Between 95% to 99% of the IROLs identified in advance of real-time have Operating Processes, Procedures, or Plans that identify actions to prevent or mitigate instances of exceeding those IROLs." Does the 95% to 99% range apply to the number of IROLs identified, or to the total time that any IROLs are identified? In other words, is it the percentage of time that for all IROLs identified, there are Operating Processes, Procedures, or Plans that identify actions to prevent or mitigate instances of exceeding any IROLs?

To put the violation severity level in a more proper context, the SDT may want to consider putting the range in a "negative sense", i.e., the percentage of time that the requirements are not met, whichever the base of the above interpreted measurements turn out to be.

Better still, we suggest the SDT consider adopting violation severity levels based on the number of times that R1 or R2 is not met, i.e. the number of times for any IROLs that are identified in advance of real-time, there lacks operating processes, procedures, or plans that identify actions to prevent or mitigatge instances of exceeding these IROLs. This way, assessment of violations can be made much more easily. Further, the severity level will be independent of the total number of IROLs identified, which can eliminate the skewed assessment due to a small of number of IROLs identified in an RC area. For example, under the as written % assessment structure, an RC could be found 0% compliant (and hence assessed a severe violation level) for just one incident of not meeting R1 or R2 if it had only one IROL identified.

For IRO-010, we agree with the measures as they are based on numbers, not a combination of number and duration. However, the same comment on "negative context" as provided for IRO-009 also apply here. In other words, we suggest turning the % meeting requirements to % failing to meet requirements (hence violation).

8. The implementation plan modifies several requirements in already approved standards because compliance with those requirements does not seem practical. Every facility in the Transmission Operator's area has a System Operating Limit, but the Reliability Coordinator isn't required to see all these limits and may not have information to determine the cause of instances of exceeding these limits — yet there are requirements that hold the Reliability Coordinator accountable for identifying the cause of any actual or potential SOL. The drafting team reviewed these requirements and made proposed modifications to limit the Reliability Coordinator's accountability for real-time actions relative to SOLs. Do you agree with the drafting team's approach?

   ☒ I agree the drafting team's approach

   ☒ I do not agree with the drafting team's approach

   Comments: There are a number of requirements in the posted IRO-005-3 that still hold the RC responsible for being aware of and directing actions when SOL is being approached or violated. The drafting team's proposed approach would require that corresponding changes be made to IRO-005-3.

9. The drafting team is recommending that when IRO-007-1 is approved, conforming changes be made to the following standards:

   - IRO-002-1 — RC – Facilities; Retire R6
   - IRO-003-2 — RC – Wide Area View; Retire R1 and R2

- IRO-005-2 — RC – Current Day Operations; Retire R1; Convert R1.1 into a Reference; Modify R13 part 2
- TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control; Modify R2

Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

☒ I agree with the proposed conforming changes

☐ I do not agree with the following conforming changes:

Comments:

10. The Drafting Team is recommending that when IRO-008-1 is approved, conforming changes be made to the following standard:

- IRO-004-1 — RC – Operations Planning; Retire R1 and R2

Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

☒ I agree with the proposed conforming changes

☐ I do not agree with the following conforming changes:

Comments:

11. The Drafting Team is recommending that when IRO-009-1 is approved, conforming changes be made to the following standards:

- EOP-001-0 — Emergency Operations Planning; Retire R2
- IRO-004-1 — RC – Operations Planning; Retire R3 and R6
- IRO-005-2 — RC – Current Day Operations; Retire R3, R5, R9; Delete R13 part 1; Modify R14; Retire R16, R17

Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

☐ I agree with the proposed conforming changes

☒ I do not agree with the following conforming changes:

Comments:

EOP-001 R2 requires that a TOP have an emergency load reduction plan for all identified IROLs. The intent of this requirement is for the TOP to be ready to implement load reduction as directed by the RC to mitigate IROL violation when other control actions have been or are in parallel being implemented. Unless this requirement is covered elsewhere, it needs to be retained to assure TOP's readiness, which is in a different context than what the requirements in IRO-009 implies. The RC does not own or operate any load reduction scheme. It must rely on the operators of these schemes - the TOP and DP, as directed by the TOP, to implement load reduction.

NPCC participating members agree with retiring R6 of IRO-004-1, but suggest that a part of R3 in IRO-004-1 which requires that the RC develop action plans in conjunction with the TOPs, be reflected in this standard.

NPCC participating members believe the key requirment in R3 and R5 is for the RC to correct an IROL violation as soon as poosible and within 30 minutes. This needs to be retained somewhere, preferrably in this standard. Not having a time limit to correct IROL violation can result in an IROL being exceeded for an indefinite period of time, subjecting the system to prolonged risks of instability and potential cascade tripping. The 30 minutes also serves as the threshold that if an IROL violation cannot be corrected by adjusting generation and interchange, reconfiguration, reducing interruptible load, voltage reduction, etc. within that time frame, curtailment of firm load must also be implemented to correct the violation immediately.

NPCC participating members believe the concept of the RC approving outages needs to be retained somewhere in the standards, retiring R9 should be conditional on having this coordination/approval requirement covered by this (IRO-009) or another standard.

12. The drafting team is recommending that when IRO-010-1 is approved, conforming changes be made to the following standards:

    - IRO-002-1 — RC – Facilities; Retire R2
    - IRO-004-1 — RC – Operations Planning; Retire R4, R5
    - IRO-005-2 — RC – Current Day Operations; Retire R2
    - TOP-003-0 — Planned Outage Coordination; Modify R1.2
    - TOP-005-1 — Operational Reliability Information; Retire R1, R1.1; Convert Attachment A to a Reference
    - TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control; Modify R4

    Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

    ☐ I agree with the proposed conforming changes

    ☒ I do not agree with the following conforming changes:

    Comments:

    (i) We agree with retiring R2 of IRO-002-1.

    (ii) We do not agree with removing R1.2 from TOP-003-2. Prividing transmission outage information to the RC is essential for ensuring the RC is aware of system changes that may affect interconnected system reliability. There should not be any prejudgment as to which outage has an impact on SOL only.

    (iii) We agree with the proposed deletions/changes to IRO-005-2, TOP-005-1 and TOP-006-1.

13. If you are aware of any conflicts between the proposed standard and any regulatory function, rule order, tariff, rate schedule, legislative requirement or agreement please identify the conflict here. Similarly, if you believe that any requirement in this set of standards has an unnecessary adverse impact on energy markets, please identify the requirement and its adverse impact here.

    ☒ No known conflicts or unnecessary adverse impacts

    ☐ Known conflict:

Unnecessary adverse impact on markets:

14. The drafting team is recommending that these standards be balloted with **four separate ballots**, according to the following table. There would be a single ballot for IRO-007-1 that would include approval of IRO-007-1 and approval of the retirement of IRO-002-1 R6, and approval of retirement of IRO-003-2 R1 and R2, etc.

Ballot for:	Includes Associated Changes to Already Approved Standards:
IRO-007	IRO-002-1 — RC – Facilities - Retire R6 IRO-003-2 — RC – Wide Area View - Retire R1 and R2 IRO-005-2 — RC – Current Day Operations - Retire R1; Convert R1.1 into a Reference; Modify R13 part 2 TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control - Modify R2
IRO-008	IRO-004-1 — RC – Operations Planning - Retire R1 and R2
IRO-009	EOP-001-0 — Emergency Operations Planning - Retire R2
	IRO-004-1 — RC – Operations Planning - Retire R3 and R6
	IRO-005-2 — RC – Current Day Operations Retire R3, R5, R9; Delete R13 part 1; Modify R14; Retire R16, R17
IRO-010	IRO-002-1 — RC – Facilities - Retire R2
	IRO-004-1 — RC – Operations Planning - Retire R4, R5
	IRO-005-2 — RC – Current Day Operations - Retire R2
	TOP-003-0 — Planned Outage Coordination Modify R1.2
	TOP-005-1 — Operational Reliability Information - Retire R1, R1.1; Convert Attachment A to a Reference
	TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control - Modify R4

☒ I agree with balloting these standards using four separate ballots

☐ I do not agree balloting these standards using four separate ballots:

Comments:

15. If you have any other comments on this set of standards or its implementation plan that you have not already submitted above, please provide them here.

☐ No additional comments

Comments:

R2 of IRO-008 requires clarification or the definition of Real-Time Assessments needs to be revised to capture that an assessment needs to be done every thirty minutes and specific made as to how far into the future the assessments must cover.

R3 of IRO-008 requires sharing of results to prevent or mitigate exceeding an IROL. We feel that this should also require an RC to direct taking necessary actions to prepare for correcting the situation. We therefore suggest that "and direct" be inserted after "...the Reliability Coordinator shall share its results with" in R3. This may clarify the IRO-008 stardand but may introduce some redundancy with IRO-009 R3 and R4.

Two new terms are defined in IRO-009: Interconnection Reliability Operating Limit Event and Interconnection Reliability Operating Limit Event Duration. Neither are used in this standard; so what is the reason for having these terms defined?

In IRO-009, Violation Severity Levels, Section 2.3.2 establishes a high violation severity if an IROL was actually exceeded and there was a delay before taking action. The term "delay" is not defined. This leaves this term open for interpretation and will result in inconsistent enforcement. The standard needs to define what is meant by delay perhaps specifying a timeframe in the Requirments section R4. Also missing is the requirement to document, with a complete violation report, whenever an IROL violation has been exceeded beyond Tv.

In the previous draft standard IRO-009, there was a requirement (R1.4) for the RC to document IROL violation incidents. This requirement is missing in the new version. NPCC Participating members believe that this requirement should be stated in this standard.

NPCC participating members have also expressed concern about these same standards appearing in NERC's Reliability Coordinator SAR project. Coordination of the comments is a major concern especially when the standards will be under revision here and also in that project concurrently.

Please use this form to submit comments on the proposed IROL standards. Comments must be submitted by **February 15, 2007**. You may submit the completed form by e-mail to sarcomm@nerc.com with the acronym "IROL" in the subject line. If you have questions please contact Maureen Long at maureen.long@nerc.net or by telephone at 609-452-8060.

Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:		
Organization:		
Telephone:		
E-mail:		
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT** ☐ **FRCC** ☐ **MRO** ☐ **NPCC** ☐ **RFC** ☐ **SERC** ☐ **SPP** ☐ **WECC** ☐ **NA – Not Applicable**	☐	1 — Transmission Owners
	☐	2 — RTOs and ISOs
	☐	3 — Load-serving Entities
	☐	4 — Transmission-dependent Utilities
	☐	5 — Electric Generators
	☐	6 — Electricity Brokers, Aggregators, and Marketers
	☐	7 — Large Electricity End Users
	☐	8 — Small Electricity End Users
	☐	9 — Federal, State, Provincial Regulatory or other Government Entities
	☐	10 - Regional Reliability Organizations; Regional Entities

Group Comments (Complete this page if comments are from a group.)

Group Name: Midwest ISO Stakeholders Standards Collaboration Participants

Lead Contact: **Jason Marshall**

Contact Organization: **Midwest ISO**

Contact Segment: **2**

Contact Telephone: **317-249-5494**

Contact E-mail: **jmarshall@midwestiso.org**

Additional Member Name	Additional Member Organization	Region*	Segment*
Jim Cyrulewski	**JDRJC Associates**	**RFC**	8

*If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

Background Information:

The IROL standards were placed in a holding pattern for two years while waiting for the completion of the standards that require entities to document and use their methodology for developing SOLs and IROLs. FAC-010-1 — System Operating Limits Methodology for the Planning Horizon, FAC-011-1 — System Operating Limits Methodology for the Operations Horizon, and FAC-014-1 — Establish and Communicate System Operating Limits, were all adopted by the NERC Board of Trustees on November 1, 2006. While waiting for these standards to be approved by applicable regulatory authorities, the drafting team has been given the authority to move ahead in refining the set of IROL standards.

Changes to Set of Standards

When last posted, there were seven standards in this set of IROL standards:

IRO-007 — Monitoring the Wide Area
IRO-008 — Reliability Coordinator Analyses and Assessments
IRO-009 — Reliability Coordinator Actions to Operate Within IROLs
IRO-010 — Reliability Coordinator Data Specification and Collection
IRO-011 — Providing Data to the Reliability Coordinator
IRO-012 — Procedures, Processes or Plans for Preventing and Mitigating IROLs
IRO-013 — Reliability Coordinator Directives Relative to IROLs

Consolidation of Related Requirements

The revised set of standards posted for comment includes only IRO-007 through IRO-010. The drafting team is recommending the following changes to the original set of standards for the reasons stated below:

- Consolidate IRO-010 and IRO-011 into a single standard
- Consolidate IRO-009 and IRO-012 into a single standard
- Transfer IRO-013 to Project 2007-02 — Operating Personnel Communications Protocols

Many stakeholders have indicated that splitting requirements for related tasks across multiple standards leads to cross-referencing between standards that can be confusing — for this reason the drafting team is proposing that the related IROL standards be consolidated to eliminate cross-referencing.

During the drafting work done by the Missing Measures and Compliance Elements Standards Drafting Team, stakeholders indicated that duplication of requirements should be eliminated. In support of these comments, the drafting team recommends moving the requirements from *IRO-013 — Reliability Coordinator Directives Relative to IROLs* into the project that will address communication protocols so that all requirements related to directives will be comprehensively addressed without duplication under the single *Project 2007-02 — Operating Personnel Communication Protocols*.

Conforming Changes to Already Approved Standards

The drafting team reviewed already-approved standards that include requirements for the Reliability Coordinator relative to operating within SOLs or IROLs and is recommending conforming changes to those already-approved standards. The implementation plan provides the justification for each of these recommended changes.

- The drafting team is recommending retirement of most of the requirements assigned to the Reliability Coordinator for real-time operation within SOLs — they should be assigned to the Transmission Operator. Every facility in the Transmission Operator's area has a System Operating Limit, but the Reliability Coordinator isn't required to see all these limits and may not have information to determine the cause of instances of exceeding these limits.
- The drafting team is recommending that requirements that describe possible types of acceptable behavior be replaced with requirements that identify the required performance, as in the case of recommending that IRO-005-2 R3 be retired when IRO-009-1 becomes effective.
- In many cases the drafting team would have recommended additional changes to the requirements in already approved standards, but doing so would be outside the scope of the SAR assigned to this drafting team and the changes can be accomplished when the standards are updated as part of the *Reliability Standards Development Plan: 2007–2009.*

Conforming Changes to Bring Standards into Alignment with Reliability Standards Development Procedure V6 and ERO Rules of Procedure

A new version of the Reliability Standards Development Procedure was approved by the NERC Board of Trustees on November 1, 2006. The drafting team made the following changes to the standards to bring them into conformance with the revised manual or other changes needed to conform to the ERO Rules of Procedure:

1. **Modified the format of the "Proposed Effective Dates"**
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Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.

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   ☒ Yes

   ☐ No

   Comments:

2. The drafting team consolidated the requirements for *IRO-009 — Reliability Coordinator Actions to Operate within IROLs* and *IRO-012— Procedures, Processes or Plans for Preventing and Mitigating IROLs* into a single standard to eliminate the cross-reference between the two standards. Do you agree with consolidating the requirements into a single standard? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

3. The drafting team recommends moving the requirements from *IRO-013 —Reliability Coordinator Directives Relative to IROLs* into the project that will address communication protocols so that all requirements related to directives will be comprehensively addressed under the single *Project 2007-02 – Operating Personnel Communication Protocols*. Do you agree with moving the requirements from IRO-013 into Project 2007-02? If not, please explain.

   ☐ Yes

   ☒ No

   Comments: The project in question should have been posted with the package. The quality of responses to this item will likely be impaired as many will not have reviewed the intent of the plan.

   We agree that clear communications are important and should be part of an operators overall training program. We have some concern about developing measures for the sake of having measures, particularly when they appear to require significant administration to track.

4. The drafting team is proposing that all standards and conforming changes become effective the first day of the first quarter, three months after regulatory approvals. Do you agree that the proposed effective date will give entities time to become fully compliant? If not, please explain.

   ☐ Yes

☒ No

Comments: Since the drafting team is not yet formed and has not seen the final product, it is premature to set a short implementation date.

5. The drafting team added a Violation Risk Factor for each requirement.

   Do you agree with the Violation Risk Factor for each requirement in the proposed standards? If not, please identify any requirement with a violation risk factor you feel is incorrect.

   ☐ I agree with the proposed Violation Risk Factors

   ☒ I do not agree with the following Violation Risk Factors:

   Comments: We strongly disagree with the violation severity levels of attribute (yes/no go/no-go) requirements being arbitrarily placed in the Severe category. This places late reports in the same category as failure to correct an IROL. We don't treat jaywalking the same as grand theft. The sanctions matrix needs to be changed to have another level for attribute requirements. The sanctions need to be based on impact to reliability.

   We also disagree with the default approach to assigning severity levels to scalable standards (only 5% in the Low area, 70% of observations in the Severe category). This is the equivalent as applying the following highway speeding rules to cars that have a typical top end of 100MPH:

65 MPH or less	Pass
66 MPH	Low
67-69 MPH	Moderate
70-74 MPH	High
75-100 MPH or higher	Severe

   Scalable standards should be assigned severity levels that approach quartiles of the observed or expected range of performance.

   This approach to assigning violation severity levels to attribute and scalable requirements doesn't appear to have been presented for official comment in any stakeholder forum.

6. The drafting team added a Mitigation Time Horizon for each requirement.

   Do you agree with the Mitigation Time Horizon for each requirement in the proposed standards? If not, please identify any requirement with a time horizon you feel is incorrect.

   ☐ I agree with the proposed Mitigation Time Horizons

   ☒ I do not agree with the following Mitigation Time Horizons:

   Comments: The meaning of Operations Assessment needs to be clarified. There is no indication of the relative impacts the drafting team considered for each mitigation time horizon. I would assume that a violation of a standard in the Real-Time Operations horizon would be considered worst than a violation in the Operations Planning Horizon. If this is the case, the standard needs to specify this. How does the team see Operations Assessment horizon fitting in?

7. The latest version of the Reliability Standards Development Procedure requires that each standard include "violation severity levels" rather than "levels of non-compliance."

"Violation severity levels" identify how badly an entity violated each requirement, and are not linked to the reliability-related impact of violating a requirement. (The reliability-related impact of violating a requirement is now identified in the "Violation Risk Factor" appended to each requirement.) Note that these severity levels are "guidelines" and variations from the above categories are acceptable.

Do you agree with the violation severity levels for each of the proposed standards? If you disagree with any of the violation severity levels for the proposed standards, please identify the standard and requirement you feel has an incorrect violation severity level.

☐ I agree with the violation severity levels

☒ I do not agree with the following violation severity levels:

Comments: The compliance percentage leaves gaps from 94-95% and from 84-85%. What is the justification for these percentages?

8. The implementation plan modifies several requirements in already approved standards because compliance with those requirements does not seem practical. Every facility in the Transmission Operator's area has a System Operating Limit, but the Reliability Coordinator isn't required to see all these limits and may not have information to determine the cause of instances of exceeding these limits — yet there are requirements that hold the Reliability Coordinator accountable for identifying the cause of any actual or potential SOL. The drafting team reviewed these requirements and made proposed modifications to limit the Reliability Coordinator's accountability for real-time actions relative to SOLs. Do you agree with the drafting team's approach?

   ☒ I agree the drafting team's approach

   ☐ I do not agree with the drafting team's approach

   Comments:

9. The drafting team is recommending that when IRO-007-1 is approved, conforming changes be made to the following standards:

   - IRO-002-1 — RC – Facilities; Retire R6
   - IRO-003-2 — RC – Wide Area View; Retire R1 and R2
   - IRO-005-2 — RC – Current Day Operations; Retire R1; Convert R1.1 into a Reference; Modify R13 part 2
   - TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control; Modify R2

   Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

   ☐ I agree with the proposed conforming changes

   ☒ I do not agree with the following conforming changes:

   Comments: Requirement R11 in Standard IRO-005-3 contradicts question 8 in the comment form. It requires the RCs to notify TPs of "SOLs and IROLs within its wide-area view". Question 8 recognizes that RCs may not have all the information for SOLs so how can they be held accountable to communicate it? This requirement needs to be eliminated.

10. The Drafting Team is recommending that when IRO-008-1 is approved, conforming changes be made to the following standard:

    - IRO-004-1 — RC – Operations Planning; Retire R1 and R2

    Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

    ☒ I agree with the proposed conforming changes

    ☐ I do not agree with the following conforming changes:

    Comments:

11. The Drafting Team is recommending that when IRO-009-1 is approved, conforming changes be made to the following standards:

    - EOP-001-0 — Emergency Operations Planning; Retire R2
    - IRO-004-1 — RC – Operations Planning; Retire R3 and R6
    - IRO-005-2 — RC – Current Day Operations; Retire R3, R5, R9; Delete R13 part 1; Modify R14; Retire R16, R17

    Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

    ☒ I agree with the proposed conforming changes

    ☐ I do not agree with the following conforming changes:

    Comments:

12. The drafting team is recommending that when IRO-010-1 is approved, conforming changes be made to the following standards:

    - IRO-002-1 — RC – Facilities; Retire R2
    - IRO-004-1 — RC – Operations Planning; Retire R4, R5
    - IRO-005-2 — RC – Current Day Operations; Retire R2
    - TOP-003-0 — Planned Outage Coordination; Modify R1.2
    - TOP-005-1 — Operational Reliability Information; Retire R1, R1.1; Convert Attachment A to a Reference
    - TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control; Modify R4

    Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

    ☐ I agree with the proposed conforming changes

    ☒ I do not agree with the following conforming changes:

    Comments: Transmission operators will not have to communicate outage information to the RC with these changes. The requirement to communicate the outage to the RC should not be removed from the transmission operator.

13. If you are aware of any conflicts between the proposed standard and any regulatory function, rule order, tariff, rate schedule, legislative requirement or agreement please

identify the conflict here. Similarly, if you believe that any requirement in this set of standards has an unnecessary adverse impact on energy markets, please identify the requirement and its adverse impact here.

☐ No known conflicts or unnecessary adverse impacts

☐ Known conflict:

Unnecessary adverse impact on markets:

14. The drafting team is recommending that these standards be balloted with **four separate ballots**, according to the following table. There would be a single ballot for IRO-007-1 that would include approval of IRO-007-1 and approval of the retirement of IRO-002-1 R6, and approval of retirement of IRO-003-2 R1 and R2, etc.

Ballot for:	Includes Associated Changes to Already Approved Standards:
IRO-007	IRO-002-1 — RC – Facilities - Retire R6 IRO-003-2 — RC – Wide Area View - Retire R1 and R2 IRO-005-2 — RC – Current Day Operations - Retire R1; Convert R1.1 into a Reference; Modify R13 part 2 TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control - Modify R2
IRO-008	IRO-004-1 — RC – Operations Planning - Retire R1 and R2
IRO-009	EOP-001-0 — Emergency Operations Planning - Retire R2
	IRO-004-1 — RC – Operations Planning - Retire R3 and R6
	IRO-005-2 — RC – Current Day Operations Retire R3, R5, R9; Delete R13 part 1; Modify R14; Retire R16, R17
IRO-010	IRO-002-1 — RC – Facilities - Retire R2
	IRO-004-1 — RC – Operations Planning - Retire R4, R5
	IRO-005-2 — RC – Current Day Operations - Retire R2
	TOP-003-0 — Planned Outage Coordination Modify R1.2
	TOP-005-1 — Operational Reliability Information - Retire R1, R1.1; Convert Attachment A to a Reference
	TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control - Modify R4

☒ I agree with balloting these standards using four separate ballots

☐ I do not agree balloting these standards using four separate ballots:

Comments:

15. If you have any other comments on this set of standards or its implementation plan that you have not already submitted above, please provide them here.

☐ No additional comments

Comments: IRO-007-1 - Tv is a term that is not defined. Measures do not specify if temporary loss of ICCP or telemetry is an exception or if it is still considered a violation. It should not be considered a violation.

IRO-008-1 - R2 requires that Real-Time Assessments be performed at least every 30 minutes. The definition of Real-Time Assessment leaves open how far into the future the assessments must cover. R3 requires sharing of results to prevent or mitigate exceeding an IROL. It seems like this should require an RC directive to correct the situation. Violation severities do not address temporary loss of ICCP, telemetry or state estimation. They should not be violations.

IRO-009-1 - Two new terms are defined for inclusion in the glossary: Interconnection Reliability Operating Limit Event and Interconnection Reliability Operating Limit Event Duration. Neither are used in the standard. Section 2.3.2 establishes a high violation severity if an IROL was actually exceeded and there was a delay before taking action. Delay is not defined. This leaves this term open for interpretation and will result in inconsistent enforcement. The standard needs to define what is meant by delay. Additionally, we wonder how will the ERO track a given percent of "IROLs identified in advance of real-time" against the number of operating procedures?

IRO-010-1 - Does R3 create the requirement for a entity to add metering if it does not already exist at a location, if a measurement is requested? This needs to be made clear. Data anomalies such as those caused by a bad RTU are not addressed and need to be made exceptions in the violations severity section.

While we agree with the concept of consolidating the IROL-related standards, there is more work to do. Requirements regarding IROLs can be boiled down to:

1. Have IROLs pre-defined (preparedness).
2. Train and prepare for IROLs (preparedness).
3. Update limits based on conditions (performance).
4. Monitor for and respond quickly to IROLs and correct them within 30 minutes (performance).
5. Communicate reaching IROLs to others (performance).
6. Report violations of the IROL standard (administrative).

The acronym IROL shows up 168 times in the present standards. The vast majority of these are restatements of the 6 core requirements in different standards or explanatory information that should not be assigned risk factors or measures.

Please use this form to submit comments on the proposed IROL standards. Comments must be submitted by **February 15, 2007**. You may submit the completed form by e-mail to sarcomm@nerc.com with the acronym "IROL" in the subject line. If you have questions please contact Maureen Long at maureen.long@nerc.net or by telephone at 609-452-8060.

Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	Jason Shaver	
Organization:	American Transmission Co.	
Telephone:	262 506 6885	
E-mail:	jshaver@atcllc.com	
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT** ☐ **FRCC** ☒ **MRO** ☐ **NPCC** ☒ **RFC** ☐ **SERC** ☐ **SPP** ☐ **WECC** ☐ **NA – Not Applicable**	☒	1 — Transmission Owners
	☐	2 — RTOs and ISOs
	☐	3 — Load-serving Entities
	☐	4 — Transmission-dependent Utilities
	☐	5 — Electric Generators
	☐	6 — Electricity Brokers, Aggregators, and Marketers
	☐	7 — Large Electricity End Users
	☐	8 — Small Electricity End Users
	☐	9 — Federal, State, Provincial Regulatory or other Government Entities
	☐	10 - Regional Reliability Organizations; Regional Entities

Group Comments (Complete this page if comments are from a group.)

Group Name:

Lead Contact:

Contact Organization:

Contact Segment:

Contact Telephone:

Contact E-mail:

Additional Member Name	Additional Member Organization	Region*	Segment*

*If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

Background Information:

The IROL standards were placed in a holding pattern for two years while waiting for the completion of the standards that require entities to document and use their methodology for developing SOLs and IROLs. FAC-010-1 — System Operating Limits Methodology for the Planning Horizon, FAC-011-1 — System Operating Limits Methodology for the Operations Horizon, and FAC-014-1 — Establish and Communicate System Operating Limits, were all adopted by the NERC Board of Trustees on November 1, 2006. While waiting for these standards to be approved by applicable regulatory authorities, the drafting team has been given the authority to move ahead in refining the set of IROL standards.

Changes to Set of Standards

When last posted, there were seven standards in this set of IROL standards:

IRO-007 — Monitoring the Wide Area
IRO-008 — Reliability Coordinator Analyses and Assessments
IRO-009 — Reliability Coordinator Actions to Operate Within IROLs
IRO-010 — Reliability Coordinator Data Specification and Collection
IRO-011 — Providing Data to the Reliability Coordinator
IRO-012 — Procedures, Processes or Plans for Preventing and Mitigating IROLs
IRO-013 — Reliability Coordinator Directives Relative to IROLs

Consolidation of Related Requirements

The revised set of standards posted for comment includes only IRO-007 through IRO-010. The drafting team is recommending the following changes to the original set of standards for the reasons stated below:

- Consolidate IRO-010 and IRO-011 into a single standard
- Consolidate IRO-009 and IRO-012 into a single standard
- Transfer IRO-013 to Project 2007-02 — Operating Personnel Communications Protocols

Many stakeholders have indicated that splitting requirements for related tasks across multiple standards leads to cross-referencing between standards that can be confusing — for this reason the drafting team is proposing that the related IROL standards be consolidated to eliminate cross-referencing.

During the drafting work done by the Missing Measures and Compliance Elements Standards Drafting Team, stakeholders indicated that duplication of requirements should be eliminated. In support of these comments, the drafting team recommends moving the requirements from *IRO-013 — Reliability Coordinator Directives Relative to IROLs* into the project that will address communication protocols so that all requirements related to directives will be comprehensively addressed without duplication under the single *Project 2007-02 — Operating Personnel Communication Protocols*.

Conforming Changes to Already Approved Standards

The drafting team reviewed already-approved standards that include requirements for the Reliability Coordinator relative to operating within SOLs or IROLs and is recommending conforming changes to those already-approved standards. The implementation plan provides the justification for each of these recommended changes.

- The drafting team is recommending retirement of most of the requirements assigned to the Reliability Coordinator for real-time operation within SOLs — they should be assigned to the Transmission Operator. Every facility in the Transmission Operator's area has a System Operating Limit, but the Reliability Coordinator isn't required to see all these limits and may not have information to determine the cause of instances of exceeding these limits.
- The drafting team is recommending that requirements that describe possible types of acceptable behavior be replaced with requirements that identify the required performance, as in the case of recommending that IRO-005-2 R3 be retired when IRO-009-1 becomes effective.
- In many cases the drafting team would have recommended additional changes to the requirements in already approved standards, but doing so would be outside the scope of the SAR assigned to this drafting team and the changes can be accomplished when the standards are updated as part of the *Reliability Standards Development Plan: 2007–2009.*

Conforming Changes to Bring Standards into Alignment with Reliability Standards Development Procedure V6 and ERO Rules of Procedure

A new version of the Reliability Standards Development Procedure was approved by the NERC Board of Trustees on November 1, 2006. The drafting team made the following changes to the standards to bring them into conformance with the revised manual or other changes needed to conform to the ERO Rules of Procedure:

1. **Modified the format of the "Proposed Effective Dates"**
   The drafting team modified the proposed effective dates to reflect that the standards cannot become effective until approved by applicable regulatory authorities. The drafting team estimated that it will take approximately three months following Board of Trustee adoption, to obtain regulatory approval from FERC and Canadian authorities.

2. **Added Violation Risk Factors to each requirement**
   Violation risk factors identify the potential impact to reliability when the associated requirement has been violated. The following categories of violation risk factors were approved with the latest version of the Reliability Standards Development Procedure:

   A High Risk Factor requirement:
   (a) is one that, if violated, could directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures, or could place the bulk power system at an unacceptable risk of instability, separation, or cascading failures; or

   (b) is a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures, or could place the bulk power system at an unacceptable risk of instability, separation, or cascading failures, or could hinder restoration to a normal condition.

   A Medium Risk Factor requirement
   (a) is a requirement that, if violated, could the ability to effectively monitor and control the bulk power system, but is unlikely to lead to bulk power system instability, separation, or cascading failures; or

(b) is a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly affect the electrical state or capability of the bulk power system, or the ability to effectively monitor, control, or restore the bulk power system, but is unlikely, under emergency, abnormal, or restoration conditions anticipated by the preparations, to lead to bulk power system instability, separation, or cascading failures, nor to hinder restoration to a normal condition.

A Lower Risk Factor requirement is administrative in nature and
(a) is a requirement that, if violated, would not be expected to affect the electrical state or capability of the bulk power system, or the ability to effectively monitor and control the bulk power system; or

(b) is a requirement in a planning time frame that, if violated, would not, under the emergency, abnormal, or restorative conditions anticipated by the preparations, be expected to affect the electrical state or capability of the bulk power system, or the ability to effectively monitor, control, or restore the bulk power system.

The drafting team added violation risk factors for each requirement. (For this set of BAL standards, the violation risk factors drafting team provided the violation risk factors already identified by stakeholders. If stakeholders indicate that some of the risk factors posted November 2 through December 1, 2006 need modification, the Balance Resources and Demand Standards Drafting Team will make conforming changes to the risk factors in these standards.)

3. Added a Mitigation Time Horizon to each requirement
The ERO Rules of Procedure include the use of Mitigation Time Horizons as one element used to determine the size of sanctions. The drafting team used the following guidelines in developing mitigation time horizons for each requirement:

- ***Long-term Planning:*** a planning horizon of one year or longer.
- ***Operations Planning****:* operating and resource plans from day-ahead up to and including seasonal.
- ***Same-day Operations****:* routine actions required within the timeframe of a day, but not real-time.
- ***Real-time Operations****:* actions required within one hour or less to preserve the reliability of the bulk electric system.
- ***Operations Assessment***: follow-up evaluations and reporting of real time operations.

4. Changed the identification of the Compliance Monitor
The drafting team modified all references to the Regional Reliability Organization as the Compliance Monitor, and replaced these references with, “Electric Reliability Organization.”

5. Deleted Levels of Non-compliance – Added Violation Severity Levels
The drafting team deleted “levels of non-compliance” and added “violation severity levels” to comply with the revised Reliability Standards Development Procedure. Compliance personnel assisted the drafting team in using the following criteria from the manual to establish violation severity levels:

- ***Lower:*** mostly compliant with minor exceptions — The responsible entity is mostly compliant with and meets the intent of the requirement but is deficient with respect to one or more minor details. Equivalent score: 95% to 99% compliant.
- ***Moderate:*** mostly compliant with significant exceptions — The responsible entity is mostly compliant with and meets the intent of the requirement but is deficient with respect to one or more significant elements. Equivalent score: 85% to 94% compliant.
- ***High:*** marginal performance or results — The responsible entity has only partially achieved the reliability objective of the requirement and is missing one or more significant elements. Equivalent score: 70% to 84% compliant.
- ***Severe:*** poor performance or results — The responsible entity has failed to meet the reliability objective of the requirement. Equivalent score: less than 70% compliant.

6. **Added 'Associated Documents' where applicable**
   The drafting team added a section "F" to the standard called, "Associated Documents" to list items such as forms, related standards, reports, etc.

On the following pages, the drafting team will ask for your feedback on the appropriateness of the changes it made to this set of standards. Because the changes made to the set of standards included a great deal of consolidation, a red line version will not be posted as it is not distinguish the content changes from the format changes when comparing the two versions.

You do not have to answer all questions.

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

1. The drafting team consolidated the requirements for *IRO-010— Reliability Coordinator Data Specification and Collection* and *IRO-011— Providing Data to the Reliability Coordinator* into a single standard to eliminate the cross-reference between the two standards. Do you agree with consolidating the requirements into a single standard? If not, please explain.

   ☒ Yes

   ☐ No

   Comments: ATC agrees with the decision to combine standards IRO-010 and IRO-011 into a single standard.

2. The drafting team consolidated the requirements for *IRO-009 — Reliability Coordinator Actions to Operate within IROLs* and *IRO-012— Procedures, Processes or Plans for Preventing and Mitigating IROLs* into a single standard to eliminate the cross-reference between the two standards. Do you agree with consolidating the requirements into a single standard? If not, please explain.

   ☒ Yes

   ☐ No

   Comments: ATC agrees with the decision to combine standards IRO-009 and IRO-012 into a single standard.

3. The drafting team recommends moving the requirements from *IRO-013 —Reliability Coordinator Directives Relative to IROLs* into the project that will address communication protocols so that all requirements related to directives will be comprehensively addressed under the single *Project 2007-02 – Operating Personnel Communication Protocols*. Do you agree with moving the requirements from IRO-013 into Project 2007-02? If not, please explain.

   ☐ Yes

   ☐ No

   Comments:

4. The drafting team is proposing that all standards and conforming changes become effective the first day of the first quarter, three months after regulatory approvals. Do you agree that the proposed effective date will give entities time to become fully compliant? If not, please explain.

   ☐ Yes

   ☒ No

   Comments: ATC believes that all standards and conforming changes should become effective the first day of the first quarter, six months after regulatory approvals.

5. The drafting team added a Violation Risk Factor for each requirement.

   Do you agree with the Violation Risk Factor for each requirement in the proposed standards? If not, please identify any requirement with a violation risk factor you feel is incorrect.

   ☐ I agree with the proposed Violation Risk Factors

   ☐ I do not agree with the following Violation Risk Factors:

   Comments:

6. The drafting team added a Mitigation Time Horizon for each requirement.

   Do you agree with the Mitigation Time Horizon for each requirement in the proposed standards? If not, please identify any requirement with a time horizon you feel is incorrect.

   ☐ I agree with the proposed Mitigation Time Horizons

   ☐ I do not agree with the following Mitigation Time Horizons:

   Comments:

7. The latest version of the Reliability Standards Development Procedure requires that each standard include "violation severity levels" rather than "levels of non-compliance." "Violation severity levels" identify how badly an entity violated each requirement, and are not linked to the reliability-related impact of violating a requirement. (The reliability-related impact of violating a requirement is now identified in the "Violation Risk Factor" appended to each requirement.) Note that these severity levels are "guidelines" and variations from the above categories are acceptable.

   Do you agree with the violation severity levels for each of the proposed standards? If you disagree with any of the violation severity levels for the proposed standards, please identify the standard and requirement you feel has an incorrect violation severity level.

   ☐ I agree with the violation severity levels

   ☒ I do not agree with the following violation severity levels:

   Comments: Many of the requirements need to be clarified before we can determine the appropriateness of the violation severity levels.

   See our comments under question 15.

8. The implementation plan modifies several requirements in already approved standards because compliance with those requirements does not seem practical. Every facility in the Transmission Operator's area has a System Operating Limit, but the Reliability Coordinator isn't required to see all these limits and may not have information to determine the cause of instances of exceeding these limits — yet there are requirements that hold the Reliability Coordinator accountable for identifying the cause of any actual or potential SOL. The drafting team reviewed these requirements and made proposed modifications to limit the Reliability Coordinator's accountability for real-time actions relative to SOLs. Do you agree with the drafting team's approach?

☐ I agree the drafting team's approach

☒ I do not agree with the drafting team's approach

Comments: ATC does not agree with the proposed modifications to existing NERC standards. It's our opinion that Reliability Coordinators should monitor both SOLs and IROLs within their area. The Reliability Coordinators provide an additional level of system oversight that ensures the reliable operations of the bulk power system. A strict interpretation by Reliability Coordinators would lead them to only monitor pre-determined IROLs and they would be unable to determine if an SOL becomes an IROL in real-time.

ATC does not believe that the proposed changes to existing standards have anything to do with these standards. The proposed standards are not replacing the requirements in the existing standards but are only adding on new requirements that address IROLs. The SDT is overstepping the sprit of the IROL SAR and seems to be adjusting existing standards for some unexplained reason. If the SDT believes that these changes are appropriate then they should sponsor a SAR and allow for full industry participation.

It's our opinion that the propose changes to existing standards will leave that bulk power system in a less reliable state, and we ask that the SDT abandon this effort and move the proposed changes to a SAR. Once in a SAR the industry will be able to better exam the effects of the changes.

Lastly ATC believes that changes in monitoring of SOL may impact the ability of Reliability Coordinators to call TLRs. If they are not required to monitor SOLs then identification will be the sole reponsibility of Transmission Operators with no confirmation from RCs before a TLR is started.

9. The drafting team is recommending that when IRO-007-1 is approved, conforming changes be made to the following standards:

   - IRO-002-1 — RC – Facilities; Retire R6
   - IRO-003-2 — RC – Wide Area View; Retire R1 and R2
   - IRO-005-2 — RC – Current Day Operations; Retire R1; Convert R1.1 into a Reference; Modify R13 part 2
   - TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control; Modify R2

   Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

   ☐ I agree with the proposed conforming changes

   ☒ I do not agree with the following conforming changes:

   Comments: IRO-007 states that Reliability Coordinators should monitor IROLs within their area.

   ATC does not believe that the changes to the four listed requirements have anything to do with IRO-007. In other words IRO-007 is not replacing the existing requirements, therefore the SDT has no authority to delete these requirements.

It's ATC opinion that the SDT should only modify existing requirements that are in direct alignment with their work. In other words they should only alter those existing requirements that are being replaced with new requirements.

If the SDT disagrees with ATC then they need to explain how IRO-007 is replacing the above listed requirements.

10. The Drafting Team is recommending that when IRO-008-1 is approved, conforming changes be made to the following standard:

    - IRO-004-1 — RC – Operations Planning; Retire R1 and R2

    Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

    ☐ I agree with the proposed conforming changes

    ☒ I do not agree with the following conforming changes:

    Comments: If Reliability Coordinators only have to monitor IROLs then they will have no ability to identify a SOL that becomes an IROL is real-time. It is the responsibility of the Reliability Coordinators to provide oversight of the bulk power system, therefore insuring reliable operations.

11. The Drafting Team is recommending that when IRO-009-1 is approved, conforming changes be made to the following standards:

    - EOP-001-0 — Emergency Operations Planning; Retire R2
    - IRO-004-1 — RC – Operations Planning; Retire R3 and R6
    - IRO-005-2 — RC – Current Day Operations; Retire R3, R5, R9; Delete R13 part 1; Modify R14; Retire R16, R17

    Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

    ☐ I agree with the proposed conforming changes

    ☒ I do not agree with the following conforming changes:

    Comments: ATC does not believe that a Reliability Coordinator will be able to identify an SOL that becomes an IROL in real-time if they are not required to monitor SOLs. Additionally ATC does not see the connection between IRO-009 and these three existing standards. IRO-009 is not replacing these requirements therefore they should not be changed.

12. The drafting team is recommending that when IRO-010-1 is approved, conforming changes be made to the following standards:

    - IRO-002-1 — RC – Facilities; Retire R2
    - IRO-004-1 — RC – Operations Planning; Retire R4, R5
    - IRO-005-2 — RC – Current Day Operations; Retire R2

- TOP-003-0 — Planned Outage Coordination; Modify R1.2
- TOP-005-1 — Operational Reliability Information; Retire R1, R1.1; Convert Attachment A to a Reference
- TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control; Modify R4

Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

☐ I agree with the proposed conforming changes

☒ I do not agree with the following conforming changes:

Comments: Please see our comments to question 8.

13. If you are aware of any conflicts between the proposed standard and any regulatory function, rule order, tariff, rate schedule, legislative requirement or agreement please identify the conflict here. Similarly, if you believe that any requirement in this set of standards has an unnecessary adverse impact on energy markets, please identify the requirement and its adverse impact here.

☒ No known conflicts or unnecessary adverse impacts

☐ Known conflict:

Unnecessary adverse impact on markets:

14. The drafting team is recommending that these standards be balloted with **four separate ballots**, according to the following table. There would be a single ballot for IRO-007-1 that would include approval of IRO-007-1 and approval of the retirement of IRO-002-1 R6, and approval of retirement of IRO-003-2 R1 and R2, etc.

Ballot for:	Includes Associated Changes to Already Approved Standards:
IRO-007	IRO-002-1 — RC – Facilities - Retire R6 IRO-003-2 — RC – Wide Area View - Retire R1 and R2 IRO-005-2 — RC – Current Day Operations - Retire R1; Convert R1.1 into a Reference; Modify R13 part 2 TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control - Modify R2
IRO-008	IRO-004-1 — RC – Operations Planning - Retire R1 and R2
IRO-009	EOP-001-0 — Emergency Operations Planning - Retire R2
	IRO-004-1 — RC – Operations Planning - Retire R3 and R6
	IRO-005-2 — RC – Current Day Operations Retire R3, R5, R9; Delete R13 part 1; Modify R14; Retire R16, R17
IRO-010	IRO-002-1 — RC – Facilities

	- Retire R2
	IRO-004-1 — RC – Operations Planning - Retire R4, R5
	IRO-005-2 — RC – Current Day Operations - Retire R2
	TOP-003-0 — Planned Outage Coordination Modify R1.2
	TOP-005-1 — Operational Reliability Information - Retire R1, R1.1; Convert Attachment A to a Reference
	TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control - Modify R4

☐ I agree with balloting these standards using four separate ballots

☒ I do not agree balloting these standards using four separate ballots:

Comments: These four standards should be voted on in a single ballot. The nature of this set of standards and the proposed modification to existing standards are such that a failure of one would cause a major disconnection in NERC standards. For this reason ATC strongly requests that the four standards be balloted as one.

15. If you have any other comments on this set of standards or its implementation plan that you have not already submitted above, please provide them here.

☐ No additional comments

Comments: This effort must produce a clear definition of what an IROL is and the outcome being avoided by classifying an SOL as an IROL. The definition should include both Real-Time Operations and planning horizon perspectives. There is wide discretion between what everyone believes an IROL is and what events could reasonably be predicted to identify a triggering event that should be classified as an IROL. A clear definition is required in order to identify an IROL in Real-Time Operations and planning studies.

IRO-007 Requirement R2

Has the group discussed the possible situation in which the RCs do not agree that an IROL exists? This requirement gives the impression that an IROL has been agreed to by the RCs but the limit and/or Tv is in dispute. Because the definition of IROL is subjective two RCs could have variations of what SOLs should be classified as IROLs in Real-time.

IRO-010

Requirements 1.1, 1.3 and 1.4 seem to be a fill in the blank requirements for the RCs. This group should develop the data specification requirements.

Requirement 1.2 should be deleted and replaced with the following:

Industry standard protocol or mutually agreeable format

Please use this form to submit comments on the proposed IROL standards. Comments must be submitted by **February 15, 2007**. You may submit the completed form by e-mail to sarcomm@nerc.com with the acronym "IROL" in the subject line. If you have questions please contact Maureen Long at maureen.long@nerc.net or by telephone at 609-452-8060.

Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	Ed Davis	
Organization:	Entergy Services, Inc	
Telephone:	504-576-3029	
E-mail:	edavis@entergy.com	
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT** ☐ **FRCC** ☐ **MRO** ☐ **NPCC** ☐ **RFC** ☒ **SERC** ☐ **SPP** ☐ **WECC** ☐ **NA – Not Applicable**	☒	1 — Transmission Owners
	☐	2 — RTOs and ISOs
	☐	3 — Load-serving Entities
	☐	4 — Transmission-dependent Utilities
	☐	5 — Electric Generators
	☐	6 — Electricity Brokers, Aggregators, and Marketers
	☐	7 — Large Electricity End Users
	☐	8 — Small Electricity End Users
	☐	9 — Federal, State, Provincial Regulatory or other Government Entities
	☐	10 - Regional Reliability Organizations; Regional Entities

Group Comments (Complete this page if comments are from a group.)

Group Name:

Lead Contact:

Contact Organization:

Contact Segment:

Contact Telephone:

Contact E-mail:

Additional Member Name	Additional Member Organization	Region*	Segment*

*If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

Background Information:

The IROL standards were placed in a holding pattern for two years while waiting for the completion of the standards that require entities to document and use their methodology for developing SOLs and IROLs. FAC-010-1 — System Operating Limits Methodology for the Planning Horizon, FAC-011-1 — System Operating Limits Methodology for the Operations Horizon, and FAC-014-1 — Establish and Communicate System Operating Limits, were all adopted by the NERC Board of Trustees on November 1, 2006. While waiting for these standards to be approved by applicable regulatory authorities, the drafting team has been given the authority to move ahead in refining the set of IROL standards.

Changes to Set of Standards

When last posted, there were seven standards in this set of IROL standards:

IRO-007 — Monitoring the Wide Area
IRO-008 — Reliability Coordinator Analyses and Assessments
IRO-009 — Reliability Coordinator Actions to Operate Within IROLs
IRO-010 — Reliability Coordinator Data Specification and Collection
IRO-011 — Providing Data to the Reliability Coordinator
IRO-012 — Procedures, Processes or Plans for Preventing and Mitigating IROLs
IRO-013 — Reliability Coordinator Directives Relative to IROLs

Consolidation of Related Requirements

The revised set of standards posted for comment includes only IRO-007 through IRO-010. The drafting team is recommending the following changes to the original set of standards for the reasons stated below:

- Consolidate IRO-010 and IRO-011 into a single standard
- Consolidate IRO-009 and IRO-012 into a single standard
- Transfer IRO-013 to Project 2007-02 — Operating Personnel Communications Protocols

Many stakeholders have indicated that splitting requirements for related tasks across multiple standards leads to cross-referencing between standards that can be confusing — for this reason the drafting team is proposing that the related IROL standards be consolidated to eliminate cross-referencing.

During the drafting work done by the Missing Measures and Compliance Elements Standards Drafting Team, stakeholders indicated that duplication of requirements should be eliminated. In support of these comments, the drafting team recommends moving the requirements from *IRO-013 — Reliability Coordinator Directives Relative to IROLs* into the project that will address communication protocols so that all requirements related to directives will be comprehensively addressed without duplication under the single *Project 2007-02 — Operating Personnel Communication Protocols*.

Conforming Changes to Already Approved Standards

The drafting team reviewed already-approved standards that include requirements for the Reliability Coordinator relative to operating within SOLs or IROLs and is recommending conforming changes to those already-approved standards. The implementation plan provides the justification for each of these recommended changes.

- The drafting team is recommending retirement of most of the requirements assigned to the Reliability Coordinator for real-time operation within SOLs — they should be assigned to the Transmission Operator. Every facility in the Transmission Operator's area has a System Operating Limit, but the Reliability Coordinator isn't required to see all these limits and may not have information to determine the cause of instances of exceeding these limits.
- The drafting team is recommending that requirements that describe possible types of acceptable behavior be replaced with requirements that identify the required performance, as in the case of recommending that IRO-005-2 R3 be retired when IRO-009-1 becomes effective.
- In many cases the drafting team would have recommended additional changes to the requirements in already approved standards, but doing so would be outside the scope of the SAR assigned to this drafting team and the changes can be accomplished when the standards are updated as part of the *Reliability Standards Development Plan: 2007–2009.*

Conforming Changes to Bring Standards into Alignment with Reliability Standards Development Procedure V6 and ERO Rules of Procedure

A new version of the Reliability Standards Development Procedure was approved by the NERC Board of Trustees on November 1, 2006. The drafting team made the following changes to the standards to bring them into conformance with the revised manual or other changes needed to conform to the ERO Rules of Procedure:

1. **Modified the format of the "Proposed Effective Dates"**
   The drafting team modified the proposed effective dates to reflect that the standards cannot become effective until approved by applicable regulatory authorities. The drafting team estimated that it will take approximately three months following Board of Trustee adoption, to obtain regulatory approval from FERC and Canadian authorities.

2. **Added Violation Risk Factors to each requirement**
   Violation risk factors identify the potential impact to reliability when the associated requirement has been violated. The following categories of violation risk factors were approved with the latest version of the Reliability Standards Development Procedure:

   A High Risk Factor requirement:
   (a) is one that, if violated, could directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures, or could place the bulk power system at an unacceptable risk of instability, separation, or cascading failures; or

   (b) is a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures, or could place the bulk power system at an unacceptable risk of instability, separation, or cascading failures, or could hinder restoration to a normal condition.

   A Medium Risk Factor requirement
   (a) is a requirement that, if violated, could the ability to effectively monitor and control the bulk power system, but is unlikely to lead to bulk power system instability, separation, or cascading failures; or

(b) is a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly affect the electrical state or capability of the bulk power system, or the ability to effectively monitor, control, or restore the bulk power system, but is unlikely, under emergency, abnormal, or restoration conditions anticipated by the preparations, to lead to bulk power system instability, separation, or cascading failures, nor to hinder restoration to a normal condition.

A Lower Risk Factor requirement is administrative in nature and
(a) is a requirement that, if violated, would not be expected to affect the electrical state or capability of the bulk power system, or the ability to effectively monitor and control the bulk power system; or

(b) is a requirement in a planning time frame that, if violated, would not, under the emergency, abnormal, or restorative conditions anticipated by the preparations, be expected to affect the electrical state or capability of the bulk power system, or the ability to effectively monitor, control, or restore the bulk power system.

The drafting team added violation risk factors for each requirement. (For this set of BAL standards, the violation risk factors drafting team provided the violation risk factors already identified by stakeholders. If stakeholders indicate that some of the risk factors posted November 2 through December 1, 2006 need modification, the Balance Resources and Demand Standards Drafting Team will make conforming changes to the risk factors in these standards.)

3. Added a Mitigation Time Horizon to each requirement
The ERO Rules of Procedure include the use of Mitigation Time Horizons as one element used to determine the size of sanctions. The drafting team used the following guidelines in developing mitigation time horizons for each requirement:

- ***Long-term Planning:*** a planning horizon of one year or longer.
- ***Operations Planning****:* operating and resource plans from day-ahead up to and including seasonal.
- ***Same-day Operations****:* routine actions required within the timeframe of a day, but not real-time.
- ***Real-time Operations****:* actions required within one hour or less to preserve the reliability of the bulk electric system.
- ***Operations Assessment***: follow-up evaluations and reporting of real time operations.

4. Changed the identification of the Compliance Monitor
The drafting team modified all references to the Regional Reliability Organization as the Compliance Monitor, and replaced these references with, “Electric Reliability Organization.”

5. Deleted Levels of Non-compliance – Added Violation Severity Levels
The drafting team deleted “levels of non-compliance” and added “violation severity levels” to comply with the revised Reliability Standards Development Procedure. Compliance personnel assisted the drafting team in using the following criteria from the manual to establish violation severity levels:

- ***Lower:*** mostly compliant with minor exceptions — The responsible entity is mostly compliant with and meets the intent of the requirement but is deficient with respect to one or more minor details. Equivalent score: 95% to 99% compliant.
- ***Moderate:*** mostly compliant with significant exceptions — The responsible entity is mostly compliant with and meets the intent of the requirement but is deficient with respect to one or more significant elements. Equivalent score: 85% to 94% compliant.
- ***High:*** marginal performance or results — The responsible entity has only partially achieved the reliability objective of the requirement and is missing one or more significant elements. Equivalent score: 70% to 84% compliant.
- ***Severe:*** poor performance or results — The responsible entity has failed to meet the reliability objective of the requirement. Equivalent score: less than 70% compliant.

6. **Added 'Associated Documents' where applicable**
   The drafting team added a section "F" to the standard called, "Associated Documents" to list items such as forms, related standards, reports, etc.

On the following pages, the drafting team will ask for your feedback on the appropriateness of the changes it made to this set of standards. Because the changes made to the set of standards included a great deal of consolidation, a red line version will not be posted as it is not distinguish the content changes from the format changes when comparing the two versions.

You do not have to answer all questions.

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

1. The drafting team consolidated the requirements for *IRO-010— Reliability Coordinator Data Specification and Collection* and *IRO-011— Providing Data to the Reliability Coordinator* into a single standard to eliminate the cross-reference between the two standards. Do you agree with consolidating the requirements into a single standard? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

2. The drafting team consolidated the requirements for *IRO-009 — Reliability Coordinator Actions to Operate within IROLs* and *IRO-012— Procedures, Processes or Plans for Preventing and Mitigating IROLs* into a single standard to eliminate the cross-reference between the two standards. Do you agree with consolidating the requirements into a single standard? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

3. The drafting team recommends moving the requirements from *IRO-013 —Reliability Coordinator Directives Relative to IROLs* into the project that will address communication protocols so that all requirements related to directives will be comprehensively addressed under the single *Project 2007-02 – Operating Personnel Communication Protocols*. Do you agree with moving the requirements from IRO-013 into Project 2007-02? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

4. The drafting team is proposing that all standards and conforming changes become effective the first day of the first quarter, three months after regulatory approvals. Do you agree that the proposed effective date will give entities time to become fully compliant? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

5. The drafting team added a Violation Risk Factor for each requirement.

   Do you agree with the Violation Risk Factor for each requirement in the proposed standards? If not, please identify any requirement with a violation risk factor you feel is incorrect.

   ☐ I agree with the proposed Violation Risk Factors

   ☒ I do not agree with the following Violation Risk Factors:

   Comments:

   IRO-008-1 R3 has two conditions: one the results of an Operational Planning Analysis, and one the results of a Real-Time Assessment. The Violation Risk Factor should be different for each of these two conditions. The VRF for the results of an Operational Planning Analysis should be MEDIUM, while the VRF for the results of a Real-Time Assessment should be HIGH.

   IRO-010-1 R1 requires the development of a documented specification for data and information while R2 requires distribution of that specification. Both R1 and R2 have VRFs of Medium. We suggest these two requirements be changed to LOWER. The development and distribution of a data specification is not a High or Medium risk factor.

6. The drafting team added a Mitigation Time Horizon for each requirement.

   Do you agree with the Mitigation Time Horizon for each requirement in the proposed standards? If not, please identify any requirement with a time horizon you feel is incorrect.

   ☐ I agree with the proposed Mitigation Time Horizons

   ☒ I do not agree with the following Mitigation Time Horizons:

   Comments:

   IRO-008-1 R3 has two conditions: one the results of an Operational Planning Analysis, and one the results of a Real-Time Assessment. The Mitigation Time Horizon should be different for each of these two conditions. The MTH for the results of an Operational Planning Analysis should be Operations Planning, while the MTH for the results of a Real-Time Assessment should be Real-Time Operations.

IRO-010-1 R1 requires the development of a documented specification for data and information while R2 requires distribution of that specification. Both R1 and R2 have MTHs of Operations Planning. We suggest these two requirements be changed to Long-term Planning. The development and distribution of a specification should be developed and distributed long before it is needed.

7. The latest version of the Reliability Standards Development Procedure requires that each standard include "violation severity levels" rather than "levels of non-compliance." "Violation severity levels" identify how badly an entity violated each requirement, and are not linked to the reliability-related impact of violating a requirement. (The reliability-related impact of violating a requirement is now identified in the "Violation Risk Factor" appended to each requirement.) Note that these severity levels are "guidelines" and variations from the above categories are acceptable.

   Do you agree with the violation severity levels for each of the proposed standards? If you disagree with any of the violation severity levels for the proposed standards, please identify the standard and requirement you feel has an incorrect violation severity level.

   ☐ I agree with the violation severity levels

   ☐ I do not agree with the following violation severity levels:

   Comments:

   The VSLs in IRO-009 and IRO-010 have gaps between the low end of LOW (e.g. 95%) and the high end of MODERATE (e.g. 94%) with a similar gap in other VSLs. Why is there this gap? If the argument is that the ranges are whole numbers then it may be OK. However, it seems there should not be a gap and we suggest closing those gaps by writing the VSL with - greater than and equal to - and - less than - specifications.

8. The implementation plan modifies several requirements in already approved standards because compliance with those requirements does not seem practical. Every facility in the Transmission Operator's area has a System Operating Limit, but the Reliability Coordinator isn't required to see all these limits and may not have information to determine the cause of instances of exceeding these limits — yet there are requirements that hold the Reliability Coordinator accountable for identifying the cause of any actual or potential SOL. The drafting team reviewed these requirements and made proposed modifications to limit the Reliability Coordinator's accountability for real-time actions relative to SOLs. Do you agree with the drafting team's approach?

   ☐ I agree the drafting team's approach

   ☒ I do not agree with the drafting team's approach

   Comments:

We agree that the RC should not be held responsible to identify the cause of any actual or potential SOL for which he is not monitoring the information. However, if he is monitoring the parameters associated with a SOL he does have an obligation to act on that information and should be held accountable. Therefore, a blanket reprieve for not acting on known information is not acceptable.

9. The drafting team is recommending that when IRO-007-1 is approved, conforming changes be made to the following standards:

   - IRO-002-1 — RC – Facilities; Retire R6
   - IRO-003-2 — RC – Wide Area View; Retire R1 and R2
   - IRO-005-2 — RC – Current Day Operations; Retire R1; Convert R1.1 into a Reference; Modify R13 part 2
   - TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control; Modify R2

   Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

   ☐ I agree with the proposed conforming changes

   ☒ I do not agree with the following conforming changes:

   Comments:

   IRO-007-1 R1 contains the requirement that the RC - … perform Real-Time Monitoring of system operating parameters … Given the propensity of industry participants to re-interpret meanings to their own interpretation, we strongly suggest the term CONTINUOUS be added to the requirement so R1 would read - … perform CONTINUOUS Real-Time Monitoring of system operating parameters …

   We believe there should be a minimum set of information required to be monitored by the Reliability Coordinator and that minimum set should be specified in the standards. This version, V7, of these IRO standards would remove all specification of any parameters to be monitored by the RC and place a list of some information in a Technical Reference. In addition, it is our understanding that Technical References and information contained in those References are not mandatory on the industry. The reason given for not including the list in the standard is "The list of parameters to monitor (IRO-005-2 R1.1 through R1.10) does not identify all parameters to monitor and can be misleading." The wording in IRO-005-2 R1 contains the phrase INCLUDING BUT NOT LIMITED TO THE FOLLOWING. A person must have some objective in mind other than conforming to the standard if he claims to not understand the meaning of, or can be mislead by, the phrase INCLUDING BUT NOT LIMITED TO THE FOLLOWING.

Therefore, we suggest deleting the Technical Reference and adding the following list and common English usage phrases back into the standards at the end of IRO-007-1 R1:

THOSE SYSTEM OPERATING PARAMETERS INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:

R1.1 Current status of Bulk Electric System elements (transmission or generation including critical auxiliaries such as Automatic Voltage Regulators and Special Protection Systems) and system loading.

R1.2 Current pre-contingency element conditions (voltage, thermal, or stability), including any applicable mitigation plans to alleviate SOL or IROL violations, including the plan's viability and scope.

R1.3 Current post-contingency element conditions (voltage, thermal, or stability), including any applicable mitigation plans to alleviate SOL or IROL violations, including the plan's viability and scope.

R1.4 System real and reactive reserves (actual versus required).

R1.5 Capacity and energy adequacy conditions.

R1.6 Current ACE for all its Balancing Authorities.

R1.7 Current local or Transmission Loading Relief procedures in effect.

R1.8 Planned generation dispatches.

R1.9 Planned transmission or generation outages.

R1.10 Contingency events.

10. The Drafting Team is recommending that when IRO-008-1 is approved, conforming changes be made to the following standard:

    - IRO-004-1 — RC – Operations Planning; Retire R1 and R2

Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

☒ I agree with the proposed conforming changes

☐ I do not agree with the following conforming changes:

Comments:

11. The Drafting Team is recommending that when IRO-009-1 is approved, conforming changes be made to the following standards:

    - EOP-001-0 — Emergency Operations Planning; Retire R2
    - IRO-004-1 — RC – Operations Planning; Retire R3 and R6
    - IRO-005-2 — RC – Current Day Operations; Retire R3, R5, R9; Delete R13 part 1; Modify R14; Retire R16, R17

    Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

    ☐ I agree with the proposed conforming changes

    ☒ I do not agree with the following conforming changes:

    Comments:

    IRO-009-1 R1 requires the RC to develop one or more Operating Processes, Procedures, or Plans that identify actions it shall take or actions it shall direct others to take to prevent exceeding those IROLs. IRO-004-1 R3 (to be deleted) requires the RC to develop action plans - IN CONJUNCTION WITH ITS TRANSMISSION OPERATORS AND BALANCING AUTHORITIES - (IRO-004-1 R3: Each Reliability Coordinator shall, in conjunction with its Transmission Operators and Balancing Authorities, develop action plans that may be required, including reconfiguration of the transmission system, re-dispatching of generation, reduction or curtailment of Interchange Transactions, or reducing load to return transmission loading to within acceptable SOLs or IROLs.)

    IRO-005-2 R16 (to be retired) requires the RC to discuss options to mitigate IROLs which also is not include in these revised draft standards.

    The reasoning given in the Implementation Plan for not requiring the RC to develop - in conjunction - the Operating Process, Procedures or Plans with TOPs and BAs is that - under some conditions the Reliability Coordinator may not have time to 'coordinate' the development of these plans with all of its Transmission Operators and Balancing Authorities -. We suggest the RC be required to coordinate the development of all Operating Process, Procedures or Plans with TOPs and BAs. Only in the rarest of instances when a sudden system change requires the RC to develop a new Operating Process, Procedure or Plan in real-time may RCs be exempt from developing these Operating Process, Procedures or Plans in conjunction with TOPs and BAs.

In addition, there are several requirements on TOPs and BAs (for example see TOP-002-2, TOP-004-1 R1, TOP-008-1 R1 and R2) for them to plan and operate to meet all IROLs. The TOPs and BAs must be informed of the IROLs in order to plan and operate around them.

RCs should continue to develop processes, procedures or plans in conjunction with TOPs and BAs as required in the existing IRO-004 R3, and discuss options to mitigate IROLs as required in IRO-005-2 R16. The requirement to develop in - conjunction with - should be put into IRO-009-1 R1.

Therefore we suggest IRO-009-1 R1 be changed from - ... PLANS THAT .. - to - ... PLANS DEVELOPED IN CONJUCTION WITH TRANSMISSION OPERATORS AND BALANCING AUTHORITIES THAT ... - .

IRO-009-1 R2 requires the RC to develop one or more Operating Processes, Procedures, or Plans that identify actions it shall take or actions it shall direct others to take to mitigate the magnitude and duration of exceeding all IROLs. The discussion above for IRO-009-1 R1 applies here. Therefore we suggest IRO-009-1 R2 be changed from - ... PLANS THAT .. - to - ... PLANS DEVELOPED IN CONJUCTION WITH TRANSMISSION OPERATORS AND BALANCING AUTHORITIES THAT ... - .

IRO-005-2 R5 (to be deleted) requires the RC to identify the cause of any potential or actual IROL violations. That requirement is not in these new IROs. We suggest that requirement be added back in to IRO-009-1 R3 (addressing an assessment of actual or expected system conditions) by changing - .. shall implement one or more .. - to - .. shall IDENTIFY THE CAUSE OF ANY POTENTIAL OR ACTUAL IROL VIOLATIONS and shall implement one or more ...

RO-005-2 R5 (to be deleted) requires the RC to identify the cause of any potential or actual IROL violations. That requirement is not in these new IROs. We suggest that requirement be added back in to IRO-009-1 R4 (addressing actual system conditions) by changing - .. shall, without delay, act or direct others .. - to - .. shall, without delay, IDENTIFY THE CAUSE OF EXCEEDING AN IROL, AND SHALL act or direct others ...

12. The drafting team is recommending that when IRO-010-1 is approved, conforming changes be made to the following standards:

    - IRO-002-1 — RC – Facilities; Retire R2
    - IRO-004-1 — RC – Operations Planning; Retire R4, R5
    - IRO-005-2 — RC – Current Day Operations; Retire R2
    - TOP-003-0 — Planned Outage Coordination; Modify R1.2
    - TOP-005-1 — Operational Reliability Information; Retire R1, R1.1; Convert Attachment A to a Reference
    - TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control; Modify R4

    Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

    ☐ I agree with the proposed conforming changes

    ☒ I do not agree with the following conforming changes:

    Comments:

    IRO-010-1 R3 contains the requirement that the RC provide data and information to other RCs. However, IRO-015-1 R3 already contains that requirement: IRO-015-1 R3. The Reliability Coordinator shall provide reliability-related information as requested by other Reliability Coordinators.

    Therefore either the Reliability Coordinator should be deleted from the list of entities specified in IRO-010-1 R3, or, IRO-015 -1 R3 should be deleted from that standard.

13. If you are aware of any conflicts between the proposed standard and any regulatory function, rule order, tariff, rate schedule, legislative requirement or agreement please identify the conflict here. Similarly, if you believe that any requirement in this set of standards has an unnecessary adverse impact on energy markets, please identify the requirement and its adverse impact here.

    ☒ No known conflicts or unnecessary adverse impacts

    ☐ Known conflict:

    Unnecessary adverse impact on markets:

14. The drafting team is recommending that these standards be balloted with **four separate ballots**, according to the following table. There would be a single ballot for

IRO-007-1 that would include approval of IRO-007-1 and approval of the retirement of IRO-002-1 R6, and approval of retirement of IRO-003-2 R1 and R2, etc.

Ballot for:	Includes Associated Changes to Already Approved Standards:
IRO-007	IRO-002-1 — RC – Facilities - Retire R6 IRO-003-2 — RC – Wide Area View - Retire R1 and R2 IRO-005-2 — RC – Current Day Operations - Retire R1; Convert R1.1 into a Reference; Modify R13 part 2 TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control - Modify R2
IRO-008	IRO-004-1 — RC – Operations Planning - Retire R1 and R2
IRO-009	EOP-001-0 — Emergency Operations Planning - Retire R2
	IRO-004-1 — RC – Operations Planning - Retire R3 and R6
	IRO-005-2 — RC – Current Day Operations Retire R3, R5, R9; Delete R13 part 1; Modify R14; Retire R16, R17
IRO-010	IRO-002-1 — RC – Facilities - Retire R2
	IRO-004-1 — RC – Operations Planning - Retire R4, R5
	IRO-005-2 — RC – Current Day Operations - Retire R2
	TOP-003-0 — Planned Outage Coordination Modify R1.2
	TOP-005-1 — Operational Reliability Information - Retire R1, R1.1; Convert Attachment A to a Reference
	TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control - Modify R4

☒ I agree with balloting these standards using four separate ballots

☐ I do not agree balloting these standards using four separate ballots:

Comments:

15. If you have any other comments on this set of standards or its implementation plan that you have not already submitted above, please provide them here.

☐ No additional comments

Comments:

The industry has determined that NERC reliability standards need to be more definitive as to which entities the standards are Applicable. Therefore, Entergy strongly suggests that all Applicability assignments in ALL standards and requirements be changed to be very specific. Therefore, we suggest the Applicability of each standard be changed to - ALL REGISTERED xxx, NO ADDITIONAL CONDITIONS NOR LIMITATIONS WILL BE ADDED TO THE APPLICABILITY OF THIS STANDARD, where xxx is the functional entity to whom the standard applies. Therefore, the Applicability of IRO-007-1 should not be Reliability Coordinator but should be changed to - ALL REGISTERED RELIABILITY COORDINATORS, NO ADDITIONAL CONDITIONS NOR LIMITATIONS WILL BE ADDED TO THE APPLICABILITY OF THIS STANDARD. The Applicability of all other standards should be configured in a similar manner for all entities to whom that particular standard applies.

Version 6 of IRO-009 contained the requirement:

R1.4. The reliability coordinator shall document each instance of exceeding an IROL and shall document and complete an IROL violation report for each instance of exceeding an IROL for time greater than that limit's Tv. The reliability coordinator shall file each IROL violation report with its compliance monitor within five business days of the initiation of the event.

This requirement that a RC must document exceeding an IROL and report each IROL violation has not been included in the current draft, V7, of any of these drafts IRO-007 - 010 and does not seem to be required in any other NERC standards. We suggest it be included in IRO-009-1 as R5 along with appropriate Measures, Compliance requirements, VSL, VRF, and MTH.

Please use this form to submit comments on the proposed IROL standards. Comments must be submitted by **February 15, 2007**. You may submit the completed form by e-mail to sarcomm@nerc.com with the acronym "IROL" in the subject line. If you have questions please contact Maureen Long at maureen.long@nerc.net or by telephone at 609-452-8060.

Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:		
Organization:		
Telephone:		
E-mail:		
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT** ☐ **FRCC** ☐ **MRO** ☐ **NPCC** ☐ **RFC** ☒ **SERC** ☐ **SPP** ☐ **WECC** ☐ **NA – Not Applicable**	☒	1 — Transmission Owners
	☐	2 — RTOs and ISOs
	☐	3 — Load-serving Entities
	☐	4 — Transmission-dependent Utilities
	☐	5 — Electric Generators
	☐	6 — Electricity Brokers, Aggregators, and Marketers
	☐	7 — Large Electricity End Users
	☐	8 — Small Electricity End Users
	☐	9 — Federal, State, Provincial Regulatory or other Government Entities
	☐	10 - Regional Reliability Organizations; Regional Entities

Group Comments (Complete this page if comments are from a group.)

Group Name: Tennessees Valley Authority

Lead Contact: **Stuart Goza**

Contact Organization: **Transmission System Services**

Contact Segment: **1**

Contact Telephone: **423-751-4191**

Contact E-mail: **slgoza@tva.gov**

Additional Member Name	Additional Member Organization	Region*	Segment*
Stuart Goza	**TVA**	**SERC**	1
Sue mangum-Goins	**TVA**	**SERC**	1
Mark Creech	**TVA**	**SERC**	1
Dean Robinson	**TVA**	**SERC**	1

*If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

Background Information:

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IRO-012 — Procedures, Processes or Plans for Preventing and Mitigating IROLs
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A new version of the Reliability Standards Development Procedure was approved by the NERC Board of Trustees on November 1, 2006. The drafting team made the following changes to the standards to bring them into conformance with the revised manual or other changes needed to conform to the ERO Rules of Procedure:

1. **Modified the format of the "Proposed Effective Dates"**
   The drafting team modified the proposed effective dates to reflect that the standards cannot become effective until approved by applicable regulatory authorities. The drafting team estimated that it will take approximately three months following Board of Trustee adoption, to obtain regulatory approval from FERC and Canadian authorities.

2. **Added Violation Risk Factors to each requirement**
   Violation risk factors identify the potential impact to reliability when the associated requirement has been violated. The following categories of violation risk factors were approved with the latest version of the Reliability Standards Development Procedure:

   A High Risk Factor requirement:
   (a) is one that, if violated, could directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures, or could place the bulk power system at an unacceptable risk of instability, separation, or cascading failures; or

   (b) is a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures, or could place the bulk power system at an unacceptable risk of instability, separation, or cascading failures, or could hinder restoration to a normal condition.

   A Medium Risk Factor requirement
   (a) is a requirement that, if violated, could the ability to effectively monitor and control the bulk power system, but is unlikely to lead to bulk power system instability, separation, or cascading failures; or

(b) is a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly affect the electrical state or capability of the bulk power system, or the ability to effectively monitor, control, or restore the bulk power system, but is unlikely, under emergency, abnormal, or restoration conditions anticipated by the preparations, to lead to bulk power system instability, separation, or cascading failures, nor to hinder restoration to a normal condition.

A Lower Risk Factor requirement is administrative in nature and
(a) is a requirement that, if violated, would not be expected to affect the electrical state or capability of the bulk power system, or the ability to effectively monitor and control the bulk power system; or

(b) is a requirement in a planning time frame that, if violated, would not, under the emergency, abnormal, or restorative conditions anticipated by the preparations, be expected to affect the electrical state or capability of the bulk power system, or the ability to effectively monitor, control, or restore the bulk power system.

The drafting team added violation risk factors for each requirement. (For this set of BAL standards, the violation risk factors drafting team provided the violation risk factors already identified by stakeholders. If stakeholders indicate that some of the risk factors posted November 2 through December 1, 2006 need modification, the Balance Resources and Demand Standards Drafting Team will make conforming changes to the risk factors in these standards.)

3. Added a Mitigation Time Horizon to each requirement
The ERO Rules of Procedure include the use of Mitigation Time Horizons as one element used to determine the size of sanctions. The drafting team used the following guidelines in developing mitigation time horizons for each requirement:

- ***Long-term Planning:*** a planning horizon of one year or longer.
- ***Operations Planning****:* operating and resource plans from day-ahead up to and including seasonal.
- ***Same-day Operations****:* routine actions required within the timeframe of a day, but not real-time.
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- ***Operations Assessment***: follow-up evaluations and reporting of real time operations.

4. Changed the identification of the Compliance Monitor
The drafting team modified all references to the Regional Reliability Organization as the Compliance Monitor, and replaced these references with, “Electric Reliability Organization.”

5. Deleted Levels of Non-compliance – Added Violation Severity Levels
The drafting team deleted “levels of non-compliance” and added “violation severity levels” to comply with the revised Reliability Standards Development Procedure. Compliance personnel assisted the drafting team in using the following criteria from the manual to establish violation severity levels:

- ***Lower:*** mostly compliant with minor exceptions — The responsible entity is mostly compliant with and meets the intent of the requirement but is deficient with respect to one or more minor details. Equivalent score: 95% to 99% compliant.
- ***Moderate:*** mostly compliant with significant exceptions — The responsible entity is mostly compliant with and meets the intent of the requirement but is deficient with respect to one or more significant elements. Equivalent score: 85% to 94% compliant.
- ***High:*** marginal performance or results — The responsible entity has only partially achieved the reliability objective of the requirement and is missing one or more significant elements. Equivalent score: 70% to 84% compliant.
- ***Severe:*** poor performance or results — The responsible entity has failed to meet the reliability objective of the requirement. Equivalent score: less than 70% compliant.

6. **Added 'Associated Documents' where applicable**
   The drafting team added a section "F" to the standard called, "Associated Documents" to list items such as forms, related standards, reports, etc.

On the following pages, the drafting team will ask for your feedback on the appropriateness of the changes it made to this set of standards. Because the changes made to the set of standards included a great deal of consolidation, a red line version will not be posted as it is not distinguish the content changes from the format changes when comparing the two versions.

You do not have to answer all questions.

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

1. The drafting team consolidated the requirements for *IRO-010— Reliability Coordinator Data Specification and Collection* and *IRO-011— Providing Data to the Reliability Coordinator* into a single standard to eliminate the cross-reference between the two standards. Do you agree with consolidating the requirements into a single standard? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

2. The drafting team consolidated the requirements for *IRO-009 — Reliability Coordinator Actions to Operate within IROLs* and *IRO-012— Procedures, Processes or Plans for Preventing and Mitigating IROLs* into a single standard to eliminate the cross-reference between the two standards. Do you agree with consolidating the requirements into a single standard? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

3. The drafting team recommends moving the requirements from *IRO-013 —Reliability Coordinator Directives Relative to IROLs* into the project that will address communication protocols so that all requirements related to directives will be comprehensively addressed under the single *Project 2007-02 – Operating Personnel Communication Protocols*. Do you agree with moving the requirements from IRO-013 into Project 2007-02? If not, please explain.

   ☐ Yes

   ☒ No

   Comments: Since IRO-013 is not approved, thenIRO-004-1 R7 should not be deleted until replaced. The redlined IRO-004-2 shows the entire standard to be retired.

4. The drafting team is proposing that all standards and conforming changes become effective the first day of the first quarter, three months after regulatory approvals. Do you agree that the proposed effective date will give entities time to become fully compliant? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

5. The drafting team added a Violation Risk Factor for each requirement.

   Do you agree with the Violation Risk Factor for each requirement in the proposed standards? If not, please identify any requirement with a violation risk factor you feel is incorrect.

   ☒ I agree with the proposed Violation Risk Factors

   ☐ I do not agree with the following Violation Risk Factors:

   Comments:

6. The drafting team added a Mitigation Time Horizon for each requirement.

   Do you agree with the Mitigation Time Horizon for each requirement in the proposed standards? If not, please identify any requirement with a time horizon you feel is incorrect.

   ☒ I agree with the proposed Mitigation Time Horizons

   ☐ I do not agree with the following Mitigation Time Horizons:

   Comments:

7. The latest version of the Reliability Standards Development Procedure requires that each standard include "violation severity levels" rather than "levels of non-compliance." "Violation severity levels" identify how badly an entity violated each requirement, and are not linked to the reliability-related impact of violating a requirement. (The reliability-related impact of violating a requirement is now identified in the "Violation Risk Factor" appended to each requirement.) Note that these severity levels are "guidelines" and variations from the above categories are acceptable.

   Do you agree with the violation severity levels for each of the proposed standards? If you disagree with any of the violation severity levels for the proposed standards, please identify the standard and requirement you feel has an incorrect violation severity level.

   ☒ I agree with the violation severity levels

   ☐ I do not agree with the following violation severity levels:

   Comments:

8. The implementation plan modifies several requirements in already approved standards because compliance with those requirements does not seem practical. Every facility in the Transmission Operator's area has a System Operating Limit, but the Reliability Coordinator isn't required to see all these limits and may not have information to determine the cause of instances of exceeding these limits — yet there are requirements that hold the Reliability Coordinator accountable for identifying the cause of any actual or potential SOL. The drafting team reviewed these requirements and made proposed modifications to limit the Reliability Coordinator's accountability for real-time actions relative to SOLs. Do you agree with the drafting team's approach?

   ☐ I agree the drafting team's approach

   ☒ I do not agree with the drafting team's approach

Comments: FAC-011-1 R1 (which is effective 10/01/2007) requires the Reliability Coordinator to have a documented methodology for use in developing SOLs within its Reliability Coordinator Area. TOP-007-0 R4 requires the Reliability Coordinator to evaluate actions taken to resolve SOL violation, and if the actions taken are not appropriate or sufficient, direct actions required to return the system to within limits. Existing IRO-002-1 R5 and R8 (which still exist in the proposed IRO-002-2 as R4 and R6) require the Reliability Coordinator to have detailed real-time monitoring to ensure that potential or actual SOL violations are identified. These requirements require the Reliability Coordinator to be aware of all SOLs. We agree with the concept to clarify the accountabilities between the Transmission Operator and the Reliability Coordinator for real-time actions relative to SOLs, but it is inaccurate to state that the Reliability Coordinator is not required to see all SOLs. The Transmission Operator should be pro-active in mitigating SOL violations (real-time and calculated first contingency), in coordination with the Reliability Coordinator. The Reliability Coordinator must be aware of all SOL violations in order to direct action when needed to do so.

9. The drafting team is recommending that when IRO-007-1 is approved, conforming changes be made to the following standards:

   - IRO-002-1 — RC – Facilities; Retire R6
   - IRO-003-2 — RC – Wide Area View; Retire R1 and R2
   - IRO-005-2 — RC – Current Day Operations; Retire R1; Convert R1.1 into a Reference; Modify R13 part 2
   - TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control; Modify R2

   Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

   ☒ I agree with the proposed conforming changes

   ☐ I do not agree with the following conforming changes:

   Comments: See comment in # 8,

10. The Drafting Team is recommending that when IRO-008-1 is approved, conforming changes be made to the following standard:

    - IRO-004-1 — RC – Operations Planning; Retire R1 and R2

    Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

    ☐ I agree with the proposed conforming changes

    ☒ I do not agree with the following conforming changes:

    Comments: IRO-004-1 R2 should be included in the Technical Reference. The Technical Reference document should be provide (for information purposes) as part of the document package for this review of proposed requirement changes.

11. The Drafting Team is recommending that when IRO-009-1 is approved, conforming changes be made to the following standards:

    - EOP-001-0 — Emergency Operations Planning; Retire R2

- IRO-004-1 — RC – Operations Planning; Retire R3 and R6
- IRO-005-2 — RC – Current Day Operations; Retire R3, R5, R9; Delete R13 part 1; Modify R14; Retire R16, R17

Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

☐ I agree with the proposed conforming changes

☒ I do not agree with the following conforming changes:

Comments: The modification of IRO-005-2 R14 to retire part 1, as stated on page 14 (in the Notes section) is not reflected in the redlined version of IRO-005-3. This change should be made in the redlined version.

12. The drafting team is recommending that when IRO-010-1 is approved, conforming changes be made to the following standards:

- IRO-002-1 — RC – Facilities; Retire R2
- IRO-004-1 — RC – Operations Planning; Retire R4, R5
- IRO-005-2 — RC – Current Day Operations; Retire R2
- TOP-003-0 — Planned Outage Coordination; Modify R1.2
- TOP-005-1 — Operational Reliability Information; Retire R1, R1.1; Convert Attachment A to a Reference
- TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control; Modify R4

Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

☐ I agree with the proposed conforming changes

☒ I do not agree with the following conforming changes:

Comments: Agree to retire IRO-005-2 R2, however redlined version of IRO-005-3 does not show deletion of the entire R2 (which become R1 in IRO-005-3.)

13. If you are aware of any conflicts between the proposed standard and any regulatory function, rule order, tariff, rate schedule, legislative requirement or agreement please identify the conflict here. Similarly, if you believe that any requirement in this set of standards has an unnecessary adverse impact on energy markets, please identify the requirement and its adverse impact here.

☒ No known conflicts or unnecessary adverse impacts

☐ Known conflict:

Unnecessary adverse impact on markets:

14. The drafting team is recommending that these standards be balloted with **four separate ballots**, according to the following table. There would be a single ballot for IRO-007-1 that would include approval of IRO-007-1 and approval of the retirement of IRO-002-1 R6, and approval of retirement of IRO-003-2 R1 and R2, etc.

Ballot for:	Includes Associated Changes to Already Approved Standards:
IRO-007	IRO-002-1 — RC – Facilities - Retire R6 IRO-003-2 — RC – Wide Area View - Retire R1 and R2 IRO-005-2 — RC – Current Day Operations - Retire R1; Convert R1.1 into a Reference; Modify R13 part 2 TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control - Modify R2
IRO-008	IRO-004-1 — RC – Operations Planning - Retire R1 and R2
IRO-009	EOP-001-0 — Emergency Operations Planning - Retire R2
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IRO-010	IRO-002-1 — RC – Facilities - Retire R2
	IRO-004-1 — RC – Operations Planning - Retire R4, R5
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	TOP-003-0 — Planned Outage Coordination Modify R1.2
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	TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control - Modify R4

☒ I agree with balloting these standards using four separate ballots

☐ I do not agree balloting these standards using four separate ballots:

Comments:

15. If you have any other comments on this set of standards or its implementation plan that you have not already submitted above, please provide them here.

☒ No additional comments

Comments:

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Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	Kathleen Goodman	
Organization:	ISO New England	
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E-mail:	kgoodman@iso-ne.com	
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT** ☐ **FRCC** ☐ **MRO** ☒ **NPCC** ☐ **RFC** ☐ **SERC** ☐ **SPP** ☐ **WECC** ☐ **NA – Not Applicable**	☐	1 — Transmission Owners
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Lead Contact:

Contact Organization:

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The drafting team deleted “levels of non-compliance” and added “violation severity levels” to comply with the revised Reliability Standards Development Procedure. Compliance personnel assisted the drafting team in using the following criteria from the manual to establish violation severity levels:

- ***Lower:*** mostly compliant with minor exceptions — The responsible entity is mostly compliant with and meets the intent of the requirement but is deficient with respect to one or more minor details. Equivalent score: 95% to 99% compliant.
- ***Moderate:*** mostly compliant with significant exceptions — The responsible entity is mostly compliant with and meets the intent of the requirement but is deficient with respect to one or more significant elements. Equivalent score: 85% to 94% compliant.
- ***High:*** marginal performance or results — The responsible entity has only partially achieved the reliability objective of the requirement and is missing one or more significant elements. Equivalent score: 70% to 84% compliant.
- ***Severe:*** poor performance or results — The responsible entity has failed to meet the reliability objective of the requirement. Equivalent score: less than 70% compliant.

6. **Added 'Associated Documents' where applicable**
   The drafting team added a section "F" to the standard called, "Associated Documents" to list items such as forms, related standards, reports, etc.

On the following pages, the drafting team will ask for your feedback on the appropriateness of the changes it made to this set of standards. Because the changes made to the set of standards included a great deal of consolidation, a red line version will not be posted as it is not distinguish the content changes from the format changes when comparing the two versions.

You do not have to answer all questions.

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

1. The drafting team consolidated the requirements for *IRO-010— Reliability Coordinator Data Specification and Collection* and *IRO-011— Providing Data to the Reliability Coordinator* into a single standard to eliminate the cross-reference between the two standards. Do you agree with consolidating the requirements into a single standard? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

2. The drafting team consolidated the requirements for *IRO-009 — Reliability Coordinator Actions to Operate within IROLs* and *IRO-012— Procedures, Processes or Plans for Preventing and Mitigating IROLs* into a single standard to eliminate the cross-reference between the two standards. Do you agree with consolidating the requirements into a single standard? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

3. The drafting team recommends moving the requirements from *IRO-013 —Reliability Coordinator Directives Relative to IROLs* into the project that will address communication protocols so that all requirements related to directives will be comprehensively addressed under the single *Project 2007-02 – Operating Personnel Communication Protocols*. Do you agree with moving the requirements from IRO-013 into Project 2007-02? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

4. The drafting team is proposing that all standards and conforming changes become effective the first day of the first quarter, three months after regulatory approvals. Do you agree that the proposed effective date will give entities time to become fully compliant? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

5. The drafting team added a Violation Risk Factor for each requirement.

   Do you agree with the Violation Risk Factor for each requirement in the proposed standards? If not, please identify any requirement with a violation risk factor you feel is incorrect.

   ☐ I agree with the proposed Violation Risk Factors

   ☒ I do not agree with the following Violation Risk Factors:

   Comments:

   ISO New England agree with the VRFs for IRO-008, IRO-009 and -010.

   ISO New England suggests that for IRO-007, the VRF for R1 should be HIGH. Real-time monitoring of system conditions to determine if system parameters are within IROLs is critical to ensuring interconnected system reliability. Lack of or insufficient monitoring would expose a system to potential unreliable operation.

6. The drafting team added a Mitigation Time Horizon for each requirement.

   Do you agree with the Mitigation Time Horizon for each requirement in the proposed standards? If not, please identify any requirement with a time horizon you feel is incorrect.

   ☐ I agree with the proposed Mitigation Time Horizons

   ☒ I do not agree with the following Mitigation Time Horizons:

   Comments:

   ISO New England agrees with the mitigation time horizons for IRO-007, -008 and -010.

   For IRO-009, however, R1 and R2 should also be assigned a Same Day Operation time horizon since "identified in advance of real time" may include day at hand assessments.

7. The latest version of the Reliability Standards Development Procedure requires that each standard include “violation severity levels” rather than “levels of non-compliance.” “Violation severity levels” identify how badly an entity violated each requirement, and are not linked to the reliability-related impact of violating a requirement. (The reliability-related impact of violating a requirement is now identified in the “Violation Risk Factor” appended to each requirement.) Note that these severity levels are “guidelines” and variations from the above categories are acceptable.

   Do you agree with the violation severity levels for each of the proposed standards? If you disagree with any of the violation severity levels for the proposed standards, please identify the standard and requirement you feel has an incorrect violation severity level.

   ☐ I agree with the violation severity levels

   ☒ I do not agree with the following violation severity levels:

   Comments:

   ISO New England agrees with the violation severity levels for IRO-007 and -008.

For IRO-009, the violation level is subject to interpretation. For example, "Between 95% to 99% of the IROLs identified in advance of real-time have Operating Processes, Procedures, or Plans that identify actions to prevent or mitigate instances of exceeding those IROLs." Does the 95% to 99% range apply to the number of IROLs identified, or to the total time that any IROLs are identified? In other words, is it the percentage of time that for all IROLs identified, there are Operating Processes, Procedures, or Plans that identify actions to prevent or mitigate instances of exceeding any IROLs?

To put the violation severity level in a more proper context, the SDT may want to consider putting the range in a "negative sense", i.e., the percentage of time that the requirements are not met, whichever the base of the above interpreted measurements turn out to be.

Better still, we suggest the SDT consider adopting violation severity levels based on the number of times that R1 or R2 is not met, i.e. the number of times for any IROLs that are identified in advance of real-time, there lacks operating processes, procedures, or plans that identify actions to prevent or mitigatge instances of exceeding these IROLs. This way, assessment of violations can be made much more easily. Further, the severity level will be independent of the total number of IROLs identified, which can eliminate the skewed assessment due to a small of number of IROLs identified in an RC area. For example, under the as written % assessment structure, an RC could be found 0% compliant (and hence assessed a severe violation level) for just one incident of not meeting R1 or R2 if it had only one IROL identified.

For IRO-010, we agree with the measures as they are based on numbers, not a combination of number and duration. However, the same comment on "negative context" as provided for IRO-009 also apply here. In other words, we suggest turning the % meeting requirements to % failing to meet requirements (hence violation).

8. The implementation plan modifies several requirements in already approved standards because compliance with those requirements does not seem practical. Every facility in the Transmission Operator's area has a System Operating Limit, but the Reliability Coordinator isn't required to see all these limits and may not have information to determine the cause of instances of exceeding these limits — yet there are requirements that hold the Reliability Coordinator accountable for identifying the cause of any actual or potential SOL. The drafting team reviewed these requirements and made proposed modifications to limit the Reliability Coordinator's accountability for real-time actions relative to SOLs. Do you agree with the drafting team's approach?

   ☒ I agree the drafting team's approach

   ☒ I do not agree with the drafting team's approach

   Comments: There are a number of requirements in the posted IRO-005-3 that still hold the RC responsible for being aware of and directing actions when SOL is being approached or violated. The drafting team's proposed approach would require that corresponding changes be made to IRO-005-3.

9. The drafting team is recommending that when IRO-007-1 is approved, conforming changes be made to the following standards:

   - IRO-002-1 — RC – Facilities; Retire R6
   - IRO-003-2 — RC – Wide Area View; Retire R1 and R2

- IRO-005-2 — RC – Current Day Operations; Retire R1; Convert R1.1 into a Reference; Modify R13 part 2
- TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control; Modify R2

Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

☒ I agree with the proposed conforming changes

☐ I do not agree with the following conforming changes:

Comments:

10. The Drafting Team is recommending that when IRO-008-1 is approved, conforming changes be made to the following standard:

- IRO-004-1 — RC – Operations Planning; Retire R1 and R2

Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

☒ I agree with the proposed conforming changes

☐ I do not agree with the following conforming changes:

Comments:

11. The Drafting Team is recommending that when IRO-009-1 is approved, conforming changes be made to the following standards:

- EOP-001-0 — Emergency Operations Planning; Retire R2
- IRO-004-1 — RC – Operations Planning; Retire R3 and R6
- IRO-005-2 — RC – Current Day Operations; Retire R3, R5, R9; Delete R13 part 1; Modify R14; Retire R16, R17

Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

☐ I agree with the proposed conforming changes

☒ I do not agree with the following conforming changes:

Comments:

EOP-001 R2 requires that a TOP have an emergency load reduction plan for all identified IROLs. The intent of this requirement is for the TOP to be ready to implement load reduction as directed by the RC to mitigate IROL violation when other control actions have been or are in parallel being implemented. Unless this requirement is covered elsewhere, it needs to be retained to assure TOP's readiness, which is in a different context than what the requirements in IRO-009 implies. The RC does not own or operate any load reduction scheme. It must rely on the operators of these schemes - the TOP and DP, as directed by the TOP, to implement load reduction.

ISO New England agrees with retiring R6 of IRO-004-1, but suggest that a part of R3 in IRO-004-1 which requires that the RC develop action plans in conjunction with the TOPs, be reflected in this standard.

ISO New England believes the key requirment in R3 and R5 is for the RC to correct an IROL violation as soon as poosible and within 30 minutes. This needs to be retained somewhere, preferrably in this standard. Not having a time limit to correct IROL violation can result in an IROL being exceeded for an indefinite period of time, subjecting the system to prolonged risks of instability and potential cascade tripping. The 30 minutes also serves as the threshold that if an IROL violation cannot be corrected by adjusting generation and interchange, reconfiguration, reducing interruptible load, voltage reduction, etc. within that time frame, curtailment of firm load must also be implemented to correct the violation immediately.

ISO New England believes the concept of the RC approving outages needs to be retained somewhere in the standards, retiring R9 should be conditional on having this coordination/approval requirement covered by this (IRO-009) or another standard.

12. The drafting team is recommending that when IRO-010-1 is approved, conforming changes be made to the following standards:

    - IRO-002-1 — RC – Facilities; Retire R2
    - IRO-004-1 — RC – Operations Planning; Retire R4, R5
    - IRO-005-2 — RC – Current Day Operations; Retire R2
    - TOP-003-0 — Planned Outage Coordination; Modify R1.2
    - TOP-005-1 — Operational Reliability Information; Retire R1, R1.1; Convert Attachment A to a Reference
    - TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control; Modify R4

    Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

    ☐ I agree with the proposed conforming changes

    ☒ I do not agree with the following conforming changes:

    Comments:

    (i) We agree with retiring R2 of IRO-002-1.

    (ii) We do not agree with removing R1.2 from TOP-003-2. Prividing transmission outage information to the RC is essential for ensuring the RC is aware of system changes that may affect interconnected system reliability. There should not be any prejudgment as to which outage has an impact on SOL only.

    (iii) We agree with the proposed deletions/changes to IRO-005-2, TOP-005-1 and TOP-006-1.

13. If you are aware of any conflicts between the proposed standard and any regulatory function, rule order, tariff, rate schedule, legislative requirement or agreement please identify the conflict here. Similarly, if you believe that any requirement in this set of standards has an unnecessary adverse impact on energy markets, please identify the requirement and its adverse impact here.

    ☒ No known conflicts or unnecessary adverse impacts

    ☐ Known conflict:

Unnecessary adverse impact on markets:

14. The drafting team is recommending that these standards be balloted with **four separate ballots**, according to the following table. There would be a single ballot for IRO-007-1 that would include approval of IRO-007-1 and approval of the retirement of IRO-002-1 R6, and approval of retirement of IRO-003-2 R1 and R2, etc.

Ballot for:	Includes Associated Changes to Already Approved Standards:
IRO-007	IRO-002-1 — RC – Facilities - Retire R6 IRO-003-2 — RC – Wide Area View - Retire R1 and R2 IRO-005-2 — RC – Current Day Operations - Retire R1; Convert R1.1 into a Reference; Modify R13 part 2 TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control - Modify R2
IRO-008	IRO-004-1 — RC – Operations Planning - Retire R1 and R2
IRO-009	EOP-001-0 — Emergency Operations Planning - Retire R2
	IRO-004-1 — RC – Operations Planning - Retire R3 and R6
	IRO-005-2 — RC – Current Day Operations Retire R3, R5, R9; Delete R13 part 1; Modify R14; Retire R16, R17
IRO-010	IRO-002-1 — RC – Facilities - Retire R2
	IRO-004-1 — RC – Operations Planning - Retire R4, R5
	IRO-005-2 — RC – Current Day Operations - Retire R2
	TOP-003-0 — Planned Outage Coordination Modify R1.2
	TOP-005-1 — Operational Reliability Information - Retire R1, R1.1; Convert Attachment A to a Reference
	TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control - Modify R4

☒ I agree with balloting these standards using four separate ballots

☐ I do not agree balloting these standards using four separate ballots:

Comments:

15. If you have any other comments on this set of standards or its implementation plan that you have not already submitted above, please provide them here.

☐ No additional comments

Comments:

R2 of IRO-008 requires clarification or the definition of Real-Time Assessments needs to be revised to capture that an assessment needs to be done every thirty minutes and specific made as to how far into the future the assessments must cover.

R3 of IRO-008 requires sharing of results to prevent or mitigate exceeding an IROL. We feel that this should also require an RC to direct taking necessary actions to prepare for correcting the situation. We therefore suggest that "and direct" be inserted after "...the Reliability Coordinator shall share its results with" in R3. This may clarify the IRO-008 stardand but may introduce some redundancy with IRO-009 R3 and R4.

Two new terms are defined in IRO-009: Interconnection Reliability Operating Limit Event and Interconnection Reliability Operating Limit Event Duration. Neither are used in this standard; so what is the reason for having these terms defined?

In IRO-009, Violation Severity Levels, Section 2.3.2 establishes a high violation severity if an IROL was actually exceeded and there was a delay before taking action. The term "delay" is not defined. This leaves this term open for interpretation and will result in inconsistent enforcement. The standard needs to define what is meant by delay perhaps specifying a timeframe in the Requirments section R4. Also missing is the requirement to document, with a complete violation report, whenever an IROL violation has been exceeded beyond Tv.

In the previous draft standard IRO-009, there was a requirement (R1.4) for the RC to document IROL violation incidents. This requirement is missing in the new version. NPCC Participating members believe that this requirement should be stated in this standard.

We also have concern about these same standards appearing in NERC's Reliability Coordinator SAR project. Coordination of the comments is a major concern especially when the standards will be under revision here and also in that project concurrently.

Please use this form to submit comments on the proposed IROL standards. Comments must be submitted by **February 15, 2007**. You may submit the completed form by e-mail to sarcomm@nerc.com with the acronym "IROL" in the subject line. If you have questions please contact Maureen Long at maureen.long@nerc.net or by telephone at 609-452-8060.

Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:		
Organization:		
Telephone:		
E-mail:		
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT** ☐ **FRCC** ☐ **MRO** ☐ **NPCC** ☐ **RFC** ☐ **SERC** ☐ **SPP** ☐ **WECC** ☐ **NA – Not Applicable**	☐	1 — Transmission Owners
	☐	2 — RTOs and ISOs
	☐	3 — Load-serving Entities
	☐	4 — Transmission-dependent Utilities
	☐	5 — Electric Generators
	☐	6 — Electricity Brokers, Aggregators, and Marketers
	☐	7 — Large Electricity End Users
	☐	8 — Small Electricity End Users
	☐	9 — Federal, State, Provincial Regulatory or other Government Entities
	☐	10 - Regional Reliability Organizations; Regional Entities

Group Comments (Complete this page if comments are from a group.)

Group Name: Public Service Commission of South Carolina

Lead Contact: **Phil Riley**

Contact Organization: **Public Service Commission of South Carolina**

Contact Segment: **9**

Contact Telephone: **803-896-5154**

Contact E-mail: **philip.riley@psc.sc.gov**

Additional Member Name	Additional Member Organization	Region*	Segment*
Mignon L. Clyburn	Public Service Commission of SC	SERC	9
Elizabeth B. Fleming	Public Service Commission of SC	SERC	9
G. O'Neal Hamilton	Public Service Commission of SC	SERC	9
John E. Howard	Public Service Commission of SC	SERC	9
Randy Mitchell	Public Service Commission of SC	SERC	9
C. Robert Moseley	Public Service Commission of SC	SERC	9
David A. Wright	Public Service Commission of SC	SERC	9

*If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

Background Information:

The IROL standards were placed in a holding pattern for two years while waiting for the completion of the standards that require entities to document and use their methodology for developing SOLs and IROLs. FAC-010-1 — System Operating Limits Methodology for the Planning Horizon, FAC-011-1 — System Operating Limits Methodology for the Operations Horizon, and FAC-014-1 — Establish and Communicate System Operating Limits, were all adopted by the NERC Board of Trustees on November 1, 2006. While waiting for these standards to be approved by applicable regulatory authorities, the drafting team has been given the authority to move ahead in refining the set of IROL standards.

Changes to Set of Standards

When last posted, there were seven standards in this set of IROL standards:

IRO-007 — Monitoring the Wide Area
IRO-008 — Reliability Coordinator Analyses and Assessments
IRO-009 — Reliability Coordinator Actions to Operate Within IROLs
IRO-010 — Reliability Coordinator Data Specification and Collection
IRO-011 — Providing Data to the Reliability Coordinator
IRO-012 — Procedures, Processes or Plans for Preventing and Mitigating IROLs
IRO-013 — Reliability Coordinator Directives Relative to IROLs

Consolidation of Related Requirements

The revised set of standards posted for comment includes only IRO-007 through IRO-010. The drafting team is recommending the following changes to the original set of standards for the reasons stated below:

- Consolidate IRO-010 and IRO-011 into a single standard
- Consolidate IRO-009 and IRO-012 into a single standard
- Transfer IRO-013 to Project 2007-02 — Operating Personnel Communications Protocols

Many stakeholders have indicated that splitting requirements for related tasks across multiple standards leads to cross-referencing between standards that can be confusing — for this reason the drafting team is proposing that the related IROL standards be consolidated to eliminate cross-referencing.

During the drafting work done by the Missing Measures and Compliance Elements Standards Drafting Team, stakeholders indicated that duplication of requirements should be eliminated. In support of these comments, the drafting team recommends moving the requirements from *IRO-013 — Reliability Coordinator Directives Relative to IROLs* into the project that will address communication protocols so that all requirements related to directives will be comprehensively addressed without duplication under the single *Project 2007-02 — Operating Personnel Communication Protocols*.

Conforming Changes to Already Approved Standards

The drafting team reviewed already-approved standards that include requirements for the Reliability Coordinator relative to operating within SOLs or IROLs and is recommending conforming changes to those already-approved standards. The implementation plan provides the justification for each of these recommended changes.

- The drafting team is recommending retirement of most of the requirements assigned to the Reliability Coordinator for real-time operation within SOLs — they should be assigned to the Transmission Operator. Every facility in the Transmission Operator's area has a System Operating Limit, but the Reliability Coordinator isn't required to see all these limits and may not have information to determine the cause of instances of exceeding these limits.
- The drafting team is recommending that requirements that describe possible types of acceptable behavior be replaced with requirements that identify the required performance, as in the case of recommending that IRO-005-2 R3 be retired when IRO-009-1 becomes effective.
- In many cases the drafting team would have recommended additional changes to the requirements in already approved standards, but doing so would be outside the scope of the SAR assigned to this drafting team and the changes can be accomplished when the standards are updated as part of the *Reliability Standards Development Plan: 2007–2009.*

Conforming Changes to Bring Standards into Alignment with Reliability Standards Development Procedure V6 and ERO Rules of Procedure

A new version of the Reliability Standards Development Procedure was approved by the NERC Board of Trustees on November 1, 2006. The drafting team made the following changes to the standards to bring them into conformance with the revised manual or other changes needed to conform to the ERO Rules of Procedure:

1. **Modified the format of the "Proposed Effective Dates"**
   The drafting team modified the proposed effective dates to reflect that the standards cannot become effective until approved by applicable regulatory authorities. The drafting team estimated that it will take approximately three months following Board of Trustee adoption, to obtain regulatory approval from FERC and Canadian authorities.

2. **Added Violation Risk Factors to each requirement**
   Violation risk factors identify the potential impact to reliability when the associated requirement has been violated. The following categories of violation risk factors were approved with the latest version of the Reliability Standards Development Procedure:

   A High Risk Factor requirement:
   (a) is one that, if violated, could directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures, or could place the bulk power system at an unacceptable risk of instability, separation, or cascading failures; or

   (b) is a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures, or could place the bulk power system at an unacceptable risk of instability, separation, or cascading failures, or could hinder restoration to a normal condition.

   A Medium Risk Factor requirement
   (a) is a requirement that, if violated, could the ability to effectively monitor and control the bulk power system, but is unlikely to lead to bulk power system instability, separation, or cascading failures; or

(b) is a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly affect the electrical state or capability of the bulk power system, or the ability to effectively monitor, control, or restore the bulk power system, but is unlikely, under emergency, abnormal, or restoration conditions anticipated by the preparations, to lead to bulk power system instability, separation, or cascading failures, nor to hinder restoration to a normal condition.

A Lower Risk Factor requirement is administrative in nature and
(a) is a requirement that, if violated, would not be expected to affect the electrical state or capability of the bulk power system, or the ability to effectively monitor and control the bulk power system; or

(b) is a requirement in a planning time frame that, if violated, would not, under the emergency, abnormal, or restorative conditions anticipated by the preparations, be expected to affect the electrical state or capability of the bulk power system, or the ability to effectively monitor, control, or restore the bulk power system.

The drafting team added violation risk factors for each requirement. (For this set of BAL standards, the violation risk factors drafting team provided the violation risk factors already identified by stakeholders. If stakeholders indicate that some of the risk factors posted November 2 through December 1, 2006 need modification, the Balance Resources and Demand Standards Drafting Team will make conforming changes to the risk factors in these standards.)

3. Added a Mitigation Time Horizon to each requirement
The ERO Rules of Procedure include the use of Mitigation Time Horizons as one element used to determine the size of sanctions. The drafting team used the following guidelines in developing mitigation time horizons for each requirement:

- ***Long-term Planning:*** a planning horizon of one year or longer.
- ***Operations Planning****:* operating and resource plans from day-ahead up to and including seasonal.
- ***Same-day Operations****:* routine actions required within the timeframe of a day, but not real-time.
- ***Real-time Operations****:* actions required within one hour or less to preserve the reliability of the bulk electric system.
- ***Operations Assessment***: follow-up evaluations and reporting of real time operations.

4. Changed the identification of the Compliance Monitor
The drafting team modified all references to the Regional Reliability Organization as the Compliance Monitor, and replaced these references with, “Electric Reliability Organization.”

5. Deleted Levels of Non-compliance – Added Violation Severity Levels
The drafting team deleted “levels of non-compliance” and added “violation severity levels” to comply with the revised Reliability Standards Development Procedure. Compliance personnel assisted the drafting team in using the following criteria from the manual to establish violation severity levels:

- ***Lower:*** mostly compliant with minor exceptions — The responsible entity is mostly compliant with and meets the intent of the requirement but is deficient with respect to one or more minor details. Equivalent score: 95% to 99% compliant.
- ***Moderate:*** mostly compliant with significant exceptions — The responsible entity is mostly compliant with and meets the intent of the requirement but is deficient with respect to one or more significant elements. Equivalent score: 85% to 94% compliant.
- ***High:*** marginal performance or results — The responsible entity has only partially achieved the reliability objective of the requirement and is missing one or more significant elements. Equivalent score: 70% to 84% compliant.
- ***Severe:*** poor performance or results — The responsible entity has failed to meet the reliability objective of the requirement. Equivalent score: less than 70% compliant.

6. **Added 'Associated Documents' where applicable**
   The drafting team added a section "F" to the standard called, "Associated Documents" to list items such as forms, related standards, reports, etc.

On the following pages, the drafting team will ask for your feedback on the appropriateness of the changes it made to this set of standards. Because the changes made to the set of standards included a great deal of consolidation, a red line version will not be posted as it is not distinguish the content changes from the format changes when comparing the two versions.

You do not have to answer all questions.

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

1. The drafting team consolidated the requirements for *IRO-010— Reliability Coordinator Data Specification and Collection* and *IRO-011— Providing Data to the Reliability Coordinator* into a single standard to eliminate the cross-reference between the two standards. Do you agree with consolidating the requirements into a single standard? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

2. The drafting team consolidated the requirements for *IRO-009 — Reliability Coordinator Actions to Operate within IROLs* and *IRO-012— Procedures, Processes or Plans for Preventing and Mitigating IROLs* into a single standard to eliminate the cross-reference between the two standards. Do you agree with consolidating the requirements into a single standard? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

3. The drafting team recommends moving the requirements from *IRO-013 —Reliability Coordinator Directives Relative to IROLs* into the project that will address communication protocols so that all requirements related to directives will be comprehensively addressed under the single *Project 2007-02 – Operating Personnel Communication Protocols*. Do you agree with moving the requirements from IRO-013 into Project 2007-02? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

4. The drafting team is proposing that all standards and conforming changes become effective the first day of the first quarter, three months after regulatory approvals. Do you agree that the proposed effective date will give entities time to become fully compliant? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

5. The drafting team added a Violation Risk Factor for each requirement.

   Do you agree with the Violation Risk Factor for each requirement in the proposed standards? If not, please identify any requirement with a violation risk factor you feel is incorrect.

   ☒ I agree with the proposed Violation Risk Factors

   ☐ I do not agree with the following Violation Risk Factors:

   Comments:

6. The drafting team added a Mitigation Time Horizon for each requirement.

   Do you agree with the Mitigation Time Horizon for each requirement in the proposed standards? If not, please identify any requirement with a time horizon you feel is incorrect.

   ☒ I agree with the proposed Mitigation Time Horizons

   ☐ I do not agree with the following Mitigation Time Horizons:

   Comments:

7. The latest version of the Reliability Standards Development Procedure requires that each standard include "violation severity levels" rather than "levels of non-compliance." "Violation severity levels" identify how badly an entity violated each requirement, and are not linked to the reliability-related impact of violating a requirement. (The reliability-related impact of violating a requirement is now identified in the "Violation Risk Factor" appended to each requirement.) Note that these severity levels are "guidelines" and variations from the above categories are acceptable.

   Do you agree with the violation severity levels for each of the proposed standards? If you disagree with any of the violation severity levels for the proposed standards, please identify the standard and requirement you feel has an incorrect violation severity level.

   ☒ I agree with the violation severity levels

   ☐ I do not agree with the following violation severity levels:

   Comments:

8. The implementation plan modifies several requirements in already approved standards because compliance with those requirements does not seem practical. Every facility in the Transmission Operator's area has a System Operating Limit, but the Reliability Coordinator isn't required to see all these limits and may not have information to determine the cause of instances of exceeding these limits — yet there are requirements that hold the Reliability Coordinator accountable for identifying the cause of any actual or potential SOL. The drafting team reviewed these requirements and made proposed modifications to limit the Reliability Coordinator's accountability for real-time actions relative to SOLs. Do you agree with the drafting team's approach?

   ☒ I agree the drafting team's approach

   ☐ I do not agree with the drafting team's approach

Comments:

9. The drafting team is recommending that when IRO-007-1 is approved, conforming changes be made to the following standards:

   - IRO-002-1 — RC – Facilities; Retire R6
   - IRO-003-2 — RC – Wide Area View; Retire R1 and R2
   - IRO-005-2 — RC – Current Day Operations; Retire R1; Convert R1.1 into a Reference; Modify R13 part 2
   - TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control; Modify R2

   Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

   ☒ I agree with the proposed conforming changes

   ☐ I do not agree with the following conforming changes:

   Comments:

10. The Drafting Team is recommending that when IRO-008-1 is approved, conforming changes be made to the following standard:

    - IRO-004-1 — RC – Operations Planning; Retire R1 and R2

    Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

    ☒ I agree with the proposed conforming changes

    ☐ I do not agree with the following conforming changes:

    Comments:

11. The Drafting Team is recommending that when IRO-009-1 is approved, conforming changes be made to the following standards:

    - EOP-001-0 — Emergency Operations Planning; Retire R2
    - IRO-004-1 — RC – Operations Planning; Retire R3 and R6
    - IRO-005-2 — RC – Current Day Operations; Retire R3, R5, R9; Delete R13 part 1; Modify R14; Retire R16, R17

    Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

    ☒ I agree with the proposed conforming changes

    ☐ I do not agree with the following conforming changes:

    Comments:

12. The drafting team is recommending that when IRO-010-1 is approved, conforming changes be made to the following standards:

    - IRO-002-1 — RC – Facilities; Retire R2

- IRO-004-1 — RC – Operations Planning; Retire R4, R5
- IRO-005-2 — RC – Current Day Operations; Retire R2
- TOP-003-0 — Planned Outage Coordination; Modify R1.2
- TOP-005-1 — Operational Reliability Information; Retire R1, R1.1; Convert Attachment A to a Reference
- TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control; Modify R4

Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

☒ I agree with the proposed conforming changes

☐ I do not agree with the following conforming changes:

Comments:

13. If you are aware of any conflicts between the proposed standard and any regulatory function, rule order, tariff, rate schedule, legislative requirement or agreement please identify the conflict here. Similarly, if you believe that any requirement in this set of standards has an unnecessary adverse impact on energy markets, please identify the requirement and its adverse impact here.

☒ No known conflicts or unnecessary adverse impacts

☐ Known conflict:

Unnecessary adverse impact on markets:

14. The drafting team is recommending that these standards be balloted with **four separate ballots**, according to the following table. There would be a single ballot for IRO-007-1 that would include approval of IRO-007-1 and approval of the retirement of IRO-002-1 R6, and approval of retirement of IRO-003-2 R1 and R2, etc.

Ballot for:	Includes Associated Changes to Already Approved Standards:
IRO-007	IRO-002-1 — RC – Facilities - Retire R6 IRO-003-2 — RC – Wide Area View - Retire R1 and R2 IRO-005-2 — RC – Current Day Operations - Retire R1; Convert R1.1 into a Reference; Modify R13 part 2 TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control - Modify R2
IRO-008	IRO-004-1 — RC – Operations Planning - Retire R1 and R2
IRO-009	EOP-001-0 — Emergency Operations Planning - Retire R2
	IRO-004-1 — RC – Operations Planning - Retire R3 and R6
	IRO-005-2 — RC – Current Day Operations

	Retire R3, R5, R9; Delete R13 part 1; Modify R14; Retire R16, R17
IRO-010	IRO-002-1 — RC – Facilities - Retire R2
	IRO-004-1 — RC – Operations Planning - Retire R4, R5
	IRO-005-2 — RC – Current Day Operations - Retire R2
	TOP-003-0 — Planned Outage Coordination Modify R1.2
	TOP-005-1 — Operational Reliability Information - Retire R1, R1.1; Convert Attachment A to a Reference
	TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control - Modify R4

☒ I agree with balloting these standards using four separate ballots

☐ I do not agree balloting these standards using four separate ballots:

Comments:

15. If you have any other comments on this set of standards or its implementation plan that you have not already submitted above, please provide them here.

☒ No additional comments

Comments:

Please use this form to submit comments on the proposed IROL standards. Comments must be submitted by **February 15, 2007**. You may submit the completed form by e-mail to sarcomm@nerc.com with the acronym "IROL" in the subject line. If you have questions please contact Maureen Long at maureen.long@nerc.net or by telephone at 609-452-8060.

Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	Richard Kafka	
Organization:	Pepco Holdings, Inc.	
Telephone:	301-469-5274	
E-mail:	rjkafka@pepcoholdings.com	
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT** ☐ **FRCC** ☐ **MRO** ☐ **NPCC** ☒ **RFC** ☐ **SERC** ☐ **SPP** ☐ **WECC** ☐ **NA – Not Applicable**	☒	1 — Transmission Owners
	☐	2 — RTOs and ISOs
	☐	3 — Load-serving Entities
	☐	4 — Transmission-dependent Utilities
	☐	5 — Electric Generators
	☐	6 — Electricity Brokers, Aggregators, and Marketers
	☐	7 — Large Electricity End Users
	☐	8 — Small Electricity End Users
	☐	9 — Federal, State, Provincial Regulatory or other Government Entities
	☐	10 - Regional Reliability Organizations; Regional Entities

Group Comments (Complete this page if comments are from a group.)

Group Name:

Lead Contact:

Contact Organization:

Contact Segment:

Contact Telephone:

Contact E-mail:

Additional Member Name	Additional Member Organization	Region*	Segment*

*If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

Background Information:

The IROL standards were placed in a holding pattern for two years while waiting for the completion of the standards that require entities to document and use their methodology for developing SOLs and IROLs. FAC-010-1 — System Operating Limits Methodology for the Planning Horizon, FAC-011-1 — System Operating Limits Methodology for the Operations Horizon, and FAC-014-1 — Establish and Communicate System Operating Limits, were all adopted by the NERC Board of Trustees on November 1, 2006. While waiting for these standards to be approved by applicable regulatory authorities, the drafting team has been given the authority to move ahead in refining the set of IROL standards.

Changes to Set of Standards

When last posted, there were seven standards in this set of IROL standards:

IRO-007 — Monitoring the Wide Area
IRO-008 — Reliability Coordinator Analyses and Assessments
IRO-009 — Reliability Coordinator Actions to Operate Within IROLs
IRO-010 — Reliability Coordinator Data Specification and Collection
IRO-011 — Providing Data to the Reliability Coordinator
IRO-012 — Procedures, Processes or Plans for Preventing and Mitigating IROLs
IRO-013 — Reliability Coordinator Directives Relative to IROLs

Consolidation of Related Requirements

The revised set of standards posted for comment includes only IRO-007 through IRO-010. The drafting team is recommending the following changes to the original set of standards for the reasons stated below:

- Consolidate IRO-010 and IRO-011 into a single standard
- Consolidate IRO-009 and IRO-012 into a single standard
- Transfer IRO-013 to Project 2007-02 — Operating Personnel Communications Protocols

Many stakeholders have indicated that splitting requirements for related tasks across multiple standards leads to cross-referencing between standards that can be confusing — for this reason the drafting team is proposing that the related IROL standards be consolidated to eliminate cross-referencing.

During the drafting work done by the Missing Measures and Compliance Elements Standards Drafting Team, stakeholders indicated that duplication of requirements should be eliminated. In support of these comments, the drafting team recommends moving the requirements from *IRO-013 — Reliability Coordinator Directives Relative to IROLs* into the project that will address communication protocols so that all requirements related to directives will be comprehensively addressed without duplication under the single *Project 2007-02 — Operating Personnel Communication Protocols*.

Conforming Changes to Already Approved Standards

The drafting team reviewed already-approved standards that include requirements for the Reliability Coordinator relative to operating within SOLs or IROLs and is recommending conforming changes to those already-approved standards. The implementation plan provides the justification for each of these recommended changes.

- The drafting team is recommending retirement of most of the requirements assigned to the Reliability Coordinator for real-time operation within SOLs — they should be assigned to the Transmission Operator. Every facility in the Transmission Operator's area has a System Operating Limit, but the Reliability Coordinator isn't required to see all these limits and may not have information to determine the cause of instances of exceeding these limits.
- The drafting team is recommending that requirements that describe possible types of acceptable behavior be replaced with requirements that identify the required performance, as in the case of recommending that IRO-005-2 R3 be retired when IRO-009-1 becomes effective.
- In many cases the drafting team would have recommended additional changes to the requirements in already approved standards, but doing so would be outside the scope of the SAR assigned to this drafting team and the changes can be accomplished when the standards are updated as part of the *Reliability Standards Development Plan: 2007–2009.*

Conforming Changes to Bring Standards into Alignment with Reliability Standards Development Procedure V6 and ERO Rules of Procedure

A new version of the Reliability Standards Development Procedure was approved by the NERC Board of Trustees on November 1, 2006. The drafting team made the following changes to the standards to bring them into conformance with the revised manual or other changes needed to conform to the ERO Rules of Procedure:

1. **Modified the format of the "Proposed Effective Dates"**
   The drafting team modified the proposed effective dates to reflect that the standards cannot become effective until approved by applicable regulatory authorities. The drafting team estimated that it will take approximately three months following Board of Trustee adoption, to obtain regulatory approval from FERC and Canadian authorities.

2. **Added Violation Risk Factors to each requirement**
   Violation risk factors identify the potential impact to reliability when the associated requirement has been violated. The following categories of violation risk factors were approved with the latest version of the Reliability Standards Development Procedure:

   A High Risk Factor requirement:
   (a) is one that, if violated, could directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures, or could place the bulk power system at an unacceptable risk of instability, separation, or cascading failures; or

   (b) is a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures, or could place the bulk power system at an unacceptable risk of instability, separation, or cascading failures, or could hinder restoration to a normal condition.

   A Medium Risk Factor requirement
   (a) is a requirement that, if violated, could the ability to effectively monitor and control the bulk power system, but is unlikely to lead to bulk power system instability, separation, or cascading failures; or

(b) is a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly affect the electrical state or capability of the bulk power system, or the ability to effectively monitor, control, or restore the bulk power system, but is unlikely, under emergency, abnormal, or restoration conditions anticipated by the preparations, to lead to bulk power system instability, separation, or cascading failures, nor to hinder restoration to a normal condition.

A Lower Risk Factor requirement is administrative in nature and
(a) is a requirement that, if violated, would not be expected to affect the electrical state or capability of the bulk power system, or the ability to effectively monitor and control the bulk power system; or

(b) is a requirement in a planning time frame that, if violated, would not, under the emergency, abnormal, or restorative conditions anticipated by the preparations, be expected to affect the electrical state or capability of the bulk power system, or the ability to effectively monitor, control, or restore the bulk power system.

The drafting team added violation risk factors for each requirement. (For this set of BAL standards, the violation risk factors drafting team provided the violation risk factors already identified by stakeholders. If stakeholders indicate that some of the risk factors posted November 2 through December 1, 2006 need modification, the Balance Resources and Demand Standards Drafting Team will make conforming changes to the risk factors in these standards.)

3. Added a Mitigation Time Horizon to each requirement
The ERO Rules of Procedure include the use of Mitigation Time Horizons as one element used to determine the size of sanctions. The drafting team used the following guidelines in developing mitigation time horizons for each requirement:

- ***Long-term Planning:*** a planning horizon of one year or longer.
- ***Operations Planning****:* operating and resource plans from day-ahead up to and including seasonal.
- ***Same-day Operations****:* routine actions required within the timeframe of a day, but not real-time.
- ***Real-time Operations****:* actions required within one hour or less to preserve the reliability of the bulk electric system.
- ***Operations Assessment***: follow-up evaluations and reporting of real time operations.

4. Changed the identification of the Compliance Monitor
The drafting team modified all references to the Regional Reliability Organization as the Compliance Monitor, and replaced these references with, “Electric Reliability Organization.”

5. Deleted Levels of Non-compliance – Added Violation Severity Levels
The drafting team deleted “levels of non-compliance” and added “violation severity levels” to comply with the revised Reliability Standards Development Procedure. Compliance personnel assisted the drafting team in using the following criteria from the manual to establish violation severity levels:

- ***Lower:*** mostly compliant with minor exceptions — The responsible entity is mostly compliant with and meets the intent of the requirement but is deficient with respect to one or more minor details. Equivalent score: 95% to 99% compliant.
- ***Moderate:*** mostly compliant with significant exceptions — The responsible entity is mostly compliant with and meets the intent of the requirement but is deficient with respect to one or more significant elements. Equivalent score: 85% to 94% compliant.
- ***High:*** marginal performance or results — The responsible entity has only partially achieved the reliability objective of the requirement and is missing one or more significant elements. Equivalent score: 70% to 84% compliant.
- ***Severe:*** poor performance or results — The responsible entity has failed to meet the reliability objective of the requirement. Equivalent score: less than 70% compliant.

6. **Added 'Associated Documents' where applicable**
   The drafting team added a section "F" to the standard called, "Associated Documents" to list items such as forms, related standards, reports, etc.

On the following pages, the drafting team will ask for your feedback on the appropriateness of the changes it made to this set of standards. Because the changes made to the set of standards included a great deal of consolidation, a red line version will not be posted as it is not distinguish the content changes from the format changes when comparing the two versions.

You do not have to answer all questions.

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

1. The drafting team consolidated the requirements for *IRO-010— Reliability Coordinator Data Specification and Collection* and *IRO-011— Providing Data to the Reliability Coordinator* into a single standard to eliminate the cross-reference between the two standards. Do you agree with consolidating the requirements into a single standard? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

2. The drafting team consolidated the requirements for *IRO-009 — Reliability Coordinator Actions to Operate within IROLs* and *IRO-012— Procedures, Processes or Plans for Preventing and Mitigating IROLs* into a single standard to eliminate the cross-reference between the two standards. Do you agree with consolidating the requirements into a single standard? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

3. The drafting team recommends moving the requirements from *IRO-013 —Reliability Coordinator Directives Relative to IROLs* into the project that will address communication protocols so that all requirements related to directives will be comprehensively addressed under the single *Project 2007-02 – Operating Personnel Communication Protocols*. Do you agree with moving the requirements from IRO-013 into Project 2007-02? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

4. The drafting team is proposing that all standards and conforming changes become effective the first day of the first quarter, three months after regulatory approvals. Do you agree that the proposed effective date will give entities time to become fully compliant? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

5. The drafting team added a Violation Risk Factor for each requirement.

   Do you agree with the Violation Risk Factor for each requirement in the proposed standards? If not, please identify any requirement with a violation risk factor you feel is incorrect.

   ☐ I agree with the proposed Violation Risk Factors

   ☐ I do not agree with the following Violation Risk Factors:

   Comments:

6. The drafting team added a Mitigation Time Horizon for each requirement.

   Do you agree with the Mitigation Time Horizon for each requirement in the proposed standards? If not, please identify any requirement with a time horizon you feel is incorrect.

   ☐ I agree with the proposed Mitigation Time Horizons

   ☒ I do not agree with the following Mitigation Time Horizons:

   Comments: PHI supports the comments of the IRC Standards Review Committee. In support of the drafting team, they will not be repeated in this comment form.

7. The latest version of the Reliability Standards Development Procedure requires that each standard include "violation severity levels" rather than "levels of non-compliance." "Violation severity levels" identify how badly an entity violated each requirement, and are not linked to the reliability-related impact of violating a requirement. (The reliability-related impact of violating a requirement is now identified in the "Violation Risk Factor" appended to each requirement.) Note that these severity levels are "guidelines" and variations from the above categories are acceptable.

   Do you agree with the violation severity levels for each of the proposed standards? If you disagree with any of the violation severity levels for the proposed standards, please identify the standard and requirement you feel has an incorrect violation severity level.

   ☐ I agree with the violation severity levels

   ☒ I do not agree with the following violation severity levels:

   Comments: PHI supports the comments of the IRC Standards Review Committee. In support of the drafting team, they will not be repeated in this comment form.

8. The implementation plan modifies several requirements in already approved standards because compliance with those requirements does not seem practical. Every facility in the Transmission Operator's area has a System Operating Limit, but the Reliability Coordinator isn't required to see all these limits and may not have information to determine the cause of instances of exceeding these limits — yet there are requirements that hold the Reliability Coordinator accountable for identifying the cause of any actual or potential SOL. The drafting team reviewed these requirements and made proposed modifications to limit the Reliability Coordinator's accountability for real-time actions relative to SOLs. Do you agree with the drafting team's approach?

   ☐ I agree the drafting team's approach

☒ I do not agree with the drafting team's approach

Comments: PHI supports the comments of the IRC Standards Review Committee. In support of the drafting team, they will not be repeated in this comment form.

9. The drafting team is recommending that when IRO-007-1 is approved, conforming changes be made to the following standards:

   - IRO-002-1 — RC – Facilities; Retire R6
   - IRO-003-2 — RC – Wide Area View; Retire R1 and R2
   - IRO-005-2 — RC – Current Day Operations; Retire R1; Convert R1.1 into a Reference; Modify R13 part 2
   - TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control; Modify R2

   Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

   ☒ I agree with the proposed conforming changes

   ☐ I do not agree with the following conforming changes:

   Comments:

10. The Drafting Team is recommending that when IRO-008-1 is approved, conforming changes be made to the following standard:

    - IRO-004-1 — RC – Operations Planning; Retire R1 and R2

    Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

    ☒ I agree with the proposed conforming changes

    ☐ I do not agree with the following conforming changes:

    Comments:

11. The Drafting Team is recommending that when IRO-009-1 is approved, conforming changes be made to the following standards:

    - EOP-001-0 — Emergency Operations Planning; Retire R2
    - IRO-004-1 — RC – Operations Planning; Retire R3 and R6
    - IRO-005-2 — RC – Current Day Operations; Retire R3, R5, R9; Delete R13 part 1; Modify R14; Retire R16, R17

    Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

    ☒ I agree with the proposed conforming changes

    ☐ I do not agree with the following conforming changes:

    Comments:

12. The drafting team is recommending that when IRO-010-1 is approved, conforming changes be made to the following standards:

    - IRO-002-1 — RC – Facilities; Retire R2
    - IRO-004-1 — RC – Operations Planning; Retire R4, R5
    - IRO-005-2 — RC – Current Day Operations; Retire R2
    - TOP-003-0 — Planned Outage Coordination; Modify R1.2
    - TOP-005-1 — Operational Reliability Information; Retire R1, R1.1; Convert Attachment A to a Reference
    - TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control; Modify R4

    Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

    ☐ I agree with the proposed conforming changes

    ☒ I do not agree with the following conforming changes:

    Comments: PHI supports the comments of the IRC Standards Review Committee. In support of the drafting team, they will not be repeated in this comment form.

13. If you are aware of any conflicts between the proposed standard and any regulatory function, rule order, tariff, rate schedule, legislative requirement or agreement please identify the conflict here. Similarly, if you believe that any requirement in this set of standards has an unnecessary adverse impact on energy markets, please identify the requirement and its adverse impact here.

    ☒ No known conflicts or unnecessary adverse impacts

    ☐ Known conflict:

    Unnecessary adverse impact on markets:

14. The drafting team is recommending that these standards be balloted with **four separate ballots**, according to the following table. There would be a single ballot for IRO-007-1 that would include approval of IRO-007-1 and approval of the retirement of IRO-002-1 R6, and approval of retirement of IRO-003-2 R1 and R2, etc.

Ballot for:	Includes Associated Changes to Already Approved Standards:
IRO-007	IRO-002-1 — RC – Facilities - Retire R6 IRO-003-2 — RC – Wide Area View - Retire R1 and R2 IRO-005-2 — RC – Current Day Operations - Retire R1; Convert R1.1 into a Reference; Modify R13 part 2 TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control - Modify R2
IRO-008	IRO-004-1 — RC – Operations Planning - Retire R1 and R2

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IRO-010	IRO-002-1 — RC – Facilities - Retire R2
	IRO-004-1 — RC – Operations Planning - Retire R4, R5
	IRO-005-2 — RC – Current Day Operations - Retire R2
	TOP-003-0 — Planned Outage Coordination Modify R1.2
	TOP-005-1 — Operational Reliability Information - Retire R1, R1.1; Convert Attachment A to a Reference
	TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control - Modify R4

☒ I agree with balloting these standards using four separate ballots

☐ I do not agree balloting these standards using four separate ballots:

Comments:

15. If you have any other comments on this set of standards or its implementation plan that you have not already submitted above, please provide them here.

☐ No additional comments

Comments: PHI supports the comments of the IRC Standards Review Committee. In support of the drafting team, they will not be repeated in this comment form.

Please use this form to submit comments on the proposed IROL standards. Comments must be submitted by **February 15, 2007**. You may submit the completed form by e-mail to sarcomm@nerc.com with the acronym "IROL" in the subject line. If you have questions please contact Maureen Long at maureen.long@nerc.net or by telephone at 609-452-8060.

Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	Robert Coish	
Organization:	Manitoba Hydro	
Telephone:	204-487-5479	
E-mail:	rgcoish@hydro.mb.ca	

NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT**	☒	1 — Transmission Owners
☐ **FRCC**	☐	2 — RTOs and ISOs
☒ **MRO**	☒	3 — Load-serving Entities
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Lead Contact:

Contact Organization:

Contact Segment:

Contact Telephone:

Contact E-mail:

Additional Member Name	Additional Member Organization	Region*	Segment*

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   A Medium Risk Factor requirement
   (a) is a requirement that, if violated, could the ability to effectively monitor and control the bulk power system, but is unlikely to lead to bulk power system instability, separation, or cascading failures; or

(b) is a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly affect the electrical state or capability of the bulk power system, or the ability to effectively monitor, control, or restore the bulk power system, but is unlikely, under emergency, abnormal, or restoration conditions anticipated by the preparations, to lead to bulk power system instability, separation, or cascading failures, nor to hinder restoration to a normal condition.

A Lower Risk Factor requirement is administrative in nature and
(a) is a requirement that, if violated, would not be expected to affect the electrical state or capability of the bulk power system, or the ability to effectively monitor and control the bulk power system; or

(b) is a requirement in a planning time frame that, if violated, would not, under the emergency, abnormal, or restorative conditions anticipated by the preparations, be expected to affect the electrical state or capability of the bulk power system, or the ability to effectively monitor, control, or restore the bulk power system.

The drafting team added violation risk factors for each requirement. (For this set of BAL standards, the violation risk factors drafting team provided the violation risk factors already identified by stakeholders. If stakeholders indicate that some of the risk factors posted November 2 through December 1, 2006 need modification, the Balance Resources and Demand Standards Drafting Team will make conforming changes to the risk factors in these standards.)

3. Added a Mitigation Time Horizon to each requirement
The ERO Rules of Procedure include the use of Mitigation Time Horizons as one element used to determine the size of sanctions. The drafting team used the following guidelines in developing mitigation time horizons for each requirement:

- ***Long-term Planning:*** a planning horizon of one year or longer.
- ***Operations Planning****:* operating and resource plans from day-ahead up to and including seasonal.
- ***Same-day Operations****:* routine actions required within the timeframe of a day, but not real-time.
- ***Real-time Operations****:* actions required within one hour or less to preserve the reliability of the bulk electric system.
- ***Operations Assessment***: follow-up evaluations and reporting of real time operations.

4. Changed the identification of the Compliance Monitor
The drafting team modified all references to the Regional Reliability Organization as the Compliance Monitor, and replaced these references with, “Electric Reliability Organization.”

5. Deleted Levels of Non-compliance – Added Violation Severity Levels
The drafting team deleted “levels of non-compliance” and added “violation severity levels” to comply with the revised Reliability Standards Development Procedure. Compliance personnel assisted the drafting team in using the following criteria from the manual to establish violation severity levels:

- ***Lower:*** mostly compliant with minor exceptions — The responsible entity is mostly compliant with and meets the intent of the requirement but is deficient with respect to one or more minor details. Equivalent score: 95% to 99% compliant.
- ***Moderate:*** mostly compliant with significant exceptions — The responsible entity is mostly compliant with and meets the intent of the requirement but is deficient with respect to one or more significant elements. Equivalent score: 85% to 94% compliant.
- ***High:*** marginal performance or results — The responsible entity has only partially achieved the reliability objective of the requirement and is missing one or more significant elements. Equivalent score: 70% to 84% compliant.
- ***Severe:*** poor performance or results — The responsible entity has failed to meet the reliability objective of the requirement. Equivalent score: less than 70% compliant.

6. **Added 'Associated Documents' where applicable**
   The drafting team added a section "F" to the standard called, "Associated Documents" to list items such as forms, related standards, reports, etc.

On the following pages, the drafting team will ask for your feedback on the appropriateness of the changes it made to this set of standards. Because the changes made to the set of standards included a great deal of consolidation, a red line version will not be posted as it is not distinguish the content changes from the format changes when comparing the two versions.

You do not have to answer all questions.

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

1. The drafting team consolidated the requirements for *IRO-010— Reliability Coordinator Data Specification and Collection* and *IRO-011— Providing Data to the Reliability Coordinator* into a single standard to eliminate the cross-reference between the two standards. Do you agree with consolidating the requirements into a single standard? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

2. The drafting team consolidated the requirements for *IRO-009 — Reliability Coordinator Actions to Operate within IROLs* and *IRO-012— Procedures, Processes or Plans for Preventing and Mitigating IROLs* into a single standard to eliminate the cross-reference between the two standards. Do you agree with consolidating the requirements into a single standard? If not, please explain.

   ☒ Yes

   ☐ No

   Comments: MH endorses the MRO comments: While the description of requirements captures the essence of preventing and mitigating IROLs, it would be helpful for clarity to change the title of the revised IRO-009-1 to Reliability Coordinator actions to operate within IROLs and plans to prevent/mitigate IROLs.

3. The drafting team recommends moving the requirements from *IRO-013 —Reliability Coordinator Directives Relative to IROLs* into the project that will address communication protocols so that all requirements related to directives will be comprehensively addressed under the single *Project 2007-02 – Operating Personnel Communication Protocols*. Do you agree with moving the requirements from IRO-013 into Project 2007-02? If not, please explain.

   ☐ Yes

   ☒ No

   Comments: MH endorses MRO comments: Project 2007-02 should have been included with this package for us to consider. The MRO is also concerned that there is a general trend to develop too many requirements and measures, which would become administratively burdensome to the ERO and the entities that must comply.

4. The drafting team is proposing that all standards and conforming changes become effective the first day of the first quarter, three months after regulatory approvals. Do you agree that the proposed effective date will give entities time to become fully compliant? If not, please explain.

   ☐ Yes

☒ No

Comments: MH endorses MRO comments: It is difficult to prescribe one time window such as, three months after regulatory approvals. Different Standards might require different implementation times to allow the responsible entities to become fully compliant. For example, for those Standards that require equipment installation, it would take more than 3 months to satisfy the compliance requirements. Moreover, the Standards drafting team is the appropriate body to stipulate how much time is needed after regulatory approvals to become compliant.

5. The drafting team added a Violation Risk Factor for each requirement.

   Do you agree with the Violation Risk Factor for each requirement in the proposed standards? If not, please identify any requirement with a violation risk factor you feel is incorrect.

   ☐ I agree with the proposed Violation Risk Factors

   ☒ I do not agree with the following Violation Risk Factors:

   Comments: MH endorses MRO comments: It is difficult to prescribe one time window such as, three months after regulatory approvals. Different Standards might require different implementation times to allow the responsible entities to become fully compliant. For example, for those Standards that require equipment installation, it would take more than 3 months to satisfy the compliance requirements. Moreover, the Standards drafting team is the appropriate body to stipulate how much time is needed after regulatory approvals to become compliant.

6. The drafting team added a Mitigation Time Horizon for each requirement.

   Do you agree with the Mitigation Time Horizon for each requirement in the proposed standards? If not, please identify any requirement with a time horizon you feel is incorrect.

   ☐ I agree with the proposed Mitigation Time Horizons

   ☐ I do not agree with the following Mitigation Time Horizons:

   Comments: Mitigation Time Horizons are described near the top of this comment form.

   The description of the Mitigation Time Horizons states: The ERO Rules of Procedure include the use of mitigation time horizons as one element used to determine the size of sanctions.

   Can the drafting team inform the Registered Ballot Body where the ERO definition of Mitigation Time Horizons can be found along with documentation describing how the mitigation time horizons will be used in determining penalties. Mitigation Time Horizons are not listed as a Performance Element of a Reliability Standard in the Reliability Standards Development Procedure Version 6 adopted by the NERC BOT on November 1, 2006. As such, it does not seem appropriate to include them in any Reliability Standards.

   The comment form description of Mitigation Time Horizons further states The drafting team used the following guidelines in developing mitigation time horizons for each requirement, whereas the final statement in the description of the Violation Risk Factors states The following categories of violation risk factors were approved with the latest version of the Reliability Standards Development Procedure. Like the Violation Risk Factors, the categories of Mitigation Time Horizons should also be approved and incorporated into the Reliability Standards Development Procedure in order to ensure that the definitions are consistent for all NERC Reliability Standards.

   The MH cannot vote to approve a standard that includes Mitigation Time Horizons until the drafting team can produce ERO documented definitions and the documented manner in which the Mitigation Time Horizons will be used to determine penalties.

7. The latest version of the Reliability Standards Development Procedure requires that each standard include "violation severity levels" rather than "levels of non-compliance." "Violation severity levels" identify how badly an entity violated each requirement, and are not linked to the reliability-related impact of violating a requirement. (The reliability-related impact of violating a requirement is now identified in the "Violation Risk Factor" appended to each requirement.) Note that these severity levels are "guidelines" and variations from the above categories are acceptable.

   Do you agree with the violation severity levels for each of the proposed standards? If you disagree with any of the violation severity levels for the proposed standards, please identify the standard and requirement you feel has an incorrect violation severity level.

   ☐ I agree with the violation severity levels

   ☒ I do not agree with the following violation severity levels:

   Comments: endorses the MRO comments: The way the Violation Severity levels are spelled out, it again appears to be arbitrary cut offs, and especially the High and Severe Violation Severity Levels have to be tightly defined so that the entities would know what actions to take to be compliant.

8. The implementation plan modifies several requirements in already approved standards because compliance with those requirements does not seem practical. Every facility in the Transmission Operator's area has a System Operating Limit, but the Reliability Coordinator isn't required to see all these limits and may not have information to determine the cause of instances of exceeding these limits — yet there are requirements that hold the Reliability Coordinator accountable for identifying the cause of any actual or potential SOL. The drafting team reviewed these requirements and made proposed modifications to limit the Reliability Coordinator's accountability for real-time actions relative to SOLs. Do you agree with the drafting team's approach?

   ☒ I agree the drafting team's approach

   ☐ I do not agree with the drafting team's approach

   Comments: However, the drafting team should ensure that where the RC's accountability has been limited or removed regarding real-time actions relative to SOLs, the accountability of the appropriate entity, e.g. transmission operator is covered by or added to another standard. This will ensure no reliability gaps are created.

9. The drafting team is recommending that when IRO-007-1 is approved, conforming changes be made to the following standards:

   - IRO-002-1 — RC – Facilities; Retire R6
   - IRO-003-2 — RC – Wide Area View; Retire R1 and R2
   - IRO-005-2 — RC – Current Day Operations; Retire R1; Convert R1.1 into a Reference; Modify R13 part 2
   - TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control; Modify R2

   Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

   ☐ I agree with the proposed conforming changes

   ☒ I do not agree with the following conforming changes:

Comments: If we are removing the monitoring of SOL from the RC's responsibility how can IRO-005-0 R11 be true. THe RC can not make known to Transmission Service Providers all SOLs. This Requirement needs to edited. Possibly along the lines of:

R11. Each Reliability Coordinator shall make known to Transmission Service Providers within its Reliability Coordinator Area, all IROLs and known SOLs within its wide-area view. The Transmission Service Providers shall respect IROLs and all known SOLs in accordance with filed tariffs and regional Total Transfer Calculation and Available Transfer Calculation processes.

Also, MH endorses the MRO comments: The MRO agrees with the SDT in striking the first part of IRO-005-2 since it is already covered in FAC-014-R5.1. However, the MRO does not agree with the proposed revision to the second part that states: The Transmission Service Providers shall respect SOLs and IROLs in accordance with filed tariffs….. Since the RC may not know all SOLs and IROLs, it is not possible for the RC to make the TSP aware of what the RC itself does not know. The MRO recommends the SDT amend the proposed revision to state: The Transmission Service Provider shall respect all KNOWN SOLs and IROLs in accrodance with…….

10. The Drafting Team is recommending that when IRO-008-1 is approved, conforming changes be made to the following standard:

    - IRO-004-1 — RC – Operations Planning; Retire R1 and R2

    Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

    ☐ I agree with the proposed conforming changes

    ☒ I do not agree with the following conforming changes:

    Comments: General agreement with the approach, however, the new definition, Operational Planning Analysis, is a very high level definition such that R1 in IRO-008 may be very difficult to measure.

11. The Drafting Team is recommending that when IRO-009-1 is approved, conforming changes be made to the following standards:

    - EOP-001-0 — Emergency Operations Planning; Retire R2
    - IRO-004-1 — RC – Operations Planning; Retire R3 and R6
    - IRO-005-2 — RC – Current Day Operations; Retire R3, R5, R9; Delete R13 part 1; Modify R14; Retire R16, R17

    Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

    ☐ I agree with the proposed conforming changes

    ☒ I do not agree with the following conforming changes:

    Comments: MH does not agree with the removal of required coordination between the RC and the Transmission Operator and Balancing Authority. This approach is moving in a direction to undermine reliability.

12. The drafting team is recommending that when IRO-010-1 is approved, conforming changes be made to the following standards:

    - IRO-002-1 — RC – Facilities; Retire R2
    - IRO-004-1 — RC – Operations Planning; Retire R4, R5
    - IRO-005-2 — RC – Current Day Operations; Retire R2
    - TOP-003-0 — Planned Outage Coordination; Modify R1.2
    - TOP-005-1 — Operational Reliability Information; Retire R1, R1.1; Convert Attachment A to a Reference
    - TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control; Modify R4

    Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

    ☒ I agree with the proposed conforming changes

    ☐ I do not agree with the following conforming changes:

    Comments:

13. If you are aware of any conflicts between the proposed standard and any regulatory function, rule order, tariff, rate schedule, legislative requirement or agreement please identify the conflict here. Similarly, if you believe that any requirement in this set of standards has an unnecessary adverse impact on energy markets, please identify the requirement and its adverse impact here.

    ☒ No known conflicts or unnecessary adverse impacts

    ☐ Known conflict:

    Unnecessary adverse impact on markets:

14. The drafting team is recommending that these standards be balloted with **four separate ballots**, according to the following table. There would be a single ballot for IRO-007-1 that would include approval of IRO-007-1 and approval of the retirement of IRO-002-1 R6, and approval of retirement of IRO-003-2 R1 and R2, etc.

Ballot for:	Includes Associated Changes to Already Approved Standards:
IRO-007	IRO-002-1 — RC – Facilities - Retire R6 IRO-003-2 — RC – Wide Area View - Retire R1 and R2 IRO-005-2 — RC – Current Day Operations - Retire R1; Convert R1.1 into a Reference; Modify R13 part 2 TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control - Modify R2
IRO-008	IRO-004-1 — RC – Operations Planning - Retire R1 and R2
IRO-009	EOP-001-0 — Emergency Operations Planning - Retire R2

	IRO-004-1 — RC – Operations Planning - Retire R3 and R6
	IRO-005-2 — RC – Current Day Operations Retire R3, R5, R9; Delete R13 part 1; Modify R14; Retire R16, R17
IRO-010	IRO-002-1 — RC – Facilities - Retire R2
	IRO-004-1 — RC – Operations Planning - Retire R4, R5
	IRO-005-2 — RC – Current Day Operations - Retire R2
	TOP-003-0 — Planned Outage Coordination Modify R1.2
	TOP-005-1 — Operational Reliability Information - Retire R1, R1.1; Convert Attachment A to a Reference
	TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control - Modify R4

☒ I agree with balloting these standards using four separate ballots

☐ I do not agree balloting these standards using four separate ballots:

Comments:

15. If you have any other comments on this set of standards or its implementation plan that you have not already submitted above, please provide them here.

☐ No additional comments

Comments: MH appreciates the effort the drafting team put into the development of these standards and that the material has been organized to facilitate review and comment.

MH also endorses the MRO comments:The MRO requests clarification as to why the following two definitions were added in IRO-009-1 and never used: Interconnection Reliability Operating Limit Event, and Interconnection Reliability Operating Limit Event Duration. If terms are specifically added to a standard, it is expected that the terms will be used in the standard. If the new terms are not to be used in the standard where they are originally defined, it would appear that the new terms are not needed and should be struck from the standard until a such time that they are to be used.

The MRO requests the definition of the term Delay, as it is used in in IRO-009-1-R4. Is the RC considered in violation if it does not act with in one minute? If it does not act with in two-minutes. Leaving this term undefined will result in arbitrary enforcement of this standard

Please use this form to submit comments on the proposed IROL standards. Comments must be submitted by **February 15, 2007**. You may submit the completed form by e-mail to sarcomm@nerc.com with the acronym "IROL" in the subject line. If you have questions please contact Maureen Long at maureen.long@nerc.net or by telephone at 609-452-8060.

Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	Roger Champagne	
Organization:	Hydro-Québec TransÉnergie	
Telephone:	514 289-2211; X 2766	
E-mail:	champagne.roger.2@hydro.qc.ca	
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT** ☐ **FRCC** ☐ **MRO** ☒ **NPCC** ☐ **RFC** ☐ **SERC** ☐ **SPP** ☐ **WECC** ☐ **NA – Not Applicable**	☒	1 — Transmission Owners
	☐	2 — RTOs and ISOs
	☐	3 — Load-serving Entities
	☐	4 — Transmission-dependent Utilities
	☐	5 — Electric Generators
	☐	6 — Electricity Brokers, Aggregators, and Marketers
	☐	7 — Large Electricity End Users
	☐	8 — Small Electricity End Users
	☐	9 — Federal, State, Provincial Regulatory or other Government Entities
	☐	10 - Regional Reliability Organizations; Regional Entities

Group Comments (Complete this page if comments are from a group.)

Group Name:

Lead Contact:

Contact Organization:

Contact Segment:

Contact Telephone:

Contact E-mail:

Additional Member Name	Additional Member Organization	Region*	Segment*

*If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

Background Information:

The IROL standards were placed in a holding pattern for two years while waiting for the completion of the standards that require entities to document and use their methodology for developing SOLs and IROLs. FAC-010-1 — System Operating Limits Methodology for the Planning Horizon, FAC-011-1 — System Operating Limits Methodology for the Operations Horizon, and FAC-014-1 — Establish and Communicate System Operating Limits, were all adopted by the NERC Board of Trustees on November 1, 2006. While waiting for these standards to be approved by applicable regulatory authorities, the drafting team has been given the authority to move ahead in refining the set of IROL standards.

Changes to Set of Standards

When last posted, there were seven standards in this set of IROL standards:

IRO-007 — Monitoring the Wide Area
IRO-008 — Reliability Coordinator Analyses and Assessments
IRO-009 — Reliability Coordinator Actions to Operate Within IROLs
IRO-010 — Reliability Coordinator Data Specification and Collection
IRO-011 — Providing Data to the Reliability Coordinator
IRO-012 — Procedures, Processes or Plans for Preventing and Mitigating IROLs
IRO-013 — Reliability Coordinator Directives Relative to IROLs

Consolidation of Related Requirements

The revised set of standards posted for comment includes only IRO-007 through IRO-010. The drafting team is recommending the following changes to the original set of standards for the reasons stated below:

- Consolidate IRO-010 and IRO-011 into a single standard
- Consolidate IRO-009 and IRO-012 into a single standard
- Transfer IRO-013 to Project 2007-02 — Operating Personnel Communications Protocols

Many stakeholders have indicated that splitting requirements for related tasks across multiple standards leads to cross-referencing between standards that can be confusing — for this reason the drafting team is proposing that the related IROL standards be consolidated to eliminate cross-referencing.

During the drafting work done by the Missing Measures and Compliance Elements Standards Drafting Team, stakeholders indicated that duplication of requirements should be eliminated. In support of these comments, the drafting team recommends moving the requirements from *IRO-013 — Reliability Coordinator Directives Relative to IROLs* into the project that will address communication protocols so that all requirements related to directives will be comprehensively addressed without duplication under the single *Project 2007-02 — Operating Personnel Communication Protocols*.

Conforming Changes to Already Approved Standards

The drafting team reviewed already-approved standards that include requirements for the Reliability Coordinator relative to operating within SOLs or IROLs and is recommending conforming changes to those already-approved standards. The implementation plan provides the justification for each of these recommended changes.

- The drafting team is recommending retirement of most of the requirements assigned to the Reliability Coordinator for real-time operation within SOLs — they should be assigned to the Transmission Operator. Every facility in the Transmission Operator's area has a System Operating Limit, but the Reliability Coordinator isn't required to see all these limits and may not have information to determine the cause of instances of exceeding these limits.
- The drafting team is recommending that requirements that describe possible types of acceptable behavior be replaced with requirements that identify the required performance, as in the case of recommending that IRO-005-2 R3 be retired when IRO-009-1 becomes effective.
- In many cases the drafting team would have recommended additional changes to the requirements in already approved standards, but doing so would be outside the scope of the SAR assigned to this drafting team and the changes can be accomplished when the standards are updated as part of the *Reliability Standards Development Plan: 2007–2009.*

Conforming Changes to Bring Standards into Alignment with Reliability Standards Development Procedure V6 and ERO Rules of Procedure

A new version of the Reliability Standards Development Procedure was approved by the NERC Board of Trustees on November 1, 2006. The drafting team made the following changes to the standards to bring them into conformance with the revised manual or other changes needed to conform to the ERO Rules of Procedure:

1. **Modified the format of the "Proposed Effective Dates"**
   The drafting team modified the proposed effective dates to reflect that the standards cannot become effective until approved by applicable regulatory authorities. The drafting team estimated that it will take approximately three months following Board of Trustee adoption, to obtain regulatory approval from FERC and Canadian authorities.

2. **Added Violation Risk Factors to each requirement**
   Violation risk factors identify the potential impact to reliability when the associated requirement has been violated. The following categories of violation risk factors were approved with the latest version of the Reliability Standards Development Procedure:

   A High Risk Factor requirement:
   (a) is one that, if violated, could directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures, or could place the bulk power system at an unacceptable risk of instability, separation, or cascading failures; or

   (b) is a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures, or could place the bulk power system at an unacceptable risk of instability, separation, or cascading failures, or could hinder restoration to a normal condition.

   A Medium Risk Factor requirement
   (a) is a requirement that, if violated, could the ability to effectively monitor and control the bulk power system, but is unlikely to lead to bulk power system instability, separation, or cascading failures; or

(b) is a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly affect the electrical state or capability of the bulk power system, or the ability to effectively monitor, control, or restore the bulk power system, but is unlikely, under emergency, abnormal, or restoration conditions anticipated by the preparations, to lead to bulk power system instability, separation, or cascading failures, nor to hinder restoration to a normal condition.

A Lower Risk Factor requirement is administrative in nature and
(a) is a requirement that, if violated, would not be expected to affect the electrical state or capability of the bulk power system, or the ability to effectively monitor and control the bulk power system; or

(b) is a requirement in a planning time frame that, if violated, would not, under the emergency, abnormal, or restorative conditions anticipated by the preparations, be expected to affect the electrical state or capability of the bulk power system, or the ability to effectively monitor, control, or restore the bulk power system.

The drafting team added violation risk factors for each requirement. (For this set of BAL standards, the violation risk factors drafting team provided the violation risk factors already identified by stakeholders. If stakeholders indicate that some of the risk factors posted November 2 through December 1, 2006 need modification, the Balance Resources and Demand Standards Drafting Team will make conforming changes to the risk factors in these standards.)

3. Added a Mitigation Time Horizon to each requirement
The ERO Rules of Procedure include the use of Mitigation Time Horizons as one element used to determine the size of sanctions. The drafting team used the following guidelines in developing mitigation time horizons for each requirement:

- ***Long-term Planning:*** a planning horizon of one year or longer.
- ***Operations Planning****:* operating and resource plans from day-ahead up to and including seasonal.
- ***Same-day Operations****:* routine actions required within the timeframe of a day, but not real-time.
- ***Real-time Operations****:* actions required within one hour or less to preserve the reliability of the bulk electric system.
- ***Operations Assessment***: follow-up evaluations and reporting of real time operations.

4. Changed the identification of the Compliance Monitor
The drafting team modified all references to the Regional Reliability Organization as the Compliance Monitor, and replaced these references with, “Electric Reliability Organization.”

5. Deleted Levels of Non-compliance – Added Violation Severity Levels
The drafting team deleted “levels of non-compliance” and added “violation severity levels” to comply with the revised Reliability Standards Development Procedure. Compliance personnel assisted the drafting team in using the following criteria from the manual to establish violation severity levels:

- ***Lower:*** mostly compliant with minor exceptions — The responsible entity is mostly compliant with and meets the intent of the requirement but is deficient with respect to one or more minor details. Equivalent score: 95% to 99% compliant.
- ***Moderate:*** mostly compliant with significant exceptions — The responsible entity is mostly compliant with and meets the intent of the requirement but is deficient with respect to one or more significant elements. Equivalent score: 85% to 94% compliant.
- ***High:*** marginal performance or results — The responsible entity has only partially achieved the reliability objective of the requirement and is missing one or more significant elements. Equivalent score: 70% to 84% compliant.
- ***Severe:*** poor performance or results — The responsible entity has failed to meet the reliability objective of the requirement. Equivalent score: less than 70% compliant.

6. **Added 'Associated Documents' where applicable**
   The drafting team added a section "F" to the standard called, "Associated Documents" to list items such as forms, related standards, reports, etc.

On the following pages, the drafting team will ask for your feedback on the appropriateness of the changes it made to this set of standards. Because the changes made to the set of standards included a great deal of consolidation, a red line version will not be posted as it is not distinguish the content changes from the format changes when comparing the two versions.

You do not have to answer all questions.

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

1. The drafting team consolidated the requirements for *IRO-010— Reliability Coordinator Data Specification and Collection* and *IRO-011— Providing Data to the Reliability Coordinator* into a single standard to eliminate the cross-reference between the two standards. Do you agree with consolidating the requirements into a single standard? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

2. The drafting team consolidated the requirements for *IRO-009 — Reliability Coordinator Actions to Operate within IROLs* and *IRO-012— Procedures, Processes or Plans for Preventing and Mitigating IROLs* into a single standard to eliminate the cross-reference between the two standards. Do you agree with consolidating the requirements into a single standard? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

3. The drafting team recommends moving the requirements from *IRO-013 —Reliability Coordinator Directives Relative to IROLs* into the project that will address communication protocols so that all requirements related to directives will be comprehensively addressed under the single *Project 2007-02 – Operating Personnel Communication Protocols*. Do you agree with moving the requirements from IRO-013 into Project 2007-02? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

4. The drafting team is proposing that all standards and conforming changes become effective the first day of the first quarter, three months after regulatory approvals. Do you agree that the proposed effective date will give entities time to become fully compliant? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

5. The drafting team added a Violation Risk Factor for each requirement.

   Do you agree with the Violation Risk Factor for each requirement in the proposed standards? If not, please identify any requirement with a violation risk factor you feel is incorrect.

   ☐ I agree with the proposed Violation Risk Factors

   ☒ I do not agree with the following Violation Risk Factors:

   Comments:

   We agree with the VRFs for IRO-008, IRO-009 and -010.

   We suggest that for IRO-007, the VRF for R1 should be HIGH. Real-time monitoring of system conditions to determine if system parameters are within IROLs is critical to ensuring interconnected system reliability. Lack of or insufficient monitoring would expose a system to potential unreliable operation.

6. The drafting team added a Mitigation Time Horizon for each requirement.

   Do you agree with the Mitigation Time Horizon for each requirement in the proposed standards? If not, please identify any requirement with a time horizon you feel is incorrect.

   ☐ I agree with the proposed Mitigation Time Horizons

   ☒ I do not agree with the following Mitigation Time Horizons:

   Comments:

   We agree with the mitigation time horizons for IRO-007, -008 and -010.

   For IRO-009, however, R1 and R2 should also be assigned a Same Day Operation time horizon since "identified in advance of real time" may include day at hand assessments.

7. The latest version of the Reliability Standards Development Procedure requires that each standard include “violation severity levels” rather than “levels of non-compliance.” “Violation severity levels” identify how badly an entity violated each requirement, and are not linked to the reliability-related impact of violating a requirement. (The reliability-related impact of violating a requirement is now identified in the “Violation Risk Factor” appended to each requirement.) Note that these severity levels are “guidelines” and variations from the above categories are acceptable.

   Do you agree with the violation severity levels for each of the proposed standards? If you disagree with any of the violation severity levels for the proposed standards, please identify the standard and requirement you feel has an incorrect violation severity level.

   ☐ I agree with the violation severity levels

   ☒ I do not agree with the following violation severity levels:

   Comments:

   We agree with the violation severity levels for IRO-007 and -008.

For IRO-009, the violation level is subject to interpretation. For example, "Between 95% to 99% of the IROLs identified in advance of real-time have Operating Processes, Procedures, or Plans that identify actions to prevent or mitigate instances of exceeding those IROLs." Does the 95% to 99% range apply to the number of IROLs identified, or to the total time that any IROLs are identified? In other words, is it the percentage of time that for all IROLs identified, there are Operating Processes, Procedures, or Plans that identify actions to prevent or mitigate instances of exceeding any IROLs?

To put the violation severity level in a more proper context, the SDT may want to consider putting the range in a "negative sense", i.e., the percentage of time that the requirements are not met, whichever the base of the above interpreted measurements turn out to be.

Better still, we suggest the SDT consider adopting violation severity levels based on the number of times that R1 or R2 is not met, i.e. the number of times for any IROLs that are identified in advance of real-time, there lacks operating processes, procedures, or plans that identify actions to prevent or mitigatge instances of exceeding these IROLs. This way, assessment of violations can be made much more easily. Further, the severity level will be independent of the total number of IROLs identified, which can eliminate the skewed assessment due to a small of number of IROLs identified in an RC area. For example, under the as written % assessment structure, an RC could be found 0% compliant (and hence assessed a severe violation level) for just one incident of not meeting R1 or R2 if it had only one IROL identified.

For IRO-010, we agree with the measures as they are based on numbers, not a combination of number and duration. However, the same comment on "negative context" as provided for IRO-009 also apply here. In other words, we suggest turning the % meeting requirements to % failing to meet requirements (hence violation).

8. The implementation plan modifies several requirements in already approved standards because compliance with those requirements does not seem practical. Every facility in the Transmission Operator's area has a System Operating Limit, but the Reliability Coordinator isn't required to see all these limits and may not have information to determine the cause of instances of exceeding these limits — yet there are requirements that hold the Reliability Coordinator accountable for identifying the cause of any actual or potential SOL. The drafting team reviewed these requirements and made proposed modifications to limit the Reliability Coordinator's accountability for real-time actions relative to SOLs. Do you agree with the drafting team's approach?

   ☒ I agree the drafting team's approach

   ☒ I do not agree with the drafting team's approach

   Comments: There are a number of requirements in the posted IRO-005-3 that still hold the RC responsible for being aware of and directing actions when SOL is being approached or violated. The drafting team's proposed approach would require that corresponding changes be made to IRO-005-3.

9. The drafting team is recommending that when IRO-007-1 is approved, conforming changes be made to the following standards:

   - IRO-002-1 — RC – Facilities; Retire R6
   - IRO-003-2 — RC – Wide Area View; Retire R1 and R2

- IRO-005-2 — RC – Current Day Operations; Retire R1; Convert R1.1 into a Reference; Modify R13 part 2
- TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control; Modify R2

Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

☒ I agree with the proposed conforming changes

☐ I do not agree with the following conforming changes:

Comments:

10. The Drafting Team is recommending that when IRO-008-1 is approved, conforming changes be made to the following standard:

- IRO-004-1 — RC – Operations Planning; Retire R1 and R2

Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

☒ I agree with the proposed conforming changes

☐ I do not agree with the following conforming changes:

Comments:

11. The Drafting Team is recommending that when IRO-009-1 is approved, conforming changes be made to the following standards:

- EOP-001-0 — Emergency Operations Planning; Retire R2
- IRO-004-1 — RC – Operations Planning; Retire R3 and R6
- IRO-005-2 — RC – Current Day Operations; Retire R3, R5, R9; Delete R13 part 1; Modify R14; Retire R16, R17

Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

☐ I agree with the proposed conforming changes

☒ I do not agree with the following conforming changes:

Comments:

EOP-001 R2 requires that a TOP have an emergency load reduction plan for all identified IROLs. The intent of this requirement is for the TOP to be ready to implement load reduction as directed by the RC to mitigate IROL violation when other control actions have been or are in parallel being implemented. Unless this requirement is covered elsewhere, it needs to be retained to assure TOP's readiness, which is in a different context than what the requirements in IRO-009 implies. The RC does not own or operate any load reduction scheme. It must rely on the operators of these schemes - the TOP and DP, as directed by the TOP, to implement load reduction.

We agree with retiring R6 of IRO-004-1, but suggest that a part of R3 in IRO-004-1 which requires that the RC develop action plans in conjunction with the TOPs, be reflected in this standard.

We believe the key requirment in R3 and R5 is for the RC to correct an IROL violation as soon as poosible and within 30 minutes. This needs to be retained somewhere, preferrably in this standard. Not having a time limit to correct IROL violation can result in an IROL being exceeded for an indefinite period of time, subjecting the system to prolonged risks of instability and potential cascade tripping. The 30 minutes also serves as the threshold that if an IROL violation cannot be corrected by adjusting generation and interchange, reconfiguration, reducing interruptible load, voltage reduction, etc. within that time frame, curtailment of firm load must also be implemented to correct the violation immediately.

We believe the concept of the RC approving outages needs to be retained somewhere in the standards, retiring R9 should be conditional on having this coordination/approval requirement covered by this (IRO-009) or another standard.

12. The drafting team is recommending that when IRO-010-1 is approved, conforming changes be made to the following standards:

    - IRO-002-1 — RC – Facilities; Retire R2
    - IRO-004-1 — RC – Operations Planning; Retire R4, R5
    - IRO-005-2 — RC – Current Day Operations; Retire R2
    - TOP-003-0 — Planned Outage Coordination; Modify R1.2
    - TOP-005-1 — Operational Reliability Information; Retire R1, R1.1; Convert Attachment A to a Reference
    - TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control; Modify R4

    Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

    ☐ I agree with the proposed conforming changes

    ☒ I do not agree with the following conforming changes:

    Comments:

    (i) We agree with retiring R2 of IRO-002-1.

    (ii) We do not agree with removing R1.2 from TOP-003-2. Providing transmission outage information to the RC is essential for ensuring the RC is aware of system changes that may affect interconnected system reliability. There should not be any prejudgment as to which outage has an impact on SOL only.

    (iii) We agree with the proposed deletions/changes to IRO-005-2, TOP-005-1 and TOP-006-1.

13. If you are aware of any conflicts between the proposed standard and any regulatory function, rule order, tariff, rate schedule, legislative requirement or agreement please identify the conflict here. Similarly, if you believe that any requirement in this set of standards has an unnecessary adverse impact on energy markets, please identify the requirement and its adverse impact here.

    ☒ No known conflicts or unnecessary adverse impacts

    ☐ Known conflict:

Unnecessary adverse impact on markets:

14. The drafting team is recommending that these standards be balloted with **four separate ballots**, according to the following table. There would be a single ballot for IRO-007-1 that would include approval of IRO-007-1 and approval of the retirement of IRO-002-1 R6, and approval of retirement of IRO-003-2 R1 and R2, etc.

Ballot for:	Includes Associated Changes to Already Approved Standards:
IRO-007	IRO-002-1 — RC – Facilities - Retire R6 IRO-003-2 — RC – Wide Area View - Retire R1 and R2 IRO-005-2 — RC – Current Day Operations - Retire R1; Convert R1.1 into a Reference; Modify R13 part 2 TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control - Modify R2
IRO-008	IRO-004-1 — RC – Operations Planning - Retire R1 and R2
IRO-009	EOP-001-0 — Emergency Operations Planning - Retire R2
	IRO-004-1 — RC – Operations Planning - Retire R3 and R6
	IRO-005-2 — RC – Current Day Operations Retire R3, R5, R9; Delete R13 part 1; Modify R14; Retire R16, R17
IRO-010	IRO-002-1 — RC – Facilities - Retire R2
	IRO-004-1 — RC – Operations Planning - Retire R4, R5
	IRO-005-2 — RC – Current Day Operations - Retire R2
	TOP-003-0 — Planned Outage Coordination Modify R1.2
	TOP-005-1 — Operational Reliability Information - Retire R1, R1.1; Convert Attachment A to a Reference
	TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control - Modify R4

☒ I agree with balloting these standards using four separate ballots

☐ I do not agree balloting these standards using four separate ballots:

Comments:

15. If you have any other comments on this set of standards or its implementation plan that you have not already submitted above, please provide them here.

☐ No additional comments

Comments:

R2 of IRO-008 requires clarification or the definition of Real-Time Assessments needs to be revised to capture that an assessment needs to be done every thirty minutes and specific made as to how far into the future the assessments must cover.

R3 of IRO-008 requires sharing of results to prevent or mitigate exceeding an IROL. We feel that this should also require an RC to direct taking necessary actions to prepare for correcting the situation. We therefore suggest that "and direct" be inserted after "...the Reliability Coordinator shall share its results with" in R3. This may clarify the IRO-008 stardand but may introduce some redundancy with IRO-009 R3 and R4.

Two new terms are defined in IRO-009: Interconnection Reliability Operating Limit Event and Interconnection Reliability Operating Limit Event Duration. Neither are used in this standard; so what is the reason for having these terms defined?

In IRO-009, we question the need of both R1 and R2 since the difference is very subtile. R1 is to "prevent exceeding an IROL" and R2 is to "mitigate magnitude and duration of exceeding an IROL". Combining the two requirements would seem more practical since they are both in the same time frame of " in advance of Real-time". In the same way, R3 and R4 might be combined also.

In IRO-009, Violation Severity Levels, Section 2.3.2 establishes a high violation severity if an IROL was actually exceeded and there was a delay before taking action. The term "delay" is not defined. This leaves this term open for interpretation and will result in inconsistent enforcement. The standard needs to define what is meant by delay perhaps specifying a timeframe in the Requirments section R4. Also missing is the requirement to document, with a complete violation report, whenever an IROL violation has been exceeded beyond Tv.

In the previous draft standard IRO-009, there was a requirement (R1.4) for the RC to document IROL violation incidents. This requirement is missing in the new version. We believe that this requirement should be stated in this standard.

We also have concern about these same standards appearing in NERC's Reliability Coordinator SAR (project 2006-06). Coordination of the comments is a major concern especially when the standards will be under revision here and also in that project concurrently.

Please use this form to submit comments on the proposed IROL standards. Comments must be submitted by **February 15, 2007**. You may submit the completed form by e-mail to sarcomm@nerc.com with the acronym "IROL" in the subject line. If you have questions please contact Maureen Long at maureen.long@nerc.net or by telephone at 609-452-8060.

Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:		
Organization:		
Telephone:		
E-mail:		
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT** ☐ **FRCC** ☐ **MRO** ☐ **NPCC** ☐ **RFC** ☒ **SERC** ☐ **SPP** ☐ **WECC** ☐ **NA – Not Applicable**	☒	1 — Transmission Owners
	☐	2 — RTOs and ISOs
	☐	3 — Load-serving Entities
	☐	4 — Transmission-dependent Utilities
	☐	5 — Electric Generators
	☐	6 — Electricity Brokers, Aggregators, and Marketers
	☐	7 — Large Electricity End Users
	☐	8 — Small Electricity End Users
	☐	9 — Federal, State, Provincial Regulatory or other Government Entities
	☐	10 - Regional Reliability Organizations; Regional Entities

Group Comments (Complete this page if comments are from a group.)

Group Name: Southern Co. Transmission

Lead Contact: **Roman Carter**

Contact Organization: **Southern Co. Transmission**

Contact Segment: **1**

Contact Telephone: **205-257-6027**

Contact E-mail: **jrcarter@southernco.com**

Additional Member Name	Additional Member Organization	Region*	Segment*
Marc Butts	**Southern Co. Transmission**	**SERC**	1
Jim Busbin	**Southern Co. Transmission**	**SERC**	1
JT Wood	**Southern Co. Transmission**	**SERC**	1
Jim Griffith	**Southern Co. Transmission**	**SERC**	1

*If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

Background Information:

The IROL standards were placed in a holding pattern for two years while waiting for the completion of the standards that require entities to document and use their methodology for developing SOLs and IROLs. FAC-010-1 — System Operating Limits Methodology for the Planning Horizon, FAC-011-1 — System Operating Limits Methodology for the Operations Horizon, and FAC-014-1 — Establish and Communicate System Operating Limits, were all adopted by the NERC Board of Trustees on November 1, 2006. While waiting for these standards to be approved by applicable regulatory authorities, the drafting team has been given the authority to move ahead in refining the set of IROL standards.

Changes to Set of Standards

When last posted, there were seven standards in this set of IROL standards:

IRO-007 — Monitoring the Wide Area
IRO-008 — Reliability Coordinator Analyses and Assessments
IRO-009 — Reliability Coordinator Actions to Operate Within IROLs
IRO-010 — Reliability Coordinator Data Specification and Collection
IRO-011 — Providing Data to the Reliability Coordinator
IRO-012 — Procedures, Processes or Plans for Preventing and Mitigating IROLs
IRO-013 — Reliability Coordinator Directives Relative to IROLs

Consolidation of Related Requirements

The revised set of standards posted for comment includes only IRO-007 through IRO-010. The drafting team is recommending the following changes to the original set of standards for the reasons stated below:

- Consolidate IRO-010 and IRO-011 into a single standard
- Consolidate IRO-009 and IRO-012 into a single standard
- Transfer IRO-013 to Project 2007-02 — Operating Personnel Communications Protocols

Many stakeholders have indicated that splitting requirements for related tasks across multiple standards leads to cross-referencing between standards that can be confusing — for this reason the drafting team is proposing that the related IROL standards be consolidated to eliminate cross-referencing.

During the drafting work done by the Missing Measures and Compliance Elements Standards Drafting Team, stakeholders indicated that duplication of requirements should be eliminated. In support of these comments, the drafting team recommends moving the requirements from *IRO-013 — Reliability Coordinator Directives Relative to IROLs* into the project that will address communication protocols so that all requirements related to directives will be comprehensively addressed without duplication under the single *Project 2007-02 — Operating Personnel Communication Protocols*.

Conforming Changes to Already Approved Standards

The drafting team reviewed already-approved standards that include requirements for the Reliability Coordinator relative to operating within SOLs or IROLs and is recommending conforming changes to those already-approved standards. The implementation plan provides the justification for each of these recommended changes.

- The drafting team is recommending retirement of most of the requirements assigned to the Reliability Coordinator for real-time operation within SOLs — they should be assigned to the Transmission Operator. Every facility in the Transmission Operator's area has a System Operating Limit, but the Reliability Coordinator isn't required to see all these limits and may not have information to determine the cause of instances of exceeding these limits.
- The drafting team is recommending that requirements that describe possible types of acceptable behavior be replaced with requirements that identify the required performance, as in the case of recommending that IRO-005-2 R3 be retired when IRO-009-1 becomes effective.
- In many cases the drafting team would have recommended additional changes to the requirements in already approved standards, but doing so would be outside the scope of the SAR assigned to this drafting team and the changes can be accomplished when the standards are updated as part of the *Reliability Standards Development Plan: 2007–2009.*

Conforming Changes to Bring Standards into Alignment with Reliability Standards Development Procedure V6 and ERO Rules of Procedure

A new version of the Reliability Standards Development Procedure was approved by the NERC Board of Trustees on November 1, 2006. The drafting team made the following changes to the standards to bring them into conformance with the revised manual or other changes needed to conform to the ERO Rules of Procedure:

1. **Modified the format of the "Proposed Effective Dates"**
   The drafting team modified the proposed effective dates to reflect that the standards cannot become effective until approved by applicable regulatory authorities. The drafting team estimated that it will take approximately three months following Board of Trustee adoption, to obtain regulatory approval from FERC and Canadian authorities.

2. **Added Violation Risk Factors to each requirement**
   Violation risk factors identify the potential impact to reliability when the associated requirement has been violated. The following categories of violation risk factors were approved with the latest version of the Reliability Standards Development Procedure:

   A High Risk Factor requirement:
   (a) is one that, if violated, could directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures, or could place the bulk power system at an unacceptable risk of instability, separation, or cascading failures; or

   (b) is a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures, or could place the bulk power system at an unacceptable risk of instability, separation, or cascading failures, or could hinder restoration to a normal condition.

   A Medium Risk Factor requirement
   (a) is a requirement that, if violated, could the ability to effectively monitor and control the bulk power system, but is unlikely to lead to bulk power system instability, separation, or cascading failures; or

(b) is a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly affect the electrical state or capability of the bulk power system, or the ability to effectively monitor, control, or restore the bulk power system, but is unlikely, under emergency, abnormal, or restoration conditions anticipated by the preparations, to lead to bulk power system instability, separation, or cascading failures, nor to hinder restoration to a normal condition.

A Lower Risk Factor requirement is administrative in nature and
(a) is a requirement that, if violated, would not be expected to affect the electrical state or capability of the bulk power system, or the ability to effectively monitor and control the bulk power system; or

(b) is a requirement in a planning time frame that, if violated, would not, under the emergency, abnormal, or restorative conditions anticipated by the preparations, be expected to affect the electrical state or capability of the bulk power system, or the ability to effectively monitor, control, or restore the bulk power system.

The drafting team added violation risk factors for each requirement. (For this set of BAL standards, the violation risk factors drafting team provided the violation risk factors already identified by stakeholders. If stakeholders indicate that some of the risk factors posted November 2 through December 1, 2006 need modification, the Balance Resources and Demand Standards Drafting Team will make conforming changes to the risk factors in these standards.)

3. Added a Mitigation Time Horizon to each requirement
The ERO Rules of Procedure include the use of Mitigation Time Horizons as one element used to determine the size of sanctions. The drafting team used the following guidelines in developing mitigation time horizons for each requirement:

- ***Long-term Planning:*** a planning horizon of one year or longer.
- ***Operations Planning****:* operating and resource plans from day-ahead up to and including seasonal.
- ***Same-day Operations****:* routine actions required within the timeframe of a day, but not real-time.
- ***Real-time Operations****:* actions required within one hour or less to preserve the reliability of the bulk electric system.
- ***Operations Assessment***: follow-up evaluations and reporting of real time operations.

4. Changed the identification of the Compliance Monitor
The drafting team modified all references to the Regional Reliability Organization as the Compliance Monitor, and replaced these references with, “Electric Reliability Organization.”

5. Deleted Levels of Non-compliance – Added Violation Severity Levels
The drafting team deleted “levels of non-compliance” and added “violation severity levels” to comply with the revised Reliability Standards Development Procedure. Compliance personnel assisted the drafting team in using the following criteria from the manual to establish violation severity levels:

- ***Lower:*** mostly compliant with minor exceptions — The responsible entity is mostly compliant with and meets the intent of the requirement but is deficient with respect to one or more minor details. Equivalent score: 95% to 99% compliant.
- ***Moderate:*** mostly compliant with significant exceptions — The responsible entity is mostly compliant with and meets the intent of the requirement but is deficient with respect to one or more significant elements. Equivalent score: 85% to 94% compliant.
- ***High:*** marginal performance or results — The responsible entity has only partially achieved the reliability objective of the requirement and is missing one or more significant elements. Equivalent score: 70% to 84% compliant.
- ***Severe:*** poor performance or results — The responsible entity has failed to meet the reliability objective of the requirement. Equivalent score: less than 70% compliant.

6. **Added 'Associated Documents' where applicable**
   The drafting team added a section "F" to the standard called, "Associated Documents" to list items such as forms, related standards, reports, etc.

On the following pages, the drafting team will ask for your feedback on the appropriateness of the changes it made to this set of standards. Because the changes made to the set of standards included a great deal of consolidation, a red line version will not be posted as it is not distinguish the content changes from the format changes when comparing the two versions.

You do not have to answer all questions.

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

1. The drafting team consolidated the requirements for *IRO-010— Reliability Coordinator Data Specification and Collection* and *IRO-011— Providing Data to the Reliability Coordinator* into a single standard to eliminate the cross-reference between the two standards. Do you agree with consolidating the requirements into a single standard? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

2. The drafting team consolidated the requirements for *IRO-009 — Reliability Coordinator Actions to Operate within IROLs* and *IRO-012— Procedures, Processes or Plans for Preventing and Mitigating IROLs* into a single standard to eliminate the cross-reference between the two standards. Do you agree with consolidating the requirements into a single standard? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

3. The drafting team recommends moving the requirements from *IRO-013 —Reliability Coordinator Directives Relative to IROLs* into the project that will address communication protocols so that all requirements related to directives will be comprehensively addressed under the single *Project 2007-02 – Operating Personnel Communication Protocols*. Do you agree with moving the requirements from IRO-013 into Project 2007-02? If not, please explain.

   ☐ Yes

   ☒ No

   Comments: It appears that R1 of IRO-013 would be more appropriately contained in the IRO standards. R1 of IRO-013 states: The BA, IA, and TOP shall each follow its RC's directives unless such actions would violate safety, equipment, or regulatory or statutory requirements. Under these circumstances the BA, IA or TOP shall immediately inform the RC of its inability to perform the directive so that the RC can implement alternate remedial actions. The directives covered by this requirement shall be those that:

   R1.1. Prevent instances of exceeding interconnection reliability operating limits (IROLs).

   R1.2. Mitigate the magnitude and duration of instances of exceeding IROLs.

4. The drafting team is proposing that all standards and conforming changes become effective the first day of the first quarter, three months after regulatory approvals. Do

you agree that the proposed effective date will give entities time to become fully compliant? If not, please explain.

☐ Yes

☒ No

Comments: Does regulatory approvals only include FERC or does it also include the NERC Board?

A standard approved by the NERC Board, for example, on September 30th would be implemented on January 1, which is too soon to prepare for. It might also be too soon even if it meant only FERC, since the NERC Board could approve September 29th followed by FERC approval on September 30th. In these instances, 6 months might be more appropriate.

5. The drafting team added a Violation Risk Factor for each requirement.

   Do you agree with the Violation Risk Factor for each requirement in the proposed standards? If not, please identify any requirement with a violation risk factor you feel is incorrect.

   ☒ I agree with the proposed Violation Risk Factors

   ☒ I do not agree with the following Violation Risk Factors:

   Comments: Since the VRFs are being addressed through other ballots or procedures, and by the fact that this standard drafting team has no control over the VRFs, this question may be of no value to Industry.

6. The drafting team added a Mitigation Time Horizon for each requirement.

   Do you agree with the Mitigation Time Horizon for each requirement in the proposed standards? If not, please identify any requirement with a time horizon you feel is incorrect.

   ☐ I agree with the proposed Mitigation Time Horizons

   ☒ I do not agree with the following Mitigation Time Horizons:

   Comments: The time horizon of Operations Planning related to Mitigation Time Horizons (day-ahead up to and including seasonal) is different from the time horizon used in the definition of IRO-008-1 Operational Planning Analysis (which is the next day's operation and up to 12 months ahead). Additionally, some utilities interpret Operations Planning as real time up to day ahead studies. This creates confusion with the term Operations Planning and Southern seeks clarification for the term.

   Secondly, since each requirement's time horizon appears to be contemplated within the standard itself and reflected in the assignment of the Violation Risk Factor and Violation Severity Level, Southern believes including this characteristic in the penalty adjustment process is not necessary. Therefore, we believe the Mitigation Time Horizions should NOT be a penalty adjustment factor in determining monetary penalties for non compliance.

7. The latest version of the Reliability Standards Development Procedure requires that each standard include "violation severity levels" rather than "levels of non-compliance." "Violation severity levels" identify how badly an entity violated each requirement, and are not linked to the reliability-related impact of violating a requirement. (The reliability-related impact of violating a requirement is now identified in the "Violation Risk Factor" appended to each requirement.) Note that these severity levels are "guidelines" and variations from the above categories are acceptable.

   Do you agree with the violation severity levels for each of the proposed standards? If you disagree with any of the violation severity levels for the proposed standards, please identify the standard and requirement you feel has an incorrect violation severity level.

   ☐ I agree with the violation severity levels

   ☒ I do not agree with the following violation severity levels:

   Comments: Let's say a Reliability Coordinator (RC) who performs admirably throughout the year has only one identifiable IROL for the year. However, due to one reason or

another, the RC does not have a procedure in advance that identifies actions to prevent the instance from exceeding the IROL. This results in a SEVERE violation level.

Now, let's say a RC who does less than an admirable job throughout the year and has multiple (50) identifiable IROLs for the year. This RC is allowed approximately 8 instances of not having a procedure which identified actions to prevent exceeding the IROL, and this RC only achieves a MODERATE violation level. There needs to be some type of rewarding mitigation factor for those RCs who have very few identifiable IROLs.

8. The implementation plan modifies several requirements in already approved standards because compliance with those requirements does not seem practical. Every facility in the Transmission Operator's area has a System Operating Limit, but the Reliability Coordinator isn't required to see all these limits and may not have information to determine the cause of instances of exceeding these limits — yet there are requirements that hold the Reliability Coordinator accountable for identifying the cause of any actual or potential SOL. The drafting team reviewed these requirements and made proposed modifications to limit the Reliability Coordinator's accountability for real-time actions relative to SOLs. Do you agree with the drafting team's approach?

   ☐ I agree the drafting team's approach

   ☒ I do not agree with the drafting team's approach

   Comments: One can never tell when an SOL will turn into an IROL. In fact, there may be several SOLs occurring at the same time which may turn into an IROL. What the drafting team is recommending in this standard is for the RC to no longer monitor or study SOLs even though NERC standards currently require them to. This seems contradictory to NERC's goal of maintaining a reliable BES.

   Also, there are contradictory statements throughout the standard which require the RC to coordinate and communicate SOLs to the TSPs. However, according to the changes recommended in this standard, the RC will no longer be required to monitor SOLs. One such occurance is in IRO-005-3, in which R11 states the RC shall make known to the TSPs in its wide-area view all SOLs and IROLs. How does the drafting team expect the RCs to make the TSPs aware of all SOLs when the RC is not expected to monitor or study the SOLs?

   Southern Co. Transmission recommends that the RC continue to monitor and study SOLs as the current standards require. The August 2003 Blackout resulted, in part, from the RCs not monitoring and studying SOLs within its wide-area view. To move away from this concept will make the BES more vulnerable to a possible future blackouts.

9. The drafting team is recommending that when IRO-007-1 is approved, conforming changes be made to the following standards:

   - IRO-002-1 — RC – Facilities; Retire R6
   - IRO-003-2 — RC – Wide Area View; Retire R1 and R2
   - IRO-005-2 — RC – Current Day Operations; Retire R1; Convert R1.1 into a Reference; Modify R13 part 2
   - TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control; Modify R2

Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

☐ I agree with the proposed conforming changes

☒ I do not agree with the following conforming changes:

Comments: Southern Co. believes that the RC should monitor BES elements that could result in SOLs and IROLs. We believe the RC should know the current status of critical facilities whose failure could result in an SOL and IROL.

Therefore, we recommend keeping all the requirements being recommended for retirement.

10. The Drafting Team is recommending that when IRO-008-1 is approved, conforming changes be made to the following standard:

    - IRO-004-1 — RC – Operations Planning; Retire R1 and R2

    Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

    ☐ I agree with the proposed conforming changes

    ☒ I do not agree with the following conforming changes:

    Comments: Southern Co. believes the RC should conduct contingency analysis studies that would identify SOLs and IROLs. We recommend keeping both R1 and R2.

11. The Drafting Team is recommending that when IRO-009-1 is approved, conforming changes be made to the following standards:

    - EOP-001-0 — Emergency Operations Planning; Retire R2
    - IRO-004-1 — RC – Operations Planning; Retire R3 and R6
    - IRO-005-2 — RC – Current Day Operations; Retire R3, R5, R9; Delete R13 part 1; Modify R14; Retire R16, R17

    Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

    ☐ I agree with the proposed conforming changes

    ☒ I do not agree with the following conforming changes:

    Comments: The RC has no knowledge of SOLs based on the SDT's recommended changes. So how will the RC coordinate SOL violations as the (new) R6 states in IRO-005-3? The new R11 in IRO-005-3 states the RC shall make known to the TSP all SOLs and IROLs in its area. How does the RC do this when they are NOT expected to study or monitor SOLs?

    We do agree that EOP-001-0, R2 should be retired.

    Recommend keeping R3 and R6 of IRO-004-1. The RC should develop action plans to return transmission loading to within acceptable SOL or IROLs.

    Southern also recommends keeping R3, R5, R9, R13, R14, R16, and R17 of IRO-005-2.

12. The drafting team is recommending that when IRO-010-1 is approved, conforming changes be made to the following standards:

    - IRO-002-1 — RC – Facilities; Retire R2
    - IRO-004-1 — RC – Operations Planning; Retire R4, R5
    - IRO-005-2 — RC – Current Day Operations; Retire R2
    - TOP-003-0 — Planned Outage Coordination; Modify R1.2
    - TOP-005-1 — Operational Reliability Information; Retire R1, R1.1; Convert Attachment A to a Reference
    - TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control; Modify R4

    Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

    ☐ I agree with the proposed conforming changes

    ☒ I do not agree with the following conforming changes:

    Comments: While we agree with the SDT's recommendations on TOP-003-0 and TOP-005-1, we disagree with the remainder of the retirement recommendations and suggest keeping the requirements as they are.

    It is ironic that while the SDT is recommending the removal of requirements which specifically state that the TO, GO, GOP and LSE are to provide the RC with information required for system studies by 1200 noon each day, the Blackout Report stated a concern about the NERC standards' lack of requirements for providing reliability information to the RC.

    In particular, under the heading of “Data Exchanged for Operational Reliability” in the Blackout Final Report, the Report states that “a variety of up-to-date information on the elements of the system must be collected and exchanged for modeled topology to be accurate in real time.”

    The Report states “there is no current requirement for how quickly asset owners must report changes in element status (such as a line outage) to the SDX. NERC is now developing a requirement for regular information update submittals that is scheduled to take effect in the summer of 2004.” [Reference Page 51 of the Report]

    We are approaching the third anniversary of the publishing of this Report and still have no requirement in any NERC Standard for submitting data to the NERC System Data Exchange.

13. If you are aware of any conflicts between the proposed standard and any regulatory function, rule order, tariff, rate schedule, legislative requirement or agreement please identify the conflict here. Similarly, if you believe that any requirement in this set of standards has an unnecessary adverse impact on energy markets, please identify the requirement and its adverse impact here.

    ☒ No known conflicts or unnecessary adverse impacts

    ☐ Known conflict:

Unnecessary adverse impact on markets:

14. The drafting team is recommending that these standards be balloted with **four separate ballots**, according to the following table. There would be a single ballot for IRO-007-1 that would include approval of IRO-007-1 and approval of the retirement of IRO-002-1 R6, and approval of retirement of IRO-003-2 R1 and R2, etc.

Ballot for:	Includes Associated Changes to Already Approved Standards:
IRO-007	IRO-002-1 — RC – Facilities - Retire R6 IRO-003-2 — RC – Wide Area View - Retire R1 and R2 IRO-005-2 — RC – Current Day Operations - Retire R1; Convert R1.1 into a Reference; Modify R13 part 2 TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control - Modify R2
IRO-008	IRO-004-1 — RC – Operations Planning - Retire R1 and R2
IRO-009	EOP-001-0 — Emergency Operations Planning - Retire R2
	IRO-004-1 — RC – Operations Planning - Retire R3 and R6
	IRO-005-2 — RC – Current Day Operations Retire R3, R5, R9; Delete R13 part 1; Modify R14; Retire R16, R17
IRO-010	IRO-002-1 — RC – Facilities - Retire R2
	IRO-004-1 — RC – Operations Planning - Retire R4, R5
	IRO-005-2 — RC – Current Day Operations - Retire R2
	TOP-003-0 — Planned Outage Coordination Modify R1.2
	TOP-005-1 — Operational Reliability Information - Retire R1, R1.1; Convert Attachment A to a Reference
	TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control - Modify R4

☐ I agree with balloting these standards using four separate ballots

☒ I do not agree balloting these standards using four separate ballots:

Comments: By balloting these standards in 4 separate ballots, certain problems arise. For example, Ballot 4 (IRO-010) says to retire R2 of IRO-002-1. Ballot 1 (IRO-007) says to retire R6 of IRO-002-1.

IF one ballot fails and the other passes, Standard IRO-002-1 cannot be approved by the Board because one requirement passed the ballot voting while the other requirement did not.

15. If you have any other comments on this set of standards or its implementation plan that you have not already submitted above, please provide them here.

☒ No additional comments

Comments:

Please use this form to submit comments on the proposed IROL standards. Comments must be submitted by **February 15, 2007**. You may submit the completed form by e-mail to sarcomm@nerc.com with the acronym "IROL" in the subject line. If you have questions please contact Maureen Long at maureen.long@nerc.net or by telephone at 609-452-8060.

Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	Ron Falsetti	
Organization:	IESO	
Telephone:	906-855-6187	
E-mail:	ron.falsetti@ieso.ca	
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT** ☐ **FRCC** ☐ **MRO** ☒ **NPCC** ☐ **RFC** ☐ **SERC** ☐ **SPP** ☐ **WECC** ☐ **NA – Not Applicable**	☐	1 — Transmission Owners
	☒	2 — RTOs and ISOs
	☐	3 — Load-serving Entities
	☐	4 — Transmission-dependent Utilities
	☐	5 — Electric Generators
	☐	6 — Electricity Brokers, Aggregators, and Marketers
	☐	7 — Large Electricity End Users
	☐	8 — Small Electricity End Users
	☐	9 — Federal, State, Provincial Regulatory or other Government Entities
	☐	10 - Regional Reliability Organizations; Regional Entities

Group Comments (Complete this page if comments are from a group.)

Group Name:

Lead Contact:

Contact Organization:

Contact Segment:

Contact Telephone:

Contact E-mail:

Additional Member Name	Additional Member Organization	Region*	Segment*

*If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

Background Information:

The IROL standards were placed in a holding pattern for two years while waiting for the completion of the standards that require entities to document and use their methodology for developing SOLs and IROLs. FAC-010-1 — System Operating Limits Methodology for the Planning Horizon, FAC-011-1 — System Operating Limits Methodology for the Operations Horizon, and FAC-014-1 — Establish and Communicate System Operating Limits, were all adopted by the NERC Board of Trustees on November 1, 2006. While waiting for these standards to be approved by applicable regulatory authorities, the drafting team has been given the authority to move ahead in refining the set of IROL standards.

Changes to Set of Standards

When last posted, there were seven standards in this set of IROL standards:

IRO-007 — Monitoring the Wide Area
IRO-008 — Reliability Coordinator Analyses and Assessments
IRO-009 — Reliability Coordinator Actions to Operate Within IROLs
IRO-010 — Reliability Coordinator Data Specification and Collection
IRO-011 — Providing Data to the Reliability Coordinator
IRO-012 — Procedures, Processes or Plans for Preventing and Mitigating IROLs
IRO-013 — Reliability Coordinator Directives Relative to IROLs

Consolidation of Related Requirements

The revised set of standards posted for comment includes only IRO-007 through IRO-010. The drafting team is recommending the following changes to the original set of standards for the reasons stated below:

- Consolidate IRO-010 and IRO-011 into a single standard
- Consolidate IRO-009 and IRO-012 into a single standard
- Transfer IRO-013 to Project 2007-02 — Operating Personnel Communications Protocols

Many stakeholders have indicated that splitting requirements for related tasks across multiple standards leads to cross-referencing between standards that can be confusing — for this reason the drafting team is proposing that the related IROL standards be consolidated to eliminate cross-referencing.

During the drafting work done by the Missing Measures and Compliance Elements Standards Drafting Team, stakeholders indicated that duplication of requirements should be eliminated. In support of these comments, the drafting team recommends moving the requirements from *IRO-013 — Reliability Coordinator Directives Relative to IROLs* into the project that will address communication protocols so that all requirements related to directives will be comprehensively addressed without duplication under the single *Project 2007-02 — Operating Personnel Communication Protocols*.

Conforming Changes to Already Approved Standards

The drafting team reviewed already-approved standards that include requirements for the Reliability Coordinator relative to operating within SOLs or IROLs and is recommending conforming changes to those already-approved standards. The implementation plan provides the justification for each of these recommended changes.

- The drafting team is recommending retirement of most of the requirements assigned to the Reliability Coordinator for real-time operation within SOLs — they should be assigned to the Transmission Operator. Every facility in the Transmission Operator's area has a System Operating Limit, but the Reliability Coordinator isn't required to see all these limits and may not have information to determine the cause of instances of exceeding these limits.
- The drafting team is recommending that requirements that describe possible types of acceptable behavior be replaced with requirements that identify the required performance, as in the case of recommending that IRO-005-2 R3 be retired when IRO-009-1 becomes effective.
- In many cases the drafting team would have recommended additional changes to the requirements in already approved standards, but doing so would be outside the scope of the SAR assigned to this drafting team and the changes can be accomplished when the standards are updated as part of the *Reliability Standards Development Plan: 2007–2009.*

Conforming Changes to Bring Standards into Alignment with Reliability Standards Development Procedure V6 and ERO Rules of Procedure

A new version of the Reliability Standards Development Procedure was approved by the NERC Board of Trustees on November 1, 2006. The drafting team made the following changes to the standards to bring them into conformance with the revised manual or other changes needed to conform to the ERO Rules of Procedure:

1. **Modified the format of the "Proposed Effective Dates"**
   The drafting team modified the proposed effective dates to reflect that the standards cannot become effective until approved by applicable regulatory authorities. The drafting team estimated that it will take approximately three months following Board of Trustee adoption, to obtain regulatory approval from FERC and Canadian authorities.

2. **Added Violation Risk Factors to each requirement**
   Violation risk factors identify the potential impact to reliability when the associated requirement has been violated. The following categories of violation risk factors were approved with the latest version of the Reliability Standards Development Procedure:

   A High Risk Factor requirement:
   (a) is one that, if violated, could directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures, or could place the bulk power system at an unacceptable risk of instability, separation, or cascading failures; or

   (b) is a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures, or could place the bulk power system at an unacceptable risk of instability, separation, or cascading failures, or could hinder restoration to a normal condition.

   A Medium Risk Factor requirement
   (a) is a requirement that, if violated, could the ability to effectively monitor and control the bulk power system, but is unlikely to lead to bulk power system instability, separation, or cascading failures; or

(b) is a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly affect the electrical state or capability of the bulk power system, or the ability to effectively monitor, control, or restore the bulk power system, but is unlikely, under emergency, abnormal, or restoration conditions anticipated by the preparations, to lead to bulk power system instability, separation, or cascading failures, nor to hinder restoration to a normal condition.

A Lower Risk Factor requirement is administrative in nature and
(a) is a requirement that, if violated, would not be expected to affect the electrical state or capability of the bulk power system, or the ability to effectively monitor and control the bulk power system; or

(b) is a requirement in a planning time frame that, if violated, would not, under the emergency, abnormal, or restorative conditions anticipated by the preparations, be expected to affect the electrical state or capability of the bulk power system, or the ability to effectively monitor, control, or restore the bulk power system.

The drafting team added violation risk factors for each requirement. (For this set of BAL standards, the violation risk factors drafting team provided the violation risk factors already identified by stakeholders. If stakeholders indicate that some of the risk factors posted November 2 through December 1, 2006 need modification, the Balance Resources and Demand Standards Drafting Team will make conforming changes to the risk factors in these standards.)

3. Added a Mitigation Time Horizon to each requirement
The ERO Rules of Procedure include the use of Mitigation Time Horizons as one element used to determine the size of sanctions. The drafting team used the following guidelines in developing mitigation time horizons for each requirement:

- ***Long-term Planning:*** a planning horizon of one year or longer.
- ***Operations Planning****:* operating and resource plans from day-ahead up to and including seasonal.
- ***Same-day Operations****:* routine actions required within the timeframe of a day, but not real-time.
- ***Real-time Operations****:* actions required within one hour or less to preserve the reliability of the bulk electric system.
- ***Operations Assessment***: follow-up evaluations and reporting of real time operations.

4. Changed the identification of the Compliance Monitor
The drafting team modified all references to the Regional Reliability Organization as the Compliance Monitor, and replaced these references with, “Electric Reliability Organization.”

5. Deleted Levels of Non-compliance – Added Violation Severity Levels
The drafting team deleted “levels of non-compliance” and added “violation severity levels” to comply with the revised Reliability Standards Development Procedure. Compliance personnel assisted the drafting team in using the following criteria from the manual to establish violation severity levels:

- ***Lower:*** mostly compliant with minor exceptions — The responsible entity is mostly compliant with and meets the intent of the requirement but is deficient with respect to one or more minor details. Equivalent score: 95% to 99% compliant.
- ***Moderate:*** mostly compliant with significant exceptions — The responsible entity is mostly compliant with and meets the intent of the requirement but is deficient with respect to one or more significant elements. Equivalent score: 85% to 94% compliant.
- ***High:*** marginal performance or results — The responsible entity has only partially achieved the reliability objective of the requirement and is missing one or more significant elements. Equivalent score: 70% to 84% compliant.
- ***Severe:*** poor performance or results — The responsible entity has failed to meet the reliability objective of the requirement. Equivalent score: less than 70% compliant.

6. **Added 'Associated Documents' where applicable**
   The drafting team added a section "F" to the standard called, "Associated Documents" to list items such as forms, related standards, reports, etc.

On the following pages, the drafting team will ask for your feedback on the appropriateness of the changes it made to this set of standards. Because the changes made to the set of standards included a great deal of consolidation, a red line version will not be posted as it is not distinguish the content changes from the format changes when comparing the two versions.

You do not have to answer all questions.

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

1. The drafting team consolidated the requirements for *IRO-010— Reliability Coordinator Data Specification and Collection* and *IRO-011— Providing Data to the Reliability Coordinator* into a single standard to eliminate the cross-reference between the two standards. Do you agree with consolidating the requirements into a single standard? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

2. The drafting team consolidated the requirements for *IRO-009 — Reliability Coordinator Actions to Operate within IROLs* and *IRO-012— Procedures, Processes or Plans for Preventing and Mitigating IROLs* into a single standard to eliminate the cross-reference between the two standards. Do you agree with consolidating the requirements into a single standard? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

3. The drafting team recommends moving the requirements from *IRO-013 —Reliability Coordinator Directives Relative to IROLs* into the project that will address communication protocols so that all requirements related to directives will be comprehensively addressed under the single *Project 2007-02 – Operating Personnel Communication Protocols*. Do you agree with moving the requirements from IRO-013 into Project 2007-02? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

4. The drafting team is proposing that all standards and conforming changes become effective the first day of the first quarter, three months after regulatory approvals. Do you agree that the proposed effective date will give entities time to become fully compliant? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

5. The drafting team added a Violation Risk Factor for each requirement.

   Do you agree with the Violation Risk Factor for each requirement in the proposed standards? If not, please identify any requirement with a violation risk factor you feel is incorrect.

   ☐ I agree with the proposed Violation Risk Factors

   ☒ I do not agree with the following Violation Risk Factors:

   Comments:

   (i) We agree with the VRFs for IRO-008 and -010.

   (ii) For IRO-007, the VRF for R1 should be HIGH. Real-time monitoring of system conditions to determine if system parameters are within IROLs is critical to ensuring interconnected system reliability. Lack of or insufficient monitoring would expose a system to potential unreliable operation.

   (iii) For IRO-009, the VFRs for R1 and R2 should both be HIGH. The absence of pre-determined control actions that need to be made available to operation personnel to prevent and mitigate IROL violation can result in failure to maintain interconnected system reliability. Operating personnel may be faced with having insufficient or no control actions to correct an IROL violation, which can lead to cascade tripping or instability. We believe this comment is consistent with our interpretation of the HIGH risk factor requirement definition (b), above.

6. The drafting team added a Mitigation Time Horizon for each requirement.

   Do you agree with the Mitigation Time Horizon for each requirement in the proposed standards? If not, please identify any requirement with a time horizon you feel is incorrect.

   ☐ I agree with the proposed Mitigation Time Horizons

   ☒ I do not agree with the following Mitigation Time Horizons:

   Comments:

   (i) We agree with the mitigation time horizons for IRO-007, -008 and -010.

   (ii) For IRO-009, however, R1 and R2 should also be assigned a Same Day Operation time horizon since "identified in advance of real time" may include day at hand assessments.

7. The latest version of the Reliability Standards Development Procedure requires that each standard include “violation severity levels” rather than “levels of non-compliance.” “Violation severity levels” identify how badly an entity violated each requirement, and are not linked to the reliability-related impact of violating a requirement. (The reliability-related impact of violating a requirement is now identified in the “Violation Risk Factor” appended to each requirement.) Note that these severity levels are “guidelines” and variations from the above categories are acceptable.

   Do you agree with the violation severity levels for each of the proposed standards? If you disagree with any of the violation severity levels for the proposed standards, please identify the standard and requirement you feel has an incorrect violation severity level.

   ☐ I agree with the violation severity levels

☒ I do not agree with the following violation severity levels:

Comments:

(i) We agree with the violation severity levels for IRO-007 and -008.

(ii) For IRO-009, the violation level is subject to interpretation. For example, "Between 95% to 99% of the IROLs identified in advance of real-time have Operating Processes, Procedures, or Plans that identify actions to prevent or mitigate instances of exceeding those IROLs." Does the 95% to 99% range apply to the number of IROLs identified, or to the total time that any IROLs are identified? In other words, is it the percentage of time that for all IROLs identified, there are Operating Processes, Procedures, or Plans that identify actions to prevent or mitigate instances of exceeding any IROLs?

To put the violation severity level in a more proper context, the SDT may want to consider putting the range in a "negative sense", i.e., the percentage of time that the requirements are not met, whichever the base of the above interpreted measurements turn out to be.

Better still, we suggest the SDT consider adopting violation severity levels based on the number of times that R1 or R2 is not met, i.e. the number of times that, for any IROLs that are identified in advance of real-time, there lacks operating processes, procedures, or plans that identify actions to prevent or mitigate instances of exceeding these IROLs. This way, assessment of violations can be made much more easily. Further, the severity level will be independent of the total number of IROLs identified, which can eliminate the skewed assessment due to a small of number of IROLs identified in an RC area. For example, under the as written % assessment structure, an RC could be found 0% compliant (and hence assessed a severe violation level) for just one incident of not meeting R1 or R2 if it had only one IROL identified.

(iii) For IRO-010, we agree with the measures as they are based on numbers, not a combination of number and duration. However, the same comment on "negative context" as provided for IRO-009 also apply here. In other words, we suggest turning the % meeting requirements to % failing to meet requirements (hence violation).

8. The implementation plan modifies several requirements in already approved standards because compliance with those requirements does not seem practical. Every facility in the Transmission Operator's area has a System Operating Limit, but the Reliability Coordinator isn't required to see all these limits and may not have information to determine the cause of instances of exceeding these limits — yet there are requirements that hold the Reliability Coordinator accountable for identifying the cause of any actual or potential SOL. The drafting team reviewed these requirements and made proposed modifications to limit the Reliability Coordinator's accountability for real-time actions relative to SOLs. Do you agree with the drafting team's approach?

   ☒ I agree the drafting team's approach

   ☐ I do not agree with the drafting team's approach

   Comments: There are a number of requirements in the posted IRO-005-3 that still hold the RC responsible for being aware of and directing actions when a SOL is being approached or violated. The drafting team's proposed approach would require that corresponding changes be made to IRO-005-3. On the other hand, we feel that while the RC is not required to monitor these SOLs, they need to continue to be provided the information on the results of SOL determination and assessment as currently stipulated

in R11 of TOP-002-2 since SOLs may become IROLs under certain conditions as determined by the RC.

9. The drafting team is recommending that when IRO-007-1 is approved, conforming changes be made to the following standards:

   - IRO-002-1 — RC – Facilities; Retire R6
   - IRO-003-2 — RC – Wide Area View; Retire R1 and R2
   - IRO-005-2 — RC – Current Day Operations; Retire R1; Convert R1.1 into a Reference; Modify R13 part 2
   - TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control; Modify R2

   Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

   ☒ I agree with the proposed conforming changes

   ☐ I do not agree with the following conforming changes:

   Comments:

10. The Drafting Team is recommending that when IRO-008-1 is approved, conforming changes be made to the following standard:

    - IRO-004-1 — RC – Operations Planning; Retire R1 and R2

    Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

    ☒ I agree with the proposed conforming changes

    ☐ I do not agree with the following conforming changes:

    Comments:

11. The Drafting Team is recommending that when IRO-009-1 is approved, conforming changes be made to the following standards:

    - EOP-001-0 — Emergency Operations Planning; Retire R2
    - IRO-004-1 — RC – Operations Planning; Retire R3 and R6
    - IRO-005-2 — RC – Current Day Operations; Retire R3, R5, R9; Delete R13 part 1; Modify R14; Retire R16, R17

    Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

    ☐ I agree with the proposed conforming changes

    ☒ I do not agree with the following conforming changes:

    Comments:

    (i) EOP-001 R2 requires that a TOP have an emergency load reduction plan for all identified IROLs. The intent of this requirement is for the TOP to be ready to implement load reduction as directed by the RC to mitigate IROL violations when other control actions have been implemented or are being implemented in parallel. Unless this

requirement is covered elsewhere, it needs to be retained to assure a TOP's readiness, which is in a different context than what the requirements in IRO-009 imply. Note that the RC does not own or operate any load reduction scheme. It must rely on the operators of these schemes - the TOP (and DP, as directed by the TOP), to implement load reduction.

(ii) We agree with retiring R6 of IRO-004-1, but suggest that a part of R3 in IRO-004-1 which requires that the RC develop the action plans in conjunction with the TOPs be reflected in this standard. This should be a requirement, not just an understanding, and hence needs to be stated explicitly herein.

(iii) We agree that R3, R5 and R9 of IRO-005-2 can be retired. However, the key requirment in R3 and R5 for the RC to correct an IROL violation as soon as possible and within 30 minutes needs to be retained somewhere, preferably in this standard. Not having a time limit to correct IROL violations can result in an IROL being exceeded for an indefinite period of time, subjecting the system to prolonged risks of instability and cascade tripping. The 30 minute also serves as the threshold for curtailing firm load to correct the violation immediately if an IROL violation cannot be corrected by adjusting generation and interchange, reconfiguration, reducing interruptible load, voltage reduction, etc. within that time frame.

(iv) Similar to our comment on IRO-004-1, that part in R9 of IRO-005-2 which requires the RC to coordinate transmission and generation outages needs to be stipulated somewhere, perhaps in the context of the RC approving outages. Hence, retiring R9 should be condition on halaving this coordination/approval requirement covered by this (IRO-009) or another standard.

(v) We agree that part 1 of R13, and R16 and R17 of IRO-005-2 can be deleted.

12. The drafting team is recommending that when IRO-010-1 is approved, conforming changes be made to the following standards:

    - IRO-002-1 — RC – Facilities; Retire R2
    - IRO-004-1 — RC – Operations Planning; Retire R4, R5
    - IRO-005-2 — RC – Current Day Operations; Retire R2
    - TOP-003-0 — Planned Outage Coordination; Modify R1.2
    - TOP-005-1 — Operational Reliability Information; Retire R1, R1.1; Convert Attachment A to a Reference
    - TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control; Modify R4

    Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

    ☐ I agree with the proposed conforming changes

    ☒ I do not agree with the following conforming changes:

    Comments:

    (i) We agree with retiring R2 of IRO-002-1.

    (ii) We agree with retiring R4 and R5 of IRO-004-1. However, the time frame for the RC to complete day-ahead assessment as stipulated in R5 should be retained somewhere as otherwise, there could be mis-coordination, delays and even failure to complete the assessment in time for other operating entities to prepare the system for next day operations.

(iii) We do not agree with removing R1.2 from TOP-003-1. Prividing transmission outage information to the RC is essential for ensuring the RC is aware of system changes that may affect interconnected system reliability. There should not be any prejudgment as to which outage has an impact on SOL only.

(iv) We agree with the proposed deletions/changes to IRO-005-2, TOP-005-1 and TOP-006-1.

13. If you are aware of any conflicts between the proposed standard and any regulatory function, rule order, tariff, rate schedule, legislative requirement or agreement please identify the conflict here. Similarly, if you believe that any requirement in this set of standards has an unnecessary adverse impact on energy markets, please identify the requirement and its adverse impact here.

☒ No known conflicts or unnecessary adverse impacts

☐ Known conflict:

Unnecessary adverse impact on markets:

14. The drafting team is recommending that these standards be balloted with **four separate ballots**, according to the following table. There would be a single ballot for IRO-007-1 that would include approval of IRO-007-1 and approval of the retirement of IRO-002-1 R6, and approval of retirement of IRO-003-2 R1 and R2, etc.

Ballot for:	Includes Associated Changes to Already Approved Standards:
IRO-007	IRO-002-1 — RC – Facilities - Retire R6 IRO-003-2 — RC – Wide Area View - Retire R1 and R2 IRO-005-2 — RC – Current Day Operations - Retire R1; Convert R1.1 into a Reference; Modify R13 part 2 TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control - Modify R2
IRO-008	IRO-004-1 — RC – Operations Planning - Retire R1 and R2
IRO-009	EOP-001-0 — Emergency Operations Planning - Retire R2
	IRO-004-1 — RC – Operations Planning - Retire R3 and R6
	IRO-005-2 — RC – Current Day Operations Retire R3, R5, R9; Delete R13 part 1; Modify R14; Retire R16, R17
IRO-010	IRO-002-1 — RC – Facilities - Retire R2
	IRO-004-1 — RC – Operations Planning - Retire R4, R5

	IRO-005-2 — RC – Current Day Operations - Retire R2
	TOP-003-0 — Planned Outage Coordination Modify R1.2
	TOP-005-1 — Operational Reliability Information - Retire R1, R1.1; Convert Attachment A to a Reference
	TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control - Modify R4

☒ I agree with balloting these standards using four separate ballots

☐ I do not agree balloting these standards using four separate ballots:

Comments:

15. If you have any other comments on this set of standards or its implementation plan that you have not already submitted above, please provide them here.

☐ No additional comments

Comments:

(i) The requirement to monitor, or at least be aware of the impacts on, critical parameters in other RC's areas, as proposed for IRO-007 (M2.1) and IRO-008 (R1) in the previous draft set of standards posted on March 1, 2004, is missing. This monitoring capability is essential for identifying potential reliabilty impact on other RC areas due to operation plans and real-time operations in one RC area. Note that IRO-010 has this requirement (implicit in R3).

(ii) R2 of IRO-008 requires that Real-Time Assessments be performed at least every 30 minutes. The definition of Real-Time Assessment leaves open how far into the future the assessments must cover. Please clarify.

Using the current definition for Real-Time Assessments, R2 of IRO-008 would require that a complete study for the remainder of the operating day be performed at least every 30 minutes.

We believe it is more appropriate to consider Real-Time Assessment to mean the use of real-time information to assess system conditions for the current minute up to a certain time period, say, next hour. Operations Planning Analysis, which includes day at hand, should cover the remaining hours for the current day and beyond, up to about a year. We suggest the SDT consider revising the definitions in this manner to add clarity to R2 (and R1 as well) of IRO-008.

(iii) R3 of IRO-008 requires sharing of results to prevent or mitigate exceeding an IROL. We feel that this should also require an RC to direct taking necessary actions to prepare for correcting the situation. We therefore suggest that "and direct as deemed necessary" be inserted after "...the Reliability Coordinator shall share its results with" in R3.

(iv) Two new terms are defined in IRO-009: Interconnection Reliability Operating Limit Event and Interconnection Reliability Operating Limit Event Duration. Neither are used in this standard; so what is the reason for having these terms defined?

(v) In IRO-009, Violation Severity Levels, Section 2.3.2 establishes a high violation severity if an IROL was actually exceeded and there was a delay before taking action.

The term "delay" is not defined. This leaves this term open for interpretation and will result in inconsistent enforcement. The standard needs to define what is meant by delay.

(vi) In the previous draft standard IRO-009, there was a requirement (R1.4) for the RC to document and complete an IROL violation report for each instance of exceeding an IROL for time greater than that limit's Tv. This requirement is currently stipulated in EOP-004, with cross reference to TOP-007. We feel it's more appropriate for the RC to make this report and hence this requirement should be added to IRO-009.

(vii) We do not have any comments on the proposed measures. However, from a process viewpoint, none of the questions asked in this comment form seek concurrence or comments on any of the measures proposed. Since these measures did not exist in any of the current standards, and have been revised since the last draft versions (posted on March 1, 2004), the industry needs to have an opportunity to offer its view.

Please use this form to submit comments on the proposed IROL standards. Comments must be submitted by **February 15, 2007**. You may submit the completed form by e-mail to sarcomm@nerc.com with the acronym "IROL" in the subject line. If you have questions please contact Maureen Long at maureen.long@nerc.net or by telephone at 609-452-8060.

Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:		
Organization:		
Telephone:		
E-mail:		
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT** ☐ **FRCC** ☐ **MRO** ☐ **NPCC** ☐ **RFC** ☐ **SERC** ☐ **SPP** ☐ **WECC** ☐ **NA – Not Applicable**	☐	1 — Transmission Owners
	☐	2 — RTOs and ISOs
	☐	3 — Load-serving Entities
	☐	4 — Transmission-dependent Utilities
	☐	5 — Electric Generators
	☐	6 — Electricity Brokers, Aggregators, and Marketers
	☐	7 — Large Electricity End Users
	☐	8 — Small Electricity End Users
	☐	9 — Federal, State, Provincial Regulatory or other Government Entities
	☐	10 - Regional Reliability Organizations; Regional Entities

Group Comments (Complete this page if comments are from a group.)

Group Name: Midwest Reliability Organization

Lead Contact: **Neal Balu**

Contact Organization: **MRO for Group (WPS resources for Contact)**

Contact Segment: **10**

Contact Telephone: **920-433-1846**

Contact E-mail: **nbalu@wpsr.com**

Additional Member Name	Additional Member Organization	Region*	Segment*
Terry Bilke	MISO	MRO	10
Alan Boesch	NPPD	MRO	10
Robert Coish, Chair	MHEB	MRO	10
Carol Gerou	MP	MRO	10
Ken Goldsmith	ALT	MRO	10
Todd Gosnell	OPPD	MRO	10
Jim Haigh	WAPA	MRO	10
Tom Mielnik	MEC	MRO	10
Pam Oreschnick	XEL	MRO	10
Dick Pursley	GRE	MRO	10
Dave Rudolph	BEPC	MRO	10
Eric Ruskamp	LES	MRO	10
Joe Knight, Secretary	MRO	MRO	10
27 Additional MRO members	Not named above	MRO	10

*If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

Background Information:

The IROL standards were placed in a holding pattern for two years while waiting for the completion of the standards that require entities to document and use their methodology for developing SOLs and IROLs. FAC-010-1 — System Operating Limits Methodology for the Planning Horizon, FAC-011-1 — System Operating Limits Methodology for the Operations Horizon, and FAC-014-1 — Establish and Communicate System Operating Limits, were all adopted by the NERC Board of Trustees on November 1, 2006. While waiting for these standards to be approved by applicable regulatory authorities, the drafting team has been given the authority to move ahead in refining the set of IROL standards.

Changes to Set of Standards

When last posted, there were seven standards in this set of IROL standards:

IRO-007 — Monitoring the Wide Area
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IRO-010 — Reliability Coordinator Data Specification and Collection
IRO-011 — Providing Data to the Reliability Coordinator
IRO-012 — Procedures, Processes or Plans for Preventing and Mitigating IROLs
IRO-013 — Reliability Coordinator Directives Relative to IROLs

Consolidation of Related Requirements

The revised set of standards posted for comment includes only IRO-007 through IRO-010. The drafting team is recommending the following changes to the original set of standards for the reasons stated below:

- Consolidate IRO-010 and IRO-011 into a single standard
- Consolidate IRO-009 and IRO-012 into a single standard
- Transfer IRO-013 to Project 2007-02 — Operating Personnel Communications Protocols

Many stakeholders have indicated that splitting requirements for related tasks across multiple standards leads to cross-referencing between standards that can be confusing — for this reason the drafting team is proposing that the related IROL standards be consolidated to eliminate cross-referencing.

During the drafting work done by the Missing Measures and Compliance Elements Standards Drafting Team, stakeholders indicated that duplication of requirements should be eliminated. In support of these comments, the drafting team recommends moving the requirements from *IRO-013 — Reliability Coordinator Directives Relative to IROLs* into the project that will address communication protocols so that all requirements related to directives will be comprehensively addressed without duplication under the single *Project 2007-02 — Operating Personnel Communication Protocols*.

Conforming Changes to Already Approved Standards

The drafting team reviewed already-approved standards that include requirements for the Reliability Coordinator relative to operating within SOLs or IROLs and is recommending conforming changes to those already-approved standards. The implementation plan provides the justification for each of these recommended changes.

- The drafting team is recommending retirement of most of the requirements assigned to the Reliability Coordinator for real-time operation within SOLs — they should be assigned to the Transmission Operator. Every facility in the Transmission Operator's area has a System Operating Limit, but the Reliability Coordinator isn't required to see all these limits and may not have information to determine the cause of instances of exceeding these limits.
- The drafting team is recommending that requirements that describe possible types of acceptable behavior be replaced with requirements that identify the required performance, as in the case of recommending that IRO-005-2 R3 be retired when IRO-009-1 becomes effective.
- In many cases the drafting team would have recommended additional changes to the requirements in already approved standards, but doing so would be outside the scope of the SAR assigned to this drafting team and the changes can be accomplished when the standards are updated as part of the *Reliability Standards Development Plan: 2007–2009.*

Conforming Changes to Bring Standards into Alignment with Reliability Standards Development Procedure V6 and ERO Rules of Procedure

A new version of the Reliability Standards Development Procedure was approved by the NERC Board of Trustees on November 1, 2006. The drafting team made the following changes to the standards to bring them into conformance with the revised manual or other changes needed to conform to the ERO Rules of Procedure:

1. **Modified the format of the "Proposed Effective Dates"**
   The drafting team modified the proposed effective dates to reflect that the standards cannot become effective until approved by applicable regulatory authorities. The drafting team estimated that it will take approximately three months following Board of Trustee adoption, to obtain regulatory approval from FERC and Canadian authorities.

2. **Added Violation Risk Factors to each requirement**
   Violation risk factors identify the potential impact to reliability when the associated requirement has been violated. The following categories of violation risk factors were approved with the latest version of the Reliability Standards Development Procedure:

   A High Risk Factor requirement:
   (a) is one that, if violated, could directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures, or could place the bulk power system at an unacceptable risk of instability, separation, or cascading failures; or

   (b) is a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures, or could place the bulk power system at an unacceptable risk of instability, separation, or cascading failures, or could hinder restoration to a normal condition.

   A Medium Risk Factor requirement
   (a) is a requirement that, if violated, could the ability to effectively monitor and control the bulk power system, but is unlikely to lead to bulk power system instability, separation, or cascading failures; or

(b) is a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly affect the electrical state or capability of the bulk power system, or the ability to effectively monitor, control, or restore the bulk power system, but is unlikely, under emergency, abnormal, or restoration conditions anticipated by the preparations, to lead to bulk power system instability, separation, or cascading failures, nor to hinder restoration to a normal condition.

A Lower Risk Factor requirement is administrative in nature and
(a) is a requirement that, if violated, would not be expected to affect the electrical state or capability of the bulk power system, or the ability to effectively monitor and control the bulk power system; or

(b) is a requirement in a planning time frame that, if violated, would not, under the emergency, abnormal, or restorative conditions anticipated by the preparations, be expected to affect the electrical state or capability of the bulk power system, or the ability to effectively monitor, control, or restore the bulk power system.

The drafting team added violation risk factors for each requirement. (For this set of BAL standards, the violation risk factors drafting team provided the violation risk factors already identified by stakeholders. If stakeholders indicate that some of the risk factors posted November 2 through December 1, 2006 need modification, the Balance Resources and Demand Standards Drafting Team will make conforming changes to the risk factors in these standards.)

3. Added a Mitigation Time Horizon to each requirement
The ERO Rules of Procedure include the use of Mitigation Time Horizons as one element used to determine the size of sanctions. The drafting team used the following guidelines in developing mitigation time horizons for each requirement:

- ***Long-term Planning:*** a planning horizon of one year or longer.
- ***Operations Planning****:* operating and resource plans from day-ahead up to and including seasonal.
- ***Same-day Operations****:* routine actions required within the timeframe of a day, but not real-time.
- ***Real-time Operations****:* actions required within one hour or less to preserve the reliability of the bulk electric system.
- ***Operations Assessment***: follow-up evaluations and reporting of real time operations.

4. Changed the identification of the Compliance Monitor
The drafting team modified all references to the Regional Reliability Organization as the Compliance Monitor, and replaced these references with, “Electric Reliability Organization.”

5. Deleted Levels of Non-compliance – Added Violation Severity Levels
The drafting team deleted “levels of non-compliance” and added “violation severity levels” to comply with the revised Reliability Standards Development Procedure. Compliance personnel assisted the drafting team in using the following criteria from the manual to establish violation severity levels:

- ***Lower:*** mostly compliant with minor exceptions — The responsible entity is mostly compliant with and meets the intent of the requirement but is deficient with respect to one or more minor details. Equivalent score: 95% to 99% compliant.
- ***Moderate:*** mostly compliant with significant exceptions — The responsible entity is mostly compliant with and meets the intent of the requirement but is deficient with respect to one or more significant elements. Equivalent score: 85% to 94% compliant.
- ***High:*** marginal performance or results — The responsible entity has only partially achieved the reliability objective of the requirement and is missing one or more significant elements. Equivalent score: 70% to 84% compliant.
- ***Severe:*** poor performance or results — The responsible entity has failed to meet the reliability objective of the requirement. Equivalent score: less than 70% compliant.

6. **Added 'Associated Documents' where applicable**
   The drafting team added a section "F" to the standard called, "Associated Documents" to list items such as forms, related standards, reports, etc.

On the following pages, the drafting team will ask for your feedback on the appropriateness of the changes it made to this set of standards. Because the changes made to the set of standards included a great deal of consolidation, a red line version will not be posted as it is not distinguish the content changes from the format changes when comparing the two versions.

You do not have to answer all questions.

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

1. The drafting team consolidated the requirements for *IRO-010— Reliability Coordinator Data Specification and Collection* and *IRO-011— Providing Data to the Reliability Coordinator* into a single standard to eliminate the cross-reference between the two standards. Do you agree with consolidating the requirements into a single standard? If not, please explain.

   ☒ Yes

   ☐ No

   Comments: This is a step in the right direction, and the revised IRO-010-1 captures the relevant information related to data collection as reflected in R1.1, R1.3, R1.4, R3. A fewer number of standards to deal with is always better.

2. The drafting team consolidated the requirements for *IRO-009 — Reliability Coordinator Actions to Operate within IROLs* and *IRO-012— Procedures, Processes or Plans for Preventing and Mitigating IROLs* into a single standard to eliminate the cross-reference between the two standards. Do you agree with consolidating the requirements into a single standard? If not, please explain.

   ☒ Yes

   ☐ No

   Comments: While the description of requirements captures the essence of preventing and mitigating IROLs, it would be helpful for clarity to change the title of the revised IRO-009-1 to Reliability Coordinator actions to operate within IROLs and plans to prevent/mitigate IROLs.

3. The drafting team recommends moving the requirements from *IRO-013 —Reliability Coordinator Directives Relative to IROLs* into the project that will address communication protocols so that all requirements related to directives will be comprehensively addressed under the single *Project 2007-02 – Operating Personnel Communication Protocols*. Do you agree with moving the requirements from IRO-013 into Project 2007-02? If not, please explain.

   ☐ Yes

   ☒ No

   Comments: Project 2007-02 should have been included with this package for us to consider. The MRO is also concerned that there is a general trend to develop too many requirements and measures, which would become administratively burdensome to the ERO and the entities that must comply.

4. The drafting team is proposing that all standards and conforming changes become effective the first day of the first quarter, three months after regulatory approvals. Do you agree that the proposed effective date will give entities time to become fully compliant? If not, please explain.

☐ Yes

☒ No

Comments: It is difficult to prescribe one time window such as, three months after regulatory approvals. Different Standards might require different implementation times to allow the responsible entities to become fully compliant. For example, for those Standards that require equipment installation, it would take more than 3 months to satisfy the compliance requirements. Moreover, the Standards drafting team is the appropriate body to stipulate how much time is needed after regulatory approvals to become compliant.

5. The drafting team added a Violation Risk Factor for each requirement.

   Do you agree with the Violation Risk Factor for each requirement in the proposed standards? If not, please identify any requirement with a violation risk factor you feel is incorrect.

   ☐ I agree with the proposed Violation Risk Factors

   ☒ I do not agree with the following Violation Risk Factors:

   Comments: For many requirements, the VRFs are overstated. ERO has not given correct directives on how to assign VRFs. In addition, one cannot assign a single VRF for a requirement such as IRO-008-1 R3 that covers both Operational Planning Analysis , and real time assessment. In such instances, IRO -008-1 R3 should be split into two separate requirements, one dealing with Operational Planning Analysis, for which the VRF would be Medium and the other, addressing real time assessment for which the VRF would be High. For IRO-007-1 R2 , the VRF should be Medium since not adopting the most conservative value for IROL or its Tv would not result in cascading outages. For IRO-010-1 Requirement R2 , the VRF should be Low since it is an administrative item, and all that is needed is that the RC receives the status information.

6. The drafting team added a Mitigation Time Horizon for each requirement.

   Do you agree with the Mitigation Time Horizon for each requirement in the proposed standards? If not, please identify any requirement with a time horizon you feel is incorrect.

   ☐ I agree with the proposed Mitigation Time Horizons

   ☒ I do not agree with the following Mitigation Time Horizons:

   Comments: Mitigation Time Horizons are described near the top of this comment form.

   The description of the Mitigation Time Horizons states: The ERO Rules of Procedure include the use of mitigation time horizons as one element used to determine the size of sanctions.

   Can the drafting team inform the Registered Ballot Body where the ERO definition of Mitigation Time Horizons can be found along with documentation describing how the mitigation time horizons will be used in determining penalties. Mitigation Time Horizons are not listed as a Performance Element of a Reliability Standard in the Reliability Standards Development Procedure Version 6 adopted by the NERC BOT on November 1, 2006. As such, it does not seem appropriate to include them in any Reliability Standards.

   The comment form description of Mitigation Time Horizons further states The drafting team used the following guidelines in developing mitigation time horizons for each requirement, whereas the final statement in the description of the Violation Risk Factors states The following categories of violation risk factors were approved with the latest version of the Reliability Standards Development Procedure. Like the Violation Risk Factors, the categories of Mitigation Time Horizons should also be approved and incorporated into the Reliability Standards Development Procedure in order to ensure that the definitions are consistent for all NERC Reliability Standards.

The MRO cannot vote to approve a standard that includes Mitigation Time Horizons until the drafting team can produce ERO documented definitions and the documented manner in which the Mitigation Time Horizons will be used to determine penalties.

7. The latest version of the Reliability Standards Development Procedure requires that each standard include "violation severity levels" rather than "levels of non-compliance." "Violation severity levels" identify how badly an entity violated each requirement, and are not linked to the reliability-related impact of violating a requirement. (The reliability-related impact of violating a requirement is now identified in the "Violation Risk Factor" appended to each requirement.) Note that these severity levels are "guidelines" and variations from the above categories are acceptable.

   Do you agree with the violation severity levels for each of the proposed standards? If you disagree with any of the violation severity levels for the proposed standards, please identify the standard and requirement you feel has an incorrect violation severity level.

   ☐ I agree with the violation severity levels

   ☒ I do not agree with the following violation severity levels:

   Comments: The way the Violation Severity levels are spelled out, it again appears to be arbitrary cut offs, and especially the High and Severe Violation Severity Levels have to be tightly defined so that the entities would know what actions to take to be compliant.

8. The implementation plan modifies several requirements in already approved standards because compliance with those requirements does not seem practical. Every facility in the Transmission Operator's area has a System Operating Limit, but the Reliability Coordinator isn't required to see all these limits and may not have information to determine the cause of instances of exceeding these limits — yet there are requirements that hold the Reliability Coordinator accountable for identifying the cause of any actual or potential SOL. The drafting team reviewed these requirements and made proposed modifications to limit the Reliability Coordinator's accountability for real-time actions relative to SOLs. Do you agree with the drafting team's approach?

   ☒ I agree the drafting team's approach

   ☐ I do not agree with the drafting team's approach

   Comments:

9. The drafting team is recommending that when IRO-007-1 is approved, conforming changes be made to the following standards:

   - IRO-002-1 — RC – Facilities; Retire R6
   - IRO-003-2 — RC – Wide Area View; Retire R1 and R2
   - IRO-005-2 — RC – Current Day Operations; Retire R1; Convert R1.1 into a Reference; Modify R13 part 2
   - TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control; Modify R2

   Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

   ☐ I agree with the proposed conforming changes

☒ I do not agree with the following conforming changes:

Comments: The MRO agrees with the SDT in striking the first part of IRO-005-2 since it is already covered in FAC-014-R5.1. However, the MRO does not agree with the proposed revision to the second part that states: The Transmission Service Providers shall respect SOLs and IROLs in accordance with filed tariffs….. Since the RC may not know all SOLs and IROLs, it is not possible for the RC to make the TSP aware of what the RC itself does not know. The MRO recommends the SDT amend the proposed revision to state: The Transmission Service Provider shall respect all KNOWN SOLs and IROLs in accrodance with…….

10. The Drafting Team is recommending that when IRO-008-1 is approved, conforming changes be made to the following standard:

    - IRO-004-1 — RC – Operations Planning; Retire R1 and R2

    Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

    ☒ I agree with the proposed conforming changes

    ☐ I do not agree with the following conforming changes:

    Comments:

11. The Drafting Team is recommending that when IRO-009-1 is approved, conforming changes be made to the following standards:

    - EOP-001-0 — Emergency Operations Planning; Retire R2
    - IRO-004-1 — RC – Operations Planning; Retire R3 and R6
    - IRO-005-2 — RC – Current Day Operations; Retire R3, R5, R9; Delete R13 part 1; Modify R14; Retire R16, R17

    Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

    ☒ I agree with the proposed conforming changes

    ☐ I do not agree with the following conforming changes:

    Comments:

12. The drafting team is recommending that when IRO-010-1 is approved, conforming changes be made to the following standards:

    - IRO-002-1 — RC – Facilities; Retire R2
    - IRO-004-1 — RC – Operations Planning; Retire R4, R5
    - IRO-005-2 — RC – Current Day Operations; Retire R2
    - TOP-003-0 — Planned Outage Coordination; Modify R1.2
    - TOP-005-1 — Operational Reliability Information; Retire R1, R1.1; Convert Attachment A to a Reference
    - TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control; Modify R4

Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

☒ I agree with the proposed conforming changes

☐ I do not agree with the following conforming changes:

Comments: The MRO reviewed the implementation plan and it is clear that IRO-010-1 gives the flexibility to specify the data requirements in R1 and the requirement that the functional entities follow them in R3.

13. If you are aware of any conflicts between the proposed standard and any regulatory function, rule order, tariff, rate schedule, legislative requirement or agreement please identify the conflict here. Similarly, if you believe that any requirement in this set of standards has an unnecessary adverse impact on energy markets, please identify the requirement and its adverse impact here.

☒ No known conflicts or unnecessary adverse impacts

☐ Known conflict:

Unnecessary adverse impact on markets:

14. The drafting team is recommending that these standards be balloted with **four separate ballots**, according to the following table. There would be a single ballot for IRO-007-1 that would include approval of IRO-007-1 and approval of the retirement of IRO-002-1 R6, and approval of retirement of IRO-003-2 R1 and R2, etc.

Ballot for:	Includes Associated Changes to Already Approved Standards:
IRO-007	IRO-002-1 — RC – Facilities - Retire R6 IRO-003-2 — RC – Wide Area View - Retire R1 and R2 IRO-005-2 — RC – Current Day Operations - Retire R1; Convert R1.1 into a Reference; Modify R13 part 2 TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control - Modify R2
IRO-008	IRO-004-1 — RC – Operations Planning - Retire R1 and R2
IRO-009	EOP-001-0 — Emergency Operations Planning - Retire R2
	IRO-004-1 — RC – Operations Planning - Retire R3 and R6
	IRO-005-2 — RC – Current Day Operations Retire R3, R5, R9; Delete R13 part 1; Modify R14; Retire R16, R17
IRO-010	IRO-002-1 — RC – Facilities - Retire R2
	IRO-004-1 — RC – Operations Planning

	- Retire R4, R5
	IRO-005-2 — RC – Current Day Operations - Retire R2
	TOP-003-0 — Planned Outage Coordination Modify R1.2
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☒ I agree with balloting these standards using four separate ballots

☐ I do not agree balloting these standards using four separate ballots:

Comments:

15. If you have any other comments on this set of standards or its implementation plan that you have not already submitted above, please provide them here.

☐ No additional comments

Comments: The MRO requests clarification as to why the following two definitions were added in IRO-009-1 and never used: Interconnection Reliability Operating Limit Event, and Interconnection Reliability Operating Limit Event Duration. If terms are specifically added to a standard, it is expected that the terms will be used in the standard. If the new terms are not to be used in the standard where they are originally defined, it would appear that the new terms are not needed and should be struck from the standard until a such time that they are to be used.

The MRO requests the definition of the term Delay, as it is used in in IRO-009-1-R4. Is the RC considered in violation if it does not act with in one minute? If it does not act with in two-minutes. Leaving this term undefined will result in arbitrary enforcement of this standard

Please use this form to submit comments on the proposed IROL standards. Comments must be submitted by **February 15, 2007**. You may submit the completed form by e-mail to sarcomm@nerc.com with the acronym "IROL" in the subject line. If you have questions please contact Maureen Long at maureen.long@nerc.net or by telephone at 609-452-8060.

Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	David L. Folk	
Organization:	First Energy Corp	
Telephone:	330-384-4668	
E-mail:	folkd@firstenergycorp.com	
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT** ☐ **FRCC** ☐ **MRO** ☐ **NPCC** ☒ **RFC** ☐ **SERC** ☐ **SPP** ☐ **WECC** ☐ **NA – Not Applicable**	☒	1 — Transmission Owners
	☐	2 — RTOs and ISOs
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	☐	10 - Regional Reliability Organizations; Regional Entities

Group Comments (Complete this page if comments are from a group.)

Group Name:

Lead Contact:

Contact Organization:

Contact Segment:

Contact Telephone:

Contact E-mail:

Additional Member Name	Additional Member Organization	Region*	Segment*

*If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

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During the drafting work done by the Missing Measures and Compliance Elements Standards Drafting Team, stakeholders indicated that duplication of requirements should be eliminated. In support of these comments, the drafting team recommends moving the requirements from *IRO-013 — Reliability Coordinator Directives Relative to IROLs* into the project that will address communication protocols so that all requirements related to directives will be comprehensively addressed without duplication under the single *Project 2007-02 — Operating Personnel Communication Protocols*.

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The drafting team reviewed already-approved standards that include requirements for the Reliability Coordinator relative to operating within SOLs or IROLs and is recommending conforming changes to those already-approved standards. The implementation plan provides the justification for each of these recommended changes.

- The drafting team is recommending retirement of most of the requirements assigned to the Reliability Coordinator for real-time operation within SOLs — they should be assigned to the Transmission Operator. Every facility in the Transmission Operator's area has a System Operating Limit, but the Reliability Coordinator isn't required to see all these limits and may not have information to determine the cause of instances of exceeding these limits.
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- In many cases the drafting team would have recommended additional changes to the requirements in already approved standards, but doing so would be outside the scope of the SAR assigned to this drafting team and the changes can be accomplished when the standards are updated as part of the *Reliability Standards Development Plan: 2007–2009.*

Conforming Changes to Bring Standards into Alignment with Reliability Standards Development Procedure V6 and ERO Rules of Procedure

A new version of the Reliability Standards Development Procedure was approved by the NERC Board of Trustees on November 1, 2006. The drafting team made the following changes to the standards to bring them into conformance with the revised manual or other changes needed to conform to the ERO Rules of Procedure:

1. **Modified the format of the "Proposed Effective Dates"**
   The drafting team modified the proposed effective dates to reflect that the standards cannot become effective until approved by applicable regulatory authorities. The drafting team estimated that it will take approximately three months following Board of Trustee adoption, to obtain regulatory approval from FERC and Canadian authorities.

2. **Added Violation Risk Factors to each requirement**
   Violation risk factors identify the potential impact to reliability when the associated requirement has been violated. The following categories of violation risk factors were approved with the latest version of the Reliability Standards Development Procedure:

   A High Risk Factor requirement:
   (a) is one that, if violated, could directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures, or could place the bulk power system at an unacceptable risk of instability, separation, or cascading failures; or

   (b) is a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures, or could place the bulk power system at an unacceptable risk of instability, separation, or cascading failures, or could hinder restoration to a normal condition.

   A Medium Risk Factor requirement
   (a) is a requirement that, if violated, could the ability to effectively monitor and control the bulk power system, but is unlikely to lead to bulk power system instability, separation, or cascading failures; or

(b) is a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly affect the electrical state or capability of the bulk power system, or the ability to effectively monitor, control, or restore the bulk power system, but is unlikely, under emergency, abnormal, or restoration conditions anticipated by the preparations, to lead to bulk power system instability, separation, or cascading failures, nor to hinder restoration to a normal condition.

A Lower Risk Factor requirement is administrative in nature and
(a) is a requirement that, if violated, would not be expected to affect the electrical state or capability of the bulk power system, or the ability to effectively monitor and control the bulk power system; or

(b) is a requirement in a planning time frame that, if violated, would not, under the emergency, abnormal, or restorative conditions anticipated by the preparations, be expected to affect the electrical state or capability of the bulk power system, or the ability to effectively monitor, control, or restore the bulk power system.

The drafting team added violation risk factors for each requirement. (For this set of BAL standards, the violation risk factors drafting team provided the violation risk factors already identified by stakeholders. If stakeholders indicate that some of the risk factors posted November 2 through December 1, 2006 need modification, the Balance Resources and Demand Standards Drafting Team will make conforming changes to the risk factors in these standards.)

3. Added a Mitigation Time Horizon to each requirement
The ERO Rules of Procedure include the use of Mitigation Time Horizons as one element used to determine the size of sanctions. The drafting team used the following guidelines in developing mitigation time horizons for each requirement:

- ***Long-term Planning:*** a planning horizon of one year or longer.
- ***Operations Planning****:* operating and resource plans from day-ahead up to and including seasonal.
- ***Same-day Operations****:* routine actions required within the timeframe of a day, but not real-time.
- ***Real-time Operations****:* actions required within one hour or less to preserve the reliability of the bulk electric system.
- ***Operations Assessment***: follow-up evaluations and reporting of real time operations.

4. Changed the identification of the Compliance Monitor
The drafting team modified all references to the Regional Reliability Organization as the Compliance Monitor, and replaced these references with, “Electric Reliability Organization.”

5. Deleted Levels of Non-compliance – Added Violation Severity Levels
The drafting team deleted “levels of non-compliance” and added “violation severity levels” to comply with the revised Reliability Standards Development Procedure. Compliance personnel assisted the drafting team in using the following criteria from the manual to establish violation severity levels:

- ***Lower:*** mostly compliant with minor exceptions — The responsible entity is mostly compliant with and meets the intent of the requirement but is deficient with respect to one or more minor details. Equivalent score: 95% to 99% compliant.
- ***Moderate:*** mostly compliant with significant exceptions — The responsible entity is mostly compliant with and meets the intent of the requirement but is deficient with respect to one or more significant elements. Equivalent score: 85% to 94% compliant.
- ***High:*** marginal performance or results — The responsible entity has only partially achieved the reliability objective of the requirement and is missing one or more significant elements. Equivalent score: 70% to 84% compliant.
- ***Severe:*** poor performance or results — The responsible entity has failed to meet the reliability objective of the requirement. Equivalent score: less than 70% compliant.

6. **Added 'Associated Documents' where applicable**
   The drafting team added a section "F" to the standard called, "Associated Documents" to list items such as forms, related standards, reports, etc.

On the following pages, the drafting team will ask for your feedback on the appropriateness of the changes it made to this set of standards. Because the changes made to the set of standards included a great deal of consolidation, a red line version will not be posted as it is not distinguish the content changes from the format changes when comparing the two versions.

You do not have to answer all questions.

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

1. The drafting team consolidated the requirements for *IRO-010— Reliability Coordinator Data Specification and Collection* and *IRO-011— Providing Data to the Reliability Coordinator* into a single standard to eliminate the cross-reference between the two standards. Do you agree with consolidating the requirements into a single standard? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

2. The drafting team consolidated the requirements for *IRO-009 — Reliability Coordinator Actions to Operate within IROLs* and *IRO-012— Procedures, Processes or Plans for Preventing and Mitigating IROLs* into a single standard to eliminate the cross-reference between the two standards. Do you agree with consolidating the requirements into a single standard? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

3. The drafting team recommends moving the requirements from *IRO-013 —Reliability Coordinator Directives Relative to IROLs* into the project that will address communication protocols so that all requirements related to directives will be comprehensively addressed under the single *Project 2007-02 – Operating Personnel Communication Protocols*. Do you agree with moving the requirements from IRO-013 into Project 2007-02? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

4. The drafting team is proposing that all standards and conforming changes become effective the first day of the first quarter, three months after regulatory approvals. Do you agree that the proposed effective date will give entities time to become fully compliant? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

5. The drafting team added a Violation Risk Factor for each requirement.

   Do you agree with the Violation Risk Factor for each requirement in the proposed standards? If not, please identify any requirement with a violation risk factor you feel is incorrect.

   ☒ I agree with the proposed Violation Risk Factors

   ☐ I do not agree with the following Violation Risk Factors:

   Comments:

6. The drafting team added a Mitigation Time Horizon for each requirement.

   Do you agree with the Mitigation Time Horizon for each requirement in the proposed standards? If not, please identify any requirement with a time horizon you feel is incorrect.

   ☒ I agree with the proposed Mitigation Time Horizons

   ☐ I do not agree with the following Mitigation Time Horizons:

   Comments:

7. The latest version of the Reliability Standards Development Procedure requires that each standard include "violation severity levels" rather than "levels of non-compliance." "Violation severity levels" identify how badly an entity violated each requirement, and are not linked to the reliability-related impact of violating a requirement. (The reliability-related impact of violating a requirement is now identified in the "Violation Risk Factor" appended to each requirement.) Note that these severity levels are "guidelines" and variations from the above categories are acceptable.

   Do you agree with the violation severity levels for each of the proposed standards? If you disagree with any of the violation severity levels for the proposed standards, please identify the standard and requirement you feel has an incorrect violation severity level.

   ☐ I agree with the violation severity levels

   ☒ I do not agree with the following violation severity levels:

   Comments: IRO-009-1 Violation Severity Level 2.3.2 should read as follows "… delay of 5 minutes or greater before acting or directing …"

8. The implementation plan modifies several requirements in already approved standards because compliance with those requirements does not seem practical. Every facility in the Transmission Operator's area has a System Operating Limit, but the Reliability Coordinator isn't required to see all these limits and may not have information to determine the cause of instances of exceeding these limits — yet there are requirements that hold the Reliability Coordinator accountable for identifying the cause of any actual or potential SOL. The drafting team reviewed these requirements and made proposed modifications to limit the Reliability Coordinator's accountability for real-time actions relative to SOLs. Do you agree with the drafting team's approach?

   ☒ I agree the drafting team's approach

   ☐ I do not agree with the drafting team's approach

Comments:

9. The drafting team is recommending that when IRO-007-1 is approved, conforming changes be made to the following standards:

   - IRO-002-1 — RC – Facilities; Retire R6
   - IRO-003-2 — RC – Wide Area View; Retire R1 and R2
   - IRO-005-2 — RC – Current Day Operations; Retire R1; Convert R1.1 into a Reference; Modify R13 part 2
   - TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control; Modify R2

   Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

   ☐ I agree with the proposed conforming changes

   ☒ I do not agree with the following conforming changes:

   Comments: The revised IRO-005 requirement 10 (formerly Requirement 13) should be moved to TOP-004 Transmission Operations since it now only pertains to Transmission Operators, Balancing Authorities, Generator Operators, Transmission Service Providers, Load-Serving Entities, and Purchasing-Selling Entities.

10. The Drafting Team is recommending that when IRO-008-1 is approved, conforming changes be made to the following standard:

    - IRO-004-1 — RC – Operations Planning; Retire R1 and R2

    Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

    ☒ I agree with the proposed conforming changes

    ☐ I do not agree with the following conforming changes:

    Comments:

11. The Drafting Team is recommending that when IRO-009-1 is approved, conforming changes be made to the following standards:

    - EOP-001-0 — Emergency Operations Planning; Retire R2
    - IRO-004-1 — RC – Operations Planning; Retire R3 and R6
    - IRO-005-2 — RC – Current Day Operations; Retire R3, R5, R9; Delete R13 part 1; Modify R14; Retire R16, R17

    Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

    ☒ I agree with the proposed conforming changes

    ☐ I do not agree with the following conforming changes:

    Comments: IRO-005-2 Requirement 9 does not appear to be marked for deletion as proposed above in the files provided with this posting.

12. The drafting team is recommending that when IRO-010-1 is approved, conforming changes be made to the following standards:

    - IRO-002-1 — RC – Facilities; Retire R2
    - IRO-004-1 — RC – Operations Planning; Retire R4, R5
    - IRO-005-2 — RC – Current Day Operations; Retire R2
    - TOP-003-0 — Planned Outage Coordination; Modify R1.2
    - TOP-005-1 — Operational Reliability Information; Retire R1, R1.1; Convert Attachment A to a Reference
    - TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control; Modify R4

    Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

    ☒ I agree with the proposed conforming changes

    ☐ I do not agree with the following conforming changes:

    Comments:

13. If you are aware of any conflicts between the proposed standard and any regulatory function, rule order, tariff, rate schedule, legislative requirement or agreement please identify the conflict here. Similarly, if you believe that any requirement in this set of standards has an unnecessary adverse impact on energy markets, please identify the requirement and its adverse impact here.

    ☒ No known conflicts or unnecessary adverse impacts

    ☐ Known conflict:

    Unnecessary adverse impact on markets:

14. The drafting team is recommending that these standards be balloted with **four separate ballots**, according to the following table. There would be a single ballot for IRO-007-1 that would include approval of IRO-007-1 and approval of the retirement of IRO-002-1 R6, and approval of retirement of IRO-003-2 R1 and R2, etc.

Ballot for:	Includes Associated Changes to Already Approved Standards:
IRO-007	IRO-002-1 — RC – Facilities - Retire R6 IRO-003-2 — RC – Wide Area View - Retire R1 and R2 IRO-005-2 — RC – Current Day Operations - Retire R1; Convert R1.1 into a Reference; Modify R13 part 2 TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control - Modify R2
IRO-008	IRO-004-1 — RC – Operations Planning - Retire R1 and R2
IRO-009	EOP-001-0 — Emergency Operations Planning - Retire R2

	IRO-004-1 — RC – Operations Planning - Retire R3 and R6
	IRO-005-2 — RC – Current Day Operations Retire R3, R5, R9; Delete R13 part 1; Modify R14; Retire R16, R17
IRO-010	IRO-002-1 — RC – Facilities - Retire R2
	IRO-004-1 — RC – Operations Planning - Retire R4, R5
	IRO-005-2 — RC – Current Day Operations - Retire R2
	TOP-003-0 — Planned Outage Coordination Modify R1.2
	TOP-005-1 — Operational Reliability Information - Retire R1, R1.1; Convert Attachment A to a Reference
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☒ I agree with balloting these standards using four separate ballots

☐ I do not agree balloting these standards using four separate ballots:

Comments:

15. If you have any other comments on this set of standards or its implementation plan that you have not already submitted above, please provide them here.

☐ No additional comments

Comments:

Please use this form to submit comments on the proposed IROL standards. Comments must be submitted by **February 15, 2007**. You may submit the completed form by e-mail to sarcomm@nerc.com with the acronym "IROL" in the subject line. If you have questions please contact Maureen Long at maureen.long@nerc.net or by telephone at 609-452-8060.

Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	James H. Sorrels, Jr.	
Organization:	American Electric Power Company	
Telephone:	(614) 716-2370	
E-mail:	jhsorrels@AEP.com	
NERC Region		**Registered Ballot Body Segment**
☒ **ERCOT** ☐ **FRCC** ☐ **MRO** ☐ **NPCC** ☒ **RFC** ☐ **SERC** ☒ **SPP** ☐ **WECC** ☐ **NA – Not Applicable**	☒	1 — Transmission Owners
	☐	2 — RTOs and ISOs
	☐	3 — Load-serving Entities
	☐	4 — Transmission-dependent Utilities
	☒	5 — Electric Generators
	☒	6 — Electricity Brokers, Aggregators, and Marketers
	☐	7 — Large Electricity End Users
	☐	8 — Small Electricity End Users
	☐	9 — Federal, State, Provincial Regulatory or other Government Entities
	☐	10 - Regional Reliability Organizations; Regional Entities

Group Comments (Complete this page if comments are from a group.)

Group Name:

Lead Contact:

Contact Organization:

Contact Segment:

Contact Telephone:

Contact E-mail:

Additional Member Name	Additional Member Organization	Region*	Segment*

*If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

Background Information:

The IROL standards were placed in a holding pattern for two years while waiting for the completion of the standards that require entities to document and use their methodology for developing SOLs and IROLs. FAC-010-1 — System Operating Limits Methodology for the Planning Horizon, FAC-011-1 — System Operating Limits Methodology for the Operations Horizon, and FAC-014-1 — Establish and Communicate System Operating Limits, were all adopted by the NERC Board of Trustees on November 1, 2006. While waiting for these standards to be approved by applicable regulatory authorities, the drafting team has been given the authority to move ahead in refining the set of IROL standards.

Changes to Set of Standards

When last posted, there were seven standards in this set of IROL standards:

IRO-007 — Monitoring the Wide Area
IRO-008 — Reliability Coordinator Analyses and Assessments
IRO-009 — Reliability Coordinator Actions to Operate Within IROLs
IRO-010 — Reliability Coordinator Data Specification and Collection
IRO-011 — Providing Data to the Reliability Coordinator
IRO-012 — Procedures, Processes or Plans for Preventing and Mitigating IROLs
IRO-013 — Reliability Coordinator Directives Relative to IROLs

Consolidation of Related Requirements

The revised set of standards posted for comment includes only IRO-007 through IRO-010. The drafting team is recommending the following changes to the original set of standards for the reasons stated below:

- Consolidate IRO-010 and IRO-011 into a single standard
- Consolidate IRO-009 and IRO-012 into a single standard
- Transfer IRO-013 to Project 2007-02 — Operating Personnel Communications Protocols

Many stakeholders have indicated that splitting requirements for related tasks across multiple standards leads to cross-referencing between standards that can be confusing — for this reason the drafting team is proposing that the related IROL standards be consolidated to eliminate cross-referencing.

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You do not have to answer all questions.

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

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   ☒ Yes

   ☐ No

   Comments:

2. The drafting team consolidated the requirements for *IRO-009 — Reliability Coordinator Actions to Operate within IROLs* and *IRO-012— Procedures, Processes or Plans for Preventing and Mitigating IROLs* into a single standard to eliminate the cross-reference between the two standards. Do you agree with consolidating the requirements into a single standard? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

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   ☒ Yes

   ☐ No

   Comments:

4. The drafting team is proposing that all standards and conforming changes become effective the first day of the first quarter, three months after regulatory approvals. Do you agree that the proposed effective date will give entities time to become fully compliant? If not, please explain.

   ☒ Yes

   ☐ No

   Comments:

5. The drafting team added a Violation Risk Factor for each requirement.

   Do you agree with the Violation Risk Factor for each requirement in the proposed standards? If not, please identify any requirement with a violation risk factor you feel is incorrect.

   ☐ I agree with the proposed Violation Risk Factors

   ☒ I do not agree with the following Violation Risk Factors:

   Comments: IRO-007-1 R1: VRF should be high not medium.

   IRO-008-1 R1: VRF should be high not medium.

   IRO-008-1 R3: VRF should be high not medium.

6. The drafting team added a Mitigation Time Horizon for each requirement.

   Do you agree with the Mitigation Time Horizon for each requirement in the proposed standards? If not, please identify any requirement with a time horizon you feel is incorrect.

   ☐ I agree with the proposed Mitigation Time Horizons

   ☒ I do not agree with the following Mitigation Time Horizons:

   Comments: IRO-008-1 R3: MTH should be: same day operations; real-time operations.

7. The latest version of the Reliability Standards Development Procedure requires that each standard include "violation severity levels" rather than "levels of non-compliance." "Violation severity levels" identify how badly an entity violated each requirement, and are not linked to the reliability-related impact of violating a requirement. (The reliability-related impact of violating a requirement is now identified in the "Violation Risk Factor" appended to each requirement.) Note that these severity levels are "guidelines" and variations from the above categories are acceptable.

   Do you agree with the violation severity levels for each of the proposed standards? If you disagree with any of the violation severity levels for the proposed standards, please identify the standard and requirement you feel has an incorrect violation severity level.

   ☐ I agree with the violation severity levels

   ☒ I do not agree with the following violation severity levels:

   Comments: IRO-008-1: Change the Moderate Violation Severity Level to: Not Applicable

   IRO-008-1: Add to the High Violation Severity Level: Shared the results with some but not all of the entities that were required to take action.

8. The implementation plan modifies several requirements in already approved standards because compliance with those requirements does not seem practical. Every facility in the Transmission Operator's area has a System Operating Limit, but the Reliability Coordinator isn't required to see all these limits and may not have information to determine the cause of instances of exceeding these limits — yet there are requirements that hold the Reliability Coordinator accountable for identifying the cause

of any actual or potential SOL. The drafting team reviewed these requirements and made proposed modifications to limit the Reliability Coordinator's accountability for real-time actions relative to SOLs. Do you agree with the drafting team's approach?

☐ I agree the drafting team's approach

☒ I do not agree with the drafting team's approach

Comments: Exempting Reliability Coordinators from all SOLs is inappropriate. Most of the TLRs that the Reliability Coordinators call today are for relieving SOLs not IROLs, therefore, exempting them from knowing and taking action on those SOLs is in direct conflict with current practices and does not improve the reliability practices from what we have today. At a minimum, Reliability Coordinators need to monitor and know the EHV system SOLs and ensure operation within those SOLs and to monitor and operate to other SOLs as specified in the agreements between the RC and TOPS and BA (see ORG-021-1 R3).

9. The drafting team is recommending that when IRO-007-1 is approved, conforming changes be made to the following standards:

   - IRO-002-1 — RC – Facilities; Retire R6
   - IRO-003-2 — RC – Wide Area View; Retire R1 and R2
   - IRO-005-2 — RC – Current Day Operations; Retire R1; Convert R1.1 into a Reference; Modify R13 part 2
   - TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control; Modify R2

   Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

   ☐ I agree with the proposed conforming changes

   ☒ I do not agree with the following conforming changes:

   Comments: We agree with the development of IRO-007-1. We don't agree to retiring IRO-002-1 R6, IRO-003-2 R1, IRO-003-2 R2, TOP-006-1 R2 if the Reliability Coordinator Operational Analysis and Real-Time Assessment standard (IRO-008-1) does not require the Balancing Authority to monitor and take action for an agreed upon set of SOLs as discussed in response to question 8.

   IRO-005-2 R1.1-R1.10 sets a minimum threshold (and clearly states it is not an exhaustive list) of requirements for all Reliability Coordinators to monitor. We feel that these requirements if moved should be included in IRO-008-1 rather than IRO-007-1 R1. Furthermore IRO-007-1 R1 and IRO-008-1 is too vague and does not set a minimum set of requirements as a baseline. If IRO-005-2 R1.1-R1.10 is reitired we suggest that the associated requirements are put into the appropriate standard as follows "Each Reliability Coordinator shall monitor its Reliability Coordinator Area parameters, including but not limited to the following:

   Current status of Bulk Electric System elements (transmission or generation including critical auxiliaries such as Automatic Voltage Regulators and Special Protection Systems) and system loading.

Current pre-contingency element conditions (voltage, thermal, or stability), including any applicable mitigation plans to alleviate SOL or IROL violations, including the plan's viability and scope.

Current post-contingency element conditions (voltage, thermal, or stability), including any applicable mitigation plans to alleviate SOL or IROL violations, including the plan's viability and scope.

System real and reactive reserves (actual versus required).

Capacity and energy adequacy conditions.

Current ACE for all its Balancing Authorities.

Current local or Transmission Loading Relief procedures in effect.

Planned generation dispatches.

Planned transmission or generation outages.

Contingency events."

We fail to see how this is an improvement from how things are today. The technical reference document has yet to be created therefore leaving a gap in visibility of responsibility and accountability.

IRO-005-2 R13 should not remove the Reliability Coordinator from the list of parties that need to operate the Bulk Electric system to the most limiting parameter.

10. The Drafting Team is recommending that when IRO-008-1 is approved, conforming changes be made to the following standard:

    - IRO-004-1 — RC – Operations Planning; Retire R1 and R2

    Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

    ☐ I agree with the proposed conforming changes

    ☒ I do not agree with the following conforming changes:

    Comments: We don't agree to retiring IRO-004-1 R1 if IRO-008-1 R1 does not require the Balancing Authorities to monitor and taking action based on an agreed upon set of SOL as discussed in response to question 8.

    Furthermore IRO-008-1 R1 is too vague and does not set a minimum set of analysis or data requirements as a baseline. We fail to see how this is an improvement from how things are today.

11. The Drafting Team is recommending that when IRO-009-1 is approved, conforming changes be made to the following standards:

    - EOP-001-0 — Emergency Operations Planning; Retire R2
    - IRO-004-1 — RC – Operations Planning; Retire R3 and R6

- IRO-005-2 — RC – Current Day Operations; Retire R3, R5, R9; Delete R13 part 1; Modify R14; Retire R16, R17

Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

☐ I agree with the proposed conforming changes

☒ I do not agree with the following conforming changes:

Comments: EOP-001-0 R2 should not be retired because Transmission Operators still need to have an emergency load reduction plan for all identified IROLs. We do agree that this plan needs to be coordinated with the plan(s) for the Reliability Coordinator referenced in proposed requirement IRO-009-1 R1. The Reliability Coordinator will need to make the determination whether or not load needs to be dropped to relieve an IROL, but based on the plan determination of what loads and required actions to drop that load needs to be developed and carried out by the Transmission Operator.

IRO-004-1 Should not be removed. The comment in the Implementation Plan notes (page 8) "under some conditions, the Reliability Coordinator may not have time to 'coordinate' the development of these plans with all of its transmission Operators and Balancing Authorities. IRO-004-1 is, by definition of the standard, for activities that were a day ahead or more in there performance and did not deal with any current day analysis. Therefore, the rationale of not having time to coordinate is not valid.

To address our concerns with the retirement of some of the existing requirements, IRO-009-1 R1 & R3 needs to be modified to say each IROL "or each EHV SOL" for each reference of IROL in the requirements.

We understand that IRO-005-2 R9 is to be modified not retired as stated in the comment form. We concur with the modification, but do not agree with retirement of this requirement.

IRO-005-2 R13 should not be modified as drafted since IRO-008 R1 does not require the Balancing Authority to monitor and taking action for an agreed upon set of SOL as discussed in response to question 8. IRO-005-2 R13 should be reworded to ensure that Reliabilities Coordinators, Balancing Authorities and Transmission Operators operate to the agreed upon SOLs per the agreements.

IRO-005-2 R14 we agree with the comments in the implementation plan, but the red-lined version does not agree with the recommended changes in the implementation plan.

IRO-005-2 R16 & R17 we can agree to retire these requirements to the extent that IRO-008 is modified with the changes we have stated.

12. The drafting team is recommending that when IRO-010-1 is approved, conforming changes be made to the following standards:

- IRO-002-1 — RC – Facilities; Retire R2

- IRO-004-1 — RC – Operations Planning; Retire R4, R5
- IRO-005-2 — RC – Current Day Operations; Retire R2
- TOP-003-0 — Planned Outage Coordination; Modify R1.2
- TOP-005-1 — Operational Reliability Information; Retire R1, R1.1; Convert Attachment A to a Reference
- TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control; Modify R4

Do you agree with these proposed conforming changes? If not, please identify any conforming change you feel is incorrect.

☐ I agree with the proposed conforming changes

☒ I do not agree with the following conforming changes:

Comments: While we agree with limiting the cross references in the standards, we don't agree with changes to IRO-010-1 and the modifications/retirement of many existing standards/requirements.

For example, we disagree with the modification to IRO-010-1 R1.3 allowing the Reliability Coordinator specifying the reporting time frame opposed to a universal time reporting period. We support the timing requirement that is currently in place in IRO-004-1 R4.

IRO-010-1 needs to require the Reliability Coordinator to share the results of its system studies with other entities as required in IRO-004-1 R5.

IRO-008-1 R3 is also not adequate for this purpose as it only requires the Reliability Coordinator to share results of studies that indicate the possibility of exceeding the limits of an IROL. The Reliability Coordinator needs to perform studies and if EHV SOLs have the potential of being violated, the Reliability Coordinator needs to share these results with the Transmission Operators and Balancing Authorities.

TOP-003-0 R1.2 we feel that is a mistake to remove the Reliability Coordinator from a standard labeled “Planned Outage Coordination”.

Retiring TOP-005-1 R1 & R1.1 is acceptable

TOP-006-1 R2 we do not agree with the changes. IRO-007-1 only referenced IROL monitoring not the monitoring of EHV SOL.

TOP-006-1 R4 there is no point in removing the Reliability Coordinator from this requirement rather than implying it.

13. If you are aware of any conflicts between the proposed standard and any regulatory function, rule order, tariff, rate schedule, legislative requirement or agreement please identify the conflict here. Similarly, if you believe that any requirement in this set of

standards has an unnecessary adverse impact on energy markets, please identify the requirement and its adverse impact here.

☐ No known conflicts or unnecessary adverse impacts

☒ Known conflict:

Unnecessary adverse impact on markets:

14. The drafting team is recommending that these standards be balloted with **four separate ballots**, according to the following table. There would be a single ballot for IRO-007-1 that would include approval of IRO-007-1 and approval of the retirement of IRO-002-1 R6, and approval of retirement of IRO-003-2 R1 and R2, etc.

Ballot for:	Includes Associated Changes to Already Approved Standards:
IRO-007	IRO-002-1 — RC – Facilities - Retire R6 IRO-003-2 — RC – Wide Area View - Retire R1 and R2 IRO-005-2 — RC – Current Day Operations - Retire R1; Convert R1.1 into a Reference; Modify R13 part 2 TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control - Modify R2
IRO-008	IRO-004-1 — RC – Operations Planning - Retire R1 and R2
IRO-009	EOP-001-0 — Emergency Operations Planning - Retire R2
	IRO-004-1 — RC – Operations Planning - Retire R3 and R6
	IRO-005-2 — RC – Current Day Operations Retire R3, R5, R9; Delete R13 part 1; Modify R14; Retire R16, R17
IRO-010	IRO-002-1 — RC – Facilities - Retire R2
	IRO-004-1 — RC – Operations Planning - Retire R4, R5
	IRO-005-2 — RC – Current Day Operations - Retire R2
	TOP-003-0 — Planned Outage Coordination Modify R1.2
	TOP-005-1 — Operational Reliability Information - Retire R1, R1.1; Convert Attachment A to a Reference
	TOP-006-1 — Monitoring System Conditions Voltage and Reactive Control - Modify R4

☒ I agree with balloting these standards using four separate ballots

☐ I do not agree balloting these standards using four separate ballots:

Comments:

15. If you have any other comments on this set of standards or its implementation plan that you have not already submitted above, please provide them here.

☐ No additional comments

Comments: We believe that this draft has significantly diluted the responsibilities of the Reliability Coordinator in the operation planning and real-time horizons. The proposed standards/requirements are completely off track with where they were before. As was mentioned in number 8 of the comment form, this draft seems to be heavily focused on monitoring IROLs, which is one of many of their responsibilities, but not their only responsibility.