

Standard Authorization Request Form

Title of Proposed Standard:	Emergency Operations (Project 2009-03)
Request Date	October 30, 2009
SC Approval Date	December 3, 2009
<u>Modified Date</u>	<u>November 5, 2010</u>

SAR Requester Information		SAR Type <i>(Check a box for each one that applies.)</i>	
Name	Al McMeekin	<input type="checkbox"/>	New Standard
Primary Contact	Al McMeekin	<input checked="" type="checkbox"/>	Revision to existing Standard
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Purpose (Describe what the standard action will achieve in support of bulk power system reliability.)

Applicable Standards [and Interpretation Projects](#):

- EOP-001-0 — Emergency Operations Planning
- [EOP-001-1 — Emergency Operations Planning](#)
- [EOP-001-2 — Emergency Operations Planning](#)
- EOP-002-2 — Capacity and Energy Emergencies
- [EOP-002-2.1 — Capacity and Energy Emergencies](#)
- [EOP-002-3 — Capacity and Energy Emergencies](#)
- EOP-003-1 — Load Shedding Plans
- ~~IRO~~[EOP-003-2 — Load Shedding Plans](#)
- [Project 2007-23 — Violation Severity Levels](#)
- ~~Project 2010-INT-04 Interpretation of EOP-001-1 — Reliability Coordination — Responsibilities~~[R2.4](#)
- [Project 2009-28 Interpretation of EOP-001-1 and Authorities](#)[EOP-001-2 Requirement R2.2](#)
- [Project 2008-09 Interpretation for EOP-001-0, R1](#)
- [Project 2008-07 Interpretation EOP-002-2, R6.3 and R7.1](#)

The ~~first three~~[EOP](#) standards in the list above ~~may~~[shall](#) be [clarified individually, reorganized, or merged into a single standard.](#) ~~There are some requirements in IRO-001 that may be improved and merged into IRO-001 was originally a part of this project but has been removed because all of the new EOP issues and directives associated with that standard have been addressed by the Reliability Coordination SDT, Project 2006-06.~~

The development ~~may include~~[shall incorporate the NERC BOT approved interpretations, FERC directives, and](#) other improvements to the standards deemed appropriate by the drafting team; ~~with the consensus of stakeholders;~~ consistent with establishing high quality, enforceable and technically sufficient bulk power system reliability standards.

Industry Need (Provide a justification for the development or revision of the standard, including an assessment of the reliability and market interface impacts of implementing or not implementing the standard action.)

The industry needs standards that are technically accurate, [clearly written so as to leave no confusion as to what a requirement means](#), and support the overall goal of ensuring bulk power system reliability. For the applicable entities to effectively comply, measurable and enforceable standards must be reasonable, clear and unambiguous minimizing the need for interpretation. Users, owners, and operators of the bulk power system should have no doubts with regards to what is required and who it is required of. [Merging/Modifying](#) these standards will eliminate requirements that do not impact the bulk power system and remove redundant requirements.

Brief Description (Provide a paragraph that describes the scope of this standard action.)

Many of the requirements in this set of standards were translated from Operating Policies as part

of the Version 0 process; suggestions for improvement have been submitted by stakeholders, other drafting teams, and FERC staff. The drafting team will consider these comments throughout its review of the standards. Options for the proposed changes are to:

- Modify the requirement to improve its clarity and measurability while removing ambiguity,
- Move the requirement (into another SAR or Standard or to the certification process)
- Eliminate the requirement (either because it is redundant or because it doesn't support bulk power system reliability).

The standard drafting team will review the associated items in what is termed the "NERC Standards Issues Database (Issues Database)." The Issues Database is used by the NERC standards program staff to track the issues and concerns identified with a particular standard. Prior to the development of the Issues Database, the Standard Review Form was utilized to capture all issues referencing a particular standard. The Standard Review Forms and the Issues Database excerpts applicable to these standards are listed in (Attachment 1).

The standard drafting team will also review the assigned standards and modify them to conform to the latest version of NERC's [Reliability Standards Development Procedure Processes Manual](#), the NERC Standard Drafting Team Guidelines, and the ERO Rules of Procedure as described in the "Global Improvements" section of Volume I of the *Reliability Standards Development Plan* (Applicable sections of the Global Improvements section have been provided in Attachment2).

This project will require the standard drafting team to coordinate with NAESB to ensure the reliability standard does not have any undue, adverse impact on business practices or competition, and to coordinate with the drafting teams that are already in place and have proposed requirements that interface with some of the EOP requirements (includes the [Balancing Authority Reliability Coordination Based Control](#) SDT ~~and~~, the Operations Communications Protocols [SDT](#), and the [Underfrequency Load Shedding](#) SDT).

Additionally, FERC directives from Order 693 pertaining to these standards must be addressed.

Detailed Description (Provide a description of the proposed project with sufficient details for the standard drafting team to execute the SAR.)

This project involves reviewing and revising the ~~four~~ referenced standards:

For each existing requirement, the drafting team will work with stakeholders and:

- Eliminate redundancy in the requirements.
- Identify requirements that should be moved.
- Eliminate requirements that do not support bulk power system reliability.
- Improve clarity and measurability, ~~and remove ambiguity from the requirement.~~
- [Remove ambiguity from the requirements.](#)

EOP-001~~1~~, EOP-002~~2~~, and EOP-003~~3~~ were Version 0 standards with minimal updates. They each have requirements with applicabilities that are inconsistent with the functional model, as well as various words or elements that need clarification. ~~IRO-001-1 has requirements with applicability and clarity issues that must be addressed and some requirements that may be moved to the new EOP standard(s).~~

The Operations Communications Protocols SDT is working on a set of requirements for a new standard (COM-003-1) that references the use of Alert Levels, including those alert levels included in EOP-002-2. Close coordination between the two projects will be required.

The ~~Reliability Coordination~~ Underfrequency Load Shedding SDT modified EOP-003-1 and the new version EOP-003-2 has been approved by the NERC BOT. EOP-003-2 now addresses both manual load shed and automatic UVLS. This DT is working on a set of revisions to IRO-001-1 that includes retirement of several considering separating the automatic UVLS from the manual load shed requirements. The manual load shed requirements would be incorporated into the revised or new EOP standard while the automatic UVLS would remain in the newly revised EOP-003-3.

The Balancing Authority Reliability Based Control SDT references modifying EOP-002-2, Requirement R5 after BAL-007-1 through BAL-009-1 become effective. Close coordination between the two projects will be required.

To ensure consistency, NERC staff will coordinate with any SDT that incorporates the pertinent EOP standards in their scope.

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Reliability Functions

The Standard will Apply to the Following Functions <i>(Check box for each one that applies.)</i>		
<input type="checkbox"/>	Reliability Assurer	Monitors and evaluates the activities related to planning and operations, and coordinates activities of Responsible Entities to secure the reliability of the bulk power system within a Reliability Assurer Area and adjacent areas.
X	Reliability Coordinator	Responsible for the real-time operating reliability of its Reliability Coordinator Area in coordination with its neighboring Reliability Coordinator's wide area view.
X	Balancing Authority	Integrates resource plans ahead of time, and maintains load-interchange-resource balance within a Balancing Authority Area and supports Interconnection frequency in real time.
<input type="checkbox"/>	Interchange Authority	Ensures communication of interchange transactions for reliability evaluation purposes and coordinates implementation of valid and balanced interchange schedules between Balancing Authority Areas.
<input type="checkbox"/>	Planning Coordinator	Assesses the longer-term reliability of its Planning Coordinator Area.
<input type="checkbox"/>	Resource Planner	Develops a >one year plan for the resource adequacy of its specific loads within its portion of the Planning Coordinator's Area.
<input checked="" type="checkbox"/>	Transmission Owner	Owns and maintains transmission facilities.
X	Transmission Operator	Ensures the real-time operating reliability of the transmission assets within a Transmission Operator Area.
<input type="checkbox"/>	Transmission Planner	Develops a >one year plan for the reliability of the interconnected Bulk Electric System within the Transmission Planner Area.
X	Transmission Service Provider	Administers the transmission tariff and provides transmission services under applicable transmission service agreements (e.g., the pro forma tariff).
X	Distribution Provider	Delivers electrical energy to the End-use customer.
<input checked="" type="checkbox"/>	Generator Owner	Owns and maintains generation facilities.
X	Generator Operator	Operates generation unit(s) to provide real and reactive power.
X	Purchasing-Selling Entity	Purchases or sells energy, capacity, and necessary reliability-related services as required.
X	Load-Serving Entity	Secures energy and transmission service (and reliability-related services) to serve the End-use Customer.

Reliability and Market Interface Principles

Applicable Reliability Principles <i>(Check box for all that apply.)</i>	
X	1. Interconnected bulk power systems shall be planned and operated in a coordinated manner to perform reliably under normal and abnormal conditions as defined in the NERC Standards.
X <input type="checkbox"/>	2. The frequency and voltage of interconnected bulk power systems shall be controlled within defined limits through the balancing of real and reactive power supply and demand.
X	3. Information necessary for the planning and operation of interconnected bulk power systems shall be made available to those entities responsible for planning and operating the systems reliably.
X	4. Plans for emergency operation and system restoration of interconnected bulk power systems shall be developed, coordinated, maintained and implemented.
X	5. Facilities for communication, monitoring and control shall be provided, used and maintained for the reliability of interconnected bulk power systems.
X	6. Personnel responsible for planning and operating interconnected bulk power systems shall be trained, qualified, and have the responsibility and authority to implement actions.
X	7. The security of the interconnected bulk power systems shall be assessed, monitored and maintained on a wide area basis.
<input type="checkbox"/>	8. Bulk power systems shall be protected from malicious physical or cyber attacks.
Does the proposed Standard comply with all of the following Market Interface Principles? <i>(Select 'yes' or 'no' from the drop-down box.)</i>	
1. A reliability standard shall not give any market participant an unfair competitive advantage. Yes	
2. A reliability standard shall neither mandate nor prohibit any specific market structure. Yes	
3. A reliability standard shall not preclude market solutions to achieving compliance with that standard. Yes	
4. A reliability standard shall not require the public disclosure of commercially sensitive information. All market participants shall have equal opportunity to access commercially non-sensitive information that is required for compliance with reliability standards. Yes	

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Related Standards

Standard No.	Explanation
PER-002	Applicable personnel must be trained in restoration and blackstart procedures.
EOP-005	Contains TOP requirements for coordination of emergency plans with RC.
EOP-006	Contains RC requirements for coordination of emergency plans.
COM-003-1	Contains pre-defined system condition terminology for verbal and written Interoperability Communications.

Related SARs

SAR ID	Explanation
Project 2007-02	Operations Communications Protocols SDT is working on a set of requirements for a new standard (COM-003-1) that references the use of Alert Levels, including those alert levels included in EOP-002-2.
2006-06 2007-01	The Reliability Coordination Underfrequency Load Shedding SDT is working on a set of revisions revision to RO-001 EOP-003-1 , proposed EOP-003-2 .
Project 2010-14	The Balancing Authority Reliability-based Control SDT references EOP-003-1 in their its project scope.

Regional Variances

Region	Explanation
ERCOT	
FRCC	
MRO	
NPCC	
SERC	
RFC	
SPP	
WECC	

SAR for Project 2009-03 – Emergency Operations Attachment 1

Relevant Issues from NERC Standards Issues Database

Source	Standard No.	Project No	Language
Frank Gaffney (FMPA) RSDP Input	EOP-001-0	2009-03	The NERC Glossary of terms defines a TOP as: "the entity responsible for the reliability of its 'local' transmission system, and that operates or directs the operations of the transmission facilities." With this definition in mind, why is the TOP made responsible for EOP-001-1 R2.1: "develop, maintain, and implement a set of plans to mitigate operating emergencies for insufficient generating capacity?"
Frank Gaffney (FMPA) RSDP Input	EOP-001-0	2009-03	The NERC Glossary of terms defines a BA as: "The responsible entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a Balancing Authority Area, and supports Interconnection frequency in real time." In other words, responsible for supply and demand balance in the operating horizon. With this definition in mind, why is the BA responsible for EOP-001-1 R2.2 "Develop, maintain, and implement a set of plans to mitigate operating emergencies on the transmission system"?
Frank Gaffney (FMPA) RSDP Input	EOP-001-0	2009-03	With regard to requirement R2, why is the BA responsible for Under Frequency Load Shedding (UFLS) when PRC-006-0 and PRC-007-0 make it the responsibility of the Regional Entities, the TOPs, the Distribution Providers and the LSEs? Why is the BA responsible for Under Voltage Load Shedding (UVLS) when the responsibility should probably be just the TOP's? Isn't this requirement redundant with PRC-006-0 and PRC-007-0?
Frank Gaffney (FMPA) RSDP Input	EOP-001-0	2009-03	Requirement R4 (and by reference Attachment 1-EOP-001-0) is applicable to both the Transmission Operator and Balancing Authority but includes items that are not applicable to the TOP and are only applicable to the BA, e.g., why is a TOP responsible for fuel supply? Why is a TOP responsible for R6.2 concerning emergency energy? Why is a TOP responsible for fuel supply in R6.4, and why is the TOP responsible for arranging energy delivery?
Frank Gaffney (FMPA) RSDP Input	EOP-001-0 EOP-003-1	2009-03	Requirement R2 of EOP-003-1 states: "Each Transmission Operator and Balancing Authority shall establish plans for automatic load shedding for underfrequency or undervoltage conditions." The standards drafting team for Project 2007-01 Underfrequency Load Shedding should consider modifying this requirement as part of their project.
Real-time Best Practices Standards	EOP-001-0	2009-03	Establish document plans and procedures for conservative operations

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Study Group

FERC's December 20, 2007 and April 4, 2008 Orders	EOP-002-2 2009-03	<p>On March 4, 2008, NERC submitted a compliance filing in response to a December 20, 2007 Order, in which the Commission reversed a NERC decision to register three retail power marketers to comply with Reliability Standards applicable to load serving entities (LSEs) and directed NERC to submit a plan describing how it would address a possible "reliability gap" that NERC asserted would result if the LSEs were not registered. NERC's compliance filing included the following proposal for a short-term plan and a long-term plan to address the potential gap: · Short-term: Using a posting and open comment process, NERC will revise the registration criteria to define "Non-Asset Owning LSEs" as a subset of Load Serving Entities and will specify the reliability standards applicable to that subset. · Longer-term: NERC will determine the changes necessary to terms and requirements in reliability standards to address the issues surrounding accountability for loads served by retail marketers/suppliers and process them through execution of the three-year Reliability Standards Development Plan. In this revised Reliability Standards Development Plan, NERC is commencing the implementation of its stated long-term plan to address the issues surrounding accountability for loads served by retail marketers/suppliers. The NERC Reliability Standards Development Procedure will be used to identify the changes necessary to terms and requirements in reliability standards to address the issues surrounding accountability for loads served by retail marketers/suppliers. Specifically, the following description has been incorporated into the scope for affected projects in this revised Reliability Standards Development Plan that includes a standard applicable to Load Serving Entities: Source: FERC's December 20, 2007 Order in Docket Nos. RC07-004-000, RC07-6-000, and RC07-7-000 Issue: In FERC's December 20, 2007 Order, the Commission reversed NERC's Compliance Registry decisions with respect to three load serving entities in the ReliabilityFirst (RFC) footprint. The distinguishing feature of these three LSEs is that none own physical assets. Both NERC and RFC assert that there will be a "reliability gap" if retail marketers are not registered as LSEs. To avoid a possible gap, a consistent, uniform approach to ensure that appropriate Reliability Standards and associated requirements are applied to retail marketers must be followed. Each drafting team responsible for reliability standards that are applicable to LSEs is to review and change as necessary, requirements in the reliability standards to address the issues surrounding accountability for loads served by retail marketers/suppliers. For additional information see: · FERC's December 20, 2007 Order (http://www.nerc.com/files/LSE_decision_order.pdf) · NERC's March 4, 2008 (http://www.nerc.com/files/FinalFiledLSE3408.pdf), · FERC's April 4, 2008 Order (http://www.nerc.com/files/AcceptLSECompFiling-040408.pdf), and · NERC's July 31, 2008 (http://www.nerc.com/files/FinalFiled-CompFiling-LSE-07312008.pdf) compliance filings to FERC on this subject.</p>
Real-time Best Practices Standards Study Group	EOP-003-1 2009-03	<p>Provide the location, Real-time status, and MWs of Load available to be shed.</p>

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FERC's
December 20,
2007 and April
4, 2008 Orders

IRO-001-1 2009-03

On March 4, 2008, NERC submitted a compliance filing in response to a December 20, 2007 Order, in which the Commission reversed a NERC decision to register three retail power marketers to comply with Reliability Standards applicable to load serving entities (LSEs) and directed NERC to submit a plan describing how it would address a possible “reliability gap” that NERC asserted would result if the LSEs were not registered. NERC’s compliance filing included the following proposal for a short-term plan and a long-term plan to address the potential gap: · Short-term: Using a posting and open comment process, NERC will revise the registration criteria to define “Non-Asset Owning LSEs” as a subset of Load Serving Entities and will specify the reliability standards applicable to that subset. · Longer-term: NERC will determine the changes necessary to terms and requirements in reliability standards to address the issues surrounding accountability for loads served by retail marketers/suppliers and process them through execution of the three-year Reliability Standards Development Plan. In this revised Reliability Standards Development Plan, NERC is commencing the implementation of its stated long-term plan to address the issues surrounding accountability for loads served by retail marketers/suppliers. The NERC Reliability Standards Development Procedure will be used to identify the changes necessary to terms and requirements in reliability standards to address the issues surrounding accountability for loads served by retail marketers/suppliers. Specifically, the following description has been incorporated into the scope for affected projects in this revised Reliability Standards Development Plan that includes a standard applicable to Load Serving Entities: Source: FERC’s December 20, 2007 Order in Docket Nos. RC07-004-000, RC07-6-000, and RC07-7-000 Issue: In FERC’s December 20, 2007 Order, the Commission reversed NERC’s Compliance Registry decisions with respect to three load serving entities in the ReliabilityFirst (RFC) footprint. The distinguishing feature of these three LSEs is that none own physical assets. Both NERC and RFC assert that there will be a “reliability gap” if retail marketers are not registered as LSEs. To avoid a possible gap, a consistent, uniform approach to ensure that appropriate Reliability Standards and associated requirements are applied to retail marketers must be followed. Each drafting team responsible for reliability standards that are applicable to LSEs is to review and change as necessary, requirements in the reliability standards to address the issues surrounding accountability for loads served by retail marketers/suppliers. For additional information see: · FERC’s December 20, 2007 Order (http://www.nerc.com/files/LSE_decision_order.pdf) · NERC’s March 4, 2008 (<http://www.nerc.com/files/FinalFiledLSE3408.pdf>), · FERC’s April 4, 2008 Order (<http://www.nerc.com/files/AcceptLSECompFiling-040408.pdf>), and · NERC’s July 31, 2008 (<http://www.nerc.com/files/FinalFiled-CompFiling-LSE-07312008.pdf>) compliance filings to FERC on this subject.

Standard Review Form	
Project 2009-03 — Emergency Operations	
Standard #	Title
EOP-001-1	Emergency Operations Planning

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Issues	<p>FERC Order 693 Disposition: Approved with modification</p> <ul style="list-style-type: none"> • Include reliability coordinators as an applicable entity. • Consider Southern California Edison’s and Xcel’s suggestions in the standard development process. • Clarify that the 30-minute requirement in requirement R2 to state that load shedding should be capable of being implemented as soon as possible but no more than 30 minutes. • Includes definitions of system states (e.g. normal, alert, emergency), criteria for entering into these states. And the authority that will declare them. • Consider a pilot program (field test) for the system states proposal. • Clarifies that the actual emergency plan elements, and not the “for consideration” elements of Attachment 1, should be the basis for compliance. <p>V1 Industry Comments</p> <ul style="list-style-type: none"> • Combine R4 & R5 • Revise R5 • Measures are really data retention requirements <p>VRF comment</p> <ul style="list-style-type: none"> • R1 – primarily administrative <p>Other</p> <ul style="list-style-type: none"> • Modify standard to conform with the latest version of NERC’s Reliability Standards Development Procedure, the NERC Standard Drafting Team Guidelines, and the ERO Rules of Procedure.
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Standard Review Form	
Project 2009-03 – Emergency Operations	
Standard #	Title
EOP-002-2	Capacity and Energy Emergencies
Issues	<p>FERC Order 693 Disposition: Approved with modification</p> <ul style="list-style-type: none"> • Address emergencies resulting not only from insufficient generation but also insufficient transmission capability, particularly as it affects the implement of the capacity and energy emergency plan. • Include all technically feasible resource options, including demand response and generation resources • Ensure the TLR procedure is not used to mitigate actual IROL violations.

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	<p>V0 Industry Comments</p> <ul style="list-style-type: none"> • R3 should be applied to RC's • Re-wording in R7 • Measures aren't really measures but requirements • L4 non-compliance needs definition of time frame • Several wording changes to Attachment • Compliance not mapped to requirements <p>VRF comments</p> <ul style="list-style-type: none"> • R10R9 - This is a commercial and administrative ordering of curtailments. <p>Other</p> <ul style="list-style-type: none"> • Modify standard to conform with the latest version of NERC's Reliability Standards Development Procedure, the NERC Standard Drafting Team Guidelines, and the ERO Rules of Procedure.
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Standard Review Form Project 2009-03 — Emergency Operations	
Standard #	Title
EOP-003-1	Load Shedding Plans
Issues	<p>FERC Order 693 Disposition: Approved with modification</p> <ul style="list-style-type: none"> • Develop specific minimum load shedding capability that should be provided and the maximum amount of delay before load shedding can be implemented based on overarching nationwide criteria that take into account system characteristics. • Require periodic drills of simulated load shedding. • Suggest a review of industry best practices in determining nationwide criteria. • Consider comments from APPA and ISO-NE in the standards development process. <p>V0 Industry Comments</p> <ul style="list-style-type: none"> • Move implementation requirements • Re-state purpose • Move to Policy 5 & 9 • Add UVLS

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	<p>VRF comments</p> <ul style="list-style-type: none">• R4 – Needs clarification• R6 - Failure to shed load in this condition can inhibit restoration. <p>Other</p> <ul style="list-style-type: none">• Modify standard to conform with the latest version of NERC's Reliability Standards Development Procedure, the NERC Standard Drafting Team Guidelines, and the ERO Rules of Procedure.
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SAR for Project 2009-03 – Emergency Operations Attachment 2

Global Improvements

The standard drafting team is expected to review the assigned standards and modify the standards to conform to the latest version of NERC’s Reliability Standards Development Procedure, the NERC Standard Drafting Team Guidelines, and the ERO Rules of Procedure as described in this “Global Improvements” section.

Statutory Criteria

In accordance with Section 215 of the Federal Power Act, FERC may approve, by rule or order, a proposed reliability standard or modification to a reliability standard if it determines that “the standard is just, reasonable, not unduly discriminatory or preferential, and in the public interest.”

The first three of these criteria can be addressed in large part by the diligent adherence to NERC’s *Reliability Standards Development Procedure*, which has been certified by the ANSI as being open, inclusive, balanced, and fair. Users, owners, and operators of the bulk power system that must comply with the standards, as well as the end-users who benefit from a reliable supply of electricity and the public in general, gain some assurance that standards are just, reasonable, and not unduly discriminatory or preferential because the standards are developed through an ANSI-accredited procedure.

The remaining portion of the statutory test is whether the standard is “in the public interest.” Implicit in the public-interest test is that a standard is technically sound and ensures a level of reliability that should be reasonably expected by end-users of electricity. Additionally, each standard must be clearly written, so that bulk power system users, owners, and operators are ~~put-on-notice~~ [informed of the expected behavior- or have knowledge of the expected behavior.](#) Ultimately, the standards should be defensible in the event of a governmental authority review or court action that may result from enforcing the standard and applying a financial penalty.

The standards must collectively provide a comprehensive and complete set of technically sound requirements that establish an acceptable threshold of performance necessary to ensure the reliability of the bulk power system. “An adequate level of reliability” would argue for both a complete set of standards addressing all aspects of bulk power system design, planning, and operation that materially affect reliability, and for the technical efficacy of each standard. The Commission directed NERC to define the term,

“adequate level of reliability” as part of its January 18, 2007 Order on Compliance Filing. Accordingly, NERC’s Operating and Planning Committees prepared the definition and the NERC Board approved it at its February 2008 meeting for filing with regulatory authorities. The NERC Standards Committee was then tasked to integrate the definition into the development of future reliability standards.

Quality Objectives

To achieve the goals outlined above, NERC has developed 10 quality objectives for the development of reliability standards. Drafting teams working on assigned projects are charged to ensure their work adheres to the following quality objectives:

- 1. Applicability** — Each reliability standard shall clearly identify the functional classes of entities responsible for complying with the reliability standard, with any specific additions or exceptions noted. Such functional classes¹ include: ERO, Regional Entities, reliability coordinators, balancing authorities, transmission operators, transmission owners, generator operators, generator owners, interchange authorities, transmission service providers, market operators, planning coordinators, transmission planners, resource planners, load-serving entities, purchasing-selling entities, and distribution providers. Each reliability standard that does not apply to the entire North American bulk power system shall also identify the geographic applicability of the standard, such as an interconnection, or within a regional entity area. The applicability section of the standard should also include any limitations on the applicability of the standard based on electric facility characteristics, such as a requirement that applies only to the subset of distribution providers that own or operate underfrequency load shedding systems.
- 2. Purpose** — Each reliability standard shall have a clear statement of purpose that shall describe how the standard contributes to the reliability of the bulk power system.
- 3. Performance Requirements** — Each reliability standard shall state one or more performance requirements, which if achieved by the applicable entities, will provide for a reliable bulk power system, consistent with good utility practices and the public interest. Each requirement is not a “lowest common denominator” compromise, but instead achieves an objective that is the best approach for bulk power system reliability, taking account of the costs and benefits of implementing the proposal.
- 4. Measurability** — Each performance requirement shall be stated so as to be objectively measurable by a third party with knowledge or expertise in the area addressed by that requirement. Each performance requirement shall have one or more associated measures used to objectively evaluate compliance with the requirement. If performance results can be practically measured quantitatively, metrics shall be provided within the requirement to indicate satisfactory performance.

¹ These functional classes of entities are derived from NERC’s Reliability Functional Model. When a standard identifies a class of entities to which it applies, that class must be defined in the Glossary of Terms Used in Reliability Standards.

5. **Technical Basis in Engineering and Operations** — Each reliability standard shall be based upon sound engineering and operating judgment, analysis, or experience, as determined by expert practitioners in that particular field.
6. **Completeness** — Each reliability standard shall be complete and self-contained. The standards shall not depend on external information to determine the required level of performance.
7. **Consequences for Noncompliance** — Each reliability standard shall make clearly known to the responsible entities the consequences of violating a standard, in combination with guidelines for penalties and sanctions, as well as other ERO and Regional Entity compliance documents.
8. **Clear Language** — Each reliability standard shall be stated using clear and unambiguous language. Responsible entities, using reasonable judgment and in keeping with good utility practices, are able to arrive at a consistent interpretation of the required performance.
9. **Practicality** — Each reliability standard shall establish requirements that can be practically implemented by the assigned responsible entities within the specified effective date and thereafter.
10. **Consistent Terminology** — Each reliability standard, to the extent possible, shall use a set of standard terms and definitions that are approved through the NERC Reliability Standards Development Process.

In addition to these factors, standard drafting teams also contemplate the following factors the Commission uses to approve a proposed reliability standard as outlined in Order No. 672. A standard proposed to be approved:

1. Must be designed to achieve a specified reliability goal

“321. The proposed Reliability Standard must address a reliability concern that falls within the requirements of section 215 of the FPA. That is, it must provide for the reliable operation of bulk power system facilities. It may not extend beyond reliable operation of such facilities or apply to other facilities. Such facilities include all those necessary for operating an interconnected electric energy transmission network, or any portion of that network, including control systems. The proposed Reliability Standard may apply to any design of planned additions or modifications of such facilities that is necessary to provide for reliable operation. It may also apply to cyber security protection.”

“324. The proposed Reliability Standard must be designed to achieve a specified reliability goal and must contain a technically sound means to achieve this goal.

Although any person may propose a topic for a Reliability Standard to the ERO, in the ERO’s process, the specific proposed Reliability Standard should be developed initially by persons within the electric power industry and community with a high level of technical expertise and be based on sound technical and engineering criteria. It should be based on actual data and

lessons learned from past operating incidents, where appropriate. The process for ERO approval of a proposed Reliability Standard should be fair and open to all interested persons.”

2. Must contain a technically sound method to achieve the goal

“324. The proposed Reliability Standard must be designed to achieve a specified reliability goal and must contain a technically sound means to achieve this goal.

Although any person may propose a topic for a Reliability Standard to the ERO, in the ERO’s process, the specific proposed Reliability Standard should be developed initially by persons within the electric power industry and community with a high level of technical expertise and be based on sound technical and engineering criteria. It should be based on actual data and lessons learned from past operating incidents, where appropriate. The process for ERO approval of a proposed Reliability Standard should be fair and open to all interested persons.”

3. Must be applicable to users, owners, and operators of the bulk power system, and not others

“322. The proposed Reliability Standard may impose a requirement on any user, owner, or operator of such facilities, but not on others.”

4. Must be clear and unambiguous as to what is required and who is required to comply

“325. The proposed Reliability Standard should be clear and unambiguous regarding what is required and who is required to comply. Users, owners, and operators of the Bulk-Power System must know what they are required to do to maintain reliability.”

5. Must include clear and understandable consequences and a range of penalties (monetary and/or non-monetary) for a violation

“326. The possible consequences, including range of possible penalties, for violating a proposed Reliability Standard should be clear and understandable by those who must comply.”

6. Must identify clear and objective criterion or measure for compliance, so that it can be enforced in a consistent and non-preferential manner

“327. There should be a clear criterion or measure of whether an entity is in compliance with a proposed Reliability Standard. It should contain or be accompanied by an objective measure of compliance so that it can be enforced and so that enforcement can be applied in a consistent and non-preferential manner.”

7. Should achieve a reliability goal effectively and efficiently - but does not necessarily have to reflect “best practices” without regard to implementation cost

“328. The proposed Reliability Standard does not necessarily have to reflect the optimal method, or “best practice,” for achieving its reliability goal without regard to implementation cost or historical regional infrastructure design. It should however achieve its reliability goal effectively and efficiently.”

8. Cannot be “lowest common denominator,” i.e., cannot reflect a compromise that does not adequately protect bulk power system reliability

“329. The proposed Reliability Standard must not simply reflect a compromise in the ERO’s Reliability Standard development process based on the least effective North American practice — the so-called “lowest common denominator”—if such practice does not adequately protect Bulk-Power System reliability. Although the Commission will give due weight to the technical expertise of the ERO, we will not hesitate to remand a proposed Reliability Standard if we are convinced it is not adequate to protect reliability.”

9. Costs to be considered for smaller entities but not at consequence of less than excellence in operating system reliability

“330. A proposed Reliability Standard may take into account the size of the entity that must comply with the Reliability Standard and the cost to those entities of implementing the proposed Reliability Standard. However, the ERO should not propose a “lowest common denominator” Reliability Standard that would achieve less than excellence in operating system reliability solely to protect against reasonable expenses for supporting this vital national infrastructure. For example, a small owner or operator of the Bulk-Power System must bear the cost of complying with each Reliability Standard that applies to it.”

10. Must be designed to apply throughout North American to the maximum extent achievable with a single reliability standard while not favoring one area or approach

“331. A proposed Reliability Standard should be designed to apply throughout the interconnected North American Bulk-Power System, to the maximum extent this is achievable with a single Reliability Standard. The proposed Reliability Standard should not be based on a single geographic or regional model but should take into account geographic variations in grid characteristics, terrain, weather, and other such factors; it should also take into account regional variations in the organizational and corporate structures of transmission owners and operators, variations in generation fuel type and ownership patterns, and regional variations in market design if these affect the proposed Reliability Standard.”

11. No undue negative effect on competition or restriction of the grid

“332. As directed by section 215 of the FPA, the Commission itself will give special attention to the effect of a proposed Reliability Standard on competition. The ERO should attempt to develop a proposed Reliability Standard that has no undue

negative effect on competition. Among other possible considerations, a proposed Reliability Standard should not unreasonably restrict available transmission capability on the Bulk-Power System beyond any restriction necessary for reliability and should not limit use of the Bulk-Power System in an unduly preferential manner. It should not create an undue advantage for one competitor over another.”

12. Implementation time

“333. In considering whether a proposed Reliability Standard is just and reasonable, the Commission will consider also the timetable for implementation of the new requirements, including how the proposal balances any urgency in the need to implement it against the reasonableness of the time allowed for those who must comply to develop the necessary procedures, software, facilities, staffing or other relevant capability.”

13. Whether the reliability standard process was open and fair

“334. Further, in considering whether a proposed Reliability Standard meets the legal standard of review, we will entertain comments about whether the ERO implemented its Commission-approved Reliability Standard development process for the development of the particular proposed Reliability Standard in a proper manner, especially whether the process was open and fair. However, we caution that we will not be sympathetic to arguments by interested parties that choose, for whatever reason, not to participate in the ERO’s Reliability Standard development process if it is conducted in good faith in accordance with the procedures approved by the Commission.”

14. Balance with other vital public interests

“335. Finally, we understand that at times development of a proposed Reliability Standard may require that a particular reliability goal must be balanced against other vital public interests, such as environmental, social and other goals. We expect the ERO to explain any such balancing in its application for approval of a proposed Reliability Standard.”

15. Any other relevant factors

“323. In considering whether a proposed Reliability Standard is just and reasonable, we will consider the following general factors, as well as other factors that are appropriate for the particular Reliability Standard proposed.”

“337. In applying the legal standard to review of a proposed Reliability Standard, the Commission will consider the general factors above. The ERO should explain in its application for approval of a proposed Reliability Standard how well the proposal meets these factors and explain how the Reliability Standard balances conflicting factors, if any. The Commission may consider any other factors it deems appropriate for determining if the proposed Reliability Standard is just and reasonable, not unduly discriminatory or preferential, and in the public interest. The ERO applicant may, if it chooses, propose other such

general factors in its ERO application and may propose additional specific factors for consideration with a particular proposed reliability standard.”

Issues Related to the Applicability of a Standard

In Order No. 672, the Commission states that a proposed reliability standard should be clear and unambiguous regarding what is required and who is required to comply. Users, owners, and operators of the bulk power system must know what they are required to do to maintain reliability. Section 215(b) of the FPA requires all “users, owners and operators of the bulk power system” to comply with Commission-approved reliability standards.

The term “users, owners, and operators of the bulk power system” defines the statutory applicability of the reliability standards. NERC’s Reliability Functional Model (Functional Model) further refines the set of users, owners, and operators by identifying categories of functions that entities perform so the applicability of each standard can be more clearly defined. Applicability is clear if a standard precisely states the applicability using the functions an entity performs. For example, “Each Generator Operator shall verify the reactive power output capability of each of its generating units” states clear applicability compared with a standard that states “a bulk power system user shall verify the reactive power output capability of each generating unit.” The use of the Functional Model in the standards narrows the applicability of the standard to a particular class or classes of bulk power system users, owners, and operators. A standard is more clearly enforceable when it narrows the applicability to a specific class of entities than if the standard simply references a wide range of entities, e.g., all bulk power system users, owners, and operators.

In determining the applicability of each standard and the requirements within a standard, the drafting team should follow the definitions provided in the NERC Glossary of Terms Used in Reliability Standards and should also be guided by the Functional Model.

In addition to applying definitions from the Functional Model, the revised standards must address more specific applicability criteria that identify only those entities and facilities that are material to bulk power system reliability with regard to the particular standard.

The drafting team should review the registration criteria provided in the NERC Statement of Compliance Registry Criteria, which is the criteria for applicability. The registration criteria identify the criteria NERC uses to identify those entities responsible for compliance to the reliability standards. Any deviations from the criteria used in the Statement of Compliance Registry Criteria must be identified in the applicability section of the. It is also important to note that standard drafting teams cannot set the applicability of reliability standards to extend to entities beyond the scope established by the criteria for inclusion on NERC’s Compliance Registry. This is expressly prohibited by Commission Order No. 693-A.

The goal is to place obligations on the entities whose performance will impact the reliability of the bulk power system, but to avoid painting the applicability with such a broad brush that entities are obligated even when meeting a requirement will make no material contribution to bulk power system reliability.

Every entity class described in the Functional Model performs functions that are essential to the reliability of the bulk power system. This point is best highlighted with the example that might be the most difficult to understand, the inclusion of distribution providers. Section 215 of the FPA specifically excludes facilities used in the local distribution of electric energy. Nonetheless, some of the NERC standards apply to a class of entities called Distribution Providers. Distribution Providers are covered because, although they own and operate facilities in the local distribution of electric energy, they also perform functions affecting and essential to the reliability of the bulk power system. With regard to these facilities and functions that are material to the reliability of the bulk power system, a distribution provider is a bulk power system user. For example, requirements for distribution providers in the reliability standards apply to the underfrequency load shedding relays that are maintained and operated within the distribution system to protect the reliability of the bulk power system. There are also requirements for distribution providers to provide demand forecast information for the planning of reliable operations of the bulk power system.

A similar line of thinking can apply to every other entity in the Functional Model, including Load-serving Entities and Purchasing-selling Entities, which are users of the bulk power system to the extent they transact business for the use of transmission service or to transfer power across the bulk power system. NERC has specific requirements for these entities based on how these uses may impact the reliability of the bulk power systems. Other functional entities are more obviously bulk power system owners and operators, such as Reliability Coordinators, Transmission Owners and Operators, Generator Owners and Operators, Planning Coordinators, Transmission Planners, and Resource Planners. It is the extent to which these entities provide for a reliable bulk power system or perform functions that materially affect the reliability of the bulk power system that these entities fall under the jurisdiction of Section 215 of the FPA and the reliability standards. The use of the Functional Model simply groups these entities into logical functional areas to enable the standards to more clearly define the applicability.

Issues Related to Regional Entities and Reliability Organizations

Because of the transition from voluntary reliability standards to mandatory reliability standards, confusion has occurred over the distinction between Regional Entities and Regional Reliability Organizations. The regional councils have traditionally been the owners and members of NERC. They have been referred to as Regional Reliability Organizations in the Functional Model and in the reliability standards. In an era of voluntary standards and guides, it was acceptable that a number of the standards included requirements for Regional Reliability Organizations to develop regional criteria, procedures, and plans, and included requirements for entities within the region to follow those requirements. Section 215 of the FPA introduced a new term, called “Regional Entity.”

Regional Entities have specific delegated authorities, under agreements with NERC, to propose and enforce reliability standards within the region, and to perform other functions in support of the electric reliability organization. The former Regional Reliability Organizations have entered into delegation agreements with NERC to become Regional Entities for this purpose.

With regard to distinguishing between the terms Regional Reliability Organizations and Regional Entities, the following guidance should be used. The corporations that provide regional reliability services on behalf of their members are Regional Reliability Organizations. NERC may delegate to these entities a set of regional entity functions. The Regional Reliability Organizations perform delegated regional entity functions much like NERC is the organization that performs the ERO function. Regional Reliability Organizations may do things other than their statutory or delegated regional entity functions.

With the regions having responsibility for enforcement, it is no longer appropriate for the regions to be named as responsible entities within the standards. The plan calls for removing requirements from the standards that refer to Regional Reliability Organizations, either by deleting the requirements or redirecting the responsibilities to the most applicable functions in the Functional Model, such as Planning Coordinators, Reliability Coordinators, or Resource Planners. In instances where a regional standard or criteria are needed, the ERO may direct the Regional Entities to propose a regional standard in accordance with ERO Rule 312.2, which states NERC, may “direct regional entities to develop regional reliability standards.” There is no need to have a NERC standard that directs the regions to develop a regional standard. NERC standards should only include requirements for Regional Entities in those rare instances where the regions have a specific operational, planning, or security responsibility. In this case, Regional Entities (or NERC) may be noted as the applicable entity. However, these Regional Entities (or NERC) are held accountable for compliance to these requirements through NERC’s Rules of Procedure that, by delegation agreement, extend to the Regional Entities. The Regional Entities are not users, owners, or operators of the bulk power system and cannot be held responsible for compliance through the compliance monitoring and enforcement program. However, NERC and the Regional Entities can be held by the Commission to be in violation of its rules of procedure for failing to comply with the standards requirements to which it is assigned.

Issues Related to Ambiguity

Drafting teams should strive to remove all potential ambiguities in the language of each standard, particularly in the performance requirements. Redundancies should also be eliminated.

Specifically, each performance requirement must be written to include four elements:

- **Who** — defines which functional entity or entities are responsible for the requirements, including any narrowing or qualifying limits on the applicability to or of an entity, based on material impact to reliability.

- **Shall do what** — describes an action the responsible entity must perform.
- **To what outcome** — describes the expected, measurable outcome from the action.
- **Under what conditions** — describes specific conditions under which the action must be performed. If blank, the action is assumed to be required at all times and under all conditions.

Each requirement should identify a product or activity that makes a definite contribution to reliability.

Drafting teams should focus on defining measurable outcomes for each requirement, and not on prescribing *how* a requirement is to be met. While being more prescriptive may provide a sense of being more measurable, it does not add reliability benefits and may be inefficient and restrict innovation.

Issues Related to Technical Adequacy

In May 2006, the Commission issued an assessment on the then proposed reliability standards. The Commission noted under a “technical adequacy” section that requirements specified in some standards may not be sufficient to ensure an adequate level of reliability. While Order No. 672 notes that “best practice” may be an inappropriately high standard, it also warns that a “lowest common denominator” approach will not be acceptable if it is not sufficient to ensure system reliability.

Each standard should clearly meet the statutory test of providing an adequate level of reliability to the bulk power system. Each requirement should be evaluated and the bar raised as needed, consistent with good practice and as supported by consensus.

Issues Related to Compliance Elements

Each reliability standard includes a section to address measures and a section to address compliance. The Uniform Compliance Monitoring and Enforcement Guidelines, ERO Sanctions Guidelines, and Compliance Registry Criteria have been modified and have been approved by the Commission. As each standard is revised, or as new standards are developed, drafting teams need to familiarize themselves with these documents to ensure that each standard proposed for ballot is in a format that includes all the elements needed to support reliability and to ensure that the standard can be enforced for compliance.

The compliance-related elements of standards that may need to be modified to meet the latest approved versions of the various compliance documents noted above include the following:

- Each requirement must have an associated Violation Risk Factor.

- Each requirement must have an associated Time Horizon.
- The term, “Compliance Monitor” has been replaced with the term, “Compliance Enforcement Authority.” Either the Regional Entity or the ERO may serve as the compliance enforcement authority. For most standards, the Regional Entity will serve as the compliance enforcement authority. In the situation where a Regional Entity has authority over a reliability coordinator, for example, the ERO will serve as the compliance enforcement authority to eliminate any conflict of interest.
- The eight processes used to monitor and enforce compliance have been assigned new names.
 - Compliance Audits
 - Self-Certifications
 - Spot Checking
 - Compliance Violation Investigations
 - Self-Reporting
 - Periodic Data Submittals
 - Exception Reporting
 - Complaints
- The audit cycles for various entities have been standardized so that the Reliability Coordinator, Transmission Operator, and Balancing Authority will undergo a routine audit to assess compliance with each applicable requirement once every three years while all other responsible entities will undergo a routine audit once every six years.
- Levels of Non-compliance have been replaced with “Violation Severity Levels.”

All requirements are subject to compliance audits, self-certification, spot checking, compliance violation investigations, self-reporting and complaints. Only a subset of requirements is subject to monitoring through periodic data submittals and exception reporting.

Measures: While a measure can be used for more than one requirement, there must be at least one measure for each requirement. A measure states what a responsible entity must have or do to demonstrate compliance to a third party, i.e., the compliance enforcement authority. Measures are “yardsticks” used to evaluate whether required performance or outcomes have been achieved. Measures do not add new requirements or expand the details of the requirements. Each measure shall be tangible, practical, and objective. A measure should be written so that achieving full compliance with the measure provides the compliance monitor with the necessary and

sufficient information to demonstrate that the associated requirement was met by the responsible entity. Each measure should clearly refer to the requirement(s) to which it applies.

Violation Severity Levels: The Violation Severity Levels (formerly known as Levels of Non-Compliance) indicate how severely an entity violated a requirement. Historically, there has been confusion about Levels of Non-Compliance. Some of the previously existing Levels of Non-Compliance incorporate reliability-related risk impacts or consequences. Going forward, the risk or consequences component should be addressed only by the Violation Risk Factor, while the Violation Severity Levels should only be used to categorize how badly the requirement was violated.

Criteria for determining which VSL to use:

It is preferable to have four VSLs representing a spectrum of performance, but where that does not work; the VSLs should be defensible in supporting the criteria in the table below.

Lower VSL	Moderate VSL	High VSL	Severe VSL
The performance or product measured almost meets the full intent of the requirement.	The performance or product measured meets the majority of the intent of the requirement.	The performance or product measured does not meet the majority of the intent of the requirement, but does meet some of the intent.	The performance or product measured does not substantively meet the intent of the requirement.

Violation Risk Factors: Each drafting team is also instructed to develop a Violation Risk Factor for each requirement in a standard in accordance with the following definitions:

- High Risk Requirement** — A requirement 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 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.
- Medium Risk Requirement** — A requirement that, if violated, could directly affect the electrical state or the capability of the bulk power system, or the ability to effectively monitor and control the bulk power system. However, violation of a medium risk requirement is unlikely to lead to bulk electric system instability, separation, or cascading failures; or a requirement in a

planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly and adversely affect the electrical state or capability of the bulk power system, or the ability to effectively monitor, control, or restore the bulk power system. However, violation of a medium risk requirement 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.

- **Lower Risk Requirement** — A requirement that is administrative in nature and, 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. A requirement that is administrative in nature; or 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.

Time Horizons: The drafting team must also indicate the time horizon available for mitigating a violation to the 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.

Note that some requirements occur in multiple time horizons, and it is acceptable to have more than one time horizon for a single requirement.

The drafting team should seek input and review of all measures and compliance information from the compliance elements drafting team members assigned to support each standard drafting team or from the NERC compliance staff.

Coordination with NAESB

Many of the existing NERC standards are related to business practices, although their primary purpose is to support reliability. Reliability standards, business practices, and commercial interests are inextricably linked.

It would be safe to conclude that every reliability standard has some degree of commercial impact and therefore impacts competition. The statutory test to be applied by the Commission is whether the reliability standard has an “undue adverse effect” on competition.

NERC has taken several steps to ensure its reliability standards do not have any undue, adverse impact on business practices or competition. First, NERC coordinates the development of all standards with the North American Energy Standards Board (NAESB). In addition to this formal process, drafting teams work with NAESB groups to ensure effective coordination of wholesale electric business practice standards and reliability standards. NERC and NAESB follow their procedure for the joint development of standards in areas that have both reliability and business practice elements. This procedure is being implemented for all standards in which the reliability and business practice elements are closely related, thereby making joint development a more efficient approach.

This project will require close coordination and joint development with NAESB as there are anticipated revisions to these standards that may need new or revised associated business practices.

To ensure each reliability standard does not have an undue adverse effect on competition, NERC requires that each standard meet the following criteria:

- Competition — A reliability standard shall not give any market participant an unfair competitive advantage.
- Market Structures — A reliability standard shall neither mandate nor prohibit any specific market structure.
- Market Solutions — A reliability standard shall not preclude market solutions to achieve compliance with that standard.
- Commercially Sensitive Information — A reliability standard shall not require the public disclosure of commercially sensitive information. All market participants shall have equal opportunity to access commercially non-sensitive information that is required for compliance with reliability standards.

During the standards development process, each Standards Authorization Request (SAR) drafting team asks the following question to determine if there is a need to develop a business practice associated with the proposed standard:

- Are you aware of any associated business practices that we should consider with this SAR?

Each standard drafting team also asks the following question to determine if there is a potential conflict between a reliability standard and business practice:

- Are you aware of any conflicts between the proposed standard and any regulatory function, rule order, tariff, rate schedule, legislative requirement, or agreement? If yes, please identify the conflict.

Additional Considerations

Drafting teams should consider the following in reviewing and revising their assigned standards:

- **Title:** In general, the title should be concise and to the point. Care should be taken not to try to fully describe a standard through its title. The title should fit a single line in both the header and in the body of the standard.
- **Purpose:** The purpose should clearly state a benefit to the industry (value proposition) in fulfilling the requirements. The purpose should not simply state “the purpose is to develop a standard to...” The purpose should be tied to one or more of the reliability principles.
- **References:** Section (F) provides a place to list associated references that support implementation of the standard. Drafting teams may develop or reference supporting documents with approval of the Standards Committee.
- **Version histories:** Version histories should be expanded to include complete listings of what has been changed from version to version so that end-users can easily keep track of changes to standards. This will also serve as a type of audit trail for changes.

Resource Documents Used

NERC used several references when preparing this plan. These references provide detailed descriptions of the issues and comments that need to be considered by the drafting teams, which are included in the second volume of the work plan, as they work on the standards projects defined in the plan. The references include:

- [FERC NOPR on Reliability Standards, October 20, 2006.](#)
- [FERC Staff Preliminary Assessment of Proposed Reliability Standards, May 11, 2006.](#)
- [FERC Order No. 693 Mandatory Reliability standards for the Bulk Power System, March 16, 2007.](#)
- [FERC Order No. 693-A Mandatory Reliability Standards for the Bulk Power System, July 19, 2007.](#)
- [FERC Order No. 890 Preventing Undue Discrimination and Preference in Transmission Service, February 16, 2007.](#)
- [Comments of the North American Electric Reliability Council and North American Electric Reliability Corporation on Staff Preliminary Assessment of Reliability Standards, June 26, 2006.](#)

Standards Authorization Request Form

- [Comments of the North American Electric Reliability Corporation on Staff Preliminary Assessment of NERC Standards CIP-002 through CIP-009, February 12, 2007.](#)
- [Comments of the North American Electric Reliability Corporation on the Notice of Proposed Rulemaking for Facilities Design, Connections and Maintenance Reliability standards, September 19, 2007.](#)
- [Comments received during the development of Version 0 reliability standards.](#)
- [Consideration of comments of the Missing Compliance Elements drafting team.](#)
- [Consideration of comments of the Violation Risk Factors drafting team.](#)
- [Consideration of comments in the Phase III–IV standards.](#)
- [Comments received during industry comment period on work plan.](#)
- [Q&A for Standards and Compliance.](#)