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## Standard Authorization Request Form

Title of Proposed Standard	Violation Risk Factors
Request Date	January 5, 2006

SAR Requestor Information	SAR Type (Put an 'x' in front of one of these selections)
Name Stan Kopman, chair	<input type="checkbox"/> New Standard
Primary Contact: Stan Kopman	<input checked="" type="checkbox"/> Revision to existing Standard
Telephone (212) 840-1070 Fax (212) 302-2782	<input type="checkbox"/> Withdrawal of existing Standard
E-mail skopman@npcc.org	<input type="checkbox"/> Urgent Action

### Purpose/Industry Need (Provide one or two sentences)

This SAR proposes a matrix that assigns a risk of high, medium, or lower for all of the requirements contained in the reliability standards. This assignment provides a baseline understanding of the risk that a violation of a requirement poses to the bulk power system. This factor will be used when determining a penalty or sanction for a violation of that requirement.

## Reliability Functions

The Standard will Apply to the Following Functions (Check box for each one that applies by double clicking the grey boxes.)		
<input checked="" type="checkbox"/>	Reliability Authority	Ensures the reliability of the bulk transmission system within its Reliability Authority area. This is the highest reliability authority.
<input checked="" type="checkbox"/>	Balancing Authority	Integrates resource plans ahead of time, and maintains load-interchange-resource balance within its metered boundary and supports system frequency in real time
<input checked="" type="checkbox"/>	Interchange Authority	Authorizes valid and balanced Interchange Schedules
<input checked="" type="checkbox"/>	Planning Authority	Plans the bulk electric system
<input checked="" type="checkbox"/>	Resource Planner	Develops a long-term (>1year) plan for the resource adequacy of specific loads within a Planning Authority area.
<input checked="" type="checkbox"/>	Transmission Planner	Develops a long-term (>1 year) plan for the reliability of transmission systems within its portion of the Planning Authority area.
<input checked="" type="checkbox"/>	Transmission Service Provider	Provides transmission services to qualified market participants under applicable transmission service agreements
<input checked="" type="checkbox"/>	Transmission Owner	Owens transmission facilities
<input checked="" type="checkbox"/>	Transmission Operator	Operates and maintains the transmission facilities, and executes switching orders
<input checked="" type="checkbox"/>	Distribution Provider	Provides and operates the "wires" between the transmission system and the customer
<input checked="" type="checkbox"/>	Generator Owner	Owens and maintains generation unit(s)
<input checked="" type="checkbox"/>	Generator Operator	Operates generation unit(s) and performs the functions of supplying energy and Interconnected Operations Services
<input checked="" type="checkbox"/>	Purchasing-Selling Entity	The function of purchasing or selling energy, capacity and all necessary Interconnected Operations Services as required
<input checked="" type="checkbox"/>	Market Operator	Integrates energy, capacity, balancing, and transmission resources to achieve an economic, reliability-constrained dispatch.
<input checked="" type="checkbox"/>	Load-Serving Entity	Secures energy and transmission (and related generation services) to serve the end user

## Reliability and Market Interface Principles

<b>Applicable Reliability Principles</b> (Check boxes for all that apply by double clicking the grey boxes.)	
<input checked="" type="checkbox"/>	1. Interconnected bulk electric systems shall be planned and operated in a coordinated manner to perform reliably under normal and abnormal conditions as defined in the NERC Standards.
<input checked="" type="checkbox"/>	2. The frequency and voltage of interconnected bulk electric systems shall be controlled within defined limits through the balancing of real and reactive power supply and demand.
<input checked="" type="checkbox"/>	3. Information necessary for the planning and operation of interconnected bulk electric systems shall be made available to those entities responsible for planning and operating the systems reliably.
<input checked="" type="checkbox"/>	4. Plans for emergency operation and system restoration of interconnected bulk electric systems shall be developed, coordinated, maintained and implemented.
<input checked="" type="checkbox"/>	5. Facilities for communication, monitoring and control shall be provided, used and maintained for the reliability of interconnected bulk electric systems.
<input checked="" type="checkbox"/>	6. Personnel responsible for planning and operating interconnected bulk electric systems shall be trained, qualified and have the responsibility and authority to implement actions.
<input checked="" type="checkbox"/>	7. The security of the interconnected bulk electric systems shall be assessed, monitored and maintained on a wide area basis.
<b>Does the proposed Standard comply with all of the following Market Interface Principles?</b> (Select 'yes' or 'no' from the drop-down box by double clicking the grey area.)	
1. The planning and operation of bulk electric systems shall recognize that reliability is an essential requirement of a robust North American economy. Yes	
2. An Organization Standard shall not give any market participant an unfair competitive advantage. Yes	
3. An Organization Standard shall neither mandate nor prohibit any specific market structure. Yes	
4. An Organization Standard shall not preclude market solutions to achieving compliance with that Standard. Yes	
5. An Organization 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	

**Detailed Description** (Provide enough detail so that an independent entity familiar with the industry could draft, modify, or withdraw a Standard based on this description.)

The requirements associated with each NERC reliability standard have been assigned a level of risk; high, medium, or lower, based on the detrimental effect a violation of the requirement could have on the reliability of the bulk power system. These levels of risk are in a matrix that, if approved, will become an addendum to the existing reliability standards and included in the body of the newly developed standards.

These proposed initial risk factors were assigned by the SAR drafting team. Risk factors for new standards and requirements are proposed to be created by the standard drafting teams using criteria that will be included in the Reliability Standards Process Manual. The risk factors from this matrix will be inserted into the proper standard as each reliability standard comes up for its five-year review. At that time, the requirement and risk factor will be retired from the addendum.

All proposed risk factors will be posted for stakeholder comment prior to being balloted. For violation risk factors being developed for already approved standards, a matrix of risk factors will be balloted. In the future, risk factors will be added to each requirement by the associated standard drafting team. The risk factors will become a part of the standard and will be subject to stakeholder comment and balloting.

**The Need for Violation Risk Factors**

Since their inception, the NERC Reliability Standards have not included approved indicators of the relative risk of non-compliance. Without these indicators, it is difficult for the industry, regulators, and public to understand the risk that violations can have on the bulk electric system. From standard to standard, the current noncompliance levels do not provide a consistent indication of relative risk to the bulk electric system.

The proposed violation risk factors are designed to indicate the potential reliability impact of violating a standard requirement. Assigning a risk factor to each requirement is fundamental to implementing the ERO Sanction Guidelines if NERC becomes the ERO. The existing levels of noncompliance for each standard, when used with the existing penalty matrix, are based on a limited amount of information that makes it difficult to develop a fair or meaningful penalty or sanction for a violation. A new and more consistent method that relies on the violation risk factor to create the base penalty in the ERO Sanction Guidelines has been developed. The ERO Sanction Guidelines document is part of the NERC's ERO Application and will be used to determine penalties and sanctions when a requirement is violated.

**Development of the Violation Risk Factors**

The SAR drafting team developed the initial violation risk factors, using the definitions contained in the list and assigned a violation risk factor of high, medium, or lower to each currently approved standard requirement.

**Definition of Risk Factors**

The requirements associated with each of NERC reliability standards have been assigned a level of risk; high, medium, and lower, based on the detrimental effect a violation of the requirement could have on the reliability of the bulk power system. The following definitions were applied to determine the assignment of risk for each requirement:

High Risk Requirement

a. A requirement that, if violated, could directly cause or contribute to bulk electric system instability, separation, or a cascading sequence of failures, or could place the bulk electric system at an unacceptable risk of instability, separation, or cascading failures; or

b. 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 electric system instability, separation, or a cascading sequence of failures, or could place the bulk electric system at an unacceptable risk of instability, separation, or cascading failures, or could hinder restoration to a normal condition.

**Medium Risk Requirement**

a. A requirement that, if violated, could directly and adversely affect the electrical state or the capability of the bulk electric system, or the ability to effectively monitor and control the bulk electric system. However, violation of a medium risk requirement is unlikely to lead to bulk electric system instability, separation, or cascading failures; or

b. 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 electric system, or the ability to effectively monitor, control, or restore the bulk electric system. However, violation of a medium risk requirement is unlikely, under emergency, abnormal or restoration conditions anticipated by the preparations, to lead to bulk electric system instability, separation, or cascading failures, nor to hinder restoration to a normal condition.

**Lower Risk Requirement**

a. A requirement that, if violated, would not be expected to adversely affect the electrical state or capability of the bulk electric system, or the ability to effectively monitor and control the bulk electric system. A requirement that is administrative in nature; or

b. 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 adversely affect the electrical state or capability of the bulk electric system, or the ability to effectively monitor, control, or restore the bulk electric system. A planning requirement that is administrative in nature.

**Other Relevant Standards Activities**

The violation risk factors are part of a larger plan to improve the standards process and the standards themselves. Also attached is the White Paper on Guidelines for Compliance Information in Support of Reliability Standards that was approved by both the Standards Authorization Committee and the Compliance and Certification Committee (CCC). The paper outlines the proposed changes to the Reliability Standards Process Manual that includes restructuring the compliance elements in the standards. Some of the compliance elements currently contained in the standards will be moved to a manual administered by the CCC. An open process to develop, revise, and approve compliance elements for a new or revised standard will parallel the development of that particular standard. Violation risk factors, however, would be included as part of each standard requirement. They would be developed by the subject matter experts on the standard drafting teams and reviewed and approved by the industry in accordance with the standards ballot process.

**Related Standards**

Standard No.	Explanation
All	All standards that are in effect as of 1/1/2006 have violation risk factors developed. Those approved after that date but before the final risk violation factors standard is balloted will have factors developed so no requirements are left without factors.

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***Related SARs***

<b>SAR ID</b>	<b>Explanation</b>
Reliability Standards Process Manual	The Reliability Standards Process Manual is undergoing proposed changes; additional changes would be required.
Provide Missing Measures and Compliance Elements in Existing Standards	This is a parallel effort to clarify compliance enforcement elements in the standards for consistency.

***Regional Differences***

<b>Region</b>	<b>Explanation</b>
ERCOT	
FRCC	
MRO	
NPCC	
RFC	
SERC	
SPP	
WECC	