

## Standard Authorization Request Form

Title of Proposed Standard	Policy 8C
Request Date	March 5, 2002

<b>SAR Requestor Information</b>	<b>SAR Type</b> (Put an 'x' in front of one of these selections)
Name            Personnel Subcommittee	<input type="checkbox"/> New Standard
Primary Contact    Bob Thompson	<input type="checkbox"/> Revision to existing Standard
Telephone    724-838-6479      Fax            724-838-6156	<input type="checkbox"/> Withdrawal of existing Standard 1
e-mail            rthomps@alleghenypower.com	<input checked="" type="checkbox"/> Emergency Action

<b>Purpose</b> (Provide one or two sentences)
---

<p><b>Industry Need</b> (Provide one or two sentences)</p> <p>The 2001 System Operator job analysis revealed that the current single System Operator Certification Exam is no longer a valid instrument to evaluate today's more specialized System Operators. New multiple specialty exams will be available for use by September 3, 2002. On recommendation from NERC General Council David N. Cook, the Personnel Subcommittee revised Policy 8C to match the requirements of the new examination structure. The changes embodied in the Proposed Policy 8C must be approved prior to the September 3 delivery of the new exams.</p>
---

<p><b>Brief Description</b> (A few sentences or a paragraph) Provide enough detail so that an independent entity familiar with the industry could draft a Standard based on this description.)</p> <p><i>See Attached Proposed Policy 8C</i></p>
--

---

<sup>1</sup> Requests to Withdraw an existing Organization Standard only require that this page be completed.

## SAR: Policy 8C

### Reliability Functions

<b>The Standard will Apply to the Following Functions</b> <i>(Put an 'X' in front of each one that applies)</i>		
X	Reliability Authority	Ensures the reliability of the bulk transmission system within its Security Authority Area. This is the highest reliability authority.
X	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
X	Interchange Authority	Authorizes valid and balanced Interchange Schedules
	Planning Authority	Plans the bulk electric system
	Transmission Service Provider	Provides transmission services to qualified market participants under applicable transmission service agreements
	Transmission Owner	Owns transmission facilities
X	Transmission Operator	Operates and maintains the transmission facilities, and executes switching orders
	Distribution Provider	Provides and operates the "wires" between the transmission system and the customer
	Generator	Owns and operates generation unit(s) or runs a market for generation products that performs the functions of supplying energy and Interconnected Operations Services
	Purchasing-Selling Entity	The function of purchasing or selling energy, capacity and all necessary Interconnected Operations Services as required.
	Load-Serving Entity	Secures energy and transmission (and related generation services) to serve the end user

**SAR: Policy 8C**

**Reliability and Market Interface Principles**

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

## SAR: Policy 8C

### Implementation Plan

<b>Description</b> (Provide plans for the implementation of the proposed standard, including any known systems or training requirements.)
(See description in attached Policy 8C)
Proposed Implementation _____ days after Board of Trustees adoption or on (date): _____

### Assignments

	Assignment
Tech Subcommittee(s)	
NERC Staff	

## C. Certification

### *Standards*

1. **All real-time<sup>1</sup> operating positions in control centers for the operation of the BULK ELECTRIC SYSTEM<sup>2</sup> where any critical task listed below is performed, or from which others are directed to perform such tasks, shall be staffed at all times with NERC Certified personnel holding a valid credential for that position:**

#### 1.1. **Balancing & Interchange activities**

##### 1.1.1. **Critical Task List – Balancing & Interchange**

- Balance loads and resources (such as generation, dispatchable load and/or interchange) to maintain system reliability at scheduled frequency.
- Evaluate, modify and implement a resource plan for the current operating period to balance system load and resources.
- Operate AGC to dispatch generation resources within the entity's metered boundaries.
- Procure alternate source of energy when the Reliability Authority curtails transactions or calls for resource re-dispatch.
- Direct actions to correct abnormal frequency
- Direct procurement of replacement energy upon a loss of a generating or interchange resource.
- Direct the separation or shutdown of generators that are unsafe to operate during or after an area disturbance.
- Ensure adequate spinning and operating reserves are available.
- Request an Energy Emergency Alert (EEA) when resources (such as generation, dispatchable load and/or interchange) and reserves are inadequate to meet demand.
- React to a capacity emergency by ordering on all available generation and/or scheduling energy purchases and/or requesting emergency assistance from other systems.
- Confirm and implement interchange schedules and schedule changes.

---

<sup>1</sup> The phrase 'real-time' here implies an action that produces a response from the interconnected electrical system that is virtually concurrent with the causative action. This wording is intended to exclude personnel such as planners and others who may perform a task listed on the critical task lists but who do so in a manner that precludes immediacy of consequences.

<sup>2</sup> The phrase 'control centers for the operation of the BULK ELECTRIC SYSTEM' was chosen to exclude such sites as power plant and substation control rooms except where such a control room is also responsible for control area operations.

### **1.1.2. Valid credentials for the Critical Task List – Balancing & Interchange:**

- NERC Certified System Operator (certificate dated prior to 08/03/2002).
- NERC Certified System Operator – Balancing & Interchange
- NERC Certified System Operator – Balancing, Interchange & Transmission.
- NERC Certified System Operator – Reliability

## **1.2. Transmission activities**

### **1.2.1. Critical Task List – Transmission**

- Direct the restoration of the transmission system following a major system outage, load shedding, islanding or blackout.
- Direct and/or control switching of bulk-electric system elements at switching stations, generating stations and transmission line terminals.
- Direct and/or approve the real-time operation of the bulk electric transmission system.
- Coordinate outages of transmission system elements with all impacted systems to ensure transmission system reliability.
- Provide emergency services coordination for field personnel.
- Initiate control actions to mitigate thermal, stability, and voltage limit violations.
- Following the activation of automatic load shedding schemes, disable automatic underfrequency relays if system conditions warrant.
- Coordinate with impacted systems, and monitor actual and/or expected operating reliability limit violations and respond as required.
- Coordinate operations between the host control area and any transmission operating entities that exist within the host control area's boundaries to ensure transmission reliability.
- Monitors voltage levels and directs or controls reactive resources, and coordinates MVAR flows with neighboring systems.
- Directs or initiates shedding load to alleviate system emergency conditions.

### **1.2.2. Valid credentials for the Critical Task List – Transmission:**

- NERC Certified System Operator (certificate dated prior to 08/03/2002)
- NERC Certified System Operator – Transmission
- NERC Certified System Operator – Balancing, Interchange & Transmission
- NERC Certified System Operator – Reliability

### 1.3. Reliability activities

#### 1.3.1. Critical Task List – Reliability

- Produce and publish system status information via Reliability Authority Information System (RAIS) other regional communication networks.
- Initiate a Reliability Authority hotline conference call when frequency error exceeds specified limits.
- Monitor, evaluate and act upon reliability-related data from the RAIS.
- Monitor, evaluate and act upon reliability-related data within a Reliability Authority Area.
- Coordinate Reliability processes and actions with, and among, other Reliability Authorities.
- Issue Energy Emergency Alerts to Generators, Load Serving Entities, Transmission Operators, Balancing Authorities And Interchange Authorities<sup>3</sup>.

#### 1.3.2. Valid credentials for the Critical Task List – Reliability:

- NERC Certified System Operator (certificate dated prior to 08/03/2002)
- NERC Certified System Operator – Reliability

### 1.4. Personnel whose duties include tasks from both the Balancing & Interchange Critical Task List and the Transmission Critical Task List shall hold one of the credentials or the combination of credentials listed below:

- NERC Certified System Operator (certificate dated prior to 08/03/2002)
- NERC Certified System Operator – Balancing, Interchange & Transmission
- NERC Certified System Operator – Reliability
- Both NERC Certified System Operator – Balancing & Interchange and NERC Certified System Operator – Transmission

2. **Operator-in-Training** – While in training, an individual without the proper NERC certification credential may not independently fill a required operating position performing any tasks identified on the Critical Task Lists. An Operator-in-Training may perform critical tasks only under the direct, continuous supervision and observation of the NERC-Certified individual filling the required position.

---

<sup>3</sup> The NERC Functional Model defines the reliability functions that are necessary to ensure resource-demand balance and transmission reliability in real time, as well as provides the mechanism for the marketplace to deliver its goods to its customers. Generators, Load Serving Entities and Transmission Operators are three Operating Functions identified in the Model. Balancing Authorities and Interchange Authorities are two of the Service Functions identified in the Model.

3. **Phase-in of NERC Certification requirements resulting from these provisions** – In recognition that this change to Policy 8C may impose an obligation for staffing certain operating positions with NERC-Certified System Operators that is different than the previous requirement, a twelve month transition period is provided to allow time for compliance with the new requirements. This transition period only applies to operating positions that did not require NERC-Certified System Operators under the requirements of Policy 8C versions approved by the NERC Board of Trustees on or before February 7, 2000. Effective September 1, 2003, all personnel performing any of the critical tasks identified above must hold appropriate valid credential(s) as defined above.