Standard Authorization Request Form

Name of Proposed Standard	Certification of the Transmission Operator Function
Request Date	October 7, 2002
Authorized for Posting	November 20, 2002
SAR ID#	TOP_CERTIFICATION_01_03

SAR Requestor Information		***SAR Type***	
Name	Organization Certification Task Force	☒	1. New Standard
Primary Contact	Gerry Burrows	☐	2. Revision to existing Standard or
Telephone	816-654-1183	☐	3. Withdrawal of existing Standard
e-mail	gerry.burrows@kcpl.com	☐	4. Urgent Action

Purpose/Industry Need of Standard

To ensure that each entity that wants to be recognized as a Transmission Operator has the capability of performing the responsibilities assigned to the Transmission Operator function.

Brief Description of New Standard or Revision to Existing Standard

Each entity that wants to be recognized as a Transmission Operator shall demonstrate that it has the processes, procedures, tools and agreements in place to demonstrate that it has the capability of performing the responsibilities assigned to the Reliability Function.

Detailed Description of New Standard or Revision to Existing Standard

Summary

The primary steps in the Transmission Operator Certification Process, and the entity responsible for each step, are as follows:

- Initiation of Process – Entity seeking certification (the "Applicant")
- Provision of criteria, process, documentation, etc. – Region
- Formation of Certification Review Team – Region
- Data collection – Region
- Data review – Region (Review Team)
- Site visit – Region (Review Team)
- Recommendation – Region (Review Team)
- Certification and Authority to operate – Region
- Notification of authority to operate – NERC

Transmission Operator Certification Process

1. Single TOP in a Single Region

An entity seeking certification as a Transmission Operator (the "Applicant") will initiate the certification process by making a formal request to the Regional Manager in the Region where the Applicant plans to operate. A copy of the request will also be sent to the NERC Director-Compliance.

Single TOP in Multiple Regions

An entity seeking certification as a Transmission Operator (the "Applicant") in multiple Regions will initiate the certification process by making a formal request to one of the Regional Managers of a Region where the Applicant plans to operate and copy all other Regional Managers of those Regions within which the Applicant will operate. A copy of the request will also be sent to the NERC Director-Compliance.

2. Single TOP in a Single Region

The NERC Region in which the Applicant plans to operate will be responsible for conducting the formal review process and awarding of certification.

Single TOP in multiple Regions

In situations where a TOP crosses Regional boundaries, all affected Regions shall participate in the certification process. The affected Regions shall identify one of the affected Regions as the Lead Region. The Lead Region shall be responsible for coordinating the formal review process and the awarding of certification in concurrence with the other affected Regions.

3. A timeline, including specific milestones, shall be agreed to by the Applicant and the Regional or Lead Regional Council. The NERC Transmission Operator Certification Procedure and certification recommendation is expected to be completed within nine months of the date when the initial request was received by the Regional Manager.

4. The Region or Lead Region will notify all appropriate parties and provide each with the necessary information regarding the Transmission Operator's request for certification, the certification process, and the duties expected from each entity.

5. The Applicant must register in the NERC Master Registry. Registration stays on hold until certification is granted or denied

6. NERC/Regional Staff will begin the process of making any necessary modeling/software changes. The Applicant and Region will supply necessary information to NERC.

7. The Region or Lead Region will provide questionnaires and related documents that will be used by all entities involved in the certification process. These questionnaires and related documents will be used to address the Applicant's capabilities and actions as they relate to established Transmission Operator requirements. The following list of entities will be recipients of the questionnaires and related documents as each is a source of certification information and data:

- Applicant (i.e. entity seeking Transmission Operator certification)
- Its Balancing Authorities and Reliability Authorities
- Its Transmission Service Provider(s)
- All Adjacent Transmission Operators

8. The Region or Lead Region will provide expectations and standards regarding confidentiality and retention of all data reporting, completed questionnaires and forms, reports and recommendations associated with the documentation it provides and receives.

9. The Region or Lead Region will assemble a Certification Review Team charged with the responsibility of determining if the Applicant meets NERC's Transmission Operator Criteria. The Region or Lead Region and the Applicant will agree on the Review Team members before the commencement of the review process. The Review Team will subject themselves to confidentiality agreements for any data or information that is made available to them through the certification review process.

10. The Review Team will consist of a minimum of three individuals. The selected individuals will represent at least three of the categories listed below:

- Interchange Authority
- Balancing Authority
- Reliability Authority
- Transmission Operator
- Regional Compliance Committee member
- Regional Operating Committee member
- Representative from NERC Staff
- Representative from Regional Staff
- Representative from another NERC Region

- Representative from an RTO, when applicable

Review team members cannot be employees of the applicant or any of its affiliates.

Review processes that involve an entity that is performing a function across Regional boundaries shall have a review team that consists of at least one member from each of the affected Regions. These representatives will be selected by the individual Regions that they represent and not by the Lead Region. Regional representation is still subject to Applicant approval. Remaining review team members must represent at least two of the remaining categories.

In the alternative, the Region may elect, with applicant agreement, to engage a completely independent review team.

11. The Review Team will report its initial findings to the Applicant and to the Region(s) based on the information obtained through the initial application and questionnaires. The review Team will request any additional information before making an on-site visit.

12. The Review Team will conduct at least one on-site visit to the Applicant's control center facility. During the visit, the Review Team will:

- Review with the Applicant the data collected through the questionnaires,
- Interview the Applicant's operations and management personnel,
- Inspect the Applicant's facilities and equipment, and
- Review all necessary documents and data.

13. The Review Team will identify any deficiencies (to both the Applicant and to the Region(s)) that must be resolved prior to the review team making their final recommendation. The Review Team will review any follow-up work required by the Applicant until a certification recommendation is made.

14. The Review Team will formulate a certification recommendation based on: data collected and validated from the questionnaires; and from observations and information collected during an on-site visit to the Applicant's facility. The Review Team will support its recommendation through the production of an evaluation review template and a formal report. All members of the review team will have an equal voice in the certification recommendation.

15. Single TOP in Single Region

The certification recommendation from the Review Team will be presented to the appropriate Regional committee(s). The certification recommendation is made by the review team and then approved or disapproved by the Region.

Single TOP in multiple Regions

The certification recommendation will be presented to the appropriate Regional committee(s) of all the affected Regions by the Review Team. The certification recommendation is then approved or disapproved by all of the affected Regions. The Lead Region will be responsible for verifying the Regional approvals prior to awarding certification.

16. The Region or Lead Region will notify the Applicant of the certification decision. The Region or Lead Region (in consultation with the affected Regions) may award or deny the Applicant's certification as a Transmission Operator. As an alternative, the Region or Lead Region (in consultation with the affected Regions) may grant 'pending certification' to the applicant. The pending certification shall be granted for a period of time not longer than 180 days. Pending certification, does not grant operation as a Transmission Operator. If the Applicant fails to meet the conditions set by the Region(s), within the granted timeframe, the Applicant's certification

will be deemed to be the same as denied. If the Applicant meets the conditions set by the Region or Lead Region(in consultation with the affected Regions), within the granted timeframe, the Region(s) must respond to the Applicant's notification of completion of requirements within 30 days.

17. After the Region or Lead Region has approved the Applicant as a Transmission Operator, the Region or Lead Region will notify NERC Staff, who in turn, will notify all of the necessary entities as to the date that the Applicant may begin its Transmission Operator operation. Transmission Operator operation shall not begin before the agreed upon date and must commence operation within 12 months of certification. Failure to begin operation within the 12-month period will require the applicant to re-apply for certification.

18. If the Region or Lead Region denies certification, it shall provide the Applicant with a written report containing specific reasons for the denial. If the Applicant disagrees with the Region's decision, it can initiate the Regional ADR process within 60 days of the date of the written denial. If the Applicant fails to initiate the ADR process within the 60-day time limit as identified in the previous step, it may reapply for certification after 90 days from the date of written denial.

De-certification Process

This section describes the process that will be used for the de-certification of a Transmission Operator when the entity does not wish to continue performing the Transmission Operator function and has arranged for a replacement entity to assume its Transmission Operator responsibilities.

1. The Transmission Operator requesting de-certification notifies the Region(s) it operates in that it wishes to be decertified and names the Transmission Operator (s) that will be assuming its Transmission Operator responsibilities. If the Transmission Operator (s) assuming the responsibilities is in a different Region, then a Lead Region will be designated and all Regions will be involved in the process.

2. The Region or Lead Region contacts the Transmission Operator (s) that is to assume the additional Transmission Operator responsibilities to begin the certification process.

3. After the Region or Lead Region has certified the Transmission Operator(s) assuming additional responsibilities, the Region or Lead Region will notify the Transmission Operator desiring de-certification and NERC staff of the date the Transmission Operator will cease operation.

4. NERC will notify the appropriate entities of this date.

Transmission Operator Criteria

Introduction

These Criteria establish the requirements for certification as a NERC Transmission Operator. They are based on existing NERC Reliability Standards, NERC Operating Policies and Planning Standards, and the NERC Functional Model. NERC Policies and Standards applicable to the Transmission Operator function must be adhered to until they are replaced by Reliability Standards or retired.

Definition of the Transmission Operator Function

Monitors and assesses local reliability, operates the transmission facilities, and executes switching orders

in support of the Reliability Authority.

Certification Criteria

1. **Confirmation by Regional Council.** To be recognized as a NERC-Certified Transmission Operator, the entity must be reviewed and confirmed by the Regional Council(s) in which the entity operates.

2. **Agreements.** Agreements must be in place defining the responsibilities and authority of the Transmission Operator with the Reliability Authorities, Transmission Service Providers, Distribution Providers, and all other applicable functional entities with which its facilities connect. Agreements shall address both normal and emergency operations.

3. **Personnel**

3.1. Must have NERC-certified system operators performing the Transmission Operator responsibilities 24 hours a day, 7 days a week.

4. **Organization**

4.1. Documentation identifying that the organization has signed the NERC Confidentiality Agreement.

4.2. Documentation identifying that the Transmission Operator personnel are aware of their obligations and responsibilities under the NERC Confidentiality Agreement.

5. **Data Acquisition and System Analysis**

5.1. Must have the ability to monitor its area with real-time data. (e.g., demand, volts, VArs, reactive reserve, equipment status, transmission line flows, etc.)

5.2. Process/procedures and tools in place for obtaining generation and transmission system information.

5.3. Process/procedures and tools in place to provide transmission system information, in real-time, to the appropriate authorities.

5.4. Process/procedures and tools in place for providing local network integrity by:

5.4.1. Performing reliability analyses, both real-time and contingency analyses.

5.4.2. Establishing thermal, voltage, and stability limits for real-time operations.

5.4.3. Operating the transmission system within the established thermal, voltage, and stability limits.

5.4.4. Implementing adjustments to dc ties.

5.4.5. Setting and coordinating transmission outage schedules

5.5. Process/procedures in place for coordinating with other transmission operators and their reliability authority.

5.6. Process/procedure in place for providing construction and maintenance plans to the Reliability Authority.

5.7. Process/procedure and tools in place for compliance with all applicable NERC reliability standards.

6. **Emergency Operations**

6.1. Process/procedure in place that defines the coordination and implementation of

emergency operations within its local area.

6.2. Process/procedure in place that defines the coordination and implementation of system restoration operations within its local area.

6.3. Plan in place that ensures continued operation during abnormal and emergency conditions due to the loss of facilities.

Reliability Functions

The Standard will Apply to the Following Functions (Check all that apply)		
☐	Reliability Authority	Ensures the reliability of the bulk transmission system within its Security Authority Area. This is the highest reliability authority.
☐	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
☐	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
☒	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

Reliability and Market Interface Principles

Applicable Reliability and Market Interface Principles (check all that apply)	
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	☒
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	☒
The proposed Standard must comply with all of the following Market Interface Principles	☒
Interconnected The planning and operation of bulk electric systems shall recognize that reliability is an essential requirement of a robust North American economy	
An Organization Standard shall not give any market participant an unfair competitive advantage	
An Organization Standard shall neither mandate nor prohibit any specific market structure	
An Organization Standard shall not preclude market solutions to achieving compliance with that Standard	
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	

Related Standards, Function Certification Requirements or Business Practices

Standard No.	***Explanation***

Related SARs

SAR ID	***Explanation***

Regional Differences

Region	*Explanation*
ECAR	
ERCOT	
FRCC	FRCC requires their own confidentiality agreement in addition to the NERC agreement. In addition, FRCC's Security Process (Reliability Plan) has other requirements for tools, etc. that must be met. Also, NERC can not set a requirement for the IA will preempt any state jurisdictional requirements. Linda Campbell for FRCC OC
MAAC	
MAIN	
MAPP	
NPCC	
SERC	
SPP	
WSCC	WECC has additional data and Reliability Management System confidentiality agreements that may or may not be included Ed Riley CAISO

SAR DT Members

Gerry Burrows, Chairman
Pat Everly, Secretary
Larry Alderink
Don Badley
Alan Boesch
Lucius Burris
David Little
Norb Mizwicki
Don Reichenbach
Richard Sikes
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