NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

Standard Authorization Request Form

Title of Proposed Standard	Revisions to NERC Glossary of Terms
Request Date	12/09/2009
SC Approval Date	1/15/2010

SAR Requester Information	**SAR Type (*Check a box for each one that applies.*)**	
Name Mike Yealland on behalf of the Functional Model Working Group	☐	New Standard
Primary Contact Mike Yealland	☒	Revision to existing Standard – Definitions of certain entities in NERC Glossary of Terms
Telephone (416) 923-6914 Fax	☐	Withdrawal of existing Standard
E-mail mike.yealland@ieso.ca	☐	Urgent Action

Purpose (Describe what the standard action will achieve in support of bulk power system reliability.)

To align the definitions of various functional entities between the Functional Model, the NERC Glossary of Terms, and the NERC Statement of Compliance Registration Criteria.

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 FMWG has received many comments and questions from stakeholders concerning the differences in definitions between the Functional Model, the NERC Glossary of Terms, and the NERC Statement of Compliance Registration Criteria. This SAR is designed to address these comments and make the definitions of functional entities consistent between these documents.

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

Make definitions in the Functional Model, the NERC Glossary of Terms, and the NERC Statement of Compliance Registration Criteria consistent.

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

The Functional Model Working Group has completed its proposed revisions to version 4.

These revisions have been approved by the NERC Operating, Planning and Critical Infrastructure Protection Committees. Version 5 contains terminology changes intended to improve consistency between the Model and the NERC Glossary of Terms (see Functional Model Technical Document version 5, Section II, Part 11). Inconsistency has potential for creating needless complexity, confusion and wasted effort for those who use NERC documents. The changes are of three types:

1. Entity terminology
2. Entity names
3. Entity definitions.

Entity terminology

The term "responsible entity" in the Model has been changed to "functional entity".

- The usage of "responsible" in Version 4 derived from an earlier version of the Model. Version 4 clarified that the Model is limited to describing the performance of tasks, but not compliance aspects such as responsibility for such performance. Version 5 takes this clarification one step further by replacing the term "responsible" in the Model.
- The Model uses the term functional entity to apply to a class of entity, such as a Balancing Authority, and makes no reference to the specific organizations that register as functional entities. Consistency within NERC documents would be improved if conforming changes were made to the NERC Glossary of Terms to consistently use the term "functional entity" when the reference is to the class of entity (e.g., BA), and use the terms "responsible entity" and "registered entity" when the reference is to a specific organization regarding its responsibility or registration, respectively. In addition, some inconsistencies in usage were found in the Rules of Procedure, specifically, in Appendix 5 - Organization Registration and Certification Manual, and Appendix 3A, Reliability Standards Development Process. However, these inconsistencies in the Rules of Procedure are minor, and it is recommended they be considered only when other revisions to these appendices are considered

Entity names

The functional entity name Interchange Authority has been changed to Interchange Coordinator as the term "coordinator" better reflects the nature of the function. (Note that the proposed changes to this term are significant and will be vetted by the Coordinate Interchange Standard Drafting Team.)

Entity definitions

1. The Model has been revised to define the various functional entities, not the Functions as in version 4, consistent with the approach used in the Glossary and standards.
2. The functional entity definitions have been revised.
    - The form of the definitions is uniform, with each definition beginning: "The functional entity …"
    - Each definition is single sentence, limited to a simple statement of the nature of the tasks performed.

The proposed revisions (redline) to the NERC Glossary of Terms definitions are in Attachment 1. The proposed revisions mirror the definitions shown in Version 5 of the Functional Model.

Reliability Functions

The Standard will Apply to the Following Functions *(Check box for each one that applies.)*		
☐	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.
☒	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.
☒	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.
☒	Interchange Authority	Ensures communication of interchange transactions for reliability evaluation purposes and coordinates implementation of valid and balanced interchange schedules between Balancing Authority Areas.
☒	Planning Coordinator	Assesses the longer-term reliability of its Planning Coordinator Area.
☒	Resource Planner	Develops a >one year plan for the resource adequacy of its specific loads within its portion of the Planning Coordinator's Area.
☒	Transmission Owner	Owns and maintains transmission facilities.
☒	Transmission Operator	Ensures the real-time operating reliability of the transmission assets within a Transmission Operator Area.
☒	Transmission Planner	Develops a >one year plan for the reliability of the interconnected Bulk Electric System within the Transmission Planner Area.
☒	Transmission Service Provider	Administers the transmission tariff and provides transmission services under applicable transmission service agreements (e.g., the pro forma tariff).
☒	Distribution Provider	Delivers electrical energy to the End-use customer.
☒	Generator Owner	Owns and maintains generation facilities.
☒	Generator Operator	Operates generation unit(s) to provide real and reactive power.
☒	Purchasing-Selling Entity	Purchases or sells energy, capacity, and necessary reliability-related services as required.
☒	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 *(Check box for all that apply.)*	
☒	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.
☒	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.
☒	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.
☒	4. Plans for emergency operation and system restoration of interconnected bulk power 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 power systems.
☒	6. Personnel responsible for planning and operating interconnected bulk power systems shall be trained, qualified, and have the responsibility and authority to implement actions.
☒	7. The security of the interconnected bulk power systems shall be assessed, monitored and maintained on a wide area basis.
☒	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? *(Select 'yes' or 'no' from the drop-down box.)*	
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	

Related Standards

Standard No.	Explanation

Related SARs

SAR ID	Explanation

Regional Variances

Region	Explanation
ERCOT	
FRCC	
MRO	
NPCC	
SERC	
RFC	
SPP	
WECC	

Attachment 1 — Proposed revisions to Glossary of Terms Used in Reliability Standards

Balancing Authority	BA	The functional ~~responsible~~ entity that integrates resource plans ahead of time, maintains generation-load-interchange~~-generation~~ balance within a Balancing Authority Area, and contributes to ~~supports~~ Interconnection frequency in real time.
Compliance Enforcement Authority ~~Monitor~~	CEA	The functional entity that monitors, reviews, and ensures compliance with reliability standards and administers sanctions or penalties for non-compliance to the ~~of responsible entities with~~ reliability standards.
Distribution Provider	DP	The functional entity that ~~P~~provides facilities that interconnect and~~d operates the "wires" between the transmission system and the~~ end-use customer load and the electric system for the transfer of electrical energy to the end-use customer. ~~For those end-use customers who are served at transmission voltages, the Transmission Owner also serves as the Distribution Provider. Thus, the Distribution Provider is not defined by a specific voltage, but rather as performing the Distribution function at any voltage.~~
Generator Operator	GOP	The functional entity that operates generating unit(s) and performs the functions of supplying energy and Reliability-related ~~Interconnected Operations~~ Services.
Generator Owner	GO	The functional ~~E~~ entity that owns and maintains generating units.
Interchange Coordinator ~~Authority~~	IC	The ~~responsible~~ functional entity that ensures communication of Arranged Interchange ~~authorizes implementation of valid and balanced Interchange Schedules between Balancing Authority Areas, and ensures communication of Interchange information~~ for reliability ~~assessment~~ evaluation purposes and coordinates implementation of valid and balanced Confirmed Interchange between Balancing Authority Areas.
Interchange Authority		See Interchange Coordinator. ~~The responsible entity that authorizes implementation of valid and balanced Interchange Schedules between Balancing Authority Areas, and ensures communication of Interchange information for reliability assessment purposes~~.
Interconnected Operations Service	IOS	See Reliability-related Services, the term to be used in new or revised standards and NERC documents generally. ~~A service (exclusive of basic energy and transmission services) that is required to support the reliable operation of interconnected Bulk Electric Systems.~~
~~Interconnected Operations Service~~ Reliability-related Services		A service (exclusive of basic energy and transmission services) that is required to support the reliable operation of interconnected Bulk Electric Systems.

The definitions for Interchange Coordinator and Interchange Authority will be vetted as part of the work from the Coordinate Interchange SDT and are provided here for information only.

Load-Serving Entity	LSE	The functional entity that ~~S~~ secures energy and transmission service (and ~~related Interconnected Operations~~ Reliability-related Services) to serve the electrical demand and energy requirements of its end-use customers.
Planning Authority		See Planning Coordinator, the term to be used in new or revised standards and NERC documents generally. ~~The responsible entity that coordinates and integrates transmission facility and service plans, resource plans, and protection systems.~~
Planning Coordinator	PC	~~See Planning Authority~~. The functional entity that coordinates, facilitates, integrates and evaluates (generally one year and beyond) transmission facility and service plans, and resource plans within a Planning Coordinator area and coordinates those plans with adjoining Planning Coordinator areas
Purchasing-Selling Entity	PSE	The functional entity that purchases or sells, and takes title to, energy, capacity, and ~~Interconnected Operations~~ Reliability-related Services. ~~Purchasing-Selling Entities may be affiliated or unaffiliated merchants and may or may not own generating facilities~~.
Reliability Coordinator	RC	The functional entity that maintains the Real-time operating reliability ~~is the highest level of authority who is responsible for the reliable operation~~ of the Bulk Electric System within a Reliability Coordinator Area ~~, has the Wide Area view of the Bulk Electric System, and has the operating tools, processes and procedures, including the authority to prevent or mitigate emergency operating situations in both next-day analysis and real-time operations. The Reliability Coordinator has the purview that is broad enough to enable the calculation of Interconnection Reliability Operating Limits, which may be based on the operating parameters of transmission systems beyond any Transmission Operator's vision~~.
Resource Planner	RP	The functional entity that develops a long-term (generally one year and beyond) plan for the resource adequacy of specific loads (customer demand and energy requirements) within a Resource Planner ~~ing Authority A~~ area.
Transmission Operator	TOP	The functional entity that ensures the Real-time operating reliability of the transmission assets within a Transmission Operator area. ~~responsible for the reliability of its "local" transmission system, and that operates or directs the operations of the transmission facilities~~.
Transmission Owner	TO	The functional entity that owns and maintains transmission facilities.
Transmission Planner	TP	The functional entity that develops a long-term (generally one year and beyond) plan for the reliability (adequacy) of the interconnected bulk electric transmission systems within ~~its portion of the~~ a Transmission Planner ~~ing Authority A~~ area.
Transmission Service Provider	TSP	The functional entity that administers the transmission tariff and provides Transmission Service to Transmission Customers under applicable transmission service agreements.