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**Compliance Audit Report
Nova Scotia Power Incorporated
(NSPI)
September 19/20, 2007**

Public Version

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Executive Summary

The onsite compliance audit of Nova Scotia Power Incorporated (NSPI) was conducted on September 19/20, 2007. Nova Scotia Power Inc. provides the transmission operator duties and the balancing authority duties for the province of Nova Scotia. The audit team evaluated NSPI compliance with nineteen reliability standards identified in the NERC 2007 Implementation Plan for the period of the last twelve months or monitoring timeframes specified in each reliability standard. The audit team interviewed five NSPI employees representing subject matter expertise and reviewed accompanying documentation NSPI presented as evidence of compliance.

All but one of the reliability standards applicable to Transmission Operators and Balancing Authorities were classified as applicable to NSPI, but not all of the requirements within those remaining eighteen standards were applicable. See Audit Results Findings for the specifics. NSPI provided adequate evidence of compliance with all of the applicable standards.

Audit Process

The compliance audit process steps are detailed in the NERC CMEP. The NERC CMEP generally conforms to the United States Government Accountability Office Government Auditing Standards and other generally accepted audit practices.

Objectives

All registered entities are subject to audit for compliance with all reliability standards applicable to the functions for which the registered entity is registered.¹ The audit objectives are:

- Independently review NSPI's compliance with the requirements of the reliability standards that are applicable to NSPI based on their registered functions.
- Validate compliance with applicable reliability standards from the NERC 2007 Implementation Plan list of actively monitored standards.

Scope

The compliance audit was performed by an audit team consisting of regional entity staff, independent contractors, and NERC representatives. Confidentiality agreements executed by the independent contractors and code of conduct documentation for the NERC representative and regional entity staff were provided to the audited entity in advance of the audit. NSPI was given an opportunity to object to an audit team member on the basis of a possible conflict of interest or the existence of other circumstances that could interfere with the audit team member's impartial performance of duties. NSPI accepted the audit team member participants with no objections.

The audit team interviewed NSPI employees representing subject matter expertise and reviewed accompanying documentation presented as evidence of compliance. These employees represented all of its registered functions from the NSPI Transmission Operations and Balancing Authority organization.

Compliance audits of NSPI are scheduled on a periodic basis of three year intervals. The reliability standards reviewed in the NSPI audit included all of the standards in the NERC 2007 Implementation Plan. For the 2007 program, reliability standards are monitored based on the

¹ North American Electric Reliability Corporation CMEP, paragraph 3.1, Compliance Audits

retention periods and monitoring timeframes specified in each reliability standard. The list of reliability standards along with their corresponding monitoring timeframes are listed in Appendix 1. The audit team leader provided a list of reliability standards and an audit agenda to NSPI before the audit.

Methodology

The audit team generally followed an agenda that was provided in advance to NSPI. The audit team was flexible with the availability of the NSPI audit participants when conducting the audit. The audit team worked in one group for the audit process.

The audit team conducted interviews as necessary for each applicable reliability standard with NSPI subject matter experts and reviewed documented evidence. If after reviewing the submitted evidence, the audit team had additional questions, the NSPI subject matter expert was asked to respond to the questions.

The audit team would take time to go through submitted evidence and discuss findings as a team to determine if the evidence meets the requirements of the reliability standard. If the evidence was inadequate or did not cover all of the requirements in the reliability standard, the audit team asked for additional evidence. If NSPI could not find or submit additional evidence then the audit team determined that a possible violation exists. NSPI was not asked to create documentation in these instances only to submit existing evidence in addition to what was already submitted. The audit team reviewed NSPI documentation at the NSPI facilities and did not remove any original documentation from their facilities during the audit. NSPI subject matter experts provided additional evidence to support their compliance in the form of photocopies. Examples of the photocopied material are Operator log extracts, Outage Plans, NERC operator certificates, Training records, etc. Throughout the audit, the audit team members took notes on findings of evidence of compliance or if evidence was not sufficient to show compliance.

The audit team conducted an exit briefing immediately following the audit with NSPI compliance audit participants and higher level NSPI management personnel. The audit team shared its preliminary results verbally and via a presentation. The NSPI audit participants asked questions and commented on the audit team's findings.

The exit briefing was also a forum for the audit team to offer informal recommendations for process improvement. These recommendations are not included in this audit report but were documented in the exit presentation and were left with NSPI in the form of a Power-point presentation.

Audit Considerations

No audit process or procedure can define every possible aspect, situation or scenario encountered by auditors when conducting a compliance audit. Auditors are expected to use their best professional judgment. The following paragraphs describe considerations when conducting bulk electric system reliability compliance audits.

Compliance audits of the bulk electric system reliability are based on newly defined mandatory reliability standards. Implementation of the reliability standards involves some risk for compliance audits due to the inherent learning curve of registered entities. This risk is mitigated by educating registered entities via regional compliance seminars, providing reliability standard

information on the regional and NERC websites, encouraging industry involvement in the standards development process and by training compliance auditors.

The bulk electric system contains many variables which require skilled personnel to plan and operate in a reliable manner. Many requirements in the NERC reliability standards specify or are dependent on reliability studies depicting both the planning and operational time horizons. It is difficult to audit the validity of the multitude of studies that are performed to ensure registered entities meet these requirements. To mitigate this risk the audit team must make professional judgments in its assessment of compliance based on 1) the interview with the registered entity's subject matter experts, 2) documented reports and policies, 3) tools/programs used to perform the studies, 4) results of the studies.

Company Profile

Nova Scotia Power Incorporated (NSPI) is a fully-integrated, electric utility operating in a traditional regulated environment, within the province of Nova Scotia, Canada. Information about the utility can be found on the web site: <http://www.nspower.ca/>

NSPI is wholly owned by Emera Inc., a company listed on the Toronto stock exchange (EMA-TSX). Further information on the parent company can be found at: <http://www.emera.com/>

Emera Inc. is an energy and services company with 570,000 customers, \$4.0 billion in assets and a \$2.0 billion market capitalization.

The core business of Emera is electricity. The company operates two regulated utility subsidiaries in northeast North America - Nova Scotia Power and Bangor Hydro-Electric (located in the state of Maine, USA) - that together account for over 90% of Emera's revenues. In addition, Emera owns a 12.9% equity interest in the Maritimes & Northeast Pipeline, which delivers Nova Scotia's offshore natural gas to markets in Maritime Canada and New England.

NSPI is the principal electric utility in the province of Nova Scotia. The Company supplies over 97% of the generation, transmission and distribution of electrical power to 460,000 customers in the province.

NSPI operates in Nova Scotia, in the Maritimes Area of the Northeast Power Coordinating Council footprint. The Maritimes Area reliability coordinator is the New Brunswick System Operator (NBSO).

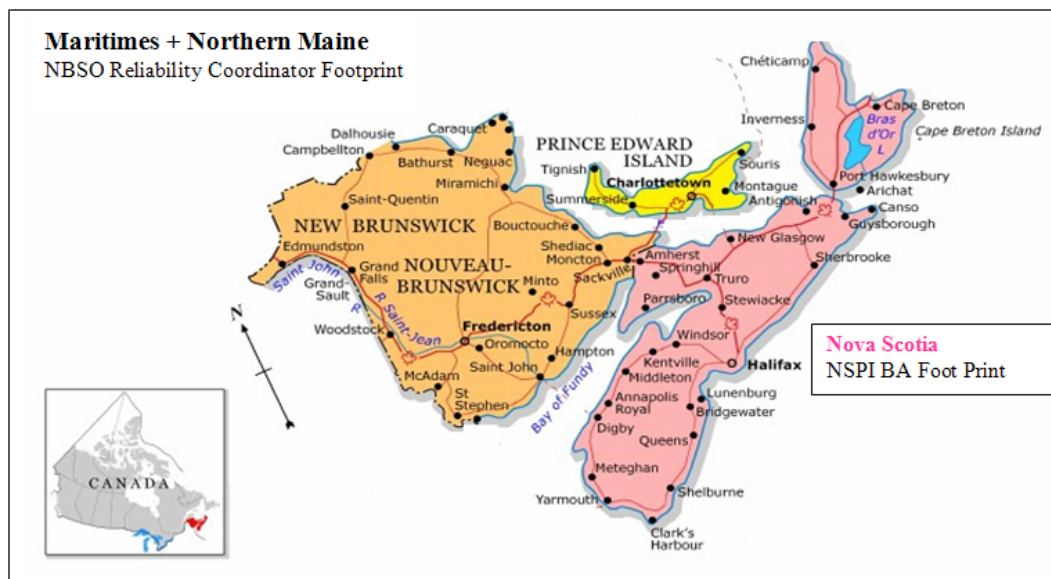
Additional information about NSPI:

- NSPI owns and operates approximately 5,000 km of transmission lines, 25,000 km of distribution lines (12 and 25 kV), and 200 substations.
- NSPI's transmission system consists of lines operating at 69, 138, 230 and 345 kV, with a breakdown as follows.

Voltage Level	Length (km)
69 kV	1,667
138 kV	1,786
230 kV	1,253

345 kV	468
Grand Total:	5,175

- NSPI has an installed gross generation capacity of approximately 2,400 megawatts of generation, primarily thermal and hydroelectric power. Generation facilities include 5 thermal plants, 33 hydroelectric plants, 1 tidal plant, and 3 combustion turbine sites. The fuel mix for these plants is included in an attached document.
- NSPI's most recent peak occurred on January 28, 2005. The maximum hourly load on that date was 2143 MW.
- Nova Scotia Power is interconnected with the Eastern Interconnection through a single interconnection, to New Brunswick, that consists of two 138 kV lines and a 345 kV line.
- NSPI has registered with NPCC / NERC as the following:
 - Balancing Authority
 - Transmission Owner & Operator
 - Generator Owner & Operator
 - Load Serving Entity
 - Purchasing / Selling Entity
 - Distribution Provider
 - Resource Planner
 - Transmission Planner
 - Transmission Service Provider
 - Planning Authority
 - Reserve Sharing Group
- NSPI operates as the only Transmission Operator and Balancing Authority in the province of Nova Scotia, and is contained within the NPCC - Maritimes Area RC footprint. The New Brunswick System Operator (NBSO) acts as Reliability Coordinator for the three Maritime Provinces: NB, NS, PEI and also for an area of northern Maine, USA. The NBSO also acts as TOP and BA within the province of New Brunswick.



Audit Specifics

The compliance audit was conducted on September 19+20, 2007 at their Control Centre in Halifax, Nova Scotia.

Audit Team

Audit Team Role	Name	Title	Company
Lead	Kim Pitchell	Contracted Consultant	NPCC-Compliance Audit Program
Member	Sal Buffamante	Manager	NPCC-Compliance Audit Program
Member	Donal Kidney	Manager	NPCC-Compliance Program Implementation
Observer	Ellen Oswald	Program Coordinator	NERC-Regional Compliance Program
Observer	Cherie Broadrick	Manager	NERC-Regional Compliance Oversight

NSPI Audit Participants

Name	Title	NSPI Organization
David Little	Project Manager	NSPI Control Centre Operations
Bill Ellis	Manager Technical Services	NSPI Control Centre Operations
Chuck Victor	Sr. Engineer (Telecommunications)	NSPI Control Centre Operations
Joe Thomas	Manager System Support	NSPI Control Centre Operations
James Delorme	Superintendent System Control	NSPI Control Centre Operations

Audit Results

The audit team documented the evidence reviewed for compliance with each applicable reliability standard. When necessary, the audit team would ask the NSPI subject matter expert to go through a scenario of explaining a representative set of data and how that data was derived and stored.

An overview of the NSPI control room was provided to Audit Team members and the members questioned the staff on shift regarding evidence to support the paper documentation provided to the Audit Team. This did assist in confirming that procedures and other documentation presented as evidence are readily available to the system operators.

Findings

The following table details the summarized auditor notes relating to evidence reviewed for compliance with the reliability standards.

Reliability Standard	Auditor Notes	Finding
BAL-001-0	NSPI provided spreadsheets with required calculations and documentation. R3 determined to be not applicable	Compliant
BAL-002-0	NSPI provided spreadsheets capturing the required information and adequate document.	Compliant
BAL-003-0	NSPI provided adequate documentation R4+R6 determined to be not applicable.	Compliant
CIP-001-1	NSPI provided a procedure on how sabotage events will be identified and reported to policing and government officials, neighboring entities and to regulatory bodies. Discussion with a NSPI operations employee revealed that the employees are aware and have been trained on the procedure.	Compliant
CIP-002-1 through CIP-009-1	NSPI should be aware that compliance will be required in the future	Begin Work
COM-001-1	NSPI were requested to show compliance on only R1, R2+R5. Procedures identifying critical communications equipment and written operating instructions and procedures to enable continued operation of the system during the loss of telecommunications facilities were provided. The maintenance logs of communication equipment were provided to the audit team as evidence. The audit team made a recommendation regarding testing the facilities and verification of phone contacts.	Compliant
EOP-001-0	NSPI provided the following: Operating agreements and procedures with New Brunswick System Operator (NBSO) the Reliability Coordinator (RC). The documents included plans to mitigate operating emergencies on the transmission system and load shedding and other emergencies as defined in the requirements of EOP-001-0. Evidence of coordination in the NSPI emergency plans was indicated and several internal procedures were provided.	Compliant
EOP-003-1	R1, R5, and R6 - No events have occurred in the last 12 months. R2 – NSPI does not have an UVLS. NSPI showed evidence of their UFLS scheme. R3 – NBSO requires that NSPI have a load shedding plan and participates on regional coordination activities. The evidence is in the form of the documentation for UFLS. R4 – NSPI UFLS schemes are based on NPCC criteria. NSPI compliance to the criteria is reported to NBSO who holds the overall responsibility for their jurisdiction. R5-11 – NSPI provided documentation and screen captures of the operators displays and tools which support their compliance.	Compliant

Reliability Standard	Auditor Notes	Finding
EOP-005-1	<p>R1 – NSPI provided evidence of the necessary plans to meet this requirement.</p> <p>R2 – NSPI System Restoration Plan is updated annually.</p> <p>R3 – NSPI plan states it will coordinate with its reliability coordinator in the restoration effort, and if necessary restore its area separately.</p> <p>R4 – NSPI showed evidence of co-ordination.</p> <p>R5 – The Audit team recommended that NSPI to create and implement an inclusive procedure to ensure telecom infrastructure and phone numbers to operation contacts is tested regularly</p> <p>R6, R7 – NSPI operating personnel participate in its reliability coordinator sponsored restoration training and simulation activities.</p> <p>R8 – This requirement was also specified in the NSPI System Restoration Plan.</p> <p>R9 – NSPI provided documentation indicating such for the equipment in their area.</p> <p>R10 – NSPI have conducted studies and provided adequate documentation</p> <p>R11 – NSPI has not experienced an isolation event in the last 12 months.</p>	Compliant
EOP-006-1	Not applicable – NSPI is not a reliability coordinator.	NA
EOP-008-0	The NSPI provided procedures to indicate their compliance to the requirements of this standard applicable to them.	Compliant
EOP-009-0	Not applicable to NSPI	N/A
FAC-003-1	Not applicable to NSPI	N/A
FAC-008-1	Not applicable to NSPI	N/A
FAC-009-1	Not applicable to NSPI	N/A
IRO-001-1	Since NSPI is not a reliability coordinator, only R8 in this standard applies. NSPI provided evidence (operator logs) to show compliance with this standard. The Audit team made a recommendation regarding logging.	Compliant
IRO-004-1	Since NSPI is not a reliability coordinator, only R3, R4 and R7 apply. All the NSPI documentation provided indicated their compliance to the applicable requirements in this standard.	Compliant
IRO-014-1	Not applicable – NSPI is not a reliability coordinator.	NA
IRO-015-1	Not applicable – NSPI is not a reliability coordinator.	NA
IRO-016-1	Not applicable – NSPI is not a reliability coordinator.	NA
PER-002-0	Individual training records were provided for each operator. The operators are all NERC certified and they all receive restoration training and refresher training. Records indicate they all receive at least the minimum hours mandated by NERC.	Compliant
PER-003-0	A spreadsheet was provided that lists the names and certification of the operators. The audit team verified the certification numbers with NERC. Copies of shift schedules verified the operators are covered with NERC Certification.	Compliant
PER-004-1	Not applicable – NSPI is not a reliability coordinator.	NA
PRC-004-1	Not applicable to NSPI	NA

Reliability Standard	Auditor Notes	Finding
PRC-005-1	Not applicable to NSPI	NA
PRC-008-0	Not applicable to NSPI	NA
PRC-010-0	NSPI does not have UVLS on its system.	NA
PRC-011-0	Not applicable to NSPI	NA
PRC-016-0	Not applicable to NSPI	NA
PRC-017-0	Not applicable to NSPI	NA
PRC-021-1	Not applicable to NSPI	NA
TOP-003-0	NSPI provided documentation supporting requirements R1, R2 +R3. R4 is not applicable.	Compliant
TOP-004-1	Only R2+R6 requirements are applicable to NSPI. Documentation was provided was to support their compliance.	Compliant
TOP-005-1	Only R1+ R3 requirement is applicable to NSPI. NSPI does not have access to the NERC ISN. NSPI data is provided to NBSO, its reliability coordinator who then distributes it as necessary to other entities.	Compliant
TOP-007-0	NSPI provided documentation indicating their actions for past events comply with this standard. R4 is not applicable	Compliant
TPL-001-0	Not applicable to NSPI	NA
TPL-002-0	Not applicable to NSPI	NA
TPL-003-0	Not applicable to NSPI	NA
TPL-004-0	Not applicable to NSPI	NA
VAR-001-1	NSPI provided documentation supporting all requirements except for R5 which is not applicable.	Compliant

Conclusions

NSPI provided evidence of compliance with all of the applicable monitored reliability standards. The documentation and employee support afforded the audit team by NSPI was precise and excellent.

As a result of the audit, NPCC concluded that NSPI is doing an outstanding job in supporting the NERC compliance program.

Appendix I – Applicable Reliability Standards

Std #	Requirements	Standard	Who	Purpose	Monitoring Timeframe	Applicable to NSPI?
BAL-001-0	All except R3	Real Power Balancing Control Performance	BA	To maintain Interconnection steady-state frequency within defined limits by balancing real power demand and supply in real-time.	The data that supports the calculation of CPS1 and CPS2 (Attachment 1-BAL-001-0) are to be retained in electronic form for at least a one-year period. If the CPS1 and CPS2 data for a Balancing Authority Area are undergoing a review to address a question that has been raised regarding the data, the data are to be saved beyond the normal retention period until the question is formally resolved. Each Balancing Authority shall retain for a rolling 12-month period the values of: one-minute average ACE (ACEi), one-minute average Frequency Error, and, if using variable bias, one-minute average Frequency Bias.	Yes
BAL-002-0	All	Disturbance Control Performance	BA, RSG, RRO	To ensure the Balancing Authority is able to utilize its Contingency Reserve to balance resources and demand and return Interconnection frequency within defined limits.	Compliance for DCS will be evaluated for each reporting period. Reset is one calendar quarter without a violation. The data that support the calculation of DCS are to be retained in electronic form for at least a one-year period.	Yes

Std #	Requirements	Standard	Who	Purpose	Monitoring Timeframe	Applicable to NSPI?
BAL-003-0	All except R4+R6	Frequency Response and Bias	BA	This standard provides a consistent method for calculating the Frequency Bias component of ACE.	Yearly or by request.	Yes
CIP-001-1	All	Sabotage Reporting	RC, BA, TOP, GOP, LSE	Disturbances or unusual occurrences, suspected or determined to be caused by sabotage, shall be reported to the appropriate systems, governmental agencies, and regulatory bodies.	By request and any events in the last year.	Yes
CIP-002-1 through CIP-009-1	All	Critical Infrastructure Protection Standards	BA, GO, GOP, IA, LSE, NERC, RC, RRO, TO, TOP, TSP	Cyber Security Standards-Follow revised Implementation Plan for Cyber Security Standards CIP-002-1 through CIP-009-1	By request.	Yes
COM-001-1	R1,R2 and R5	Telecommunications	TO, BA, RC, NERCNet User Organizations.	Each Reliability Coordinator, Transmission Operator and Balancing Authority needs adequate and reliable telecommunications facilities internally and with others for the exchange of Interconnection and operating information necessary to maintain reliability.	By request.	Yes

Std #	Requirements	Standard	Who	Purpose	Monitoring Timeframe	Applicable to NSPI?
EOP-001-0	All	Emergency Operations Planning	BA, TOP	Each Transmission Operator and Balancing Authority needs to develop, maintain, and implement a set of plans to mitigate operating emergencies. These plans need to be coordinated with other Transmission Operators and Balancing Authorities, and the Reliability Coordinator.	By request.	Yes
EOP-003-1	All	Load Shedding Plans	BA, TOP	A Balancing Authority and Transmission Operator operating with insufficient generation or transmission capacity must have the capability and authority to shed load rather than risk an uncontrolled failure of the Interconnection.	R1, R5, R6 - Event Driven. Has an event occurred in the past year? R2, R3, R4, R7, R8 – By request	Yes
EOP-005-1	All	System Restoration Plans	BA, TOP	To ensure plans, procedures, and resources are available to restore the electric system to a normal condition in the event of a partial or total shut down of the system	By request. Note: entity must follow the timelines specified in the standard: show that the plan is reviewed annually; simulation or testing must be done every 5 years.	Yes
EOP-006-1	All	Reliability Coordination – System Restoration	RC	The Reliability Coordinator must have a coordinating role in system restoration to ensure reliability is maintained during restoration and priority is placed on restoring the Interconnection.	By request.	No

Std #	Requirements	Standard	Who	Purpose	Monitoring Timeframe	Applicable to NSPI?
EOP-008-0	All	Plans for Loss of Control Center Functionality	BA, RC, TOP	Each reliability entity must have a plan to continue reliability operations in the event its control center becomes inoperable.	By request.	Yes
EOP-009-0	All	Documentation of Blackstart Generating Unit Test Results	GO, GOP	To ensure that the quantity and location of system blackstart generators are sufficient and that they can perform their expected functions.	By request. Note entity must meet testing frequency specified in EOP-007-0.	No
FAC-003-1	All	Vegetation Management	RRO, TO	To improve the reliability of the electric transmission systems by preventing outages from vegetation located on transmission rights-of-way (ROW) and minimizing outages from vegetation located adjacent to ROW, maintaining clearances between transmission lines.	By request – program documentation and last 4 quarterly outage reports.	No
FAC-008-1	All	Facility Ratings Methodology	GO, TO	To ensure that Facility Ratings used in the reliable planning and operation of the Bulk Electric System (BES) are determined based on an established methodology.	By request the current methodology and any superseded portions of the methodology within the past 12 months.	No
FAC-009-1	All	Establish and Communicate Facility Ratings	GO, TO	To ensure that Facility Ratings used in the reliable planning and operation of the Bulk Electric System (BES) are determined based on an established methodology or methodologies.	By request.	No

Std #	Requirements	Standard	Who	Purpose	Monitoring Timeframe	Applicable to NSPI?
IRO-001-1	R8	Reliability Coordination – Responsibilities and Authorities	BA, GOP, LSE, PSE, RC, RRO, TOP, TSP	Reliability Coordinators must have the authority, plans, and agreements in place to immediately direct reliability entities within their Reliability Coordinator Areas to re-dispatch generation, reconfigure transmission, or reduce load to mitigate critical conditions to return the system to a reliable state. If a Reliability Coordinator delegates tasks to others, the Reliability Coordinator retains its responsibilities for complying with NERC and regional standards. Standards of conduct are necessary to ensure the Reliability Coordinator does not act in a manner that favors one market participant over another.	By request.	Yes
IRO-004-1	R3,R4+R7	Reliability Coordination — Operations Planning	BA, GO, GOP, LSE, RC, TO, TOP, TSP	Each Reliability Coordinator must conduct next-day reliability analyses for its Reliability Coordinator Area to ensure the Bulk Electric System can be operated reliably in anticipated normal and Contingency conditions.	By request.	Yes

Std #	Requirements	Standard	Who	Purpose	Monitoring Timeframe	Applicable to NSPI?
IRO-014-1	All	Procedures, Processes, or Plans to Support Coordination Between Reliability Coordinators	RC	To ensure that each Reliability Coordinator's operations are coordinated such that they will not have an Adverse Reliability Impact on other Reliability Coordinator Areas and to preserve the reliability benefits of interconnected operations.	By request.	No
IRO-015-1	All	Notifications and Information Exchange Between Reliability Coordinators	RC	To ensure that each Reliability Coordinator's operations are coordinated such that they will not have an Adverse Reliability Impact on other Reliability Coordinator Areas and to preserve the reliability benefits of interconnected operations.	Rolling 12 months of information provided on request.	No
IRO-016-1	All	Coordination of Real-time Activities Between Reliability Coordinators	RC	that they will not have an Adverse Reliability Impact on other Reliability Coordinator Areas	Rolling 12 months of information provided on request.	No
PER-002-0	All	Operating Personnel Training	BA, TOP	Each Transmission Operator and Balancing Authority must provide their personnel with a coordinated training program that will ensure reliable system operation.	By request training program and training records.	Yes
PER-003-0	All	Operating Personnel Credentials	BA, RC, TOP	Certification of operating personnel is necessary to ensure minimum competencies for operating a reliable Bulk Electric System.	By request latest certification information and present calendar year plus previous calendar year staffing plan.	Yes

Std #	Requirements	Standard	Who	Purpose	Monitoring Timeframe	Applicable to NSPI?
PER-004-1	All	Reliability Coordination — Staffing	RC	Reliability Coordinators must have sufficient, competent staff to perform the Reliability Coordinator functions.	By request - Each Reliability Coordinator shall keep evidence of compliance for the previous two calendar years plus the current year.	No
PRC-004-1	All	Analysis and Mitigation of Transmission and Generation Protection System Misoperations	DP*, GO, TO	Provide trip operation / misoperation information per regional process.	By request – last 12 months of protection system Misoperation analysis.	No
PRC-005-1	All	Transmission and Generation Protection System Maintenance and Testing	DP*, GO, TO	Document/implement transmission protection system maintenance/testing/monitoring PROGRAM	By request - maintenance and testing program and testing records to show that testing intervals are on schedule.	No
PRC-008-0	All	Implementation and Documentation of Underfrequency Load Shedding Equipment Maintenance Program	DP, TO	Document/implement UFLS maintenance/testing PROGRAM	By request - maintenance and testing program and testing records to show that testing intervals are on schedule.	No
PRC-010-0	All	Technical Assessment of the Design and Effectiveness of Undervoltage Load Shedding Program.	DP, LSE, TO, TOP	ASSESS design and effectiveness of UVLS programs	By request – current assessment.	No
PRC-011-0	All	UVLS System Maintenance and Testing	DP, TO	Document/implement UVLS maintenance/testing PROGRAM	By request - maintenance and testing program and testing records to show that testing intervals are on schedule.	No
PRC-016-0	All	Special Protection System Misoperations	DP, GO, TO	DOCUMENT/analyze misoperations	By request – last 12 months of special protection system Misoperation analysis.	No

Std #	Requirements	Standard	Who	Purpose	Monitoring Timeframe	Applicable to NSPI?
PRC-017-0	All	Special Protection System Maintenance and Testing	DP, GO, TO	Document/implement SPS maintenance/testing PROGRAM	By request - maintenance and testing program and testing records to show that testing intervals are on schedule.	No
PRC-021-1	All	Under-Voltage Load Shedding Program Data	DP, TO	DOCUMENTATION of undervoltage load shedding program	By request – latest UVLS data.	No
TOP-003-0	All except R4	Planned Outage Coordination	BA, GOP, RC, TOP	Scheduled generator and transmission outages that may affect the reliability of interconnected operations must be planned and coordinated among Balancing Authorities, Transmission Operators, and Reliability Coordinators.	By request.	Yes
TOP-004-1	R2+R6	Transmission Operations	TOP	To ensure that the transmission system is operated so that instability, uncontrolled separation, or cascading outages will not occur as a result of the most severe single Contingency and specified multiple Contingencies.	By request - Each Transmission Operator shall keep 90 days of historical data for Measure 1. Each Transmission Operator shall have current, in-force policies and procedures, as evidence of compliance to Measure 2.	Yes
TOP-005-1	All except R2+R4	Operational Reliability Information	BA, PSE, RC, TOP	To ensure reliability entities have the operating data needed to monitor system conditions within their areas.	By request.	Yes

Std #	Requirements	Standard	Who	Purpose	Monitoring Timeframe	Applicable to NSPI?
TOP-007-0	All except R4	Reporting System Operating Limit (SOL) and Interconnection Reliability	RC, TOP	Ensure SOL and IROL violations are being reported to the Reliability Coordinator so that the Reliability Coordinator may evaluate actions being taken and direct additional corrective actions as needed.	Event driven.	Yes
TPL-001-0	All	System Performance Under Normal (No Contingency) Conditions	PA, TPL	System performance under normal conditions	By request – latest annual assessment.	No
TPL-002-0	All	System Performance Following Loss of a Single Bulk Electric System Element	PA, TPL	System performance under single contingency	By request – latest annual assessment.	No
TPL-003-0	All	System Performance Following Loss of Two or More Bulk Electric System Elements	PA, TPL	System performance under multiple contingencies	By request – latest annual assessment.	No
TPL-004-0	All	System Performance Following Extreme Events Resulting in the Loss of Two or More Bulk Electric System Elements	PA, TPL	System performance under extreme contingencies	By request – latest annual assessment.	No
VAR-001-1	All except R5	Voltage and Reactive Control	PSE, TOP	To ensure voltage levels, reactive flows, and reactive resources are monitored, controlled, and maintained within limits in real time to protect equipment and the reliable operation of the Interconnection.	By request – last 12 months of data.	Yes

Appendix 2: Confidential Security Sensitive Information

[This section contains confidential security sensitive information which is not included with the public version, but retained by NERC and the regional organization and is sent privately to the audited entity.]