

# Appendix A3 - Northeast Power Coordinating Council (NPCC) 2016 CMEP Implementation Plan

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This Appendix contains the CMEP Implementation Plan (IP) for the NPCC as required by the NERC Rules of Procedure.

## 1. Compliance Monitoring and Enforcement

### 1.1 CMEP IP Highlights and Material Changes

In January 2015, NPCC formed an Entity Risk Assessment group within the Compliance Audit and Investigations Program Area to support the NERC risk-based CMEP effort. This group performs Inherent Risk Assessments (IRA) and Internal Control Evaluations (ICE) that are used in determining the scope of the monitoring engagement. Procedural documents for IRA and ICE were developed and approved by NPCC's Compliance Committee. The scope of 2016 audits will be based on NPCC's Internal Risk Assessments (IRA) and Internal Control Evaluations (voluntary ICE) of each registered entity performed by the NPCC Entity Risk Assessment (ERA) staff.

NPCC will continue to implement the risk-based approach to compliance monitoring and enforcement as described in the 2016 ERO CMEP Implementation Plan, including conducting IRAs and ICEs, exercising enforcement discretion through Compliance Exceptions, and implementing the self-logging program.

- NPCC specific information regarding the IRA and ICE process is located [here](#):
- Instructions for registered entities interested in self-logging in NPCC are located [here](#):

NPCC will continue to

- Implement its coordinated oversight responsibilities (MRRE) as described in the 2016 ERO CMEP Implementation Plan.
- Participate in the Events Analysis Process as described in the 2016 ERO CMEP Implementation Plan.
- Implement a cyber-security outreach program that consists of NPCC Subject Matter Experts visiting critical facilities owned by participating entities (participation is voluntary) and assessing the cyber security posture of the control systems that support the operation of these facilities.
- Implement the physical security outreach program in 2016 (participation is voluntary) and NPCC staff will hold a Security Information Exchange session, which will include entity presentations, at the spring and fall Compliance Workshops.

In the 3rd quarter of 2015, NPCC began conducting guided Self-Certifications in lieu of traditional Self-Certifications. This process will continue in 2016. NPCC will select one or more Reliability Standards for a guided Self-Certification each quarter. NPCC will use the Standards and Requirements identified in the 2016 ERO CMEP Implementation Plan, including the Standards and Requirements identified in this Appendix A3 as the initial basis for selecting the Reliability Standards and Requirements that will be subject to a guided Self-Certification. A further description of the guided Self-Certification Process in NPCC is located [here](#):

In 2016, NPCC will issue a Notice of Preliminary Screen for each potential noncompliance discovered through any means. The Notice of Preliminary Screen notifies the registered entity that the potential noncompliance is being processed by enforcement and serves as official notice to preserve all documentation pertaining to the potential noncompliance.

NPCC will continue to verify the completion of all mitigation activities for potential noncompliance and possible violations processed by NPCC enforcement, including potential noncompliance processed as Compliance Exceptions.

A separate implementation plan will apply to entities registered in New Brunswick with the New Brunswick Energy and Utilities Board.

A separate implementation plan will apply to entities registered in Québec with the Régie de l'énergie.

## **1.2 Other Regional Key Initiatives & Activities**

NPCC will continue to support all ERO Enterprise committees, subcommittees, working groups, task forces, and other teams to improve compliance monitoring and enforcement within the ERO Enterprise.

NPCC has developed various regional specific tools to assist in audits, spot checks, guided self-certifications, IRAs, and ICEs.

- Evidence tracking sheet (audits, spot checks)
- Guided Self-Certification worksheet
- IRA entity worksheet
- ICE worksheet
- ICE summary report

## **2. Regional Risk Assessment Process**

NPCC coordinated with the other Regional Entities to obtain information regarding risk elements and areas of focus that other Regional Entities have included and/or plan to include in each of their regionally specific appendices to the ERO-wide Implementation Plan.

NPCC also developed a team of seven subject matter experts that reviewed each requirement and provided an opinion, with justification, on whether each requirement should be an area of focus in NPCC.

The previous steps served as an initial screen as to how likely it would be that each requirement should be an area of focus in NPCC. NPCC then examined the Violation Severity Levels of each requirement and eleven other factors to determine whether each requirement should be an area of focus in NPCC. The justification provided by the subject matter experts also shaped the requirements that should be an area of focus in NPCC. The 11 other factors were:

- Conditions/equipment/capability to perform the functions can change as technology changes.
- NERC/NPCC reliability area of focus in 2014/2015.
- Basic capability required to manage reliability during emergency conditions.
- Process is critical to maintaining the power system equipment capability/reliability.
- Nuclear Plant Interface Requirements in area.
- Auditing to NPCC requirements.
- Important to reliability and also used to determine if audit needs to be expanded.
- Entity has had issues with this requirement in past audits.
- New responsibility for entity.

- Prior violation or self-report. Monitor for mitigating actions.
- Canadian Provincial Regulator required.

In applying these factors, NPCC found that based on the application of the revised definition of the BES in the NPCC Region, it is very likely that a significant number of Elements and Facilities within the NPCC Region will be subject to the NERC Reliability Standards for the first time. To address these new responsibilities for entities across several different standard families, NPCC created a new regional risk element, Revised BES Definition, to address this regionally specific difference. The standards and requirements related to this regional risk element are identified in the Regional Risk Elements table in Section 3 of this Appendix A3.

The remainder of the requirements added as an area of focus in NPCC fit within one of the existing ERO-wide risk elements. The specific justification for each additional Standard and requirement is described in the Expanded ERO Risk Elements table in Section 3 of this Appendix A3.

In a similar manner, NPCC also analyzed whether any requirements included in the ERO-wide Implementation Plan should be removed from the NPCC specific implementation plan. There were also factors that were analyzed that could justify such removal, but NPCC determined that none of the requirements could be removed.

### **3. Regional Risk Elements and Areas of Focus**

The table below contains the Regional risk focus areas identified during the Regional Risk Assessment process. The table also contains areas of focus to identified risks that may be considered in the Regional compliance oversight plan.

The FERC Approved BES (Phase 2) Definition became effective on July 1, 2014 with compliance obligations beginning on July 1, 2016 for newly identified Elements. NPCC's U.S. element pool that must meet NERC Standards will increase. Newly identified BES elements in NY require a TOP to be assigned, therefore 7 NY TOs will be certified and registered as TOPs. TP registration will also be needed.

NPCC Canadian entities subject to the new BES definition are determined by Provincial Authority with RC input. The IESO, NB, and NS are using Revised BES 100 kV bright-line as a basis with a Provincial specific exception request process. Quebec is not using revised BES bright-line but is using a tiered approach that is based on performance and reliability criteria.

In practice, each province has its own BES list. NPCC's regional risk element is needed because under the new definition of the BES, these standard's requirements will be a new responsibility for certain NPCC registered entities.

Regional Risk Elements		
Regional Risk Element	Justification	Associated Standard & Requirement(s)
Revised BES Definition	<p>The FERC approved revised definition of BES becomes effective on July 1, 2016. The revised definition includes bright-line core criteria, including a general 100kV threshold, with various enumerated inclusions and exclusions. As a result of the application of these BES definition provisions, all Elements and Facilities necessary for the reliable operation and planning of the interconnected bulk power system will be included as BES elements.</p> <p>As a result of the new application of the revised definition in the NPCC Region, NPCC expects that a significant number of Elements and Facilities within the NPCC Region will be subject to the NERC Reliability Standards for the first time. Therefore, NPCC created a new regional risk element, Revised BES Definition, to address this regionally specific difference.</p>	<p>EOP-005-2 R1, R5, R6, R9, R10, R11, R12, R13</p> <p>FAC-003 R1, R2, R3, R4, R5, R6</p> <p>IRO-004-2 R1</p> <p>PER-001-0.2 R1</p> <p>TOP-004-2 R1, R2, R3, R4, R5, R6</p> <p>EOP-006-2 R1, R2, R3, R4, R5, R6, R7, R8, R9, R10</p> <p>EOP-008-1 R1, R2, R3, R4, R5, R6, R7, R8</p> <p>FAC-011-2 R1, R2, R3</p> <p>TOP-002-2.1b R1, R2, R4, R11, R17, R19</p> <p>PER-005-1 R1, R3</p> <p>FAC-008-3 R2, R3</p> <p>TOP-006-2 R3, R4, R5, R6</p> <p>PRC-004-2.1a R3</p> <p>EOP-001-2.1b R4, R5</p> <p>PER-005-1 R1</p> <p>EOP-002-3.1 R6, R7, R8</p> <p>FAC-014-2</p>

Expanded ERO Risk Elements		
Expanded ERO Risk Element	Justification	Associated Standard & Requirement(s)
Critical Infrastructure Protection	NPCC is expanding this risk element due to identified regional deficiencies in manual load shed plans and operator response. Also, for increased reliability, NPCC professes shedding load to prevent equipment damage that would disconnect more load for a longer time period. Any part of a power system (transformers, power lines) will begin to deteriorate if there is an excess of load over available capability. These elements can overload and become permanently damaged as they attempt to supply the excess load. This combination of events can also cause various parts of the systems to separate due to power swings and resulting instability. The result can be large blocks of load lost for extended periods of time (die to transformer replacement, etc.). Load shedding is a last resort to prevent the collapse of the system.	EOP-003-2 R1, R3, R5, R8
Extreme Physical Events	<p>The ability to mitigate the effects of geomagnetic disturbance (GMD) events is a focus area within the NPCC Region because Northern US and Canadian terrain has more potential for a GMD event.</p> <p>Earth surface potential is highest in igneous rock areas and where transmission lines terminate near water. Upstate NY and NE have large areas of igneous rock. Also, due to the Earth Surface Potential being greater at higher latitudes, areas with close proximity to the Earth's magnetic north pole typically experience greater effects of GMDs.</p> <p>Past history also deems this to be an expanded risk element. A significant GMD occurred on March 13, 1989 and resulted in a blackout of the power system in Quebec due to the tripping of shunt reactive devices.</p>	EOP-010-1 R2
Monitoring and Situational Awareness	NPCC is expanding this risk element due to identified regional deficiencies in identifying and operating to the most limiting parameter, and in the RC's issuing alerts to all impacted Transmission Operators and Balancing Authorities in its area without delay when foreseeing a transmission problem" Also, each Reliability Coordinator who foresees a transmission problem (such as an SOL or IROL violation, loss of reactive reserves, etc.) within its Reliability Coordinator Area is required to issue an alert to all impacted Transmission Operators and Balancing Authorities in its area without delay.	IRO-005-3.1a R10, R12
Human Performance	Having adequate communication and appropriate staffing of such communication capabilities to address a real-time emergency condition is essential. NPCC is expanding this risk element due to identified regional deficiencies in entities ensuring that communications shall be staffed and available for addressing a real-time emergency.	COM-002-4 R1

## 4. Regional Compliance Monitoring Plan

This section includes regional risk-based CMEP activities. Following is an overview of the year's currently known IRA, audit, spot check, periodic data submittals, and self-certifications.

### IRA

NPCC began completing IRAs for registered entities in 2015. The priority was to perform IRAs for entities scheduled for audits and then move to remaining entities. NPCC intends to complete IRAs for every registered entity by the end of 2016.

Results of an entity's IRA are used to scope the CMEP engagement for entities on the onsite audit schedule for RCs, BAs and TOPs. IRAs will also be completed for those registered entities that were previously under the 6-year cycle. The results of an IRA may shift the monitoring engagement of a registered entity from an audit to a guided self-certification or spot check, or some combination.

IRAs outside of the normal protocol can be triggered by a system event in the NPCC area, a NERC alert, results of a spot check or results of a guided self-certification.

### Audits

NPCC will continue to audit BAs, RCs and TOPs every three years but uses the IRA (and ICE) to scope the audit requirements. As explained above, an IRA (and ICE) will determine whether other registered entities are subject to an audit or to alternative compliance monitoring activities.

The audit schedule is also located on the NPCC's website.

### Spot Check

NPCC will conduct a spot check program that will be guided by the results of the IRAs and ICEs.

### Self-Certifications

NPCC will use guided Self-Certifications in 2016. Each quarter, NPCC will select one or more Reliability Standards for a guided Self-Certification. The guided Self-Certifications will target selected risk elements across several registered functions. NPCC does not plan to require traditional self-certifications in 2016.

2016 Compliance Audit Plan		
NCR #	Registered Entity	Compliance Activity
NCR07112	Hydro-Quebec TransEnergie	Onsite O&P
NCR07203	Public Service Company of New Hampshire	Onsite O&P
NCR07176	Eversource Energy Service Company	Onsite O&P
NCR07178	Nova Scotia Power Inc.	Onsite O&P
NCR07181	Consolidated Edison Company of New York, Inc.	Onsite O&P
NCR07176	Central Hudson Gas & Electric Company	Onsite O&P
NCR07186	Orange & Rockland Utilities	Onsite O&P
NCR07160	New York Independent System Operator	Onsite CIP
NCR07178	Nova Scotia Power Inc.	Onsite CIP
NCR07046	Consolidated Edison Company of New York, Inc.	Onsite CIP
NCR07028	Central Hudson Gas & Electric Corporation	Onsite CIP
NCR07186	Orange & Rockland Utilities, Inc.	Onsite CIP
NCR07181	Orange & Rockland Utilities	Onsite CIP
NCR07112	Hydro-Quebec TransEnergie	Onsite CIP
NCR07203	Public Service Company of New Hampshire	Onsite CIP

<b>2016 Compliance Audit Plan</b>		
<b>NCR #</b>	<b>Registered Entity</b>	<b>Compliance Activity</b>
NCR07176	Eversource Energy Service Company	Onsite CIP
NCR07028	Central Hudson Gas & Electric Company	Onsite CIP
NCR11387	Allegany Generating Station LLC	Off-Site O&P
NCR11559	Berlin Station, LLC	Off-Site O&P
NCR11500	Binghamton BOP LLC	Off-Site O&P
NCR11488	CAMS - New York, LLC	Off-Site O&P
NCR11436	Kendall Green Energy Holdings, LLC	Off-Site O&P
NCR11535	NAES Corporation - Beaver Falls	Off-Site O&P
NCR11160	NAES Corporation - Berkshire	Off-Site O&P
NCR11536	NAES Corporation - Syracuse	Off-Site O&P
NCR11405	Plainfield Renewable Energy, LLC	Off-Site O&P
NCR11239	PSEG New Haven LLC	Off-Site O&P
NCR07201	PSEG Power Connecticut LLC	Off-Site O&P
NCR07202	PSEG Power New York LLC	Off-Site O&P
NCR11504	Pureenergy Operating Services LLC Selkirk	Off-Site O&P
NCR11514	ReEnergy Livermore Falls	Off-Site O&P
NCR11340	ReEnergy Lyonsdale	Off-Site O&P
NCR11341	Roseton Generating LLC	Off-Site O&P
NCR11408	Stony Creek Energy LLC	Off-Site O&P
NCR07227	Vermont Public Power Supply Authority	Off-Site O&P
NCR11487	Danskammer Energy, LLC	Off-Site O&P
NCR11534	SBF New York, L.L.C.	Off-Site O&P
NCR11459	Verso Bucksport Power LLC	Off-Site O&P
NCR07134	Maine Electric Power Company	Off-Site O&P
NCR00130	Neptune Regional Transmission System LLC	Off-Site O&P
NCR10351	Berkshire Power Company, LLC	Off-Site O&P
NCR10353	Caithness Long Island, LLC	Off-Site O&P
NCR10354	Carr Street Generating Station, LP	Off-Site O&P
NCR10355	Carthage Energy, LLC	Off-Site O&P
NCR10382	Castleton Power, LLC	Off-Site O&P
NCR11341	CCI Roseton LLC	Off-Site O&P
NCR10357	CMEEC - Alfred L. Pierce Power Station	Off-Site O&P
NCR10298	Covanta West Enfield	Off-Site O&P
NCR10358	Erie Boulevard Hydropower, LP	Off-Site O&P
NCR11111	GenConn Middletown, LLC	Off-Site O&P
NCR10359	Great Lakes Hydro America - ME	Off-Site O&P
NCR10360	Indeck - Corinth, LP	Off-Site O&P
NCR10361	Indeck - Olean, LP	Off-Site O&P
NCR10362	Indeck - Oswego, LP	Off-Site O&P
NCR10363	Indeck - Yerkes, LP	Off-Site O&P
NCR00364	Indeck Energy Services of Silver Springs, LP	Off-Site O&P
NCR07143	Milford Power, LLC	Off-Site O&P
NCR07150	Montville Power, LLC	Off-Site O&P
NCR07128	National Grid Generation, LLC	Off-Site O&P
NCR11110	ReEnergy Sterling CT Limited Partnership	Off-Site O&P

<b>2016 Compliance Audit Plan</b>		
<b>NCR #</b>	<b>Registered Entity</b>	<b>Compliance Activity</b>
NCR10352	ReEnergy Stratton	Off-Site O&P
NCR10051	Selkirk Cogen Partners, L.P.	Off-Site CIP
NCR10172	Wheelabrator Millbury Inc.	Off-Site CIP
NCR10193	Syracuse Energy Corporation	Off-Site CIP
NCR10221	Wheelabrator Westchester Inc.	Off-Site CIP
NCR10231	Maine Public Service Company	Off-Site CIP
NCR10237	Brooklyn Navy Yard Cogeneration Partners, L.P.	Off-Site CIP
NCR10239	Verso Bucksport LLC	Off-Site CIP
NCR10251	Middleborough Gas and Electric Department	Off-Site CIP
NCR10252	Shrewsbury Electric and Cable Operations	Off-Site CIP
NCR10253	Wakefield Municipal Gas and Light Department	Off-Site CIP
NCR10271	Noble Bliss Windpark, LLC	Off-Site CIP
NCR10272	Noble Clinton Windpark, LLC	Off-Site CIP
NCR10273	Noble Ellenburg Windpark, LLC	Off-Site CIP
NCR10298	Covanta West Enfield	Off-Site CIP
NCR10299	Sheldon Energy, LLC	Off-Site CIP
NCR10330	Canandaigua Power Partners, LLC	Off-Site CIP
NCR10331	First Wind O&M, LLC	Off-Site CIP
NCR10339	Waterbury Generation, LLC	Off-Site CIP
NCR10342	Pinetree Power - Tamworth, Inc.	Off-Site CIP
NCR10351	Berkshire Power Company, LLC	Off-Site CIP
NCR10352	ReEnergy Stratton	Off-Site CIP
NCR10353	Caithness Long Island, LLC	Off-Site CIP
NCR10354	Carr Street Generating Station, LP	Off-Site CIP
NCR10355	Carthage Energy, LLC	Off-Site CIP
NCR10357	CMEEC - Alfred L. Pierce Power Station	Off-Site CIP
NCR10358	Erie Boulevard Hydropower, LP	Off-Site CIP
NCR10359	Great Lakes Hydro America - ME	Off-Site CIP
NCR10360	Indeck - Corinth, LP	Off-Site CIP
NCR10361	Indeck - Olean, LP	Off-Site CIP
NCR10362	Indeck - Oswego, LP	Off-Site CIP
NCR10363	Indeck - Yerkes, LP	Off-Site CIP
NCR10364	Indeck Energy Services of Silver Springs, LP	Off-Site CIP
NCR10366	Noble Altona Windpark, LLC	Off-Site CIP
NCR10367	Noble Chateaugay Windpark, LLC	Off-Site CIP
NCR10368	Noble Wethersfield Windpark, LLC	Off-Site CIP
NCR10369	Penobscot Energy Recovery Company	Off-Site CIP
NCR10370	Power City Partners, LP	Off-Site CIP
NCR10371	CCI Rensselaer LLC	Off-Site CIP
NCR10372	Seneca Power Partners, LP	Off-Site CIP
NCR10373	Sterling Power Partners	Off-Site CIP
NCR10374	Waterside Power, LLC	Off-Site CIP
NCR10382	Castleton Power, LLC	Off-Site CIP
NCR11027	Algonquin Power Windsor Locks, LLC	Off-Site CIP
NCR11028	GenConn Devon LLC	Off-Site CIP



## 5. Compliance Outreach

Compliance Outreach Activities	
Outreach Activity	Anticipated Date
<u>Spring and Fall Workshops</u> – NPCC holds semi-annual workshops as a primary mechanism for outreach to registered entities.	May 2016, November 2016
<u>Introduction to NPCC for beginners</u> – NPCC provides an introductory class for those new to CMEP activities prior to its spring and fall workshops	May 2016, November 2016
<u>Physical Security outreach program</u> – This will focus on Transmission Owner’s and Transmission Operator’s transition to the new CIP-014 Physical Security standard. Emphasis will be placed on the unique challenges and characteristics of facilities affected by the new Standard.	
<u>Physical Security Information Exchange Sessions</u> - The sessions, which will coincide with the fall and spring workshops, will address NPCC Awareness Programs, Security Strategies, and subjects such CIP-014 implementation and evolving physical threats to the electric industry.	May 2016, November 2016
<u>Cyber Security outreach program</u> – This will provide guidance to NPCC registered entities during their transition to CIP Version 5. NPCC will also publish general guidance in order to help registered entities successfully complete the transition.	
<u>One on one meetings with registered entities</u> – NPCC will meet with registered entities for specific CMEP related issues if requested and warranted.	
<u>Compliance Issue Tracking System (“CITS”)</u> – CITS will issue announcements informing registered entities regarding updates to NPCC’s Compliance Portal.	
<u>Compliance Wiki</u> - NPCC’s compliance wiki provides outreach specific to CITS related issues and questions.	
<u>Webinars</u> – NPCC will hold various webinars on an as needed basis	
<u>FAQs</u> – NPCC will post FAQs on an as needed basis	
<u>Compliance Guidance Statements</u> – Although rarely used, NPCC may issue Compliance Guidance Statements to offer clarification on the compliance approach associated with the NERC Rules of Procedure, NERC Reliability Standards, or NPCC Regional Reliability Standards.	
<u>Registered entity surveys</u> – NPCC will issue surveys to registered entities on an as needed basis. Such surveys have included acquiring registration data, BES element data, workshop content preferences, etc.	
<u>Website</u> – the NPCC website provides information in the areas of Standards, Registration, Compliance Monitoring, and Compliance Enforcement.	