



NORTHEAST POWER COORDINATING COUNCIL, INC.
 1040 AVE. OF THE AMERICAS, NEW YORK, NY 10018 (212) 840-1070 FAX (212) 302-2782

NCR ID :	NIR006		
Registered Entity Name:	Cartier Énergie Éolienne (GM) Inc.		
Registered Entity Acronym:	GM		
Reliability Standards Scope:	Operations & Planning Standards		
Compliance Monitoring Process:	Compliance Audit		
Distribution:	Public Version. Confidential Information Has Been Removed, Including Privileged and Critical Energy Infrastructure Information.		
Regional Entity:	Northeast Power Coordinating Council, Inc. (NPCC)		
Date of Opening Presentation:	May 16, 2017	Date of Closing Presentation:	September 7, 2017
Date of Report:	9/25/2017	IP Year:	2017
Potential Noncompliance:	None (zero)		
Jurisdiction:	Quebec, Canada		

Table of Contents

I. Executive Summary.....	1
II. Compliance Audit Process.....	2
Objectives.....	2
Scope.....	2
Confidentiality and Conflict of Interest.....	2
Methodology.....	3
Company Profile.....	3
III. Compliance Audit Findings.....	4
IV. Recommendations and Positive Observations.....	5
Recommendations.....	5
Positive Observations.....	5
V. Compliance Culture.....	6
Northeast Power Coordinating Council, Inc. (NPCC) Contact Information.....	6
Appendix 1.....	7
Compliance Audit Participants.....	7

I. Executive Summary

Northeast Power Coordinating Council, Inc. (NPCC) conducted a Operations & Planning Standards Compliance Audit of Cartier Énergie Éolienne (GM) Inc., NIR006 from June 23, 2017 to September 7, 2017.

At the time of the Compliance Audit, GM was registered for the functions of Generator Operator (GOP), Generator Owner (GO).

The Compliance Audit team (the Audit team) evaluated GM for compliance with six (6) reliability standards and twelve (12) requirements in the 2017 Quebec Reliability Standard Compliance Monitoring and Enforcement Program (QCMEP) Annual Implementation Plan (2017 Annual Implementation Plan). The Audit team assessed compliance with the NERC Reliability Standards for the periods as indicated below:

Registered Function	Reliability Standards	Requirement(s)	Applicable Audit Period	Notes
GO/GOP	COM-002-2 IRO-001-1.1 PRC-001-1 PRC-005-2 TOP-006-2 VAR-002-3	R1 R8 R3, R4, R5 R3, R4, R5 R1 R1, R3, R4	January 1, 2016 to June 24, 2017 April 1, 2016 to June 24, 2017 January 1, 2016 to June 24, 2017 January 1, 2017 to June 24, 2017 July 1, 2016 to June 24, 2017 January 1, 2017 to June 24, 2017	See Note below

Note: Initially, PRC-005-2 was included in the scope of the audit. The GM site is a Facility classified as Main Transmission System (MTS) in the Register of Entities Subject to Reliability Standards (the Register). According to the Register, GM does not own or operate Facilities classified as Bulk Power System (BPS) Consequently, PRC-005 is not applicable GM and was removed from the scope of this audit.

GM submitted evidence for the Audit team's evaluation of GM's compliance with all requirements. The Audit team reviewed and evaluated all evidence provided to assess compliance with Reliability Standards applicable to GM at this time.

Based on the evidence provided, No Findings of non-compliance were noted for the Reliability Standards and the Eight (8) applicable Requirements in scope for this audit engagement. One (1) requirement, R4 PRC-001-1, was found to be Not Applicable to GM.

There were no open Mitigation Plans; therefore, none were reviewed by the team.

The Compliance Audit team lead certifies that the team adhered to all applicable requirements of the NERC Rules of Procedure (ROP), the QCMEP and the September 24, 2014 *Agreement on the Implementation of the Québec reliability standards compliance monitoring and enforcement program* (the Agreement).

II. Compliance Audit Process

The Compliance Audit process steps are detailed in the QCMEP. NPCC’s application for the QCMEP generally conforms to the United States Government Auditing Standards (GAGAS) and other generally accepted audit practices.

Objectives

All registered entities are subject to compliance assessments with all Reliability Standards applicable to the functions for which the registered entity is registered. The Compliance Audit objectives are to:

- Provide reasonable assurance of compliance with the requirements of Reliability Standards applicable to GM;
- Review compliance with applicable Reliability Standards;
- Observe and document GM’s compliance program and culture.

Scope

The scope of the Compliance Audit considered the Reliability Standards in the 2017 Annual Implementation Plan and Inherent Risk Assessment (IRA) of GM completed by Northeast Power Coordinating Council, Inc. (NPCC).

The Reliability Standards and Requirements in-scope for this Compliance Audit are illustrated in **Table 2** below:

Table 2: Compliance Audit Scope		
Registered Function	Standards	Requirement(s)
GO/GOP	COM-002-2	R1
	IRO-001-1.1	R8
	PRC-001-1	R3, R4, R5
	TOP-006-2	R1
	VAR-002-3	R1, R3, R4

The Audit team did not expand the scope of the Compliance Audit beyond what was stated in the notification package.

Confidentiality and Conflict of Interest

Confidentiality and conflict of interest of the Audit team are governed under the QCMEP and the Agreement. GM was informed of Northeast Power Coordinating Council, Inc. (NPCC)’s obligations and responsibilities under the Agreement and the QCMEP. The work history for each Audit team member was provided to GM, which was given an opportunity to object to a Team member’s participation on the basis of a possible conflict of interest or the existence of other circumstances that could interfere with a Team member’s impartial performance of duties. GM had not submitted any objections by the stated objection due date based on the QCMEP and accepted the Audit team member participants without objection. There were no denials or access limitations placed upon this team by GM.

Methodology

The ERO Compliance Monitoring and Enforcement Manual (Manual) documents the ERO Enterprise's current approaches used to assess a registered entity's compliance with the NERC Reliability Standards. While the ERO Enterprise does not necessarily perform compliance monitoring activities that must be in accordance with GAGAS and other generally accepted audit practices, NPCC uses these standards as framework to conduct compliance monitoring activities under the QCMEP, and recognizes that these standards provide information used in oversight, accountability, transparency, and improvements in operations.

Northeast Power Coordinating Council, Inc. (NPCC) provided GM with a Compliance Audit notification package to commence the Compliance Audit. GM provided evidence at the time requested, or as agreed upon, by Northeast Power Coordinating Council, Inc. (NPCC). The Audit team reviewed the evidence submitted by GM and assessed compliance with the requirements of the applicable Reliability Standards. Additional evidence could be submitted until the agreed-upon deadline prior to the exit briefing. After that date, only data or information deemed relevant to the content of the report or its finding could be submitted, with the agreement of the Audit team lead.

The Audit team reviewed documentation provided by GM and requested additional evidence and sought clarification from subject matter experts (SMEs) during the Compliance Audit. The evidence submitted in the form of policies, procedures, emails, logs, studies, data sheets, etc. were validated, substantiated, and cross-checked for accuracy as appropriate. Where sampling is applicable to a requirement, the sample set was determined by a statistical methodology, along with the use of professional judgment.

The findings were based on the facts and documentation reviewed, the Audit team's knowledge of the Register, the NERC Reliability Standards, and the use of professional judgment. All findings were developed based upon the consensus of the Audit team.

Company Profile

Cartier Énergie Éolienne (GM) Inc. is registered as a Generator Operator (GOP) and Generator Owner (GO). The parent company of GM is Cartier Wind Energy Inc., which itself is a partnership between two companies active in the energy field: TransCanada and Innergex Renewable Energy. GM owns and operates 141 wind turbines of 1.5 MW/1.66 MVA each. The total installed capacity of the production at the site is 211.5 MW/235 MVA

III. Compliance Audit Findings

Based on the results of the Compliance Audit, No Findings were noted for the Reliability Standards and Eight (8) applicable Requirements in scope for this audit engagement. One (1) requirement, R4 of PRC-001-1, was found to be Not Applicable to GM.

IV. Recommendations and Positive Observations

Recommendations

There were three recommendations provided by the Audit team:

1. COM-002-2: Follow-up on standardizing the list of alarm recipients for consistency amongst each site.
2. PRC-001-1: Draft a procedure that would detail the required coordination between GM, HQ and any others affected by equipment changes that may impact the protection systems.
3. IRO-001-1.1: All communications regarding operating instructions or operating directives should be logged for issuance date/time and completion date/time including any e-mail correspondence.

Positive Observations

The Audit team identified and informed GM of 3 positive observations. The specific details of each positive observation are described below.

1. COM-002-2: Alarms are sent via SMS or e-mail to site managers and lead technicians informing them of site issues prior to receiving a phone call from GONOCC.
2. TOP-006-2: As per the Common System Operating Instruction, HQ receives status in real time from each site as well as alarms.
3. VAR-002-3: As per the Common System Operating Instruction HQ receives status of AVR in real time.

V. Compliance Culture

Comments on GM Compliance culture: Observed during the audit: GM responded to the first and second round of questions in the time frame agreed. Although audit evidence was submitted in French, they did submit the QRSAs in English which facilitated the auditors review of their audit documentation. The Audit team would like to thank the Cartier Team for their cooperation and professionalism displayed during the audit. Based on our experience during this audit, it appears they take compliance seriously and were receptive to our requests and suggestions.

Northeast Power Coordinating Council, Inc. (NPCC) Contact Information

Any questions regarding this Compliance Audit report can be directed to:

Northeast Power Coordinating Council, Inc. (NPCC)
1040 Avenue of the Americas
10th Floor
New York, NY 10018-3703

On behalf of Northeast Power Coordinating Council, Inc. (NPCC), this report was prepared and reviewed by:

Audit Manager	Date
John Muir	September 22, 2017
Audit team Lead	Date
Scott Nied	September 25, 2017

Appendix 1

Compliance Audit Participants

Following is a list of all personnel from the Audit team and GM who were directly involved during the meetings and interviews.

Table 3: Compliance Audit Team		
Role	Title	Entity
Audit Manager	Manager, Compliance Monitoring	NPCC
Compliance Audit Team Lead	Manager, Operations & Planning Compliance Audits	NPCC
Team Member	Auditor	NPCC
Team Member	Auditor	NPCC
Team Member	Audit Coordinator	NPCC
Team Member	Audit coordinator	NPCC

Table 4: GM Participants	
Title	Entity
Director, General	Cartier Energie Eolienne (GM) Inc
Electrical Engineer - Operational Support	Cartier Energie Eolienne (GM) Inc