



**Project QC-2015-02  
Consultation on Proposed Reliability Standards and Supporting  
Documents**

**Information session for registered entities**

**November 26, 2015**

**RELIABILITY  
COORDINATOR**



# Presentation Overview

1. Meeting objectives
2. Webinar instructions
3. Regulatory framework in Québec
4. Consultation process
5. Project QC-2015-02
6. Next steps
7. Question period and discussion
8. Régie decisions (R-3699-2009)
  - D-2015-059, D-2015-098 and D-2015-168

# 1. Meeting Objectives

- Provide an update on reliability standards in Québec
- Present the proposed standards and supporting documents
- Give information on the consultation process
- Answer your questions
- Present the next steps

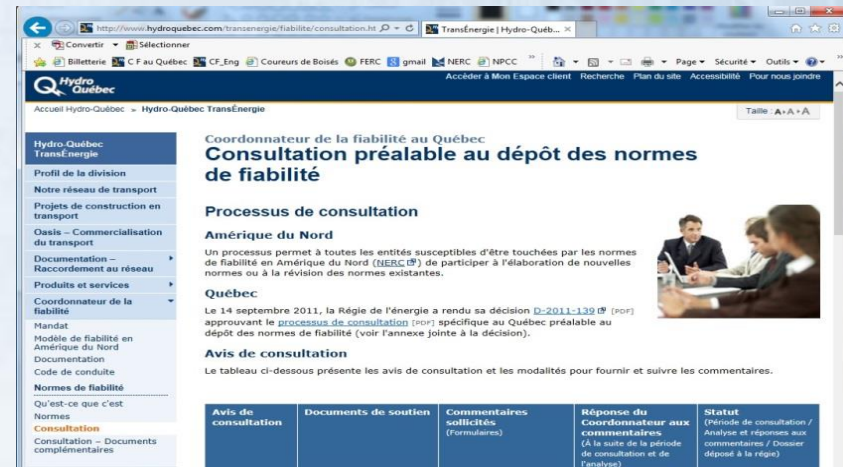
## 2. Webinar instructions

- Phone set to **Mute**



- **Chat** button for questions

- Presentation QC2015-02 is available on the **Reliability Coordinator** site (in **French** and **English**)



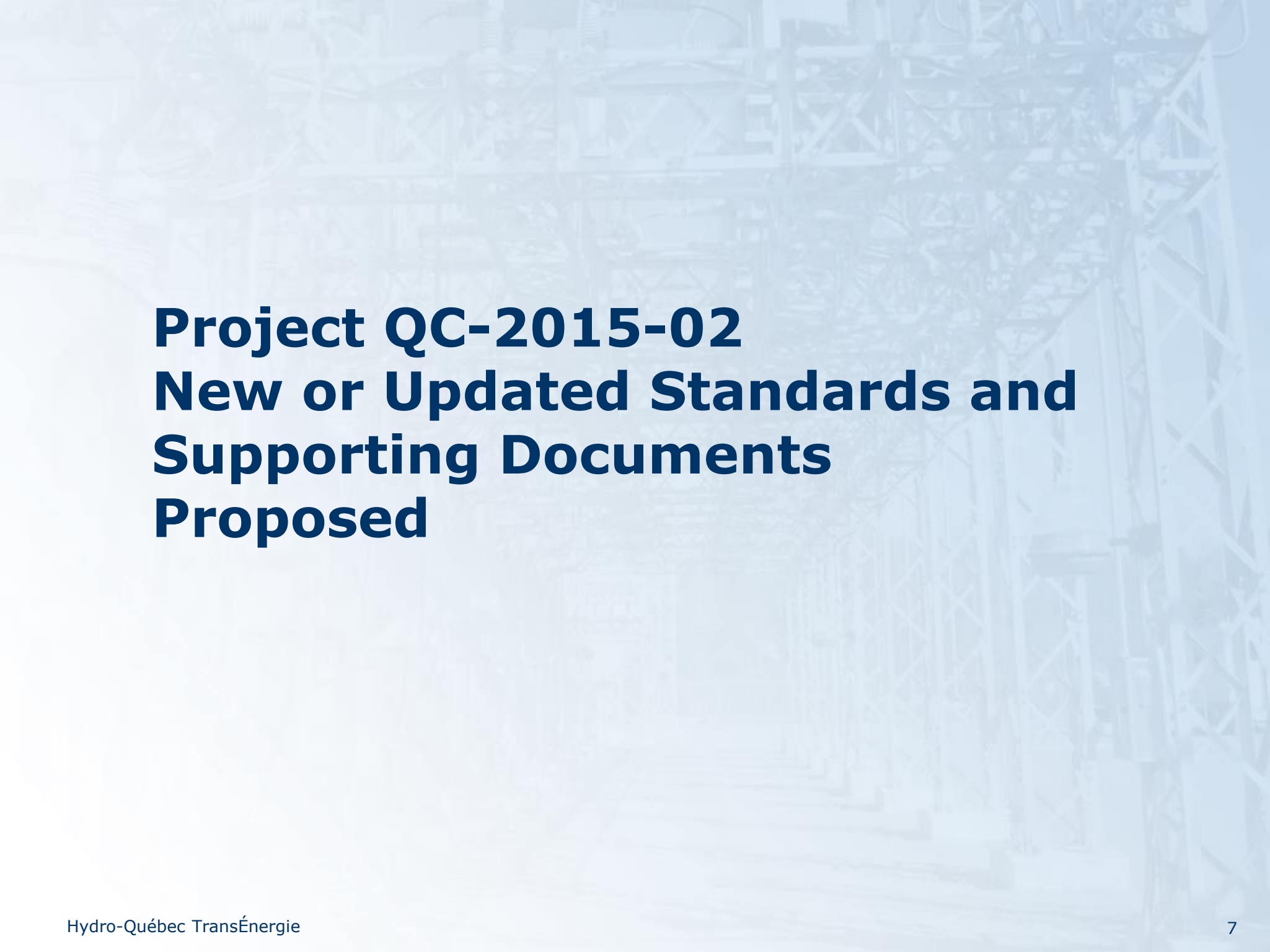
The screenshot shows the Hydro-Québec website interface. The main heading is "Coordonnateur de la fiabilité au Québec" and "Consultation préalable au dépôt des normes de fiabilité". Below this, it states "Processus de consultation Amérique du Nord". The text describes a consultation process for entities affected by reliability standards in North America. A section titled "Avis de consultation" indicates that the Régie de l'énergie has made a decision (D-2011-139) approving the consultation process. At the bottom, there is a table with five columns: "Avis de consultation", "Documents de soutien", "Commentaires sollicités (Formulaires)", "Réponse du Coordonnateur aux commentaires (À la suite de la période de consultation et de l'analyse)", and "Statut (Période de consultation / Analyse et réponses aux commentaires / Dossier déposé à la Régie)".

# 3. Regulatory Framework in Québec

- The Régie de l'énergie's responsibilities are to:
  - Designate the Reliability Coordinator for Québec.
  - Adopt the reliability standards filed by the Reliability Coordinator, as well as their attachments.
  - Approve the Register of Entities Subject to Reliability Standards.
  - Monitor compliance with reliability standards.

## 4. Consultation Process

- Consultation notice sent
- Proposed standards and supporting documents posted
- Information session
- Feedback period
  - Feedback on the standards and documents
  - Evaluation of the financial impact of the standards proposed
- Response to feedback
- Other feedback cycles, if needed
- Filed with Régie de l'énergie



# **Project QC-2015-02 New or Updated Standards and Supporting Documents Proposed**

# Reliability Standards Proposed

## ➤ Eight new standards

- BAL-001-2 Real Power Balancing Control Performance
- CIP-014-2 Physical Security
- COM-001-2 Communications
- COM-002-4 Operating Personnel Communications Protocols
- FAC-001-2 Facility Interconnection Requirements
- FAC-002-2 Facility Interconnection Studies
- PRC-002-2 Disturbance Monitoring and Reporting Requirements
- PRC-006-2 Automatic Underfrequency Load Shedding



# BAL-001-2

## Real Power Balancing Control Performance

### ➤ **Summary**

- Real power balancing control performance
- Equations moved to attachment
- Various components of BAL-001-0.1a defined (“load management” and “interconnection frequency”)
- ACE limit introduced, taking into account the frequency (Hz) of each interconnection

### ➤ **Changes to other standards or to glossary**

- Retirement of BAL-001-0.1a when BAL-001-2 adopted
- Three new terms to be added to glossary:
  - Regulation reserve sharing group
  - Regulation reserve sharing group reporting ACE
  - Reporting ACE

## BAL-001-2 (cont.)

- **Applicability:**
  - Balancing Authority (BA)
- **Proposed effective date in Québec:**
  - July 1, 2016 (same as in U.S.)
- **Preliminary evaluation of impact**
  - Low

# CIP-014-2 Physical Security

## ➤ Summary

- Identifies critical transmission facilities based on specific criteria
- Specific criteria are assessed by an independent third party
- Implements security measure designed to to deter, detect, delay, assess and communicate threats and physical vulnerabilities

## ➤ Applicability:

- Transmission owners with a transmission substation that meets the criteria in sections 4.1.1.1 to 4.1.1.4 of CIP-014-2
- Transmission operator

# CIP-014-2 (cont.)

## ➤ Proposed effective date

Standard	Effective date in U.S.	Proposed effective date in Québec
CIP-014-2	October 2, 2015	First day of first calendar quarter 6 months after Régie adopts standard

## ➤ Preliminary evaluation of impact

- Moderate

### ➤ **Summary**

- Redundancy and ambiguity eliminated
- Predefined communication protocols adopted
- Adherence to these protocols assessed annually
- Training to be given on the use of the protocols
- Use of communications in three parts
- Applicability to distribution providers and generator operators
- Ambiguities eliminated in standards now in effect

### ➤ **Three new terms added to glossary**

- Interpersonal Communication
- Alternative Interpersonal Communication
- Operating Instruction

# COM-001-2 and COM-002-4 (cont.)

- **Changes to other standards or to glossary**
  - Retirement of COM-001-1.1 and COM-002-2
- **Applicability:**
  - Transmission Operator (TOP)
  - Balancing Authority (BA)
  - Reliability Coordinator (RC)
  - Distribution Provider (DP)
  - Generator Operator (GOP)

# COM-001-2 and COM-002-4 (cont.)

## ➤ Proposed effective dates

Standard	Effective dates in U.S.	Proposed effective dates in Québec
COM-001-2	October 1, 2015	First day of first calendar quarter 3 months after Régie adopts standard
COM-002-4	July 1, 2016	First day of first calendar quarter 12 months after Régie adopts standard

## ➤ Preliminary evaluation of impact

- Low

# FAC-001-2 Facility Interconnection Requirements

## FAC-002-2 Facility Interconnection Studies

### ➤ Summary

- Periodic five-year review
- Remove requirements if no impact on transmission system reliability
- Eliminate redundancy between certain requirements
- Clearly establish requirements for each entity covered by the standards
- Make certain requirements less stringent based on type of facility
- Clarify criteria to assess for system impact when connecting loads in line with NERC guidelines.



# FAC-001-2 and FAC-002-2 (cont.)

## ➤ Changes to other standards or to glossary

- Retirement of FAC-001-1 and FAC-002-2

## ➤ Applicability:

- FAC-001-2: TO and applicable GO
- FAC-002-2: PC, TP, TO, DP, LSE and applicable GO

## ➤ Proposed effective date

Standard	Effective dates in U.S.	Proposed effective date in Québec
FAC-001-2 FAC-002-2	January 1, 2016	First day of first calendar quarter 1 year after Régie adopts standard

## ➤ Assessment of impact

- Low

# PRC-002-2 Disturbance Monitoring

## ➤ Summary

- New standard with 12 requirements
- Establishes system operation parameters that must be measured
- Specifies technical requirements for recording characteristics
- Determines preferred location of dynamic disturbance recorders
- Evaluates minimum characteristics to monitor
- Describes criteria related to disturbance data transmission

# PRC-002-2 (cont.)

## ➤ **Applicability:**

- Reliability Coordinator or Planning Coordinator (RC/PC)
- Generator Owner (GO)
- Transmission Owner (TO)

## ➤ **Proposed effective dates**

Standard PRC-002-2	Proposed effective dates in Québec
R1 and R5	First day of first calendar quarter 3 months after Régie adopts standard
R12	First day of first calendar quarter 6 months after Régie adopts standard
R2, R3, R4, R6, R7, R8, R9, R10 and R11	First day of first calendar quarter 3 years after Régie adopts standard in order to achieve 50% compliance
	First day of the first calendar quarter 5 years after Régie adopts standard and its attachment

## ➤ **Assessment of impact**

	Low	Moderate	High
Implementation of the standard			X
Enforcement of the standard		X	
Compliance monitoring		X	

# PRC-006-2 Automatic Underfrequency Load Shedding

## ➤ Summary

- Establishes design and documentation requirements for underfrequency load shedding (UFLS) programs
- Designed to arrest rapidly declining frequency
- Designed to assist recovery of frequency
- Provides last resort measures for generation-transmission system preservation and integrity

## ➤ Applicability:

- PC
- UFLS entity
- TO

## PRC-006-2 (cont.)

### ➤ Proposed effective dates

Requirement	Proposed effective dates in Québec
<b>R1 and R2, D.A.3 and D.A.4.3, R5 to R15</b>	First day of first calendar quarter 6 months after Régie adopts standard.
<b>D.A.4.1 and D.A.4.2 (Regional variance for the Québec Interconnection)</b>	First day of first calendar quarter 1 year after trip settings provided by generator owners in Québec are available, in accordance with PRC-024-1 and its attachment.

# Feedback

- Two forms are available:
  - Standards and supplementary documents
  - Evaluation of the impacts of proposed standards
- It is important to specify clearly the following:
  - Name of the person submitting the feedback
  - Name of the entity represented
  - Document and section to which the feedback applies
  - **Impact the proposed standard will have on the entity (human, material and financial resources) being as specific as possible**

**Send feedback to: [fiabilite@hydro.qc.ca](mailto:fiabilite@hydro.qc.ca)**

# Next Steps

- Study feedback
- Post response to feedback
- Hold technical meeting (if needed)
- Incorporate selected feedback into standards and supporting documents
- Compile evaluations of the monetary impact of the standards
- File case with the Régie de l'énergie for adoption of the standards

# Régie Decisions

- D-2015-059
- D-2015-098
- D-2015-198



# Decision D-2015-059

- Rendered on May 4, 2015 (R3699-2009 Phase I)
  - 14 standards and attachments adopted
  - Applicable risk factor adopted
  - 8 standards and attachments rejected
  - Amendment of 16 standards requested
  - Filing again requested for adoption of new register of entities and glossary
  - Reopening of enquiry on industrial generators (PVIIs) requested

# Decision D-2015-098

- Rendered on June 23, 2015 (R3699-2009 Phase I)
- 3 standards adopted:
  - BAL-004-1, CIP-001-2 and EOP-004-1
- Register of entities approved
- Glossary adopted

# Decision D-2015-168

- Rendered on October 7, 2015 (R3699-2009 Phase II)
- 16 standards to take effect January 1, 2016
- 29 existing standards suspended
- 2 pending standards (removal of PSE and IA functions) from [R-3936-2015](#)

# Question period and discussion

**RELIABILITY  
COORDINATOR**



**Hydro  
Québec**