

Mandatory Reliability Standards

Assessment Report 16 Workshop

January 2023

Presented by:

BCUC

BC Hydro



January 09, 2023

Safety Moment – Are you ready for winter weather?

Winter is great for a lot of reasons...



Winter also brings new safety hazards...



- Keep your feet on the ground
- Winter footwear and clothing
- Be aware of your surroundings
- Plan your travel
- Winter tires
- Adjust your driving

Agenda



<u>Section</u>	<u>Topic</u>	<u>Duration</u>
1	Introductions	15 min
2	Reliability Regulations Landscape in B.C.	20 min
3	Assessment Reports	20 min
4	How to Provide Feedback	20 min
5	Q&A and Closing	20 min

Note: Today's workshop is process oriented. Other questions, e.g., registration/ technical details/ interpretation of standard, etc. should be directed to the appropriate contact.



INTRODUCTIONS



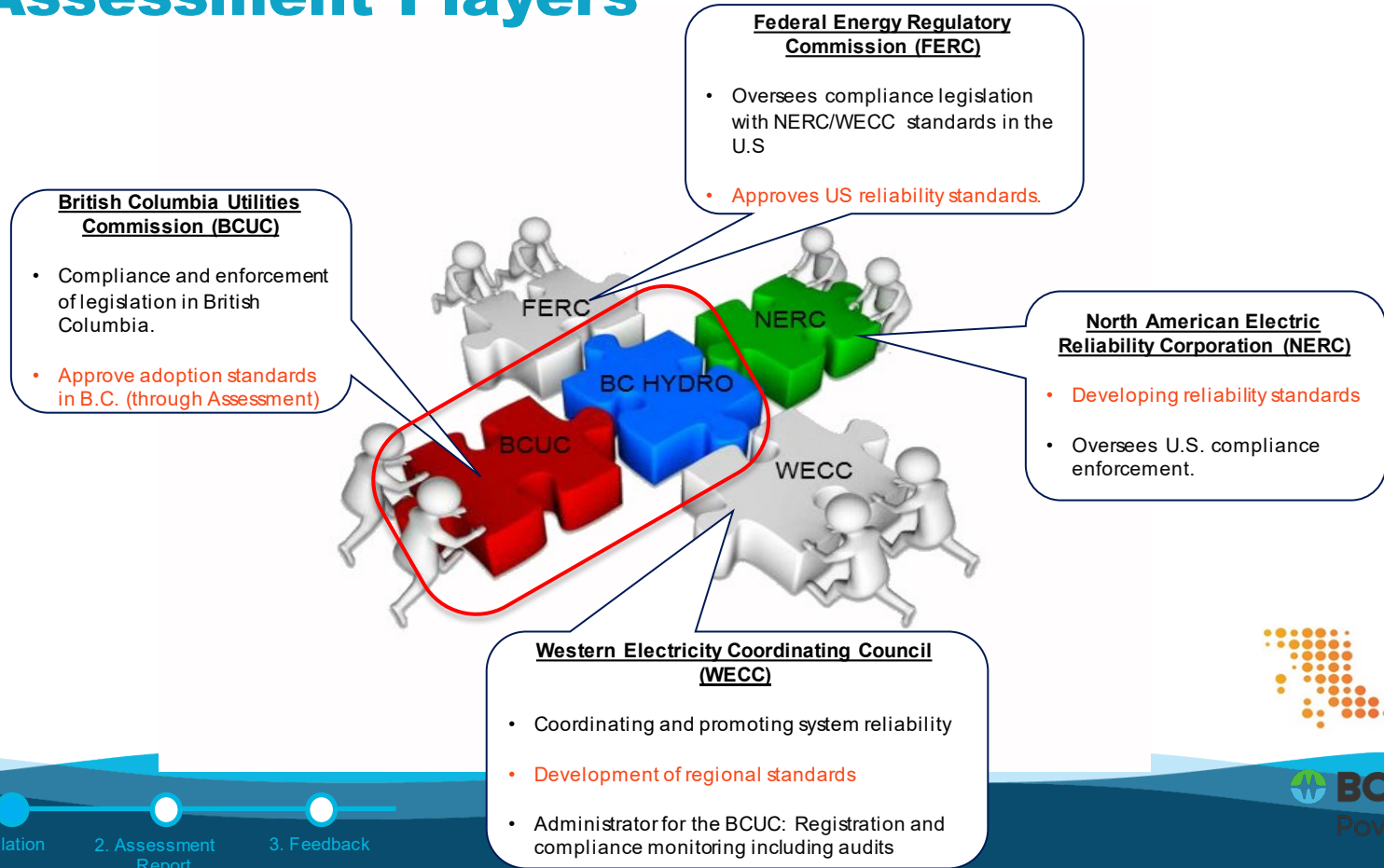
Reliability Regulations Landscape in B.C.

Nicole Manalili,

British Columbia Utilities Commission



Key Assessment Players



Mandatory Reliability Standards (MRS) in B.C.

MRS Legislation

- **2007 British Columbia Energy Plan**

- Included a Policy Action to “ensure that the province remains consistent with North American transmission reliability standards”

- **Utilities Commission Act**

- Section 125.2 establishes the adoption of MRS in B.C., gives the BCUC jurisdiction for MRS application in B.C., and assigns BC Hydro the responsibility to review each MRS and report on their suitability for adoption in B.C.
- Recent amendments to the Act and MRS Regulation shifted the applicability of the reliability standards from the Regulation to the Act
- MRS standards may only be fully adopted or rejected by the BCUC and may not be altered or revised. However, the BCUC may specify a BC effective date that would differ from the US effective date.

- **MRS Regulation**

- The provincial government issued the MRS Regulation which directs BC Hydro to provide a report to the BCUC within one year after MRS are adopted by FERC



Mandatory Reliability Standards (MRS) in B.C.

MRS Report Filing Process

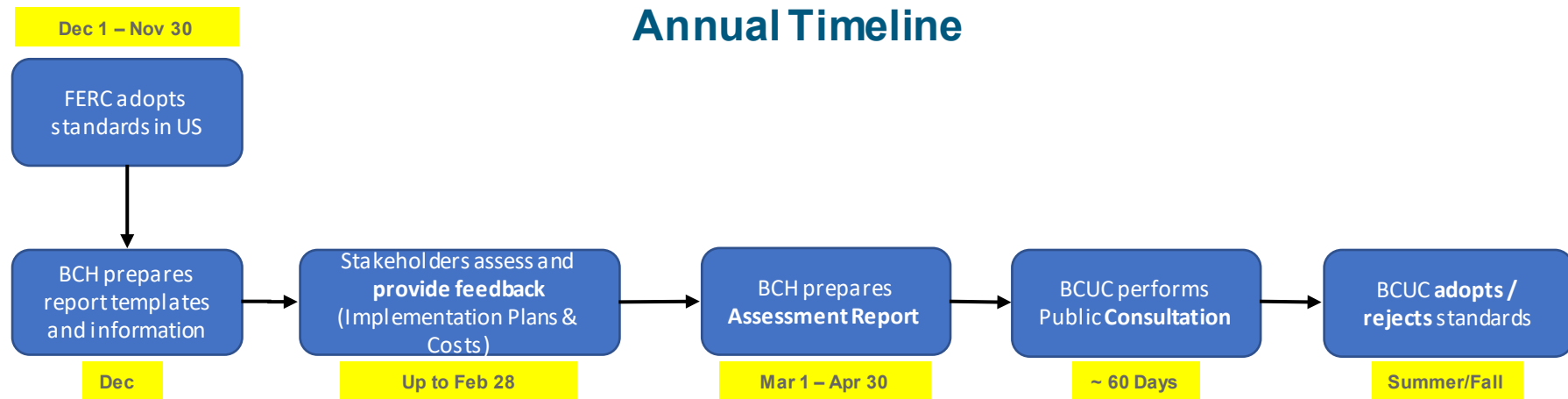
- Upon receipt of the Assessment Report, the BCUC makes the report available to the public for comment
- The BCUC considers any comments received in reply to the publication and may issue Information Requests to BC Hydro to which BC Hydro must reply

MRS Adoption in B.C.

- The BCUC adopts the MRS assessed in the report if the BCUC considers that the MRS are required to maintain or achieve consistency in B.C. with other jurisdictions that have adopted the MRS
- The BCUC is not required to adopt an MRS if the BCUC determines, after a hearing, that the MRS is not in the public interest



Adopting Mandatory Reliability Standards in B.C.



Mandatory Reliability Standards (MRS) in B.C.

MRS Compliance

- The B.C. Government has vested the BCUC with the authority and the responsibility for MRS compliance and enforcement
- The BCUC has the ability to levy monetary penalties for confirmed MRS violations
- The BCUC Rules of Procedure, which includes the Registration Manual, Compliance Monitoring Program and Penalty Guidelines, sets out the administrative framework for the monitoring of compliance with adopted MRS in B.C.
- The BCUC has an administration agreement with WECC to assist with monitoring compliance and registration



Assessment Reports

Patricia Robertson,
BC Hydro



Assessment Report Scope Definition

The scope of Reliability Standards and Terms for consideration in each annual Report is limited to the following:

- Standards and Terms adopted by an Order issued by the Federal Energy Regulatory Commission (**FERC**) in the United States; and,
- Order became effective between December 1st of the previous year to November 30th of the current year.
- Assessment 16 timeframe:
 - *December 1, 2021, to November 30, 2022*



Assessment Report 16 – Scope (1/3)

O&P standards in scope are:

Standard	Status
FAC-001-3	Revised Errata
FAC-001-4	Revised
FAC-002-4	Revised
FAC-003-5	Revised
FAC-010-3	Retired
FAC-011-4	Revised
FAC-014-3	Revised
IRO-005-3.1a	Retired
IRO-008-3	Revised
PRC-002-3	Revised
PRC-023-5	Revised
PRC-026-2	Revised
TOP-001-6	Revised

Assessment Report 16 – Scope (2/3)

CIP standards in scope are:

Standard	Status
CIP-004-7	Revised
CIP-011-3	Revised
CIP-014-3	Revised

Assessment Report 16 – Scope (3/3)

Changes to NERC Glossary of Terms

Continent-wide Term	Link to Project Page	FERC Approval Date	U.S Effective Date
System Voltage Limit (new Term)	Project-2015-09	March 4, 2022	April 1, 2024
System Operating Limit (revised Term)	Project 2015-09	March 4, 2022	April 1, 2024

Assessment Report 16

Feedback

Where to find more information?

New standards, glossary of terms and redlines can be found on the BC Hydro Reliability website: <https://www.bchydro.com/energy-in-bc/operations/transmission/transmission-system/reliability.html>

When?

All feedback is due by end of day on **February 28, 2023** (Tuesday).

Feedback received after this time will not be considered.



How to Provide Feedback

Alan Xu,
BC Hydro



Registered Entity Feedback

Comments are evaluated against the following criteria:

- **Adverse Reliability Impacts:** Less stringent requirements than currently adopted standards or practices otherwise mandated in utility tariffs or business practices approved or endorsed by the BCUC.
- **Suitability Assessment (Technical/Administrative):**
 - a) Issues with requiring NERC Approval/Participation in order to implement.
 - b) Issues with ongoing provision of information to NERC or WECC due to a lack of clarity on reporting instructions, references to undefined processes or reporting tools, etc.
 - c) References to standards/glossary terms that are not yet FERC/BCUC approved or otherwise under BCUC assessment.
 - d) Any other issues that would affect an entity's ability to implement the requirements of a standard/glossary term (i.e., Planning Authority/Planning Coordinator input required for which the role(s)/responsibilities are under consideration by the BCUC).



Registered Entity Feedback

Comments are evaluated against the following criteria (cont.):

- Only **Adverse Reliability Impact** or **Suitability Assessment** comments will be considered as part of BC Hydro's recommendations, as only they fall under the scope of the established Assessment Report process
- Examples of issues **NOT** falling under the criteria of **Adverse Reliability Impact** or **Suitability Assessment** comments include:
 - Issues with entity functional registrations
 - Requests to change standard language or glossary terms/definitions– the BCUC does not have the authority to change standards or glossary terms
- Other issues should be discussed with the BCUC separately



Registered Entity Feedback

MRS adoption recommendations are formed from your feedback

In the Assessment Report, BC Hydro will:

- Aggregate and summarize all provided costs
- Recommend implementation timelines based on entity feedback in combination with FERC approved implementation timelines



Registered Entity Feedback

Your feedback is important in the evaluation process

- All feedback comments will be kept verbatim
- If your feedback seems unclear, BC Hydro will contact the entities and ask for revisions/clarification and resubmission
- BC Hydro will **NOT** make changes to entity feedback – feedback forms are taken verbatim and appended to the Assessment Report for BCUC's reference



Feedback spreadsheet walkthrough:

- | Standard: O&P Standards Feedback | | | | | | | | | | | | |
|--|------------------------------------|-----------------------|---|---|---|---|-----------------|-----------------------|------------------------------|----------------------------|---|-----------------------|
| Disclaimer: This information has been prepared as input into BC Hydro's Assessment 16 report on Mandatory Reliability Standards and is based on information available to BC Hydro as of the date sent. It should not be relied upon for any other purpose. | | | | | | | | | | | | |
| Entity Name and Function | | | | | | | | | | | | |
| INFORMATIONAL COLUMNS | | | | | | | | | | | | |
| Standard | FERC Approved Reliability Standard | ISAW - BC Hydro (N/A) | Standard Name and Description | Link to Assessment Report (Internal) | FERC Approved Revision - Link to Revision (Internal) | FERC Approved Revision - Mapping Document | Functional Area | FERC Publication Date | BC Order of Publication Date | Effective Date of Approval | FERC Approved Revision - Effective Date | ISAW - BC Hydro (N/A) |
| FAC-001.3 | FAC-001.3.1 | FAC-001.3.1.5(a) | Facility Interconnection Requirements
To avoid adverse impacts on the reliability of the B.S. | FAC-001.3 Assessment Report 1: BLOC Order 38-13 | FAC-001.3 redline R1: No change | N/A | NA | NA | NA | 2017-09-20 | Effective 2018-01-01 | 2017-01-01 |
| FAC-001.3 | FAC-001.3.2 | FAC-001.3.2.5(a) | Facility Interconnection Requirements
To avoid adverse impacts on the reliability of the B.S. | FAC-001.3 Assessment Report 1: BLOC Order 38-13 | FAC-001.3 redline R1: No change | NA | GU | NA | NA | 2017-09-20 | Effective 2018-01-01 | 2017-01-01 |
| FAC-001.3 | FAC-001.3.3 | FAC-001.3.3.5(a) | Facility Interconnection Requirements
To avoid adverse impacts on the reliability of the B.S. | FAC-001.3 Assessment Report 1: BLOC Order 38-13 | FAC-001.3 redline R1: "Transponder" to R1.3 removed. | NA | NA | NA | NA | 2017-09-20 | Effective 2018-01-01 | 2017-01-01 |
| FAC-001.3 | FAC-001.3.4 | FAC-001.3.4.5(a) | Facility Interconnection Requirements
To avoid adverse impacts on the reliability of the B.S. | FAC-001.3 Assessment Report 1: BLOC Order 38-13 | FAC-001.3 redline R1: "Generation" to R1.3 removed | NA | NA | NA | NA | 2017-09-20 | Effective 2018-01-01 | 2017-01-01 |
| FAC-001.4 | FAC-001.4.1 | Not available | Facility Interconnection Requirements
To avoid adverse impacts on the reliability of the B.S. | FAC-001.3 Assessment Report 1: BLOC Order 38-13 | FAC-001.4 redline R1: No change | NA | NA | NA | NA | 2017-09-20 | Effective 2018-01-01 | 2017-01-01 |
| FAC-001.4 | FAC-001.4.2 | Not available | Facility Interconnection Requirements
To avoid adverse impacts on the reliability of the B.S. | FAC-001.3 Assessment Report 1: BLOC Order 38-13 | FAC-001.4 redline R1: No change | NA | NA | NA | NA | 2017-09-20 | Effective 2018-01-01 | 2017-01-01 |
| FAC-001.4 | FAC-001.4.3 | Not available | Facility Interconnection Requirements
To avoid adverse impacts on the reliability of the B.S. | FAC-001.3 Assessment Report 1: BLOC Order 38-13 | FAC-001.4 redline R1: Added the condition, "pending to make a qualified change" | NA | NA | NA | NA | 2017-09-20 | Effective 2018-01-01 | 2017-01-01 |
| FAC-001.4 | FAC-001.4.4 | Not available | Facility Interconnection Requirements
To avoid adverse impacts on the reliability of the B.S. | FAC-001.3 Assessment Report 1: BLOC Order 38-13 | FAC-001.4 redline R1: Added the condition, "pending to make a qualified change" | NA | NA | NA | NA | 2017-09-20 | Effective 2018-01-01 | 2017-01-01 |
| FAC-001.4 | FAC-001.4.5 | Not available | Facility Interconnection Requirements
To avoid the impact of interconnecting new or changed facilities on | FAC-001.3 Assessment Report 1: BLOC Order 38-13 | FAC-001.4 redline R1: Added the condition, "pending to make a qualified change" | NA | BP, FC | NA | NA | 2017-09-20 | Effective 2018-01-01 | 2017-01-01 |
| FAC-001.4 | FAC-001.4.6 | Not available | Facility Interconnection Requirements
To avoid the impact of interconnecting new or changed facilities on | FAC-001.3 Assessment Report 1: BLOC Order 38-13 | FAC-001.4 redline R1: Added the condition, "pending to make a qualified change" | NA | NA | NA | NA | 2017-09-20 | Effective 2018-01-01 | 2017-01-01 |
| FAC-001.4 | FAC-001.4.7 | Not available | Facility Interconnection Requirements
To avoid the impact of interconnecting new or changed facilities on | FAC-001.3 Assessment Report 1: BLOC Order 38-13 | FAC-001.4 redline R1: Added the condition, "pending to make a qualified change" | NA | GP | NA | NA | 2017-09-20 | Effective 2018-01-01 | 2017-01-01 |



How to Provide Feedback – Glossary of Terms

Feedback spreadsheet walkthrough

EXAMPLE ONLY

FERC Approved New/Revised/Retired NERC Glossary of Terms from the August 12, 2017 Glossary of Terms	Stakeholder Comments (Press Alt-Enter to insert a carriage return in a cell)	Estimated Incremental Cost Associated with Revised/New Term and Definition, if any (\$). (Press Alt-Enter to insert a carriage return in a cell)		BCUC Implementation Time (Press Alt-Enter to insert a carriage return in a cell)
		Cost One Time (\$)	Cost Ongoing (\$)	
Contributing Schedule * Glossary term is specific to currently effective standard IRO-006-WECC-2	Retired term; no incremental impacts.	0	0	Coincide retirement with the effective date of the IRO-006-WECC-3 standard pending BCUC adoption.
Cyber Security Incident *Glossary term is specific to revised standard CIP-008-6	See comments associated with the CIP-008-6 standard.	See comments associated with the CIP-008-6 standard.	See comments associated with the CIP-008-6 standard.	Coincide with the effective date of the CIP-008-6 standard pending BCUC adoption.

- Glossary Feedback Instructions and Survey Form will be added by Nov.25, 2022
- Incremental cost estimate of a glossary term may be associated with new/revised Standard(s) or an existing Standard(s).



In Summary

Your feedback is important in the evaluation process:

- B.C. has a separate assessment process and timeline subsequent to the U.S. adoption of standards
- Every year BC Hydro, with feedback from Registered Entities, reviews each MRS assessing the suitability for adoption in B.C. and files a report with the BCUC
- Deadline for feedback is **end of the day February 28, 2023**. Feedback received after this date will **NOT** be considered
- The BCUC must adopt the MRS assessed in the report unless after a hearing it determines that the MRS is not in the public interest



Thank You!

If further information is required or there are any further questions, please contact:

BCUC – MRS@bcuc.com

BC Hydro – BCHydroReliabilityStandards@bchydro.com

Questions?



Sources of Information

- BCUC MRS website: <https://www.bcuc.com/WhatWeDo/MRS>
- BCUC website for Current and archived MRS orders: <https://www.bcuc.com/OurWork/Proceedings>
- NERC website: <https://www.nerc.com/pa/Stand/Pages/default.aspx>
- WECC website: www.wecc.org
- NERC/WECC hosted standards drafting/implementation and compliance webinars
- WECC Reliability & Security Workshops
- Western Interconnection Forum (WICF): <http://www.wicf.biz/>



