

NB Appendix

PRC-023-6-NB-0 - Transmission Relay Loadability

This appendix establishes modifications to the FERC approved NERC standard PRC-023-6 for its specific application in New Brunswick. This appendix must be read with PRC-023-6 to determine a full understanding of the requirements of the standard for New Brunswick. Where the standard and appendix differ, the appendix shall prevail.

For the purpose of this standard:

- the term “Bulk Electric System” and its acronym, “BES” shall mean the “bulk power system” as defined in the New Brunswick *Reliability Standards Regulation – Electricity Act*;
- the term “ERO” shall mean “NERC”; and,
- the term “Planning Coordinator” shall mean “Planning Authority”.

A. Introduction

1. **Title:** **Transmission Relay Loadability**
2. **Number:** PRC-023-6
3. **Purpose:** No New Brunswick modifications
4. **Applicability:**
 - 4.1. **Functional Entity:**
 - 4.1.1. No New Brunswick modifications
 - 4.1.2. No New Brunswick modifications
 - 4.1.3. No New Brunswick modifications
 - 4.1.4. No New Brunswick Modifications
 - 4.2. **Circuits:**
 - 4.2.1. **Circuits Subject to Requirements R1 – R5:**
 - 4.2.1.1. No New Brunswick modifications
 - 4.2.1.2. No New Brunswick modifications
 - 4.2.1.3. No New Brunswick modifications
 - 4.2.1.4. No New Brunswick modifications
 - 4.2.1.5. No New Brunswick modifications

NB Appendix
PRC-023-6-NB-0 - Transmission Relay Loadability

4.2.1.6. No New Brunswick modifications

4.2.2. Circuits Subject to Requirement R6:

4.2.2.1. No New Brunswick modifications

4.2.2.2. No New Brunswick modifications

5. Effective Dates: No New Brunswick modifications

NB Appendix
PRC-023-6-NB-0 - Transmission Relay Loadability

B. Requirements and Measures

R1. No New Brunswick modifications

Criteria:

1. No New Brunswick modifications
2. No New Brunswick modifications
3. No New Brunswick modifications
4. No New Brunswick modifications
5. No New Brunswick modifications
6. No New Brunswick modifications
7. No New Brunswick modifications
8. No New Brunswick modifications
9. No New Brunswick modifications
10. No New Brunswick modifications
- 10.1. No New Brunswick modifications
11. No New Brunswick modifications
12. No New Brunswick modifications
13. No New Brunswick modifications

M1. No New Brunswick modifications

R2. No New Brunswick modifications

M2. No New Brunswick modifications

R3. No New Brunswick modifications

M3. No New Brunswick modifications

R4. No New Brunswick modifications

M4. No New Brunswick modifications

R5. Each Transmission Owner, Generator Owner, and Distribution Provider that sets transmission line relays according to Requirement R1 criterion 12 shall provide an

NB Appendix
PRC-023-6-NB-0 - Transmission Relay Loadability

updated list of the circuits associated with those relays to the Northeast Power Coordinating Council at least once each calendar year, with no more than 15 months between reports, to allow the ERO to compile a list of all circuits that have protective relay settings that limit circuit capability. *[Violation Risk Factor: Lower] [Time Horizon: Long Term Planning]*

- M5.** Each Transmission Owner, Generator Owner, or Distribution Provider that sets transmission line relays according to Requirement R1, criterion 12 shall have evidence such as dated correspondence that it provided an updated list of the circuits associated with those relays to the Northeast Power Coordinating Council within the required timeframe. The updated list may either be a full list, a list of incremental changes to the previous list, or a statement that there are no changes to the previous list. (R5)
- R6.** No New Brunswick modifications
- 6.1.** No New Brunswick modifications
- 6.2.** Provide the list of circuits to the Northeast Power Coordinating Council and to all Reliability Coordinators, Transmission Owners, Generator Owners, and Distribution Providers within its Planning Coordinator area within 30 calendar days of the establishment of the initial list and within 30 calendar days of any changes to that list.
- M6.** Each Planning Coordinator shall have evidence such as power flow results, calculation summaries, or study reports that it used the criteria established within PRC-023-6, Attachment B to determine the circuits in its Planning Coordinator area for which applicable entities must comply with the standard as described in Requirement R6. The Planning Coordinator shall have a dated list of such circuits and shall have evidence such as dated correspondence that it provided the list to the Northeast Power Coordinating Council, Reliability Coordinators, Transmission Owners, Generator Owners, and Distribution Providers within its Planning Coordinator area within the required timeframe. (R6)

C. Compliance

1. Compliance Monitoring Process

1.1. Compliance Enforcement Authority:

“Compliance Enforcement Authority” (CEA) means New Brunswick Energy and Utilities Board.

1.2. Evidence Retention:

No New Brunswick modifications

1.3. Compliance Monitoring and Enforcement Program:

“Compliance Monitoring and Enforcement Program” refers to the identification of the processes that will be used to evaluate data or information for the purpose of assessing performance or outcomes with the associated Reliability Standard as set out in the New Brunswick Compliance Monitoring and Enforcement Program.”

NB Appendix
PRC-023-6-NB-0 - Transmission Relay Loadability

Violation Severity Levels

R #	Violation Severity Levels			
	Lower VSL	Moderate VSL	High VSL	Severe VSL
R1	No New Brunswick modifications			
R2	No New Brunswick modifications			
R3	No New Brunswick modifications			
R4	No New Brunswick modifications			
R5	No New Brunswick modifications			The responsible entity did not provide the Northeast Power Coordinating Council with an updated list of circuits that have transmission line relays set according to the criteria established in Requirement R1 criterion 12 at least once each calendar year, with no more than 15 months between reports.
R6	No New Brunswick modifications			

NB Appendix
PRC-023-6-NB-0 - Transmission Relay Loadability

D. Regional Variances

No New Brunswick modifications

E. Associated Documents

No New Brunswick modifications

Version History (maintained by the NBEUB)

Version	NBEUB Approval Date	NB Appendix Effective Date	Change Tracking	Comments
0	06/07/2024	10/01/2024	1. Replace the term “Bulk Electric System” and its acronym “BES” with “bulk power system” throughout. 2. Replace the term “Planning Coordinator” and its acronym “PC” with “Planning Authority” throughout. 3. Replace “Regional Entity” with “Northeast Power Coordinating Council” (NPCC) throughout. 4. Identify NERC as the Electric Reliability Organization (ERO). 5. Revised Section C to clarify the NBEUB as the entity having the compliance enforcement authority for NB. 6. Replace “As defined in NERC Rules of Procedure” with “as set out in the New Brunswick Compliance Monitoring and Enforcement Program”. 7. Replace “NERC” with “New Brunswick Energy and Utilities Board approved Reliability Standard” to recognize that	Approved by NBEUB, Matter 577. For detailed information about the initial compliance dates, please see the implementation plan submitted under Matter 577.

NB Appendix
PRC-023-6-NB-0 - Transmission Relay Loadability

			registered entities in New Brunswick are required to comply with Board approved Reliability Standards.	

NB Appendix
PRC-023-6-NB-0 - Transmission Relay Loadability

PRC-023-6 — Attachment A

- 1.** No New Brunswick modifications
 - 1.1.** No New Brunswick modifications
 - 1.2.** No New Brunswick modifications
 - 1.3.** No New Brunswick modifications
 - 1.4.** No New Brunswick modifications
 - 1.5.** No New Brunswick modifications
 - 1.5.1.** No New Brunswick modifications
 - 1.5.2.** No New Brunswick modifications
 - 1.5.3.** No New Brunswick modifications
 - 1.5.4.** No New Brunswick modifications
 - 1.6.** No New Brunswick modifications
- 2.** No New Brunswick modifications
 - 2.1.** No New Brunswick modifications
 - 2.2.** No New Brunswick modifications
 - 2.3.** No New Brunswick modifications
 - 2.4.** No New Brunswick modifications
 - 2.5.** Relay elements used only for Remedial Action Schemes applied and approved in accordance with New Brunswick Energy and Utilities Board approved Reliability Standards PRC-012 through PRC-017 or their successors.
 - 2.6.** No New Brunswick modifications
 - 2.7.** No New Brunswick modifications
 - 2.8.** No New Brunswick modifications
 - 2.9.** No New Brunswick modifications

NB Appendix
PRC-023-6-NB-0 - Transmission Relay Loadability

PRC-023-6 — Attachment B

Circuits to Evaluate

No New Brunswick modifications

Criteria

No New Brunswick modifications

- B1.** No New Brunswick modifications
- B2.** No New Brunswick modifications
- B3.** No New Brunswick modifications
- B4.** No New Brunswick modifications
- B5.** No New Brunswick modifications
- B6.** No New Brunswick modifications