

NB Appendix
PRC-023-4-NB-0 - Transmission Relay Loadability

This appendix establishes modifications to the FERC approved NERC standard PRC-023-4 for its specific application in New Brunswick. This appendix must be read with PRC-023-4 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*; and
- the term “ERO” shall mean “NERC”

A. Introduction

1. Title: Transmission Relay Loadability

2. Number: PRC-023-4

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 Planning Authority. For the purpose of this standard “Planning Coordinator” shall mean “Planning Authority.”

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

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

B. Requirements

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
11. No New Brunswick modifications
12. No New Brunswick modifications
13. No New Brunswick modifications

R2. No New Brunswick modifications

R3. No New Brunswick modifications

- R4.** 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 updated list of the circuits associated with those relays to the New Brunswick Energy and Utilities Board or Northeast Power Coordinating Council (NPCC) as directed by the New Brunswick Energy and Utilities Board 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]*
- R6.** No New Brunswick modifications
 - 6.1** No New Brunswick modifications
 - 6.2** Provide the list of circuits to the New Brunswick Energy and Utilities Board or NPCC as directed by the New Brunswick Energy and Utilities Board and 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.

C. Measures

- M1.** No New Brunswick modifications
- M2.** No New Brunswick modifications
- M3.** No New Brunswick modifications
- M4.** No New Brunswick modifications
- 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 New Brunswick Energy and Utilities Board or NPCC as directed by the New Brunswick Energy and Utilities Board 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)

- 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-023-4, 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 New Brunswick Energy and Utilities Board or NPCC as directed by the New Brunswick Energy and Utilities Board and Reliability Coordinators, Transmission Owners, Generator Owners, and Distribution Providers within its Planning Coordinator area within the required timeframe. (R6)

D. Compliance

1. Compliance Monitoring Process

1.1. Compliance Enforcement Authority

New Brunswick Energy and Utilities Board

1.2. Data Retention

No New Brunswick modifications

1.3. Compliance Monitoring and Assessment Processes

No New Brunswick modifications

1.4. Additional Compliance Information

No New Brunswick modifications

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2. Violation Severity Levels:

Requirement	Lower	Moderate	High	Severe
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 New Brunswick Energy and Utilities Board or NPCC as directed by the New Brunswick Energy and Utilities Board 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			

E. Regional Differences

No New Brunswick modifications

F. Supplemental Technical Reference Document

1. No New Brunswick modifications

Version History (maintained by the NBEUB)

Version	NBEUB Approval Date	NB Appendix Effective Date	Change Tracking	Comments
0	07/12/16	10/01/17	1. Replaced Bulk Electric System (BES) with “bulk power system” throughout. 2. “Planning Coordinator” to be read as “Planning Authority” in Section A and throughout. 3. Revised Sections B, C and D to replace “its Regional Entity” and “Regional Entities” with	Approved Under NBEUB Matter 323

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			NBEUB or NPCC as directed by the NBEUB. 4. Revised Section C to clarify the NBEUB as the entity having the compliance enforcement authority for NB. 5. Revised Attachment A Section 2.5 to clarify that NBEUB approved reliability standards are the applicable standards in NB.	

PRC-023-4 – 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

PRC-023-4 – 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