

NB Appendix
FAC-010-2.1-NB-0 - System Operating Limits Methodology for the
Planning Horizon

This appendix establishes modifications to the FERC approved NERC standard FAC-010-2.1 for its specific application in New Brunswick. This appendix must be read with FAC-010-2.1 to determine a full understanding of the requirements of the standard for New Brunswick. Where the standard and appendix differ, the appendix shall prevail.

A. Introduction

- 1. Title:** System Operating Limits Methodology for the Planning Horizon
- 2. Number:** FAC-010-2.1
- 3. Purpose:** To ensure that System Operating Limits (SOLs) used in the reliable planning of the bulk power system are determined based on an established methodology or methodologies.
- 4. Applicability**
 - 4.1.** No New Brunswick modifications
- 5. Effective Date:** Upon approval by the New Brunswick Energy and Utilities Board

B. Requirements

- R1.** No New Brunswick modifications
 - R1.1.** No New Brunswick modifications
 - R1.2.** No New Brunswick modifications
 - R1.3.** No New Brunswick modifications
- R2.** The Planning Authority's SOL Methodology shall include a requirement that SOLs provide bulk power system performance consistent with the following:
 - R2.1.** In the pre-contingency state and with all Facilities in service, the bulk power system shall demonstrate transient, dynamic and voltage stability; all Facilities shall be within their Facility Ratings and within their thermal, voltage and stability limits. In the determination of SOLs, the bulk power system condition used shall reflect expected system conditions and shall reflect changes to system

NB Appendix
FAC-010-2.1-NB-0 - System Operating Limits Methodology for the
Planning Horizon

topology such as Facility outages.

R2.2. No New Brunswick modifications

R2.2.1. No New Brunswick modifications

R2.2.2. No New Brunswick modifications

R2.2.3. No New Brunswick modifications

R2.3. No New Brunswick modifications

R2.3.1. No New Brunswick modifications

R2.3.2. No New Brunswick modifications

R2.4. No New Brunswick modifications

R2.5. No New Brunswick modifications

R2.6. No New Brunswick modifications

R2.6.1. No New Brunswick modifications

R3. No New Brunswick modifications

R3.1. No New Brunswick modifications

R3.2. No New Brunswick modifications

R3.3. No New Brunswick modifications

R3.4. No New Brunswick modifications

R3.5. No New Brunswick modifications

R3.6. No New Brunswick modifications

R4. No New Brunswick modifications

R4.1. No New Brunswick modifications

R4.2. No New Brunswick modifications

R4.3. No New Brunswick modifications

R5. If a recipient of the SOL Methodology provides documented technical comments on the methodology, the Planning Authority shall provide a documented response to that recipient within 45 calendar days of receipt of those comments. The response shall indicate whether a change will be made to the SOL Methodology and, if no change will be made to that SOL Methodology, the reason why. (Retirement of this requirement becomes effective upon New Brunswick Energy and Utilities Board approval)

C. Measures

M1. No New Brunswick modifications

NB Appendix
FAC-010-2.1-NB-0 - System Operating Limits Methodology for the
Planning Horizon

M2. The Planning Authority shall have evidence it issued its SOL Methodology and any changes to that methodology, including the date they were issued, in accordance with Requirement 4.

If the recipient of the SOL Methodology provides documented comments on its technical review of that SOL methodology, the Planning Authority that distributed that SOL Methodology shall have evidence that it provided a written response to that commenter within 45 calendar days of receipt of those comments in accordance with Requirement 5. (Retirement becomes effective upon New Brunswick Energy and Utilities Board approval)

D. Compliance

1. Compliance Monitoring Process

1.1. Compliance Monitoring Responsibility

New Brunswick Energy and Utilities Board

1.2. Compliance Monitoring Period and Reset Time Frame

Each Planning Authority shall self-certify its compliance to the Compliance Monitor (New Brunswick Energy and Utilities Board) at least once every three years. New Planning Authorities shall demonstrate compliance through an on-site audit conducted by the Compliance Monitor within the first year that it commences operation. The Compliance Monitor shall also conduct an on-site audit once every nine years and an investigation upon complaint to assess performance.

The Performance-Reset Period shall be twelve months from the last non-compliance.

1.3. Data Retention

The Planning Authority shall keep all superseded portions to its SOL Methodology for 12 months beyond the date of the change in that methodology ~~and shall keep all documented comments on its SOL Methodology~~

NB Appendix
FAC-010-2.1-NB-0 - System Operating Limits Methodology for the
Planning Horizon

~~and associated responses for three years.~~ In addition, entities found non-compliant shall keep information related to the non-compliance until found compliant. (Deleted text retired - Effective upon New Brunswick Energy and Utilities Board approval.)
The Compliance Monitor shall keep the last audit and all subsequent compliance records.

1.4. Additional Compliance Information

No New Brunswick modifications

1.4.1 SOL Methodology.

Documented comments provided by a recipient of the SOL Methodology on its technical review of a SOL Methodology, and the associated responses. (Retirement becomes effective upon New Brunswick Energy and Utilities Board approval.)

1.4.2 No New Brunswick modifications

1.4.3 No New Brunswick modifications

2. Levels of Non-Compliance for Western Interconnection: (To be replaced with VSLs once developed and approved by WECC)

2.1. Level 1: No New Brunswick modifications

2.1.1 No New Brunswick modifications

2.1.2 No evidence of responses to a recipient's comments on the SOL Methodology. (Retirement becomes effective upon New Brunswick Energy and Utilities Board approval)

2.2. Level 2: No New Brunswick modifications

2.3. Level 3: No New Brunswick modifications

2.3.1 No New Brunswick modifications

2.3.2 No New Brunswick modifications

2.3.3 No New Brunswick modifications

2.4. Level 4: No New Brunswick modifications

3. Violation Severity Levels:

Requirement	Lower	Moderate	High	Severe
R1	No New Brunswick modifications			
R2				
R3				
R4				
R5 (Retirement of this requirement becomes effective upon New Brunswick Energy and Utilities Board approval.)				

NB Appendix
FAC-010-2.1-NB-0 - System Operating Limits Methodology for the
Planning Horizon

E. Regional Differences

1. No New Brunswick modifications
 - 1.1. No New Brunswick modifications
 - 1.1.1 No New Brunswick modifications
 - 1.1.2 No New Brunswick modifications
 - 1.1.3 No New Brunswick modifications
 - 1.1.4 No New Brunswick modifications
 - 1.1.5 No New Brunswick modifications
 - 1.1.6 No New Brunswick modifications
 - 1.1.7 No New Brunswick modifications
 - 1.2. No New Brunswick modifications
 - 1.2.1 No New Brunswick modifications
 - 1.2.2 No New Brunswick modifications
 - 1.2.3 No New Brunswick modifications
 - 1.2.4 No New Brunswick modifications
 - 1.2.5 No New Brunswick modifications
 - 1.2.6 No New Brunswick modifications
 - 1.2.7 No New Brunswick modifications
 - 1.3. No New Brunswick modifications
 - 1.3.1 No New Brunswick modifications
 - 1.4. No New Brunswick modifications

Version History (maintained by NBEUB)

Version	NBEUB Approval Date	NB Appendix Effective Date	Change Tracking	Comments
0	06/11/14	06/11/14	1. Bulk Electric System (BES) replaced with" bulk power system" throughout	Approved Under NBEUB Matter 245

NB Appendix
FAC-010-2.1-NB-0 - System Operating Limits Methodology for the
Planning Horizon

			2. Revised section A to change the effective date to the NBEUB approved effective date of 02/28/11 3. Revised section D to clarify the NBEUB as the entity having compliance monitoring responsibilities for NB 4. Revised R5, M2, D.1.3, D.1.4.1 and D.2.1.2 to change retirement date to the NBEUB approved retirement date of 06/11/14	