



New Brunswick System Opérateur
Exploitant du réseau du Nouveau-Brunswick

APPENDIX 2C

Maritimes Area Planning

NBSO/NBPT/NSPI/NMISA/MECL

Maritimes Area Technical Planning Committee

Version 003.0

Document Approval

Role	Name	Signature	Date (yy/mm/dd)
NBSO	Alden Briggs Director, Power System Engineering		
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Revision Record

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	07/07/25		Carl Gautreau	MATPC
	08/06/16	Submitted final Draft	Carl Gautreau	MAPTC
1	08/08/27	Document submitted for signatures.	Carl Gautreau	
2	08/10/23	Revised Confidentiality section	Carl Gautreau	
3	09/02/10	Minor revisions based on feedback from MAPTC	Carl Gautreau	

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Appendix 1 North American Electric Reliability Corporation (NERC) spreadsheet (form ERO-2007LTRA)

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1.0 Introduction

The Maritimes Area consists of two Balancing Areas, one being Nova Scotia and the other being the NBSO Balancing Area which includes New Brunswick, Prince Edward Island and parts of Northern Maine that are radially connected to the New Brunswick transmission system. New Brunswick and Nova Scotia are the only entities that have Bulk Power System (BPS) elements (according to the NPCC A-10 document “Classification of Bulk Power System Elements”).

Transmission Service Providers within the Maritimes Area are:

- New Brunswick System Operator (NBSO)
- Nova Scotia Power Inc (NSPI) ,
- Northern Maine Independent System Administrator (NMISA) which includes Maine Public Service (MPS) and Eastern Maine Electric Company (EMEC)
- and Maritime Electric Company Limited (MECL)

Transmission Service Providers are subject to formal requirements of their applicable market rules and business practices to perform and publish Forecast and Assessments for their areas (see Table 1).

Transmission Planners work with their perspective Transmission Service Providers to produce long range Transmission Plans. The transmission plan represents an analysis of the existing high voltage transmission network, and the development required to meet the forecast load in compliance with the established transmission planning criteria.

2.0 Maritimes Reliability Assessments

Maritimes Area Reliability Assessments for Resource Adequacy and Area Transmission are carried out to demonstrate compliance with NPCC Document A-2 “Basic Criteria for Design and Operation of Interconnected Power System”.

2.1 Resource Adequacy

Resource Adequacy evaluations are carried out in accordance with guidelines outlined in NPCC Document B-8 “Guidelines for Area Review of Resource Adequacy.” Those responsible for performing the studies are the Maritimes Area representatives (including one from NBSO and one from NSPI) on the NPCC CP-8 Working Committee - Review of Resource and Transmission Adequacy. Compliance with this criterion is evaluated probabilistically, such that the loss of load expectation (LOLE) of disconnecting firm load due to resource deficiencies shall be, on average, no more than 0.1 day per year. This evaluation makes due allowance for demand uncertainty, scheduled outages and deratings, forced outages and deratings, assistance over interconnections with neighbouring Areas and Regions, transmission transfer capabilities, and capacity and/or load relief from available operating procedures.

The types of studies performed include a full comprehensive review called the Comprehensive Review of Resource Adequacy. This review is performed every three years. An Interim Review of Resource Adequacy is performed in each year that there is not a Comprehensive Review.

NBSO coordinates these studies for the Maritimes Area by collecting required data from each entity (if applicable) in the Maritimes Area. This data is collected using a NERC spreadsheet (form ERO-2007LTRA). See Appendix 1.

Details of the resource adequacy evaluation program are described in the most recent Maritimes Area Resource Adequacy Reviews on the NPCC website under Documents/Reviews.

2.2 Transmission Reliability Reviews

“Area Transmission Reviews” are carried out in accordance with guidelines outlined in NPCC Document B-4 “Guidelines for NPCC Area Transmission Reviews”. This annual review of the Maritimes Area is conducted separately by New Brunswick Power Transmission Company (NBPT) (covering the New Brunswick Bulk Power System) and NSPI (covering the Nova Scotia Bulk Power System). The parameters of the separate studies, however, are coordinated by the two parties. The reviews are submitted to the NPCC Task Force on System Studies (TFSS) which has representation from NBPT, NSPI and NBSO.

The most recent Maritimes Area Resource Adequacy Reviews or the Maritimes Area Comprehensive Area Transmission Review can be found on the NPCC website under Documents/Reviews.

Each party in the Maritimes Area is responsible for ensuring that their portion of the integrated electricity system has adequate capacity to satisfy all applicable NPCC Reliability Criteria and NERC Standards. Each party is also responsible for addressing congestion issues.

2.3 Long Range Outlook

Each entity in the Maritimes Area develops long range plans as indicated in Table 1.

Table 1

Timeline	NBSO	NSPI	MECL	NMISA	NBPT
Initially	April 2008 “ published Ten Year Outlook for NB”	July 2007 published Integrated Resource Plan to 2029	Has developed a 138 kV Expansion plan published in the fall of 2005. Attachment K of the MECL proposed Transmission Tariff describes MECL Expansion policy.	Published 7 Year Outlook on March 30 th 2007	By August 31 st , creates Transmission Plan for NB that takes into account all interfaces with NB. This is incorporated into the NBSO 10 Year Outlook.
Semi Annually	BA assessments for the following 18 months (April through October and November through March)	Publishes Adequacy Assessments for the following 18 months (April and October)	Submits data to the NBSO to be included in 18 month BA Assessments	Publishes 18 month assessments. Submits data to the NBSO to be included in 18 month BA assessments	Submits, any revisions to the Transmission Plan to the NBSO by January 31 st .
Annually	10-year forecast, by month; and annually , by the end of March, assessments for the following ten years, starting with April 1 of the current year and covering ten 12-month periods each commencing on April 1. Coordinates NPCC Comprehensive and Interim Review studies for the Maritimes Area by collecting data from each entity in the Maritimes Area using a NERC spreadsheet (form ERO-2007LTRA).	Publish 10 year forecast and assessment (by month) of System capacity and adequacy by the end of June each year for the period beginning in the following January. - Works with NBSO on NPCC Comprehensive and Interim Reviews	Submits data for NPCC Comprehensive and Interim Reviews	Publishes annually by the last day of March a 7 year Transmission Plan (April to April) Submits data for NPCC Comprehensive and Interim Reviews	Updates Transmission Plan by August 31 st and January 31 st .

3.0 NPCC Participation

The NBSO, NBPT Planners and NSPI are involved with various NPCC task forces or working committees dealing with resource adequacy and transmission reliability.

NPCC Committee	Function	Representative
TFSS – The NPCC Task Force on System Studies	Overall coordination of system studies of the reliability of the interconnected bulk power system	NBPT, NSPI, NBSO
SS37 Modeling Working Group (reports to TFSS)	Development of designated power flow base case models including the dynamics data	NBPT & NSPI
SS38 Working Group (reports to TFSS)	Analyze dynamic phenomena which may affect interconnected system reliability	NBPT & NSPI
TFCP- Task Force on Coordination of Planning	Initiating reviews of the <i>Basic Criteria for the Design and Operation of Interconnected Power Systems</i> of other NPCC criteria, guidelines, and procedures related to planning, and of those documents which provide for the uniform implementation, interpretation and monitoring of compliance with criteria, guidelines and procedures related to planning.	NBPT, NSPI, NBSO
NPCC CP-8 Working Group - Review of Resource and Transmission Adequacy. (Reports to TFCP)	Triennial and Interim Reviews of Resource Adequacy.	NBSO & NSPI
NPCC Working Group (CO-7) Operational Review, Coordination and Assessment		NBSO
NPCC CP-11 Working Group	Review NPCC A-02 and propose required changes to TFCP	NSPI
NPCC CO-13 ATC Working Group		NBPT, NSPI, NBSO

4.0 Maritime's Area Technical Planning Committee

4.1 Scope

The function of the Maritimes Area Technical Planning Committee (MAPTC) is to review intra area transmission plans and generation plans with regards to transmission reliability and impacts to the Total Transfer Capabilities on the interfaces. This group will also examine the impacts of proposed projects outside of the Maritimes Area.

MAPTC will have representation from the NBSO, NSPI, MECL, NMISA and NBPT. Central Maine Power (CMP) and Bangor Hydro Electric Company will be invited to participate in each meeting.

The Technical Planning Committee will:

- coordinate area planning studies (base cases, contingencies, etc.)
- coordinate generation/load connection system impact studies
- identify potential problems,
- recommend possible solutions,
- develop the scope for necessary studies, and
- recommend necessary changes to Special Protection Schemes.

The Committee will also review the Draft of any Comprehensive or Interim reviews produced for NPCC.

The Maritimes Area Technical Planning Committee may recommend joint studies. The costs of these studies, should they proceed, will normally be covered within the applicable tariffs.

When assessments determine a potential need for investments in transmission facilities or other actions that may be required to maintain reliability of the interconnections, or improve performance of the market, or reduce the costs associated with transmission constraints on the transmission systems, the assessments should be reflected in the applicable published Long Term Outlooks in accordance with applicable tariffs and market rules.

MATPC may use projects such as the development of wind energy as an opportunity to share information in regards to such things as commissioning and connection requirements for the purpose of recommending common standards to be used in the Maritimes Area.

4.2 Enhancement and Expansion Studies

In general, recommendations by the Committee for enhancements and expansion studies shall include:

- (a) An identification of existing and projected limitations on the interconnections, including physical, economic, and/or operational capability or performance.

- (b) Evaluation and analysis of potential enhancements and expansions, including alternatives thereto, needed to mitigate such limitations.
- (c) Engineering studies needed to determine the effectiveness and compliance (with applicable reliability and operating criteria) of recommended enhancements and expansions.

Any actions taken as a result of recommendations from the Maritimes Area Technical Planning Committee, such as joint studies (costs incurred) will be carried out in accordance with applicable business practices and tariffs.

4.3 Transfer Limits

The Technical Planning Committee shall discuss and agree on Total Transfer Capabilities of the interconnections in accordance with applicable NERC Modelling, Data and Analysis standards.

In the case of thermal ratings of equipment, the Technical Planning Committee will agree to:

- Normal ratings
- Emergency Ratings (Short Term and/or Long Term)

The Maritimes Area Technical Planning Committee will present these ratings to the Operating Committees who in turn will update any Common Facility Instructions.

The Maritimes Area Technical Planning Committee will agree to common System Operating Limits (SOL) and Interconnection Reliability Operating Limit (IROL), where applicable, for the interfaces. Members will insure that their respective SCADA displays and that the wide area view of the Reliability Coordinator area is updated.

4.4 Meetings

The Technical Planning Committee shall meet semi-annually, or as required, prior to publishing their respective long range outlooks. Locations of meetings shall rotate amongst the membership.

The meeting agenda should include discussion of any transmission projects occurring or within the Maritimes presented by the appropriate party. Projects external to the Maritimes that may impact the Maritimes Area will be presented by the NBSO or by invited guests.

These meetings may include representatives from adjacent Reliability Coordinators (ISO-NE or TransEnergie) if appropriate.

The Committee will also review the Draft of any Comprehensive or Interim reviews produced by the NBSO for NPCC.

4.4.1 Meeting Notices

The date and location for a following meeting will be determined prior to the conclusion of a regular meeting. The NBSO shall issue meeting reminder notices via email.

These meeting notices will be extended to ISO-NE or TransEnergie if appropriate. CMP and BHE will be sent meeting notices for each meeting.

4.4.2 Agenda and Meeting Materials

The NBSO will issue meeting agendas. Meeting materials should be provided to members of the Maritimes Area Technical Planning Committee at least ten working days prior to the next meeting. Meeting materials and previous minutes will be available in the “Maritimes Area Technical Planning Committee” folder on the password protected NBSO Reliability website at:

<https://www.nbso.ca/Reliability/>

Committee members will be provided with the current password.

4.4.3 Minutes

The committee members hosting the meeting will be responsible for producing minutes. Draft Minutes will be sent within five working days following a meeting. Minutes will be read and approved at the following meeting.

5.0 Confidentiality

Members of the Maritime’s Area Technical Committee are bound by Standards of Conduct in accordance with their respective tariffs.

Appendix 1



ERO-2007LTRA.xls

Appendix 2

Maritimes Area Technical Planning Committee Members:

NBSO Members	NSPI Members	NBPT Members	NMISA Members	MECL Members
Alan MacNaughton 1-506-443-6577	Hung Huynh 1-902-428-7795	Ann Evans 1-506-458-4035	Jim Tyler 1-207-992-4722	Alisa Saciragic 1-902-629-3638
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