

**New England Control Area Transmission Services
and
ISO-NE Open Access Transmission Tariff**

General Business Practices

**Section 1: Overview of Transmission Services
offered under the
ISO-NE Open Access Transmission Tariff**

Version Date – December 1, 2025

Summary of Revisions covering Sections 1 and 2 of the OATT General Business Practices

Date	Section	Summary of Change
10/1/25		Updates throughout the document for NECEC as well as other administrative updates.
08/5/25	Sec 2; 1.3.2; & Tables 2.3-3; 2.3-4	Updated sections: 1.3.3 for Future Pool RNS Rate. Updated sections 2.3-4 for Estimated RNS or T/Out Security Deposit Calculator for future rates. Additional administrative updates throughout the document.
06/13/25	Sec 2 1.2.2; 1.3.2; 1.4.2 & Tables 2.3-1; 2.3-2; Tables 2.3-3; 2.3-4	Updated RNS Rate Schedule 1 Rate effective June 1, 2025 as well as Security Deposit Calculator table. Updated sections: 1.2.3 for Future Pool RNS Rate, 1.3.3 for Future Pool RNS Rate. Updated tables 1.3-1 for Estimated RNS or T/Out Security Deposit Formulas and 2.3-2 for Estimated RNS or T/Out Security Deposit Calculator for current rates. Updated RNS Rate Schedule 9 Rate effective January 1, 2026. Added tables 1.3-3 for Estimated RNS or T/Out Security Deposit Formulas and 2.3-4 for Estimated RNS or T/Out Security Deposit Calculator for future rates. Additional administrative updates throughout the document.
07/31/24	Sec 2 1.2.2; 1.3.2; 1.4.2 & Tables 2.3-1; 2.3-2; Tables 2.3-3; 2.3-4	Updated RNS Rate Schedule 1 Rate effective June 1, 2024 as well as Security Deposit Calculator table. Updated sections: 1.2.3 for Future Pool RNS Rate, 1.3.3 for Future Pool RNS Rate. Updated tables 1.3-1 for Estimated RNS or T/Out Security Deposit Formulas and 2.3-2 for Estimated RNS or T/Out Security Deposit Calculator for current rates. Updated RNS Rate Schedule 9 Rate effective January 1, 2025. Added tables 1.3-3 for Estimated RNS or T/Out Security Deposit Formulas and 2.3-4 for Estimated RNS or T/Out Security Deposit Calculator for future rates.
06/14/24	Sec 2 1.2.2; 1.3.2; 1.4.2 & Tables 2.3-1; 2.3-2; Figure 1.1.1	Updated RNS Rate Schedule 1 Rate effective June 1, 2024 as well as Security Deposit Calculator table. Updated sections: 1.2.3 for Future Pool RNS Rate, 1.3.3 for Future Pool RNS Rate. Updated tables 1.3-1 for Estimated RNS or T/Out Security Deposit Formulas and 2.3-2 for Estimated RNS or T/Out Security Deposit Calculator. Updated Figure 1.1.1 to include RIE in the bubblemap
01/03/24	Sec 2 1.2.2; 1.3.2; 1.4.2 & Tables 2.3-1; 2.3-2	Updated RNS Rate Schedule 9 effective January 1, 2024 as well as Security Deposit Calculator tables. Removed sections 1.2.3 & 1.3.3 as well as Tables 2.3-1a & 2.3-2a as they were categorized as Future rates beginning 1/1/24 which are now the current rates.
06/15/23	Sec 2 1.2.3; 1.3.3; & Tables 2.3-1a; 2.3-2a	Updated PTF Rate effective January 1, 2024 as well as Security Deposit Calculator table. Added additional sections: 1.2.3 for Future Pool RNS Rate, 1.3.3 for Future Pool RNS Rate. Added additional tables 1.3-1a for Estimated RNS or T/Out Security Deposit Formulas and 2.3-2a for Estimated RNS or T/Out Security Deposit Calculator
06/15/22	Sec 2 1.2.2; 1.3.2; 1.4.2 & Tables 2.3-1; 2.3-2	Updated RNS Rate Schedule 1 effective June 1, 2022 and Schedule 9 effective January 1, 2023 as well as Security Deposit Calculator tables.
12/31/21	Sec 2 1.2.2; 1.3.2 & Tables 2.3-1; 2.3-2	Updated RNS Rate effective January 1 2022 as well as Security Deposit Calculator table.
06/15/21	Sec 2 1.2.2; 1.3.2 & Tables 2.3-1; 2.3-2	Updated PTF Rate effective June 1, 2021 as well as Security Deposit Calculator table.
06/01/21	Sec 2 1.2.2; 1.3.2; 1.4.2 & Tables 2.3-1; 2.3-2	Updated PTF Rate effective June 1, 2021 as well as Security Deposit Calculator table.
6/29/20	Sec 2 1.2.2	Fix typographical error

06/01/20	Sec 2 1.2.2; 1.3.2; 1.4.2 & Tables 2.3-1; 2.3-2	Updated PTF Rate effective June 1, 2020 as well as Security Deposit Calculator table.
08/08/19	Sec 2 1.4.2	Updated Schedule 1 rate that was missed during the 06/17/19 update
06/17/19	Sec 2 1.2.2; 1.3.2; 1.4.2 & Tables 2.3-1; 2.3-2	Updated PTF Rate effective June 1, 2019 as well as Security Deposit Calculator table.
06/03/19	Sec 2 1.2.2; 1.3.2; ; 1.4.2 & Tables 2.3-1; 2.3-2	Updated PTF Rate effective June 1, 2019 as well as Security Deposit Calculator table.
01/04/19	Sec. 2.2.2 and 2.2.3	Annual review and update of Sections 1+2
06/18/18	Sec 2 1.2.2; 1.3.2; ; 1.4.2 & Tables 2.3-1; 2.3-2	Updated PTF Rate effective June 1, 2018 as well as Security Deposit Calculator table.
06/04/18	Sec 2 1.2.2; 1.3.2; 1.4.2 & Tables 2.3-1; 2.3-2	Updated PTF Rate effective June 1, 2018 as well as Security Deposit Calculator table.
01/04/18	Sections 1 + 2	Annual review and update of Sections 1+2
07/17/17	Sections 1 + 2	Ministerial cleanup of Sections 1+2
06/27/17	Sec. 2.3 & 2.4	Annual review and update of Sections 1+2
05/31/17	Sec 2 1.2.2; 1.3.2; 1.4.2 & Table 2.3-2	Updated PTF Rate effective June 1, 2017 as well as Security Deposit Calculator table.
02/27/17	Sec 2 1.2.2; 1.3.2; & Table 2.3-2	Updated PTF Rate effective June 1, 2016 as well as Security Deposit Calculator table.
09/27/16	Sec 2 1.2.2; 1.3.2; & Table 2.3-2	Updated PTF Rate effective June 1, 2016 as well as Security Deposit Calculator table.
06/16/16	Sections 1, 2 + 3	Review and update of Sections 1, 2 +3; incorporation of Section 3 content into Sections 1+2 and deletion of Section 3.
06/15/16	Sec 2 1.2.2; 1.3.2; & Table 2.3-2	Updated PTF Rate effective June 1, 2016 as well as Security Deposit Calculator table.
06/08/16	Sec 2 1.2.2; 1.3.2; 1.4.2 & Tables 2.3-1 & 2.3-2 as well as footers	Updated PTF Rate effective June 1, 2016 as well as Security Deposit Calculator table. Updated Footers for Sections 1 and 2 per ISO Records and Information Management Policy
06/08/15	Sec 2 1.2.2; 1.3.2; 1.4.2 & Tables 2.3-1 & 2.3-2	Updated PTF Rate effective June 1, 2015 as well as Security Deposit Calculator table.
06/01/15	Sec 2 1.2.2; 1.3.2; 1.4.2 & Tables 2.3-1 & 2.3-2	Updated PTF Rate effective June 1, 2015 as well as Security Deposit Calculator table.
05/28/15	Sec 2 1.2.2; 1.3.2; 1.4.2 & Tables 2.3-1 & 2.3-2	Updated PTF Rate effective June 1, 2015 as well as Security Deposit Calculator table.
11/19/14	Sec 2 1.2.2; 1.3.2; 1.4.2 & Tables	Updated PTF Rate effective June 1, 2014 as well as Security Deposit Calculator table.

	2.3-1 & 2.3-2	
09/02/14	Sections 1+2	Review and update of Sections 1+2
05/30/14	Sec 2 1.2.2; 1.3.2; 1.4.2 & Tables 2.3-1 & 2.3-2	Updated PTF Rate effective June 1, 2014 as well as Security Deposit Calculator table.
06/01/11	Sec 2 1.2.2; 1.3.2 & Table 2.3-2	Updated PTF Rate effective June 1, 2011 as well as Security Deposit Calculator table.
07/29/10	Sec2 1.2.2; 1.3.2 & Table 2.3-2	Updated PTF Rate effective June 1, 2010 as well as Security Deposit Calculator table.
06/01/10	Sec2 1.2.2; 1.3.2; 1.4.2 & Table 2.3-2	Updated PTF and Schedule 1 Rates effective June 1, 2010 as well as Security Deposit Calculator table.
10/20/09	All of G.B.P. Sections 1 & 2.	The Sections 1 and 2 of the GBP were updated to (a) reflect current OATT language, (b) remove dated concepts and language, and (c) improve the presentation of the document (general formatting).
06/01/09	2.1.3	OATT RNS rates: <u>Revised</u> on June 1, 2009 and <u>Effective</u> on June 1, 2009.
01/22/09	2.1.3	OATT RNS rates: <u>Revised</u> on January 22, 2009 and <u>Effective</u> on December 1, 2008.
12/01/08	Forward; 1.1.2; 1.2.4; 1.3.1; 1.5.3; 1.7; 2.2.3; 2.5.1; 2.6.1+4; 3.1	Modifications for roll-in of MEPCO from OTF to PTF. Restructuring of Section 1 and Section 2.
10/22/08	2.1.3	OATT RNS rates: <u>Revised</u> on October 17, 2008 and <u>Effective</u> on June 1, 2008.
08/25/08	2.1.3	OATT RNS rates: <u>Revised</u> on July 17, 2008 and <u>Effective</u> on June 1, 2008.
06/16/08	2.1.3	OATT RNS rates: <u>Revised</u> on June 16, 2008 and <u>Effective</u> on June 1, 2008.
06/02/08	2.1.3	OATT RNS rates: <u>Revised</u> on June 2, 2008 and <u>Effective</u> on June 1, 2008.
11/06/07	3.2.1.+2; 3.6	Added language on OASIS posting in Sections 3.2.1.1+2 and 3.2.2.1. Added new Section 3.6 on transmission service agreements.
09/24/07	3.2.1+2; 3.3.1+2; 3.5	Corrected typos in Sections 3.2.2, 3.3.1 and 3.5. Clarified business practice in Sections 3.2.1.2 and 3.3.2.
07/13/07	3.0	General Business Practices Section 3 added.
04/04/07	1.2.4; 1.5.2+3; 1.6.2+3; 2.1.3; 2.2.3; 2.3.1, .3+5; 2.6.1, .2+4	Updated various links, rates and new industry terminology.
09/28/05	1.2.3	Added language recognizing the Department of Energy requirement for customers intending on exporting power must acquire an Electricity Export Authorization.
08/30/05	2.1.3; 2.6	OATT rates: <u>Revised</u> on August 30, 2005 and <u>Effective</u> on June 1, 2005.
08/09/05	2.1.3; 2.6	OATT rates: <u>Revised</u> on July 25, 2005 and <u>Effective</u> on June 1, 2005.
06/15/05	2.1.3; 2.6	OATT rates: <u>Revised</u> on June 13, 2005 and <u>Effective</u> on June 1, 2005.
02/10/05	2.1.3; 2.6	NEPOOL OATT rates: <u>Effective</u> on March 1, 2003; and updated contacts on Pg 8.
02/01/05		Conform for RTO.
11/05/04	1.1; 1.2 1.2+.7; 2.1.3; 2.6.2 2.1.3; 2.6	Deletion of Citizens and addition of VETC and FPL-NED as Trans. Providers. December 1, 2004 reduction of the Through or Out Rate with NY-ISO. NEPOOL OATT rate: <u>Revised</u> on November 3, 2004 due to revisions to revenue requirements from NU and UI and is <u>Effective</u> on June 1, 2004.

09/08/04	2.1.3; 2.6	NEPOOL OATT rates: <u>Revised</u> on September 7, 2004 due to 12 CP revision and <u>Effective</u> on June 1, 2004.
07/16/04	2.1.3; 2.6	NEPOOL OATT rates: <u>Revised</u> on June 28, 2004 adding FPL and <u>Effective</u> on June 1, 2004.
06/08/04	2.1.3; 2.6	NEPOOL OATT rates: <u>Revised</u> on June 8, 2004 and <u>Effective</u> on June 1, 2004.
06/01/04	2.1.3; 2.6	NEPOOL OATT rates: <u>Revised</u> on May 25, 2003 and <u>Effective</u> on June 1, 2004.
04/01/04	2.1.3; 2.6	NEPOOL OATT rates: <u>Revised</u> on April 4, 2004 and <u>Effective</u> on March 1, 2004.
06/26/03	2.1.3; 2.6	NEPOOL OATT rates: <u>Revised</u> on June 26, 2003 and <u>Effective</u> on June 1, 2003.
05/30/03	2.1.3; 2.6	OATT RNS rates: <u>Revised</u> on May 30, 2003 and <u>Effective</u> on June 1, 2003.
03/14/03	Complete	Modifications to recognize the implementation of Standard Market Design in NE.
02/11/03	2.1.3; 2.6	NEPOOL OATT rates: <u>Effective</u> on March 1, 2003; SMD Revisions.
07/15/02	2.1.3; 2.6	NEPOOL OATT rates: <u>Revised</u> on July 11, 2002 and <u>Effective</u> on June 1, 2002.
06/21/02	2.1.3; 2.6	NEPOOL OATT rates: <u>Revised</u> on June 1, 2002 and <u>Effective</u> on June 1, 2002.
05/31/02	2.1.3; 2.6	NEPOOL OATT rates: <u>Revised</u> on May 31, 2002 and <u>Effective</u> on June 1, 2002.
02/28/02	2.1.3; 2.6; Table T1	NEPOOL OATT rates <u>Revised</u> on February 19, 2002 effective March 1, 2002. Corrected footnotes on Table T1.
06/28/01	2.1.3; 2.6	NEPOOL OATT rates <u>Revised</u> on June 28, 2001 effective June 1, 2001.
06/15/01	2.1.3; 2.6	NEPOOL OATT rates <u>Revised</u> on June 15, 2001 effective June 1, 2001.
05/31/01	2.1.3; 2.6	NEPOOL OATT rates <u>Revised</u> on May 31, 2001 effective June 1, 2001.
07/26/00	2.1.3; 2.6	NEPOOL OATT rates <u>Revised</u> on July 24, 2000 effective June 1, 2000.
06/12/00	2.6	Update Table T2 – <i>Latest Request Time for Hourly</i> from 120 to 90 minutes.
06/09/00	2.1.3; 2.6	NEPOOL OATT rates <u>Revised</u> effective June 1, 2000.
06/06/00	2.1.3; 2.6	NEPOOL OATT rates updated effective June 1, 2000.
03/28/00	2.3.3; Tables T1+T2	Changes to transmission request timing requirements
03/03/00	2.1.3; 2.6	NEPOOL OATT rates updated.
07/29/99	2.6	Revised rate for Schedule 1 Ancillary. (Effective June 1, 1999).
07/28/99	2.1.3; 2.3.3; 2.6, Table T2	NEPOOL OATT rates updated.
06/23/99	Foreword; 1.2; 1.6.3+.5; 1.7; 2.5; 2.6.3+.4; Table T2	Updates based on implementation of Market. Included references to Internal Point-To-Point Transmission Service. Timing of requests for non-firm hourly requests revised.
06/03/99	2.6	NEPOOL OATT rates updated.
08/13/98	Foreword	Contact Person for Losses updated.
07/13/98	2.1.3; 2.6	Revised Pool PTF rate, Through or Out rates, Point-To-Point rates, and RNS rates (Effective June 1, 1998).
06/16/98	2.1; 2.6	Revised rates for Schedule 1 Ancillary (Effective June 1, 1998). Change of Schedule 1 rate and corresponding changes to the security deposits.
06/15/98	Table T2; Section 2	Timing of requests for non-firm hourly requests revised.
06/15/98	2.6	RNS rates effective June 1, 1998.

05/29/98	2.6.1	Revised Pool PTF rate effective June 1, 1998.
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Foreword: About the Document

Purpose

Section I of the ISO-NE General Business Practices provides an overview of the Transmission Services available over the New England Transmission System, and the conditions and processes for obtaining transmission services from the various transmission providers. Reading the information in this document does not relieve the customer of the obligation to read and understand the applicable ISO-NE Operating Documents (e.g., Open Access Transmission Tariff (“OATT”), Market Rule 1, Manuals). All services provided and taken under the ISO-NE Transmission, Markets & Services Tariff (“Tariff”) and all External Transactions submitted against such service are subject to the terms and conditions of the approved documents regardless of the information contained in this General Business Practices document. To the extent that there is a conflict between the General Business Practices and other ISO-NE Operating Documents, the ISO-NE Operating Documents shall prevail. Unless otherwise noted, all section and Schedule references are associated with Section II – Open Access Transmission Tariff (“Section II” or “OATT”) of the Tariff, which can be found on the ISO New England Web Site in the *Open Access Transmission Tariff (OATT)* folder.

Organization of Document

The ISO-NE General Business Practices Document is organized as follows:

- **Section 1 - Overview of Transmission Services offered under the OATT:** Section 1 provides a general overview of the New England Transmission System and the types and conditions of transmission service.
- **Section 2 - Pool PTF Rate, Pool RNS Rate and Schedule 1 Rate; and an Overview of the RNS or TOut Service Application Process:** Section 2 provides a more detailed summary of (a) the Pool RNS Rate, Pool PTF Rate and Schedule 1 Rate that are applied to Transmission Customers taking RNS or TOut Service under Section II, and (b) the requirements and process for applying for RNS and TOut Service.

Unless otherwise stated, linked materials are located on the [ISO-NE website](#).

Questions

Questions regarding information contained in this document and general questions regarding transmission services offered in New England may be directed to the Participant Support and Solutions Team by submitting a case via [Ask ISO](#), emailing AskISO@iso-ne.com or by phone at (413) 540-4220 or to the contact listed on the ISO-NE website for transmission service inquiries [here](#).

Section 1: General Information

Introduction

This section provides an overview of the Transmission Services available within New England, and the conditions and processes for obtaining transmission services from the various transmission providers.

1.1 The New England Transmission System and Transmission Ties

1.1.1 New England Transmission System

This section identifies the operating agreements, sections of the OATT, transmission service providers, transmission services and (in the case of external interconnections) and the Point-of-Receipt (“POR”) and Point-of-Departure (“POD”) associated with the operation and administration of transmission services provided over the various transmission facilities located in the New England Control Area. Under the North American Electric Reliability Corporation (“NERC”) Reliability Standards, the New England Control Area falls under the Balancing Authority Area, Reliability Coordinator Area, Transmission Operator Area definitions.

The New England Transmission System is made up of transmission facilities within the New England Control Area, which is under ISO-NE’s operating authority, and includes:

- 1) **Local / Non-PTF Transmission Facilities:** Local Transmission Facilities (or “non-PTF”) are operated in accordance with the Transmission Operating Agreement (“TOA”) between ISO-NE and the Participating Transmission Owners (“PTOs”). Transmission services over the Local Transmission Facilities are administered by the individual PTOs in accordance with the TOA and the OATT (specifically, Schedule 21 - Local Service (“Schedule 21”).
- 2) **Merchant Transmission Facilities (“MTF”):** The Cross Sound Cable (“CSC”) is the only MTF in New England and is operated in accordance with the OATT. Transmission services over the Cross Sound Cable are administered by Cross Sound Cable, LLC in accordance with the OATT (specifically, Schedule 18 – MTF; MTF Service (“Schedule 18”).

Because there is only one MTF under the Tariff, this document will focus on the Cross Sound Cable Transmission Facility and Transmission Services in the following sections; hence, all MTF-based discussions and references will be specific to CSC and CSC Transmission Service.

- 3) **Other Transmission Facilities (“OTF”):** There are two OTF in New England: the Phase I/II HVDC Transmission Facility and the NECEC Transmission Line.

Phase I/II HVDC Transmission Facility is an OTF in New England and is operated in accordance with the HVDC Transmission Operating Agreement between ISO-NE and the owners of the Phase I/II HVDC Transmission Facilities (“Asset Owners”). Transmission services over the Phase I/II HVDC Transmission Facility are administered by Schedule 20A Service Providers (“SSPs”) in accordance with the Phase I/II HVDC-TF Transmission Service Administration Agreement (“TSAA”) between ISO-NE and the Independent

Rights Holders (“IRH”) and the OATT (specifically, Schedule 20A - Phase I/II HVDC-TF Service (“Schedule 20A”)).

The NECEC Transmission Line is an OTF in New England and is operated in accordance with the NECEC Transmission Operating Agreement between ISO-NE and NECEC Transmission LLC. Transmission services over the NECEC Transmission Line are administered by the Schedule 20B Service Providers (“SSPs”) in accordance with the OATT (specifically, Schedule 20B - Resale or Reassignment of Point-to-Point Transmission Service Over the New England Clean Energy Connect (“Schedule 20B”)).

- 4) **Pool Transmission Facilities (“PTF”)**: The PTF is operated in accordance with the Transmission Operating Agreement between ISO-NE and the Participating Transmission Owners (“PTOs”). Transmission services over the PTF are administered by ISO-NE in accordance with the OATT.

1.1.2 Transmission Facility Types

The New England Transmission System includes MTF, Non-PTF, OTF and PTF. This section identifies facilities of each type and explains the difference. It also makes note of the Northern Maine Transmission System, which is neither interconnected with nor part of the New England Control Area, and does not fall under ISO-NE’s operating authority and the Tariff.

- **Local / Non-PTF General Description:** The Non-PTF are the transmission facilities that are owned by PTOs that do not constitute PTF, MTF or OTF. Non-PTF are contained entirely within the New England Control Area and are the transmission facilities listed in the TOA that are not considered PTF. The PTOs operate and offer transmission service over the Non-PTF in accordance with the TOA and the Tariff (specifically, Schedule 21 to the OATT). ISO-NE exercises limited Operating Authority over the Non-PTF in accordance with the TOA and the Tariff.
- **MTF General Description:** The MTF are the transmission facilities that are owned by Merchant Transmission Owners (“MTO”) that do not constitute Non-PTF, OTF or PTF. The MTO operates and offers transmission service over the MTF in accordance with a Merchant Transmission Operating Agreement (“MTOA”) and the Tariff (specifically, Schedule 18 to the OATT). ISO-NE exercises Operating Authority over the MTF in accordance with the MTOA and the Tariff.

CSC Transmission Facility: The only MTF is the CSC Transmission Facility, which is one of the interconnections between the New England and New York Control Areas. Because a MTOA has not yet been executed between ISO-NE and the CSC MTO, the CSC is operated and transmission service administered in accordance with the Tariff.

- **Northern Maine Transmission System General Description:** The Northern Maine Transmission System in Aroostook and Washington counties, its associated load, and its electric power markets are operated and administered by the Northern Maine Independent System Administrator (“NMISA”). This area is neither interconnected with nor part of the New England Control Area, and does not fall under ISO-NE’s operating authority and the Tariff. As such, the transmission system and its associated transmission service, load, and electric power markets are not discussed in any further detail in this document.

- **OTF General Description:** The OTF are the transmission facilities that are owned by Other Transmission Owners (“OTO”) that do not constitute Non-PTF, MTF or PTF. The OTOs offer transmission service over the OTF, and ISO-NE exercises Operating Authority over the OTF. The OTF is operated in accordance with the terms and conditions set forth in an OTOA and in the Tariff (specifically, Schedule 20 to the OATT). The OTO operates and offers transmission service over the OTF in accordance with an Other Transmission Operating Agreement (“OTOA”) and the OATT (specifically, Schedule 20). ISO-NE exercises Operating Authority over the OTF in accordance with the OTOA and the Tariff.

Phase I/II HVDC Transmission Facility: One of the OTF is the Phase I/II HVDC Transmission Facility (“Phase I/II HVDC-TF”), which is one of the interconnections between the New England and Quebec Control Areas. The Phase I/II HVDC-TF Asset Owners (“Asset Owners”) operate the Phase I/II HVDC TF in accordance with the Phase I/II HVDC-TF Operating Agreement (“OA”) and the Tariff, the Schedule 20A Service Providers (“SSPs”) offer transmission service over the Phase I/II HVDC-TF in accordance with the Phase I/II HVDC-TF Transmission Service Administration Agreement (“TSAA”) and the OATT (specifically, Schedule 20A), and ISO-NE exercises Operating Authority over the Phase I/II HVDC-TF in accordance with the Phase I/II HVDC-TF OA and TSAA and the Tariff. Combined, the Phase I/II HVDC-TF OA and TSAA are the equivalent of an OTOA.

NECEC Transmission Line: The other OTF is the NECEC Transmission Line which is one of the interconnections between the New England and Quebec Control Areas. NECEC Transmission LLC operates the NECEC Transmission Line in accordance with the NECEC Transmission Operating Agreement (“OA”) between ISO-NE and NECEC Transmission LLC and the Tariff, the Schedule 20B Service Providers (“SSPs”) offer transmission service over the NECEC Transmission Line in accordance with the OATT (specifically, Schedule 20B), and ISO-NE exercises Operating Authority over the NECEC Transmission Line in accordance with the NECEC Transmission OA and the Tariff.

- **PTF General Description:** The PTF are the transmission facilities owned by PTOs, over which ISO-NE exercises Operating Authority, operates the electric power markets and provides regional transmission service (i.e., RNS and TOut Service) in accordance with the terms and conditions set forth in the TOA and the Tariff. PTF is rated at 69 kV and above (if placed in service prior to January 1, 2004) and 115 kV and above (if placed in service after December 31, 2003) and provides parallel path capability to the interconnected bulk power system. A listing of the PTF can be found in the PTF Catalog, which can be found on the ISO-NE website.

The Highgate Interconnections was classified under the TOA and the Tariff as Highgate Transmission Facility (“HTF”). Though the HTF is not defined as PTF, HTF is treated in the same manner as PTF with regard to Operating Authority and the provision of regional transmission service.

Though the majority of the bulk power transmission within the New England Control Area is PTF, there are some notable exceptions that are not:

1. The Cross Sound Cable, which is MTF;
2. The Phase I/II HVDC-TF, which is OTF;
3. The NECEC Transmission Line, which is OTF;

4. The Local Transmission Facilities, which are Non-PTF; and
5. The Northern Maine Transmission System, which is not part of the New England Control Area.

1.1.3 External Interconnections

There are seven interconnections that connect New England with its three neighboring Control Areas: New Brunswick, Hydro-Quebec and New York, and are as follows:

- i. CSC Interconnection
- ii. Northport Norwalk Cable (“NNC”) Interconnection
- iii. New York/New England (“NY/NE”) Northern AC Interconnection
- iv. Highgate Interconnection
- v. Phase I/II Interconnection
- vi. NECEC Transmission Line
- vii. New England/New Brunswick Power - System Operator (“NBP-SO”) Interconnection

Even though the Derby Transmission Facility makes it possible for a specific load area within the Vermont Local Network to be supplied by either the New England markets or Hydro-Quebec, it is not considered an interconnection since it does not provide a through path between HQ and New England.

These interconnections and the Derby Transmission Facility are illustrated schematically in Figure 1.1-1, and are also listed (along with the interties of which they are made) in Table 1.1-1.

Figure 1.1-1. External Ties and New England Transmission Providers

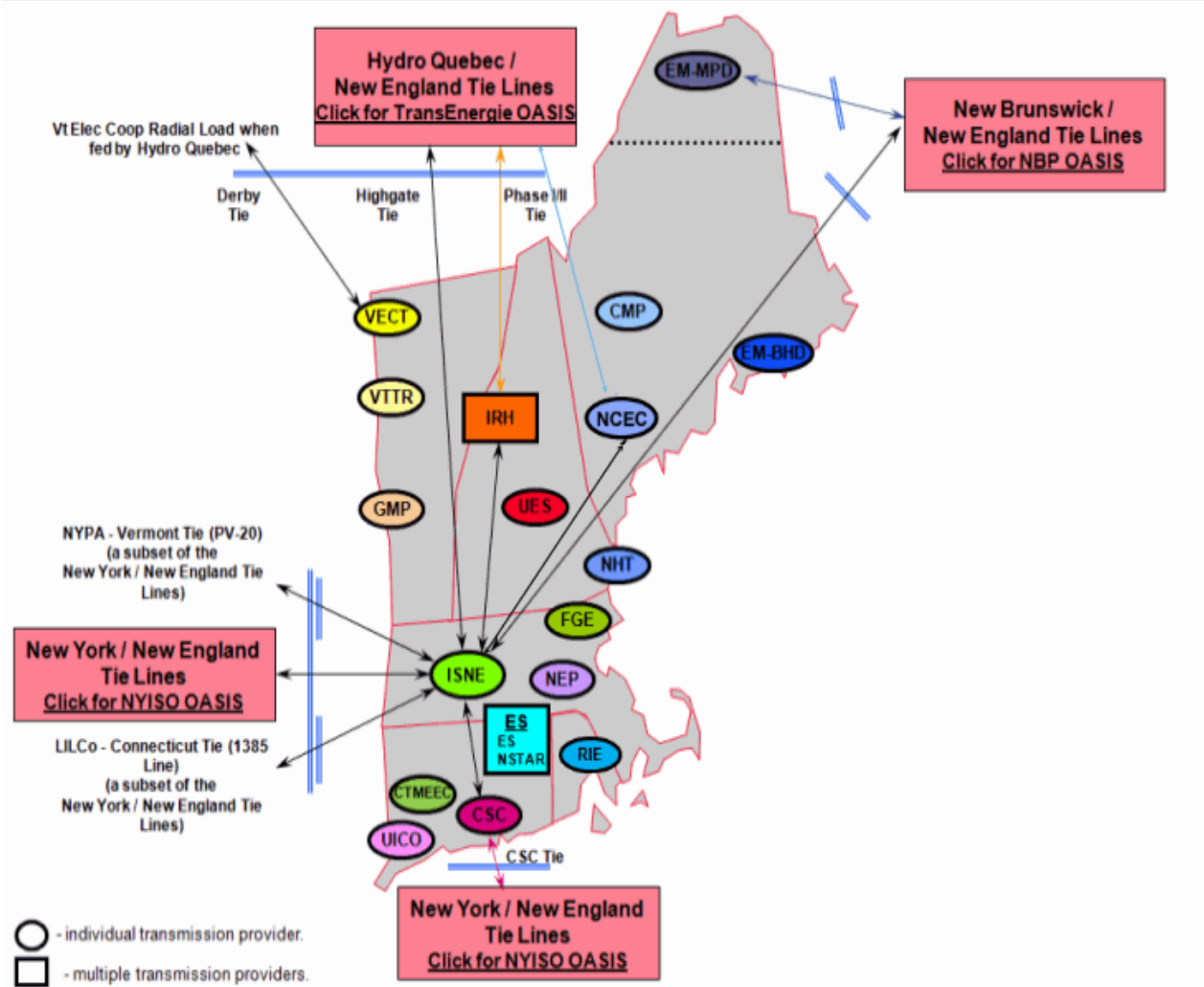


Table 1.1-1: Interconnections with External Control Areas

CSC Interconnection		
Interconnected Control Area Areas		NE/NY
OATT Transmission Facility Type:		MTF
Associated New England External Node/Location:		.I.SHOREHAM138 99 / NY-NE Border @ Shoreham
Transmission Provider:		CSC LLC
Transmission Provider Home Page on OASIS:		www.oatioasis.com/CSC/index.html
Advance Reservations Required? If yes, Type:		Yes; Schedule 18
<u>Intertie ID (Voltage)</u> CSC Intertie (150 kV HVDC)	<u>External Control Area Connection Point</u> Shoreham	<u>New England Connection Point</u> Halvarsson

NNC Interconnection		
Interconnected Control Area Areas		NE/NY
OATT Transmission Facility Type:		PTF
Associated New England External Node/Location:		.I.NRTHPORT 1385 / NY-NE Border
Transmission Provider:		ISO-NE
Transmission Provider Home Page on OASIS:		www.oatioasis.com/ISNE/index.html
Advance Reservations Required? If yes, Type:		No

<u>Intertie ID (Voltage)</u> NNC Intertie (138 kV AC)	<u>External Control Area Connection Point</u> Northport	<u>New England Connection Point</u> Norwalk Harbor
NY/NE Northern AC Interconnection		
Interconnected Control Area Areas		NE/NY
OATT Transmission Facility Type:		PTF
Associated New England External Node/Location:		.I.ROSETON 345 1 / NY-NE Border
Transmission Provider:		ISO-NE
Transmission Provider Home Page on OASIS:		www.oatioasis.com/ISNE/index.html
Advance Reservations Required? If yes, Type:		No
<u>Intertie ID (Voltage)</u> 690 Intertie (69 kV AC) K6 Intertie (115 kV AC) K7 Intertie (115 kV AC) PV-20 Intertie (115 kV AC) E205W Intertie (230 kV AC) 393 Intertie (345 kV AC) 398 Intertie (345 kV AC)	<u>External Control Area Connection Point</u> Salisbury Hoosick Whitehall Plattsburgh Rotterdam Alps Pleasant Valley	<u>New England Connection Point</u> Smithfield Bennington Blissville Sandbar Bear Swamp Berkshire Long Mountain

Table 1.1-1: Interconnections with External Control Areas (continued)

Highgate Interconnection		
Interconnected Control Area Areas		NE/HQ
OATT Transmission Facility Type:		HTF (which is treated as if it were PTF)
Associated New England External Node/Location:		.I.HQHIGATE 120 2 / HQ-NE Border
Transmission Provider:		ISO-NE
Transmission Provider Home Page on OASIS:		www.oatioasis.com/ISNE/index.html
Advance Reservations Required? If yes, Type:		No
<u>Intertie ID (Voltage)</u> Highgate Intertie (120kV)	<u>External Control Area Connection Point</u> Bedford	<u>New England Connection Point</u> Highgate
Derby Transmission Facility		
<p>Note: Though it is not considered a free-flowing interconnection in that it does not provide a through path between HQ and NE, the Derby Transmission Facility allows a specific load area within the Vermont local network the option to be supplied by either the New England markets or Hydro-Quebec.</p>		
Neighboring Control Area Areas		NE/HQ
OATT Transmission Facility Type:		Local/Non-PTF
Associated New England External Node/Location:		N/A
Transmission Provider:		VEC
Transmission Provider Home Page on OASIS:		www.oatioasis.com/VECT/index.html

Associated OATT Schedule:		Schedule 21 - VEC
<u>Intertie ID (Voltage)</u> Derby Transmission Facility (115 kV)	<u>External Control Area Connection Point</u> Stanstead	<u>New England Connection Point</u> Newport

Phase I/II Interconnection		
Interconnected Control Area Areas		NE/HQ
OATT Transmission Facility Type:		OTF
Associated New England External Node/Location:		.I.HQ_P1_P2345 5 / HQ-NE Border
Transmission Provider:		SSPs
Transmission Provider Home Page on OASIS:		www.oasis.oati.com/ISNE/ISNEdocs/hq.htm
Advance Reservations Required? If yes, Type:		Yes; Schedule 20A
<u>Intertie ID (Voltage)</u> Phase I/II (450 kV)	<u>External Control Area Connection Point</u> Radisson/Nicolet	<u>New England Connection Point</u> Sandy Pond

New England-NBP-SO Interconnection		
Interconnected Control Area Areas		NE/NB
OATT Transmission Facility Type:		PTF
Associated New England External Node/Location:		.I.SALBRYNB345 1 / NB-NE Border
Transmission Provider:		ISO-NE
Transmission Provider Home Page on OASIS:		http://www.oatioasis.com/ISNE/index.html
Advance Reservations Required? If yes, Type:		No
<u>Intertie ID (Voltage)</u> 396/3001 Intertie (345 kV AC) 390/3016 Intertie (345 kV AC)	<u>External Control Area Connection Point</u> Keswick Point Lepreau	<u>New England Connection Point</u> Orrington Orrington

NECEC Interconnection		
Interconnected Control Area Areas		NE/HQ
OATT Transmission Facility Type:		OTF
Associated New England External Node/Location:		.I.HQMRL_RD345 1 / HQ-NE Border
Transmission Provider:		SSPs
Transmission Provider Home Page on OASIS:		https://www.oasis.oati.com/NCEC/index.html
Advance Reservations Required? If yes, Type:		Yes; Schedule 20B
<u>Intertie ID (Voltage)</u> 320- kV HVDC	<u>External Control Area Connection Point</u> Appalaches	<u>New England Connection Point</u> Larabee Road

1.1.4 Transmission Services and Providers

The transmission services and the entities that provide those services over the New England Transmission System in accordance with the OATT are listed below. Figure 1.1-1 provides an approximate location of the various transmission providers in New England.

i Local (“Non-PTF”) Transmission Facilities

- Transmission Service: Local Service
- OATT Section: Schedule 21 - Local Service
- Local Service Providers:

- Central Maine Power Company (CMP)
- Connecticut Transmission Municipal Electric Energy Cooperative (CTMEEC)
- Eversource (ES)
- Fitchburg Gas and Electric Light Company (FGE or FG&E)
- Green Mountain Power Corporation (GMP)
- New England Power (NEP)
- New Hampshire Transmission, LLC (NHT)
- NSTAR Electric Company (NSTAR)
- Rhode Island Energy (RIE)
- United Illuminating (UI)
- Until Energy Systems, Inc. (UES)
- Vermont Electric Cooperative, Inc. (VECT)
- Vermont Transco, LLC (VTransco, VTTR)
- Versant Power – Bangor Hydro District (EM-BHD)

ii Merchant Transmission Facilities (CSC)

- Transmission Service: MTF Service
- OATT Section: Schedule 18 - MTF; MTF Service
- MTF Service Provider: Cross Sound Cable Company LLC (CSC)

iii Other Transmission Facilities

Phase I/II HVDC-TF:

- Transmission Service: Phase I/II HVDC-TF Service
- OATT Section: Schedule 20A - Phase I/II HVDC-TF Service
- Schedule 20A Service Providers (“SSPs”):
 - Central Maine Power Company (CMP)
 - Eversource (ES)
 - Green Mountain Power Corporation (GMP)
 - New England Power (NEP)
 - NSTAR Electric Company (NSTAR)
 - United Illuminating (UI)
 - Vermont Electric Cooperative, INC. (VEC)
 - Versant Power - Bangor Hydro District (EM-BHD)

NECEC Transmission Line:

- Transmission Service: NECEC Transmission Service
- OATT Section: Schedule 20B - Resale or Reassignment of Point-to-Point Transmission Service Over NECEC
- Schedule 20B Service Providers (“SSPs”):
 - Eversource (ES)
 - New England Power (NEP)
 - Fitchburg Gas and Electric Light Company (FGE or FG&E)

iv Pool Transmission Facilities

- Transmission Service: RNS and TOut Service
- OATT Section: II.B. and II.C.
- RNS and TOut Service Provider: ISO-NE (ISNE)

1.1.5 Transmission Services and Paths

The various transmission services provided under the OATT supports the import, export and wheeling of power across transmission facilities.

- 1) Local Service supports the importing, exporting and wheeling of power within the New England Control Area over the associated service providers' Non-PTF. Contact the associated Local Service Provider to determine the paths offered over a Local Network.
- 2) MTF Service supports the import, export or wheeling of power into, out of and through the New England Control Area via the CSC Interconnection (from/to New York).
 - a) CSC POR/ POD Paths:
 - i) Import (POR/POD): LINY CSC / LICT CSC
 - ii) Export (POR/POD): LICT CSC / LINY CSC
- 3) Phase I/II HVDC-TF Service supports the import, export or wheeling of power into, out of and through the New England Control Area via the Phase I/II Interconnection (from/to Hydro Quebec).
 - a) Phase I/II POR/POD Paths:
 - i) Import (POR/POD): NE HVDC Border / HQ_PHI_OR_II
 - ii) Export (POR/POD): HQ_PHI_OR_II / NE HVDC Border
- 4) NECEC Service supports the import or wheeling of power into, and through the New England Control Area via the NECEC Interconnection (from/to Hydro Quebec).
 - a) NECEC POR/POD Paths:
 - i) Import (POR/POD): MER/NECEC
 - ii) Not available for Export
- 5) RNS supports the:
 - a) wheeling of power over the PTF within the New England Control Area; and
 - b) importing of power over the PTF into the New England Control Area from New York (via the CSC, NNC or NY-AC Interconnections), Hydro-Quebec (via the Highgate or Phase I/II Interconnections or NECEC Transmission Line) and New Brunswick (via the New England/NBP-SO Interconnection).
 - i) PTF Import Interfaces and POR/POD Paths:
 - (1) CSC: LI CT CSC / ISNE PTF
 - (2) NNC: LI CT NNC / ISNE PTF
 - (3) NY/NE Northern AC: NY NE BORDER / ISNE PTF
 - (4) Highgate: VTHVDCBORDER / ISNE PTF
 - (5) Phase I/II: HQ_PHI_OR_II / ISNE PTF
 - (6) NB/NE: NB NE BORDER / ISNE PTF
 - (7) NECEC: NECEC / ISNE PTF

Note: In addition to RNS, MTF Service or OTF Service may also be required to import power into the New England Control Area from New York (via the CSC external interface) or Hydro-Quebec (via the Phase I/II or NECEC external interface).

- 6) TOut Service supports the:
- a) exporting of power over the PTF out of the New England Control Area to New York (via the CSC, NNC or NY-AC Interconnection), Hydro-Quebec (via the Highgate or Phase I/II Interconnection but not the NECEC Transmission Line) or New Brunswick (via the New England/NBP-SO Interconnection);
 - i) PTF Export Interfaces and POR/POD Paths:
 - (1) CSC: ISNE PTF / LI CT CSC
 - (2) NNC: ISNE PTF / LI CT NNC
 - (3) NY/NE Northern AC: ISNE PTF / NY NE BORDER
 - (4) Highgate: ISNE PTF / VTHVDCBORDER
 - (5) Phase I/II: ISNE PTF / HQ_PHI_OR_II
 - (6) NB/NE: ISNE PTF / NB NE BORDER
 - b) Wheeling of power over the PTF through the New England Control Area from one external neighboring Control Area to another (via the CSC, NNC or NY-AC, Highgate, Phase I/II, NECEC or New England/NBP-SO Interconnections).
 - i) PTF wheeling Interfaces and POR/POD Paths: A wheel of power through the New England Control Area may use any combination of: LI CT CSC, LI CT NNC, NY NE BORDER, VTHVDCBORDER, HQ_PHI_OR_II and NB NE BORDER and the NECEC external interface may only be used to import power into the New England Control Area with another external interface to export power out of the New England Control Area.

Note: In addition to TOut Service, MTF Service or OTF Service may also be required to export or wheel power out of or through the New England Control Area to New York (via the CSC external interface) or Hydro-Quebec (via the Phase I/II external interface).

1.2 Transmission Services Available in New England

This section provides a descriptive summary of the transmission products that are provided under the ISO-NE OATT. Transmission Services that support the utilization of the New England Transmission System and facilitate the movement of power energy over those facilities are offered by the various Transmission Providers via the New England Open Access Same-Time Information System (“OASIS”) site (search for “OASIS Web Site” on the ISO-NE website.)

1.2.1 General Description

- **Service to Loads located within New England:** Use of the New England Transmission System to serve load located within the New England Control Area is supported by four types of transmission services under the OATT.

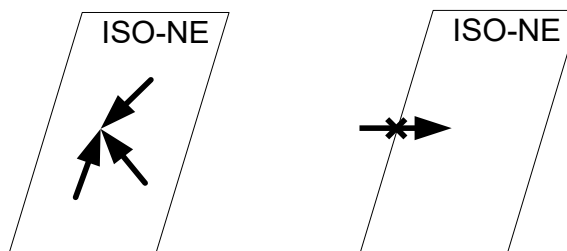
- i. **Local Service** is provided by the PTOs for the utilization of the Non-PTF by a Transmission Customer (“TC”) with generation or load in a Local Network to serve New England load.
 - ii. **MTF Service** is provided by CSC, LLC the utilization of the CSC by a Transmission Customer for the importation of power into the New England Control Area to serve New England load.
 - iii. **OTF Service** is provided by the SSPs for the utilization of the Phase I/II HVDC-TF or NECEC Transmission Line by a Transmission Customer for the importation of power into the New England Control Area to serve New England load.
 - iv. **RNS** provided by ISO-NE for the utilization of the PTF (including the importation of power into the New England Control Area) by Transmission Customers to serve New England load.
- **Service to Loads located outside of New England:** Use of the New England Transmission System to serve load located outside the New England Control Area is supported by four types of transmission services under the OATT.
- i. **Local Service** is provided by the PTOs for the utilization of the Non-PTF by a Transmission Customer with generation to serve load outside of the New England Control Area.
 - ii. **MTF Service** is provided by CSC, LLC for the utilization of the CSC by a Transmission Customer for the wheeling or exportation of power through or out of the New England Control Area (via the CSC) to serve load outside of the New England Control Area.
 - iii. **Phase I/II HVDC-TF Service** is provided by the SSPs for the utilization of the Phase I/II HVDC-TF by a Transmission Customer for the wheeling or exportation of power through or out of the New England Control Area (via the Phase I/II HVDC-TF) to serve load outside of the New England Control Area.
 - iv. **NECEC Transmission Service** is provided by the SSPs for the utilization of the NECEC Transmission Line by a Transmission Customer for the wheeling of power into and through the New England Control Area (via the NECEC Transmission Line) to serve load outside of the New England Control Area.
 - v. **Through or Out Service (“TOut Service”)** is provided by ISO-NE for the utilization of the PTF by a Transmission Customer for the wheeling or exportation of power through or out of the New England Control Area to serve load outside of the New England Control Area.
- **Reminder:** If a Transmission Customer intends to export power out of New England and into Canada, the Department of Energy (“DOE”) may require that the Transmission Customer apply for an authorization to export power (“Export Authorization”). Please contact the DOE’s Office of Electricity Delivery and Energy Reliability for further information.

1.2.2 Additional RNS Description

RNS is transmission service provided by ISO-NE under the OATT that allows Tariff-based products to be transmitted over the PTF from locations within or

outside of the New England Control Area to serve load located within the New England Control Area.

Figure 1.2-1. Pictorial Representation of RNS



Though a Market Participant Service Agreement (“MPSA”) or a non-Participant RNS Transmission Service Agreement (“TSA”) is required prior to receiving service, RNS provisions do not require that the Transmission Customer acquire an advance reservation from ISO-NE on the OASIS prior to servicing their load within the New England Control Area or importing power into the New England Control Area.

Regional Network Load (“RNL”), which reflects the utilization of the PTF and RNS to serve Network Load, is calculated based on the coincident Monthly Peak of the load located in a Local Network. It is this value that is used to determine what Transmission Customers are responsible for RNS costs. The RNL values cover all uses of the PTF (including the importation of power) to serve load located within the New England Control Area.

Transmission reservations associated with the import of power into the New England Control Area are created after-the-fact to satisfy the transparency needs of the market. RNS is paid for by Transmission Customers who are responsible for Regional Network Load (“RNL”).

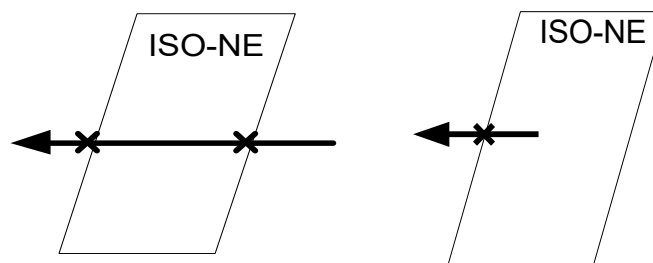
Utilization or payment of RNS does not relieve the Transmission Customer from the obligation to acquire (a) Local Service, MTF Service, or OTF Service to the extent that they intend to utilize the Non-PTF, CSC or OTF, respectively, or (b) TOut Service to the extent that they intend to utilize the PTF to export or wheel energy out of or through the New England Control Area.

- **Current RNS Rate:** The RNS Rate is the rate that is charged to Transmission Customers utilizing the PTF to serve Regional Network Load. It is determined annually in accordance with Section II.21 and Schedule 9 of the OATT. The current and historic RNS Rates can be found in the [Tariff Rates folder](#). In addition, the PTO’s supporting RNS Rate informational filings can also be found in the [Rate Development of Regional Transmission Charges folder](#).

1.2.3 Additional TOut Service Description

TOut Service is transmission service provided by ISO-NE under the OATT that allows an External Transaction to be transmitted over the PTF from locations within or outside of the New England Control Area to serve load located outside of the New England Control Area. Such movement of energy over the PTF is commonly referred to as an export or wheel-through transaction.

Figure 1.2-2. Pictorial Representation of TOut Service



Even though a Market Participant Service Agreement (“MPSA”) or a non-Participant TOut Service Agreement is required prior to receiving service, the acquisition of advance reservations for TOut Service from ISO-NE on OASIS are not required.

In accordance with Section III – Market Rule 1 (“Section III”) of the Tariff, a Market Participant may submit External Transactions into the Real-time Energy Market that export energy out of or wheel energy through the New England Control Area, and a non-Market Participant may only submit External Transactions into the Real-time Energy Market that wheel energy through the New England Control Area.

TOut reservations are issued by ISO-NE after-the-fact based on the scheduled MW of the associated Real-time Market External Transaction. All TOut Service is provided in hourly increments only, and transmission charges do apply.

Utilization or payment of TOut Service does not relieve the Transmission Customer from the obligation to acquire (a) Local Service, MTF Service or OTF Service to the extent that they intend to utilize the Non-PTF, CSC or Phase I/II HVDC-TF, respectively, or (b) RNS to the extent that they serve Regional Network Load in the New England Control Area.

- **Current TOut Service Rate:** The TOut Service Rate is the rate that is charged to Transmission Customers utilizing the PTF to export power out of or wheel power through the New England Control Area to serve load located outside of the New England Control Area, and is determined annually in accordance with Section II.25 and Schedule 8 of the OATT and, in short, the annual TOut Service Rate equals the annual RNS Rate. The TOut Service Rate is an hourly rate that equals the annual Pool PTF Rate divided by the number of hours in a year (i.e., 8760 hours). The current and historic RNS Rates can be found in the [Tariff Rates folder](#). In addition, the PTO’s supporting RNS Rate informational filings can be found in the [Rate Development of Regional Transmission Charges folder](#).

- **Application of and Exemptions to the TOut Service Rate:** TOut Service Charges are based on the External Transaction’s POD:
 - i. External Transactions with a POD of NB or HQ: the full TOut Service Rate shall be applied to any scheduled Real-time Market External Transaction that (a) flows through or out of the New England Control Area and (b) has the HQ Control Area boundary or the NB Control Area boundary as its POD.
 - ii. External Transactions with a POD of NY: The TOut Service Rate shall be reduced to zero for any scheduled Real-time Market External Transaction that (a) flows through or out of the New England Control Area and (b) has the New England/New York Control Area boundary as its POD.

1.2.4 Additional Local, Merchant and Other TF Service Descriptions

- **Local Service:** Local Service is Point-To-Point or Local Network Service provided by individual Participating Transmission Providers over their Non-PTF Transmission Facilities pursuant to Schedule 21 to the OATT. Separate service agreements and advance reservations are required of transmission customers intending to utilize the Non-PTF. Local Service is offered, administered and billed by the Local Transmission Provider.

Utilization or payment of Local Service does not relieve the Transmission Customer from the obligation to acquire (a) MTF Service or OTF Service to the extent that they intend to utilize the CSC or Phase I/II HVDC-TF or NECEC Transmission Line, respectively, or (b) RNS or TOut Service to the extent that they utilize the PTF.

- **MTF Service:** MTF Service is Point-To-Point transmission service provided by Cross Sound Cable, LLC over the Cross Sound Cable, which is MTF, pursuant to Schedule 18 to the OATT. Separate service agreements and advance reservations are required of transmission customers intending to utilize the MTF. MTF Service is offered, administered and billed by Cross Sound Cable, LLC for the CSC.

Utilization or payment of MTF Service does not relieve the Transmission Customer from the obligation to acquire (a) Local Service or OTF Service to the extent that they intend to utilize the Non-PTF or Phase I/II HVDC-TF or NECEC Transmission Line, respectively, or (b) RNS or TOut Service to the extent that they utilize the PTF.

- **OTF Service:** OTF Service is Point-To-Point transmission service provided by the individual Schedule 20A Service Providers over the Phase I/II HVDC-TF pursuant to Schedule 20A to the OATT or the Schedule 20B Service Providers over the NECEC Transmission Line pursuant to Schedule 20B of the OATT. Separate service agreements and advance reservations are required of transmission customers intending to utilize the Phase I/II HVDC-TF or NECEC Transmission Line. OTF Service over the Phase I/II HVDC-TF is offered, administered and billed by Schedule 20A Service Providers and OTF Service over the NECEC Transmission Line is offered, administered and billed by Schedule 20B Service Providers.

Utilization or payment of OTF Service does not relieve the Transmission Customer from the obligation to acquire (a) Local Service or MTF Service to the extent that they intend to utilize the Non-PTF or CSC, respectively, or (b) RNS or TOut Service to the extent that they utilize the PTF.

1.2.5 Priority of Transmission Services Available

The priority of Firm and non-Firm Network and Point-to-Point transmission service is utilized by the transmission service provider in the administration of the terms and conditions of the provisions of the associated OATT schedule. Specifically, transmission service priority plays a role in the (a) scheduling and curtailment of External Transactions over the PTF, MTF and OTF external interconnections and (b) curtailment of local transmission service. The priorities of transmission services offered under the OATT are consistent with NERC Transmission Service Priorities and the associated OATT sections and schedules (i.e., RNS (II.B. & Schedule 9), TOut Service (II.C. & Schedule 8), Local Service (Schedule 21), MTF Service (Schedule 18) and OTF Service (Schedule 20)).

- **Firm Service:** Firm service is a quality of service that (a) is of a higher priority than that of non-Firm service, (b) anticipates no planned interruption, and (c) is offered to customers by the associated transmission provider(s) under RNS, TOut Service, Local Service, MTF Service or OTF Service provisions.
 - **Local Service:** Firm Local Point-to-Point Service and Firm Local Network Service offered over the Non-PTF are available for daily, weekly, monthly or yearly periods.
 - **MTF Service and OTF Service:** Firm Point-to-Point Service offered over CSC, NECEC and Phase I/II HVDC-TF are available for daily, weekly, monthly or yearly periods.
 - **RNS and TOut Service:** RNS and TOut Service each receive a Firm transmission priority and are offered in monthly and hourly periods, respectively.
- **Non-Firm Service:** Non-Firm service is a quality of service that (a) is lower than that of Firm Service, (b) anticipates interruption, and (c) is offered to customers by the associated transmission provider(s) under Local Service, MTF Service or OTF Service provisions.
 - **Local Service:** Non-Firm Local Point-to-Point Service and/or Non-Firm Local Network Service offered over the Non-PTF are available for hourly, daily, weekly or monthly periods.
 - **MTF Service and OTF Service:** Non-Firm Point-to-Point Service offered over CSC, NECEC and Phase I/II HVDC-TF are available for hourly, daily, weekly or monthly periods.
 - **RNS and TOut Service:** Non-Firm Service is not offered under RNS and TOut Service provisions.

1.2.6 Summary of Transmission Services

Table 1.2-1 summarizes the Transmission Services that are available under the OATT.

Table 1.2-1 Summary of Transmission Service available over the PTF, Non-PTF, MTF and OTF

Transmission Service available over the PTF			
Type	Firmness	Duration	General Summary
RNS	Firm	Monthly for Regional Network Load Hourly for Real-time Market External Transaction imports	<ul style="list-style-type: none"> • RNS provided by ISO-NE for the utilization of the PTF (including the import of power into the NE CA) by Transmission Customers (“TCs) to serve NE load. • TC must first execute a MPSA or non-Participant RNS (“TSA”) • Advance reservations are not required. • After-the-fact reservations are generated by ISO-NE based on the TC’s (a) Monthly Network Load for the month and (b) scheduled Real-time Market External Transaction MWs importing power into the NE CA. • RNS-based charges (a) apply to Regional Network Load and (b) do not apply to Real-time Market External Transaction imports, which is already covered as part of RNS. • ISO-NE bills for the associated charges. • Utilization or payment of RNS does not relieve the TC from the obligation to acquire and pay for Local, MTF, OTF or TOut Services.

TOut Service	Firm	Hourly	<ul style="list-style-type: none"> • TOut Service is provided by ISO-NE for the utilization of the PTF by a TC for the wheeling or export of power through or out of the NE CA to serve load outside of the NE CA. • TC must first execute a MPSA or non-Participant RNS TSA with ISO-NE. • Advance reservations <u>are not</u> required. • After-the-fact reservations are generated by ISO-NE based on the TC’s scheduled Real-time Market External Transaction MWs wheeling or exporting power through or out of the NE CA. • After-the-fact reservation TOut-based charges apply. <ul style="list-style-type: none"> ➢ Exception: TOut Rate is reduced to zero for any scheduled Real-time Market External Transaction that serves to wheel or export power through or out of the NE CA that also has the NE/NY CA boundary as its Point of Delivery. • ISO-NE bills for the associated charges. • Utilization or payment of TOut Service does not relieve the TC from the obligation to acquire and pay for RNS, Local, MTF or OTF Services.
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Table 1.2-1 Summary of Transmission Service available over the PTF, Non-PTF, MTF and OTF (continued)

Transmission Services available over the Non-PTF, MTF and OTF			
Type	Firmness	Duration	General Summary
Local Service	Firm	Daily, or greater	<ul style="list-style-type: none"> • Local Point-to-Point and Network Service is provided by the individual PTOs for the utilization of the Non-PTF by a TC with generation or load within a Local Network. • TC must first execute a Local TSA with the PTO and ISO-NE • Advance reservation requirements are specified in Schedule 21. • Specified Local Service rates apply. • Associated PTO bills for the associated charges.
	Non-Firm	Hourly, Daily, Weekly, Monthly	<ul style="list-style-type: none"> • Utilization or payment of Local Service does not relieve the TC from the obligation to acquire and pay for RNS, MTF, OTF or TOut Services.
OTF Service	Firm	Daily, or greater	<ul style="list-style-type: none"> • OTF Point-to-Point Service is provided by the OTO/Other Transmission Providers for the utilization of the OTF by a TC for the import/export of power into/out of the NE CA. • OTF Service is available over the Phase I/II HVDC-TF and NECEC Transmission Line, which is offered by the individual SSPs. • Export Service is not available over the NECEC Transmission Line • TC must first execute a TSA with an SSP.
	Non-Firm	Hourly Daily Weekly Monthly	<ul style="list-style-type: none"> • Advance reservations <u>are</u> required on OASIS. • Specified OTF service rates apply. • The SSP bills for the associated charges. • Utilization or payment of OTF service does not relieve the TC from the obligation to acquire and pay for RNS, Local, MTF or TOut Services.

MTF Service	Firm	Daily, or greater	<ul style="list-style-type: none"> • MTF Point-to-Point Service is provided by the MTO the utilization of the MTF by a TC for the import/export of power into/out of the NE CA. • At this time, MTF Service is only available over the CSC, which is offered by CSC LLC. • TC must first execute a CSC TSA with CSC LLC. • Advance reservations <u>are</u> required on OASIS • Specified CSC service rates apply. • CSC LLC bills for the associated charges. • Utilization or payment of CSC service does not relieve the TC from the obligation to acquire and pay for RNS, Local, OTF or TOut Services.
	Non-Firm	Hourly Daily Weekly Monthly	

1.3 Transmission Service Agreements

In order to obtain transmission service, Transmission Customers must execute:

- i. a MPSA or non-Participant Transmission Service Agreement with ISO-NE for RNS or TOut Service in order to utilize the PTF;
- ii. a Local Transmission Service Agreement with the associated PTO and with ISO-NE for Local Service in order to utilize the Non-PTF;
- iii. a Phase I/II HVDC-TF Transmission Service Agreement with a SSP for Phase I/II HVDC-TF Service in order to utilize Phase I/II; and
- iv. a NECEC Transmission Service Agreement with a SSP for NECEC Transmission Service in order to utilize NECEC; and
- v. a MTF Transmission Service Agreement with CSC LLC for MTF Service in order to utilize the CSC.

Table 1.3-1 summarizes the different forms of Transmission Service Agreements offered under RNS, TOut, Local, MTF and OTF Service. This section also describes the different types of transmission service available under those service agreements.

Table 1.3-1: Transmission Service Agreement (“TSA”) Summary

Transmission Facility	Type of Service Needed	Participant	Non-Participant
PTF	RNS	Associated RNS TSA requirement is covered under the MPSA between ISO-NE and Customer	non-Participant RNS TSA is required between ISO-NE and Customer
	TOut Service	Associated TOut TSA requirement is covered under the MPSA between ISO-NE and Customer	non-Participant TOut TSA is required between ISO-NE and Customer (blanket <i>or</i> transaction-specific)
Non-PTF	Local Service	Local TSA required between PTO, ISO-NE and Customer (Network or Point-to-Point)	
CSC	MTF Service	MTF TSA required between CSC LLC and Customer (Point-to-Point)	
Phase I/II HVDC-TF or NECEC Transmission Line	OTF Service	OTF TSA required between SSP and Customer (Point-to-Point)	

1.3.1 MPSAs vs. non-Participant RNS or TOut Service Agreements

A Transmission Customer may acquire RNS or TOut Service via a MPSA or a non-Participant RNS or TOut Agreement. Both forms of agreements would allow an entity to utilize the PTF (including the NNC, NY/NE Northern AC, Highgate and New England/NBP-SOSO Interconnections) to serve (i) Regional Network Load or (ii) wheel power through or out of the New England Control Area.

Neither a MPSA nor a non-Participant Transmission Service Agreement provides the Transmission Customer with the right to use the Non-PTF, MTF or OTF.

- **MPSA:** A MPSA is a service agreement with ISO-NE that allows an entity to generate, buy, sell and transport electricity in the New England markets and can be found under Attachment A to the Tariff.
- **Non-Participant RNS or TOut Service Agreement:** A non-Participant RNS or TOut Agreement is a service agreement with ISO-NE that allows an entity (who has not executed a MPSA) to serve (i) Regional Network Load or (ii) wheel power through or out of the New England Control Area.

1.3.2 Local, MTF or OTF Service Agreements

A Transmission Customer may acquire Local, MTF or OTF Service via these agreements that allow the utilization of the associated external interconnection.

- **Local:** A Local Agreement is a point-to-point or network service agreement with an individual PTO and ISO-NE that allows an entity to utilize the PTO's Non-PTF to move generation over or serve load within a Local Network. A Local Agreement with one PTO and ISO-NE does not provide the Transmission Customer with the right to use the MTF, OTF or a different PTO's Non-PTF.
- **MTF:** A MTF Agreement is a point-to-point service agreement with CSC LLC that allows an entity to utilize the CSC to move power into or out of the New England Control Area over the CSC Interconnection. A MTF Agreement with CSC LLC does not provide the Transmission Customer with the right to use the Non-PTF, OTF or PTF.
- **OTF:** An OTF Agreement is a point-to-point service agreement with an individual SSP that allows an entity to utilize the SSP's share of the Phase I/II HVDC-TF to move power into or out of the New England Control Area over the OTF. An OTF Agreement with one SSP does not provide the Transmission Customer with the right to use the MTF, Non-PTF, PTF or another SSPs share of the OTF.

1.3.3 Network vs. Point-to-Point Agreements

Transmission Service Agreements may be point-to-point or network agreements.

- **Network:** A network agreement allows the utilization of the entire associated transmission system. Local and RNS Agreements are forms of network agreements.
- **Point-to-Point:** A point-to-point agreement allows the utilization of a specific path over or point on the associated transmission system. Local, MTF, OTF and TOut Agreements are forms of point-to-point agreements.

1.3.4 Long-Term vs. Short-Term Agreements

Transmission Service Agreements may be long- or short-term agreements.

- **Long-term:** Long-term agreements cover periods that are one year or greater in length.
- **Short-term:** Short-term agreements cover periods that are less than one year in length.

1.3.5 Transaction-Specific vs. Blanket Agreements

Transmission Service Agreements may be transaction-specific or blanket agreements.

- **Blanket:** Blanket Service Agreements are generally open-ended and provide service for multiple short-term transactions. The time periods and PORs/PODs will be specific to each transaction and apply to all transmission service between the contracting parties.
- **Transaction-specific:** Transaction-specific Service Agreements provide service for specified PORs and PODs for a specified time period under a single type of service.

1.3.6 Eligibility Requirements

- **Local, MTF and Phase I/II HVDC-TF Service:** Eligibility requirements to receive MTF, OTF and Local Service are defined in the associated OATT schedule and the CSC, SSP and PTO individual business practices.
- **RNS or TOut Service:** To be eligible to receive RNS or TOut Service from ISO-NE, a customer must be one of the following:
 - i. An appropriately registered Market Participant; or
 - ii. A non-Participant that is either:
 - a. an electric utility (including any power marketer), Federal power marketing agency, or any other entity generating electric energy for sale or for resale, subject to certain restrictions (this includes non-Market Participants, as long as they are appropriately registered with ISO-NE); or
 - b. a retail customer taking unbundled transmission service *either* in accordance with a state requirement *or* based on a voluntary offer of unbundled transmission service by the Transmission Owner.

1.3.7 Establishing the Basis for Transmission Service

ISO-NE will consult with the entities regarding the specifics relating to the transmission services required to support its transactions, generation or load. If you have questions, please contact the Participant Support and Solutions Team by submitting a case via Ask ISO, emailing AskISO@iso-ne.com or by phone at (413) 540-4220 or to the contact listed on the ISO-NE website for transmission service inquiries [here](#).

1.3.7.1 Transmission Services Available

- **Local Service:** For all Local Transmission Service, Transmission Customers are required to establish a Transmission Service Agreement with the associated transmission provider (i.e., individual PTOs) and ISO-NE.
- **MTF and OTF Service:** For all MTF and OTF Service, Transmission Customers are required to establish a Transmission Service Agreement with the associated transmission provider (i.e., CSC LLC and individual SSPs).
- **RNS and TOut Service:** Transmission customers may establish a valid basis for RNS and TOut transmission service with ISO-NE by *either* executing a non-

Participant Transmission Service Agreement *or* a MPSA. The appropriate method depends on the Transmission Customers' transmission service needs and its involvement in the New England markets. The Transmission Customer is limited to taking RNS and TOut Service under the terms of a non-Participant Transmission Service Agreement. Whereas the MPSA allows the Transmission Customer to take RNS and TOut Service, and allows it to participate in the markets. Further information about applying for a MPSA and becoming a Market Participant is provided on the <https://www.iso-ne.com/participate/applications-status-changes/new-registration/registration-checklist>.

- 1.3.7.2 Transmission Service Agreement:** A Transmission Service Agreement establishes the terms, conditions and type of service under which the customer may take transmission service from ISO-NE, a PTO, CSC LLC or a SSP. An application for service is submitted by the Transmission Customer to the appropriate Transmission Provider who reviews the application and completes an assessment (“system impact study”) of the impact upon the transmission facilities. If appropriate, the various parties enter into a supporting Transmission Service Agreement and if required, the affected Transmission Owner and Transmission Customer modify, upgrade or construct the supporting transmission facilities in order to accommodate a requested transmission service.
- 1.3.7.3 Application Process:** The RNS, TOut, CSC, OTF and Local Transmission Agreement application processes are described in detail in Section II.B, II.C, Schedules 18, 20 and 21 of the OATT, respectively. The relevant Sections of the OATT, the Applications Forms, the submitting entity and the details on where the completed Application should be submitted is summarized in the [Transmission Service Types and Upgrades; Generator Interconnection; Application Information document](#).
- **RNS and TOut Service Applications:** An application for a RNS or TOut Service Agreement can be found in the [Transmission Service Types folder](#). Section 2 of the General Business Practices includes a more detailed summary of the requirements and process for applying for RNS and TOut Service. Completed applications for RNS or TOut Service are to be submitted to the ISO staff identified in the application.
 - **MTF Service Applications:** An application for a MTF Service Agreement to utilize the CSC can be found on the [CSC Transmission Provider Page](#) on the New England OASIS. Completed applications for MTF Service are to be submitted to the Schedules and OASIS group at CSC LLC.
 - **Phase I/II HVDC-TF Service Applications:** An application for a Phase I/II HVDC-TF Service Agreement to utilize the Phase I/II HVDC-TF must include all of the information required under Section 4 of Schedule 20A – Common. Blank applications for Phase I/II HVDC-TF Service may be requested from a [Schedule 20A Service Provider](#), and completed applications are to be submitted to the applicable Schedule 20A Service Provider.
 - **NECEC Service Applications:** An application for a NECEC Transmission Service Agreement to utilize the NECEC Transmission Line must include all of

the information required under Section 3 of Schedule 20B. Blank applications for NECEC Transmission Service may be requested from a [Schedule 20B Service Provider](#), and completed applications are to be submitted to the applicable Schedule 20B Service Provider.

- **Local Service Applications:** An application for a Local Service Agreement to utilize the Non-PTF must include all of the information required under Sections I.5, I.6 or II of Schedule 21 – Common. Blank applications for Local Service can be located in the [Transmission Service Types folder](#), and completed applications are to be submitted to the ISO staff identified in the application.

1.3.7.4 Creditworthiness: As part of the application process, each transmission provider will require the applicant to establish creditworthiness in accordance with their individual financial assurance policy, which is “Attachment L” to (i) the OATT for ISO-NE, (ii) Schedule 18 for CSC LLC, (iii) Schedule 20A or 20B for the SSPs and (iv) Schedule 21 for the PTOs.

1.3.7.5 Application Deposit: As part of the application process, the each transmission provider may also require the applicant to submit a deposit to support its responsibilities and obligations under the transmission service agreement. The deposit is typically equal to the anticipated cost of the service being requested, but not more than the cost of one month’s service, and is based on the applicable rate at the time of application’s submittal.

1.3.7.6 System Impact Studies: As part of the application process, the individual PTOs and SSPs, CSC LLC and ISO-NE may each need to perform a System Impact Study to determine the options for accommodating requests for Non-PTF, MTF, OTF, RNS and TOut Service.

The Transmission Customer may be expected to pay for the cost of the System Impact Study as a condition for establishing a Transmission Service Agreement. As part of the study process, the affected Transmission Provider may determine that the associated transmission facilities need to be modified, upgraded or constructed in order to accommodate a newly requested firm service. The Transmission Customer may be required to pay a portion of or all of the construction costs, and can opt to withdraw the application prior to the start of construction. Any agreements regarding the payment of costs for the addition or upgrade of equipment or construction of associated transmission facilities will be included in the Transmission Service Agreement.

1.3.7.7 Execution of the TSA: Following the application review and System Impact Study requirements, the final draft TSA will be developed and, if appropriate, executed by the relevant parties.

- **Local TSA:** The Transmission Customer, the associated PTO and ISO-NE execute a Local Transmission Service Agreement.
- **MTF TSA:** The Transmission Customer and CSC LLC execute a CSC Transmission Service Agreement.

- **non-Participant RNS or TOut:** The Transmission Customer and ISO-NE execute a non-Participant RNS or TOut Transmission Service Agreement.
- **OTF TSA:** The Transmission Customer and the associated SSP execute an OTF Transmission Service Agreement.

1.3.7.8 Obligations and Requirements under the TSA: Customers who have the right to obtain transmission service on the New England Transmission System must meet a number of obligations, as required under the applicable sections of the OATT and as summarized below.

1.3.7.9 Reciprocity: Customers must agree to provide comparable transmission services to Market Participants, Transmission Owners and their affiliates.

- **Parties Subject to Reciprocity Obligation:** The reciprocity obligation also applies to all Transmission Customers under the OATT. Transmission Customers include, but are not limited to: a power seller, buyer and any intermediary (such as a power marketer) and any entity that owns, controls or operates transmission facilities.
- **Inability to meet the Reciprocity Obligation:** A Transmission Customer that is unable to provide comparable transmission services must submit a sworn statement with the application explaining why comparable transmission services cannot be provided. Reasons for not providing reciprocal service may include circumstances where the transmission customer does not own, control or operate transmission facilities.

1.3.7.10 Ancillary Services: Transmission Customers are required to purchase certain Ancillary Services from the associated transmission provider, as defined in the OATT or Schedule to the OATT.

- **Purchased from ISO-NE** Transmission Customers are required to purchase the following Ancillary Services from ISO-NE: (a) Schedule 1 - Scheduling, System Control and Dispatch Service, (b) Schedule 2 - Reactive Supply and Voltage Control, (c) Schedule 16 - Blackstart Service, and (d) Schedule 19 – Special Constraint Resource Service. RNS and TOut Service customers pay for the costs associated with Schedules 1 and 2; RNS customers pay for the costs associated with Schedule 16; and designated transmission providers pay for the costs associated with Schedule 19.
- **Obtained through the ISO-NE Markets:** Transmission Customers utilizing the ISO markets are required to purchase the following Ancillary Services in accordance with Section III of the Tariff: (a) Schedule 3 - Regulation & Frequency Response Service; (b) Schedule 4 - Energy Imbalance Service; (c) Schedule 5 - Ten Minute Spinning Reserve Service; (d) Schedule 6 - Ten-Minute Non-Spinning Reserve Service; (e) Schedule 7 - Thirty-Minute Operating Reserve Service; and (f) Schedule 10 – Generator Imbalance Service.
- **Purchased from MTO, OTO or PTO:** A Transmission Customer utilizing Non-PTF, MTF or OTF may be required to purchase certain Ancillary Services as specified in accordance with their Local, MTF or OTF Service Agreement.

1.3.7.11 Responsibility to Arrange for Transmission Service: It is the customer's responsibility to arrange for the transmission services needed to support its transactions, generation and the load it serves. This obligation applies to all transmission services provided within and outside of the New England Control Area by the various transmission providers.

1.3.7.12 Penalties: Failure to arrange for these supporting transmission services may result in penalties being assessed by the affected transmission provider(s).

1.4 Overview of Process for Utilizing Transmission Service

Following the execution of a Local, MTF, OTF or non-Participant TOut Service Agreement or a MPSA, the transmission customer will then need to take certain steps to utilize the associated transmission facility for the movement of power in the Real-Time Energy Market.

1.4.1 Transmission Service Requirements in the Day-ahead Energy Market

The Day-Ahead Energy Market is a “non-physical market” that is administered solely on an economic basis; hence, there are no transmission service requirements associated with internal or external energy transactions (including Supply Offers, Demand Bids, Increment Offers, Decrement Bids and External Transactions) that are submitted into the Day-ahead Energy Market.

1.4.2 Transmission Service Requirements in the Real-time Energy Market

1.4.2.1 Utilization of the of the PTF: A Transmission Customer submitting internal or external energy transactions (including Supply Offers, Demand Bids, Increment Offers, Decrement Bids and External Transactions) to the Real-Time Energy Market is not required to also submit advance reservations for RNS or TOut Service for the associated utilization of the PTF.

➤ **Utilization of the Internal PTF:** To arrange for the submittal of internal bilateral transactions, which are supported by RNS and the PTF, movement of energy over the internal PTF (i.e., no utilization of PTF external Interconnections is required) in Real-Time Energy Market, the transmission customer must:

1. Verify that their MPSA is current; and
2. Submit internal energy transactions (including Supply Offers, Demand Bids, Increment Offers and Decrement Bids) into the Real-Time Energy Market via the [ISO-NE SMD Applications Home Page](#). For assistance, please contact the Participant Support and Solutions Team by submitting a case via [Ask ISO](#), emailing AskISO@iso-ne.com or by phone at (413) 540-4220.

➤ **Utilization of the External PTF:** To arrange for the importing, exporting or wheeling energy over a PTF external interconnections in the Real-Time Energy Market, the transmission customer must:

1. Verify that their service agreement with ISO-NE is current.
 - a. A MPSA is required to support an external import or export transaction.
 - b. A MPSA or non-Participant TOut Service Agreement is required to support a wheel through transaction.

2. Acquire access to the New England OASIS via a OATI webOASIS registration, OATI registration, and register with ISO-NE as an external transmission customer. See Section 1.4.4 or contact the ISO-NE [Membership Coordinator](#) for more information.

3. Establish an E-Tag in support of the Real-Time Energy Market External Transaction.

NERC Standards for Interchange require an E-Tag to be established prior to the implementation of an Interchange Transaction. An E-Tag allows the Balancing Authorities to track transactions as they pass into, out of or through their Balancing Areas. It is the responsibility of the Transmission Customer to ensure that the E-tag is submitted for a Transaction. Additional information on *E-Tag Procedures in New England* can be found in the [Transmission Service Types folder](#).

4. Submit the External Transaction into the Real-Time Energy Market.
 - a. If customer is a under a MPSA, submit the External Transaction for import, export or wheeling via the “External Transactions” section of the [ISO-NE SMD Applications Home Page](#). For assistance, please contact the Participant Support and Solutions Team by submitting a case via [Ask ISO](#), emailing AskISO@iso-ne.com or by phone at (413) 540-4220.
 - b. If customer is a under a non-Participant TOut Service Agreement, submit the External Transaction for wheeling to ISO-NE Market Services Department, and ISO-NE will submit the transaction into the Real-Time Energy Market via the [ISO-NE SMD Applications Home Page](#).
5. ISO-NE will schedule the transaction in the Real-Time Energy Market in accordance with the Sections II and III of the Tariff.
6. If the External Transaction is scheduled, ISO-NE will create an associated RNS or TOut reservation.

- **1.4.2.2 Utilization of the CSC, NECEC and Phase I/II HVDC-TF:** A Transmission Customer submitting External Transactions to the Real-Time Energy Market that will utilize the CSC or Phase I/II HVDC-TF or NECEC Interconnection is required to also submit a MTF or OTF advance reservation, as appropriate. The Transmission Customer must acquire the MTF or OTF Service advance reservation from CSC LLC or an SSP, as appropriate.

Utilization of the CSC or Phase I/II or NECEC Interconnections: To arrange for the movement of energy over the external Phase I/II HVDC or CSC or NECEC Interconnections, the transmission customer must:

1. Verify that their service agreement with the (i) SSP or (ii) CSC LLC is current.
2. Acquire access to the New England OASIS via a OATI webOASIS registration, OATI registration, and register with ISO-NE as an external transmission customer. See Section 1.4.4 and contact the ISO-NE [Membership Coordinator](#) for more information.
3. Obtain an advance reservation over (i) the Phase I/II HVDC-TF or NECEC Transmission Line from an SSP or (ii) the CSC from the CSC LLC.

4. Establish an E-Tag in support of the Real-Time Energy Market External Transaction.

NERC Standards for Interchange require an E-Tag to be established prior to the implementation of an Interchange Transaction. An E-Tag allows the Balancing Authorities to track transactions as they pass into, out of or through their Balancing Areas. It is the responsibility of the Transmission Customer to ensure that the E-tag is submitted for an External Transaction. Additional information on *E-Tag Procedures in New England* can be found in the [Transmission Service Types folder](#).

5. Verify that their service agreement with ISO-NE is current.
6. Submit the External Transaction into the Real-Time Energy Market. The OTF or MTF Transmission Service advance reservation will need to be provided in the submittal.
 - a. If customer is a under a MPSA, submit the External Transaction for import, export or wheeling via the “External Transactions” section of the [ISO-NE SMD Applications Home Page](#). Please contact the Participant Support and Solutions Team by submitting a case via [Ask ISO](#), emailing AskISO@iso-ne.com or by phone at (413) 540-4220 for assistance.
 - b. If customer is a under a non-Participant TOut Service Agreement, submit the External Transaction for wheeling to ISO-NE Participant Support and ISO-NE will submit the transaction into the Real-Time Energy Market via the [ISO-NE SMD Applications Home Page](#).
7. ISO-NE will schedule the External Transaction in the Real-Time Energy Market in accordance with the Sections II and III of the Tariff.
8. If the External Transaction is scheduled, ISO-NE will create an associated RNS or TOut reservation for the associated use of the PTF.

- **1.4.2.3 Utilization of the Non-PTF:** Though Section III does not require a Transmission Customer submitting internal or external energy transactions (including Supply Offers, Demand Bids, Increment Offers, Decrement Bids and External Transactions) to the Real-Time Energy Market to also submit advance reservations for Local Service, the Local Service Agreement and Schedule 21 may have certain Local Service scheduling requirements related to the utilization of the Non-PTF by the associated generation or load. The Transmission Customer with load or generation in Local Network should contact the associated PTO to determine what Local Service scheduling requirements apply.

To arrange for the movement of energy over the non-PTF (i.e., the Local transmission facilities), the transmission customer must:

1. Verify that their Local Service Agreement with the associated PTO and ISO-NE is current; and
2. Schedule service as required under the associated Schedule 21 service provisions.

1.4.3 Losses

- **Assignment of Losses:** Real power losses are associated with all transmission service. The Transmission Providers are not obligated to provide “in-kind” consideration for real power losses, and all losses are considered financial in the current market structure. The costs of Real Power Losses associated with the PTF, CSC, Phase I/II and the Non-PTF are recovered in accordance with the OATT, Schedule 18, Schedule 20A and Schedule 21, respectively.
- **PTF, CSC and Phase I/II Real Power Losses:** A Transmission Customer should not include the impact of transmission losses as part of its transaction (including External Transactions) submitted for use in the Day-Ahead Energy Market or Real-Time Energy Market as transmission losses are accounted for on a financial basis through the Loss Component of the Locational Marginal Price (“LMP”). The marginal cost of system losses specific to each location is recovered through the Loss Component of the LMP pursuant to Market Rule 1. As such, the actual schedule of the transactions is not adjusted by a physical loss component; instead, the Transmission Customer pays for the costs of Real Power Losses based on the LMP of the node to which their individual transactions are associated.

In the case of Non-Participant (and Participant) wheel-through transactions in the Real-time Market, if the transaction is scheduled to flow in the Real-Time Energy Market, Real Power Loss costs (and Congestion Costs) will be calculated directly for the Transmission Customer through the normal Energy Market accounting process based on the direction of flow and the difference in the two External Node LMPs. The Participant Transmission Customer will also be responsible for all applicable OATT and market charges/credits.

- **Non-PTF Real Power Losses:** The cost of Real Power Losses over the Non-PTF shall be calculated and charged for by the associated PTO in accordance with Schedule 21.
- **Loss Determination:** Additional information related to the calculation of PTF, MTF and Phase I/II HVDC-TF Real Power Losses can be found in the LMP Calculation and LMP White Papers that are published in the [Presentations, Speeches, and Other Materials folder](#).

1.4.4 Obtaining Access to OASIS

- **OASIS Requirement:** A Transmission Customer that intends to utilize the CSC, NECEC, Phase I/II HVDC-TF and PTF external ties to import, export or wheel power into, out of or through the New England Control Area in the Real-time Market is required to be a recognized New England OASIS node user. There are two primary reasons for this:
 1. Such a Transmission Customer must be able to access the New England OASIS to establish advance reservations over the MTF and OTF; and
 2. Even though advance reservations associated with the PTO are not required to support these types of External Transactions, ISO-NE is required to create and post supporting after-the-fact transmission reservations to indicate the utilization of the PTF and satisfy the transparency needs of the market.

To become recognized as a New England OASIS node user, the Transmission Customer must be (a) registered with NERC and (b) a customer of *Open Access Technologies International Inc. (OATI)*.

- **Steps for Obtaining Access to the OASIS:** To establish access to the New England OASIS node, the Transmission Customer must be registered with NERC and also be a customer of OATI. Also, each employee making reservations must obtain an electronic certificate from OATI.

Information regarding how to establish access to OASIS can be found in the *Register for OASIS* portion of the Materials page on the [Requests to Access Software and Systems page](#).

1.5 Scheduling, Curtailment and Interruption of Real-time Energy Market External Transactions

External Transactions that are submitted into the Real-time Market and are supported by PTF, Phase I/II HVDC-TF and MTF transmission service will be scheduled and curtailed by ISO-NE in a manner that (a) provides for the reliable and economic operation of the New England Transmission System and markets, (b) recognizes the associated NERC Transmission Service Priorities, and (c) is pursuant to the terms and conditions of the applicable ISO-NE Operating Documents, including Section II.44¹ of the Tariff and ISO New England Operating Procedure No. 9 - Scheduling and Dispatch of External Transactions (“OP 9”).

1.5.1 Elevated Scheduling/Curtailment Priorities on PTF External Interconnections

As previously described in Section 1.2., all service on the PTF is Firm Service. However, Section II.44(1)(a) contains provisions that allow certain Real-Time External Transaction sales and purchases that are supported by those service agreements referenced in Attachment G-3² or Attachment H³ to the OATT and that meet the specified submittal requirements (e.g., submittal deadline, matching referenced External Node, matching “Receiver”) to receive a higher priority in the scheduling and curtailment process than other External Transactions that have been submitted to the same external interface.

The specified submittal requirements to be followed by the Market Participant to ensure this priority is assigned in the Real-Time Energy Market can be found on the ISO New England Web Site in Section II.44(1)(a) in [Section II - OATT](#) and in the [User Guide for External Transactions Using EES document](#).

Though the elevated scheduling/curtailment priorities associated with Excepted Transactions are restricted to those External Transactions that are supported by the Excepted Transactions identified in Attachment G-3, it should be noted that all Attachment G-3 agreements have terminated.

The elevated scheduling/curtailment priorities associated with Grandfathered Agreements are restricted to only those External Transactions that are that are supported by MEPCO Grandfathered Transmission Service Agreements (“MGTSA”). However, in accordance with Section II.45.1 MGTSA’s can be reassigned, see the following section for details on that process.

1.5.2 Process to acquire an MGTSA

¹ Section II.44 - Scheduling and Curtailment Rules for Real-Time External Transactions.

² Attachment G-3 is entitled “Complete List of Excepted Transaction (Transmission) Agreements Over External Ties”

³ Attachment H is entitled “MEPCO Grandfathered Transmission Service Agreements (“MGTSAs”)

- To acquire a MG TSA reservation to be referenced on Real-Time External Transaction submittal, a Transmission Customer (“Assignee”) must, in accordance with Section II.45.1, (i) make arrangements with the MG TSA holder (“Reseller”) to have the MG TSA reservations reassigned and (ii) execute a Service Agreement (Attachment H-1) with MEPCO.
- a. The Reseller must post the resulting sale or assignment on the ISNE Transmission Provider Page of the New England OASIS.
 - i. The resulting confirmed reservation must contain the following information:
 - start date/time;
 - stop date/time;
 - MW amount; and
 - price in the units of \$/MWh (required by MEPCO for billing purposes).
 - ii. Prior to posting of the sale or assignment the MG TSA holder (“Reseller”) shall verify with MEPCO that the Transmission Customer has an executed Attachment H-1 Service Agreement with MEPCO.
 - iii. If the supporting reservation violates any of the above criteria, that reservation may be ANNULLED.
 - b. MEPCO will notify ISO-NE of any change to the list of valid Attachment H-1 Transmission Customers subject to the following timeline:
 - i. Notification of a new valid H-1 customer must be provided to ISO-NE prior to noon the day before the Operating Day in which the External Transaction and MG TSA are expected to be scheduled in order for ISO-NE to validate that the Transmission Customer has a valid Attachment H-1 Service Agreement with MEPCO, which will allow the Assignee to submit an External Transaction that is supported by a MG TSA into the Real-time Market and receive scheduling and curtailment treatment pursuant to Section II.44(1)(a) in the next Operating Day.
 - In order to comply with ISO-NE’s scheduling timeline, MEPCO must receive the Eligible Transmission Customer’s executed Attachment H-1 at least 24 hours prior to the “noon the day before the Operating Day” scheduling timeline. MEPCO will accommodate shorter notice requests received during normal business hours as reasonably practicable.
 - ii. If the Transmission Customer is not recognized within the Attachment H-1 customer listing provided by MEPCO, ISO-NE will not allow the Transmission Customer to utilize II.44(1)(a) MG TSA priority by denying the External Transaction.
 - c. MEPCO will have query rights to ISO-NE’s Transmission Provider Home Page in order to perform the monthly billing for all MG TSAs.
The Reseller will receive a credit from MEPCO for the amount paid to MEPCO by the Assignee for MG TSA service provided during the relevant monthly billing period.

1.6 Invoicing of RNS and TOut Service

1.6.1 Invoicing by ISO-NE

Customers are invoiced by ISO-NE for charges and credits associated with RNS and TOut Service.

ISO-NE **does not** invoice for charges and credits associated with Local, MTF and OTF Services. Local, MTF and OTF Services are invoiced by the corresponding individual PTOs, CSC LLC and individual SSPs.

- **Items Included in the Invoice:** The ISO-NE invoice may include, but is not limited to, transmission service charges and credits for:
 - Schedule 1 - Scheduling, System Control and Dispatch Service;
 - Schedule 2 - Reactive Supply and Voltage Control from Generation Sources Service;
 - Schedule 8 - Through or Out Service – The Pool PTF Rate;
 - Schedule 9 - Regional Network Service
 - Schedule 16 - System Restoration and Planning Service from Generators; and
 - Schedule 19 - Special Constraint Resource Service.

In addition, the ISO-NE invoice may also include charges and credits associated with the:

- ISO-NE Markets, in accordance with Section III to the Tariff; and
- ISO-NE Self-Funding Tariff, in accordance with Section IV to the Tariff.

The monthly Regional Network Load (RNL) Cost Reports that are posted on the [Load Costs page](#) provide the reader with a detailed description of the charges that may be allocated to RNL.

- **Terms of Payment:** The [ISO-NE Billing Policy](#) describes how and when invoices are issued by ISO-NE and Transmission Customers make payments and receive credits associated with RNS and TOut Service.

1.6.2 Basis for Monthly Invoice

The basis for invoice varies according to the amount of RNS or TOut Service taken during the month.

- **RNS:** RNS is billed to load-serving entities based on the magnitude of Regional Network load for which they are responsible. The load used in the billing is the customer's metered load for the hour of the Local Network's peak network load for the month. The RNS rate at the time is applied to this load to determine the customer's bill for the month.
- **TOut Service:** Billing for TOut Service is reservation-based. The billing is based on the capacity of each reservation for TOut Service. TOut rates are applied to the Reserved Capacity.

1.7 Generator and Elective Transmission Upgrade (ETU) Interconnection Requests

The ISO administers the complex process for studying customer requests proposing the addition of new generators, generator upgrades, and transmission upgrades to the tightly interconnected regional power system. Through extensive engineering studies, ISO determines whether such interconnections would be feasible without adversely affecting reliability and how they should be accomplished.

Such requests are submitted and administered in accordance with Schedule 22 - Large Generator Interconnection Procedures (Schedule 22), Schedule 23 - Small Generator Interconnection Procedures (Schedule 23) and Schedule 25 - Elective Transmission Upgrade Interconnection Procedures (Schedule 25) of the OATT.

The [ISO Website](#) provides information and materials related to: (1) interconnecting a new or modifying an existing large generator (i.e., a generating facility that will be larger than 20 MW after construction or modification); (2) interconnecting a new or modifying an existing small generator (i.e., a generating facility that will be larger no larger than 20 MW after construction or modification); (3) interconnecting a new ETU to the Administered Transmission System; and (4) upgrading an existing Pool Transmission Facility, Merchant Transmission Facility or Other Transmission Facility as an ETU.