**ATTACHMENT Q**

**Transmission Line Ratings**

General:

Beginning July XX, 2025, the ISO shall implement Transmission Line Ratings as provided below.

Definitions:

The following definitions apply for purposes of this Attachment:

(1) “Transmission Line Rating” means the maximum transfer capability of a transmission line, computed in accordance with a written Transmission Line Rating methodology and consistent with Good Utility Practice, considering the technical limitations on conductors and relevant transmission equipment (such as thermal flow limits), as well as technical limitations of the New England Transmission System (such as system voltage and stability limits). Relevant transmission equipment may include, but is not limited to, circuit breakers, line traps, and transformers.

(2) “Ambient-Adjusted Rating” (“AAR”) means a Transmission Line Rating that:

(a) Applies to a time period of not greater than one hour.

(b) Reflects an up-to-date forecast of ambient air temperature across the time period to which the rating applies.

(c) Reflects the absence of solar heating during nighttime periods, where the local sunrise/sunset times used to determine daytime and nighttime periods are updated at least monthly, if not more frequently.

(d) Is calculated at least each hour, if not more frequently.

 (3) “Seasonal Line Rating” means a Transmission Line Rating that:

(a) Applies to a specified season, where seasons are defined in ISO New England Operating Documents, to include not fewer than four seasons in each year, and to reasonably reflect portions of the year where expected high temperatures are relatively consistent.

(b) Reflects up-to-date historical ambient air temperatures across the relevant season over which the rating applies.

(c) Is calculated annually, if not more frequently, for each season in the future.

(4) “Emergency Rating,” as further defined in ISO Operating Documents, means a Transmission Line Rating that reflects operation for a specified, finite period, rather than reflecting continuous operation. An Emergency Rating may assume an acceptable loss of equipment life or other physical or safety limitations for the equipment involved.

System Reliability:

If ISO or Transmission Owner reasonably determines, consistent with Good Utility Practice, that the temporary use of a Transmission Line Rating different than would otherwise be required by this Attachment is necessary to ensure the safety and reliability of the New England Transmission System, then the ISO may use such an alternate rating. The ISO and Transmission Owners shall confirm the use of such an alternate rating consistent with the procedures established in ISO Operating Documents. The ISO and Transmission Owner shall document in their databases of Transmission Line Ratings on OASIS or another password-protected website, as required by this Attachment, the use of an alternate Transmission Line Rating under this paragraph, including the nature of and basis for the alternate rating, the date and time that the alternate rating was initiated, and (if applicable) the date and time that the alternate rating was withdrawn and the standard rating became effective again.

Obligations of the ISO and Transmission Owners:

The obligations of the ISO and Transmission Owners under this Attachment are as follows:

ISO shall use AARs in the security-constrained unit commitment, security constrained economic dispatch, and related models, as well as for Day-Ahead Energy Market and Real-Time Energy Market operations and clearing. ISO shall use Seasonal Line Ratings as a recourse rating in the event that an AAR otherwise required to be used under this Attachment is unavailable.

The ISO shall use uniquely determined Emergency Ratings, as specified in the ISO New England Operating Documents and provided by the Transmission Owners, for contingency analysis and in post-contingency simulations of constraints in the Day-Ahead and Real-Time Energy Markets. Such uniquely determined Emergency Ratings shall also include separate AAR calculations for each Emergency Rating duration used.

Transmission Owners shall, consistent with this Attachment and the ISO New England Operating Documents, calculate and electronically transmit AARs and Emergency Ratings to ISO, for use in the Day-Ahead and Real-Time Energy Markets, as well as calculate and provide Seasonal Line Ratings to the ISO.

In utilizing forecasts of ambient air temperature for AARs and evaluating historical temperatures for Seasonal Line Ratings, the Transmission Owners shall utilize such forecasts and historical temperatures consistent with Good Utility Practice and on a non-discriminatory basis.

Postings to OASIS or another password-protected website: The ISO and Transmission Owners shall maintain on their respective password-protected section of their respective OASIS pages a database of Transmission Line Ratings and Transmission Line Rating methodologies.

The ISO’s database shall include a full record of all Transmission Line Ratings, as used in real-time operations. Any postings of temporary alternate Transmission Line Ratings or exceptions used under the System Reliability section above or the Exceptions section below, respectively, are considered part of the database. The database shall include records of which Transmission Line Ratings and Transmission Line Rating methodologies were in effect at which times over at least the previous five years, including records of which temporary alternate Transmission Line Ratings or exceptions were in effect at which times during the previous five years. Each record in the database shall indicate which transmission line the record applies to, and the date and time the record was entered into the database. The database shall be maintained such that users can view, download, and query data in standard formats, using standard protocols.

The Transmission Owners’ databases shall contain Transmission Line Ratings (including any Exceptions to the use of AARs discussed below and any temporary rating(s) transmitted to the ISO), and their respective Transmission Line Rating methodologies. Each record in the database shall indicate to which transmission line the record applies, and the date and time the record was entered into the database. The database shall be maintained such that users can view, download, and query data in standard formats, using standard protocols.

Sharing with Transmission Providers: The ISO and Transmission Owners shall provide, upon request by any transmission provider and in a timely manner, the following information:

(1) Transmission Line Ratings for each period for which Transmission Line Ratings are calculated, with updated ratings shared each time Transmission Line Ratings are calculated, and

(2) Written Transmission Line Rating methodologies used to calculate the Transmission Line Ratings in (1) above.

Exceptions: Where the Transmission Owner determines, consistent with Good Utility Practice, that the Transmission Line Rating of a transmission line is not affected by ambient air temperature or solar heating, the Transmission Owner may provide a Transmission Line Rating for that transmission line that is not an AAR or Seasonal Line Rating. The criteria for determining whether a given transmission line may be excepted are contained in ISO-NE Operating Documents. The Transmission Owner shall document in its database of Transmission Line Ratings and Transmission Line Rating methodologies on OASIS or another password-protected website any exceptions to the requirements contained in this Attachment initiated under this paragraph, including the nature of and basis for each exception, the date(s) and time(s) that the exception was initiated, and (if applicable) the date(s) and time(s) that each exception was withdrawn and the standard rating became effective again. If the technical basis for an exception under this paragraph changes, then the Transmission Owner shall update the relevant Transmission Line Rating(s) in a timely manner. The Transmission Owner shall reevaluate any exceptions taken under this paragraph at least every five years.