Redline text in this document represents changes to the material reviewed at the 6/8/2022 SOAS meeting.

39 Attachment GG – Transmission Facility Ratings

39.1 Overview and Definitions

39.1.1 Overview

The ISO will implement Transmission Facility Ratings, as described in this Attachment GG, on the Transmission Facilities Under ISO Operational Control and the Transmission Facilities Requiring ISO Notification, as those terms are defined in Section 1.20 of the ISO OATT.

39.1.2 Definitions

Capitalized terms used in this Attachment GG shall have the meaning specified below in this Section 39.1.2, and capitalized terms used in this Attachment GG but not defined below shall have the meaning given to them in Section 1 of the ISO OATT:

Transmission Facility Rating: The quantity of Energy (as measured in MW) that can be transmitted over a transmission facility, computed by the Transmission Owner in accordance with a written Transmission Facility Rating methodology and consistent with Good Utility Practice, considering the technical limitations on conductors and relevant transmission equipment (such as thermal flow limits). Relevant transmission equipment may include, but is not limited to, transmission lines, phase angle regulators, transformers, series reactors, and circuit breakers. Transmission Facility Ratings shall consist of ~~Ambient-Adjusted Ratings, Seasonal Facility Ratings,~~ Normal Ratings, Long-Term Emergency Ratings, and Short-Term Emergency Ratings.

Ambient-Adjusted Rating ("AAR"): A Transmission Facility Rating that:

~~(a) Facilitates continuous operation over consecutive twenty-four-hour cycles;~~

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

~~(c)~~(b) 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)~~(c) Applies to a time period of not greater than one hour;

~~(e)~~(d) Is calculated at least each hour, if not more frequently; and

~~(f)~~(e) If a transmission facility is impacted by an outage, reflects the up-to-date status of transmission equipment and accounts for transmission equipment that is out of service or derated as a result of an outage across the time period to which the rating

applies.

Seasonal Facility Rating: A Transmission Facility Rating that:

(a) Applies to a specified season, as described in ISO Procedures;

~~(b) Can be maintained for consecutive twenty-four-hour cycles;~~

(b) Reflects forecasted or historical temperatures across the relevant season over which the rating applies; and

(c) Is calculated at least annually, if not more frequently.

Normal Rating: A Transmission Facility Rating that reflects operation for continuous twenty-four-hour cycles.

Long-Term Emergency Rating ("LTE Rating"): A Transmission Facility Rating that reflects operation for infrequent, non-consecutive periods of up to four hours, rather than reflecting continuous operation. A Long-Term Emergency Rating may assume an acceptable loss of transmission equipment life or other physical or safety limitations for the transmission facilities involved.

Short-Term Emergency Rating ("STE Rating"): A Transmission Facility Rating that reflects operation for infrequent, non-consecutive periods of fifteen minutes or less, rather than reflecting continuous operation. A Short-Term Emergency Rating may assume an acceptable loss of transmission equipment life or other physical or safety limitations for the transmission facilities involved.

39.2 Obligations of the ISO

39.2.1 Use of Transmission Facility Ratings

Unless otherwise provided for in this Attachment, the ISO shall use AARs as the relevant Transmission Facility Ratings when performing any of the following functions: (1) employing Security Constrained Unit Commitment ("SCUC"), Real-Time Commitment ("RTC") and Real-Time Dispatch ("RTD") to evaluate requests for Transmission Service; or (2) responding to requests for Firm Point-To-Point Transmission Service.

The ISO shall use AARs as the relevant Transmission Facility Ratings when determining whether to curtail Firm Point-To-Point Transmission Service (under Section 3.1.6 of this ISO OATT).

The ISO will use Seasonal Facility Ratings as a recourse rating in the event that an AAR

otherwise required to be used under this Attachment is unavailable for any reason or invalid. For purposes of this Attachment, an AAR will be classified as invalid if it is not within the AAR tolerance defined in ISO Procedures.

The ISO shall use LTE Ratings or STE Ratings, as prescribed in the Reliability Rules, for contingency analysis in the operations and dispatch horizon, as needed to maintain reliability of the NYS Power System. LTE Ratings and STE Ratings must also reflect an up-to-date forecast of ambient air temperature across the time period to which the rating applies.

39.2.2 ISO OASIS Postings

The ISO shall post records of Transmission Facility Ratings and Transmission Facility Rating methodologies on its OASIS, subject to any restrictions on the disclosure of Confidential Information or Critical Energy Infrastructure Information. If necessary, the ISO may post the data on a password-protected website. The ISO shall use reasonable means to post the records in a timely manner as described in ISO Procedures.

The posted records will include the Transmission Facility Ratings provided by the Transmission Owners, as used in the Day-Ahead Market and the Real-Time Market. The posted records will also include any alternate ratings or exceptions pursuant to Section 39.3 and/or Section 39.4.3 of this Attachment. The posted records will include which Transmission Facility Ratings and Transmission Facility Rating methodologies were in effect at which times over the previous five years, including records of which alternate ratings or exceptions were in effect at which times during the previous five years. The posted records will indicate which transmission facility a rating applies to, and the date and time the record was posted. The posted records will be provided in a manner such that the data can be viewed, downloaded, and queried as described in ISO Procedures.

39.3 System Reliability

If the ISO or a Transmission Owner reasonably determines, consistent with Good Utility Practice, that the temporary use of a Transmission Facility Rating different than would otherwise be required by this Attachment (the otherwise applicable rating referred to in this Attachment as a "standard rating" and the rating that differs therefrom referred to in this Attachment as an "alternate rating") is necessary to ensure the safety and reliability of the NYS Power System, then the ISO may use a Seasonal Facility Rating or an alternate rating provided by the Transmission Owner. The ISO will post, pursuant to Section 39.2.2 of this Attachment, the date and time that an alternate rating was initiated in place of a standard rating, and (if applicable) the date and time that the alternate rating was withdrawn and the standard rating became effective again.

39.4 Obligations of the Transmission Owners

39.4.1 Calculation of Ratings

Transmission Owners shall calculate and provide the following Transmission Facility

Ratings, and associated rating methodology, to the ISO in accordance with ISO Procedures:

AARs:

1. Normal Ratings that reflect an up-to-date forecast of ambient air temperature across the time period to which the rating applies,
2. LTE Ratings that reflect an up-to-date forecast of ambient air temperature across the time period to which the rating applies, and
3. STE Ratings that reflect an up-to-date forecast of ambient air temperature across the time period to which the rating applies.~~,~~

Seasonal Facility Ratings:

1. Normal Ratings that apply to a specified season,
2. LTE Ratings that apply to a specified season, and
3. STE Ratings that apply to a specified season.

Each Transmission Owner shall calculate all Transmission Facility Ratings in accordance with this Attachment, applicable reliability standards, its rating methodology, and Good Utility Practice.

In developing any forecasts of ambient air temperature for determining ratings in accordance with this Attachment, the Transmission Owner must develop such forecasts consistent with Good Utility Practice and on a non-discriminatory basis.

39.4.2 Sharing Transmission Facility Ratings

A Transmission Owner shall share in a timely manner, upon request by another Transmission Owner, the ISO or a transmission provider other than the ISO, the following information:

(a) Transmission Facility Ratings for each period for which Transmission Facility Ratings are calculated and provided to the ISO, including any updated Transmission Facility Ratings that are calculated and provided to the ISO, and

(b) written Transmission Facility Rating methodologies used by the Transmission Owners to calculate the Transmission Facility Ratings in (a) above.

39.4.3 Exceptions

Where the Transmission Owner determines, consistent with Good Utility Practice, that the Transmission Facility Rating of a transmission facility subject to this Attachment is not affected by ambient air temperature or solar heating, the Transmission Owner may provide a Transmission Facility Rating to the ISO for that transmission facility that is not an AAR. The Transmission Facility Rating may be a Seasonal Facility Rating or a uniquely determined Transmission Facility Rating that is not an AAR or a Seasonal Facility Rating. Examples of such a transmission facility may include (but are not limited to): (1) a transmission facility for

which the technical transfer capability of the limiting conductors and/or limiting transmission equipment is not dependent on ambient air temperature or solar heating; or (2) a transmission facility whose transfer capability is limited by a NYS Power System limit (such as a system voltage or stability limit) which is not dependent on ambient air temperature or solar heating. The ISO will include in the posted records required by Section 39.2.2 of this Attachment any exceptions to the requirements contained in this Attachment initiated pursuant to this Section 39.4.3, 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 a standard rating became effective again. If the technical basis for an exception under this paragraph changes, then the Transmission Owner must notify the ISO in a timely manner and the ISO shall update the relevant Transmission Facility Rating(s) in a timely manner. Each Transmission Owner must reevaluate any exceptions taken pursuant to this Section 39.4.3 at least every five years and notify the ISO of any changes in a timely manner.