

183 FERC ¶ 61,179
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Willie L. Phillips, Acting Chairman;
James P. Danly, Allison Clements,
and Mark C. Christie.

ISO New England Inc.

Docket Nos. ER22-2467-000
ER22-2468-000

ORDER ON COMPLIANCE FILING

(Issued June 15, 2023)

1. On July 22, 2022, ISO New England Inc. (ISO-NE); New England Hydro-Transmission Electric Company, Inc.; New England Hydro-Transmission Corporation; New England Electric Transmission Corporation; and Vermont Electric Transmission Company (collectively, Asset Owners)¹ and the Schedule 20A service providers (together, Filing Parties)² submitted proposed revisions to the HVDC Transmission Operating Agreement (HVDC TOA) among ISO-NE and the Asset Owners and to the ISO-NE Transmission, Markets and Services Tariff (Tariff), specifically section II, Schedule 20A in compliance with the requirements of Order No. 881,³ a final rule that revised both the *pro forma* Open Access Transmission Tariff (OATT) and the

¹ The Asset Owners consist of the following four entities: New England Hydro-Transmission Electric Company, Inc.; New England Hydro-Transmission Corporation; New England Electric Transmission Corporation; and Vermont Electric Transmission Company.

² The Schedule 20A Service Providers consist of the following entities: Central Maine Power Company; Eversource Energy Service Company as agent for The Connecticut Light and Power Company and Public Service Company of New Hampshire; Green Mountain Power Corporation; New England Power Company; NSTAR Electric Company; The United Illuminating Company; Vermont Electric Cooperative, Inc.; and Versant Power.

³ *Managing Transmission Line Ratings*, Order No. 881, 177 FERC ¶ 61,179 (2021), *order addressing arguments raised on reh'g*, Order No. 881-A, 179 FERC ¶ 61,125 (2022).

Commission's regulations under section 206 of the Federal Power Act (FPA)⁴ to improve the accuracy and transparency of electric transmission line ratings.⁵ In this order, we accept Filing Parties' compliance filings, to become effective July 12, 2025, subject to further compliance.

I. Background

2. In Order No. 881, the Commission found that, because of the relationship between transmission line ratings and wholesale rates, inaccurate transmission line ratings cause the rates for the transmission of electric energy in interstate commerce and the sale of electric energy at wholesale in interstate commerce to be unjust and unreasonable.⁶ To ensure just and reasonable wholesale rates that more accurately reflect the cost of the wholesale service being provided (i.e., energy, capacity, ancillary services, or transmission service), the Commission adopted reforms that impose certain obligations

⁴ 16 U.S.C. § 824e.

⁵ A transmission line rating is the

[m]aximum 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 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.

Pro forma OATT, attach. M, Definitions; *see also* Order No. 881, 177 FERC ¶ 61,179 at PP 1, 44.

⁶ Order No. 881, 177 FERC ¶ 61,179 at PP 3, 29-30.

on transmission providers⁷ and public utility transmission owners with respect to transmission line ratings.⁸

3. In Order No. 881, the Commission required: (1) transmission providers to implement ambient-adjusted ratings (AAR)⁹ for near-term transmission service requests on the transmission lines over which they provide transmission service; (2) transmission providers to implement seasonal line ratings¹⁰ for longer-term transmission service

⁷ In this order, we use transmission provider to mean any public utility that owns, operates, or controls facilities used for the transmission of electric energy in interstate commerce. 18 C.F.R. § 37.3 (2022). Therefore, unless otherwise noted, “transmission provider” refers only to public utility transmission providers. Furthermore, the term “public utility” as found in section 201(e) of the FPA means “any person who owns or operates facilities subject to the jurisdiction of the Commission under this subchapter” 16 U.S.C. § 824(e).

⁸ Order No. 881, 177 FERC ¶ 61,179 at P 29.

⁹ An AAR is a:

Transmission Line Rating that: (a) [a]pplies to a time period of not greater than one hour[;] (b) [r]eflects an up-to-date forecast of ambient air temperature across the time period to which the rating applies[;] (c) [r]eflects 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[; and] (d) [i]s calculated at least each hour, if not more frequently.

Pro forma OATT, attach. M, Definitions; *see also* Order No. 881, 177 FERC ¶ 61,179 at P 4.

¹⁰ A seasonal line rating is a:

Transmission Line Rating that: (a) [a]pplies to a specified season, where seasons are defined by the Transmission Provider 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) [r]eflects an up-to-date forecast of ambient air temperature across the relevant season over which the rating applies[; and] (c) [i]s calculated annually, if not more frequently, for each season in the future for which Transmission Service can be requested.

requests on the transmission lines over which they provide transmission service; (3) regional transmission organizations and independent system operators (RTO/ISO) to establish and implement the systems and procedures necessary to allow transmission owners to electronically update transmission line ratings at least hourly;¹¹ (4) transmission providers to use uniquely determined¹² emergency ratings;¹³ (5) public utility transmission owners to share their transmission line ratings and transmission line rating methodologies with their respective transmission provider(s) and with market monitors in RTOs/ISOs; (6) transmission providers to share their transmission owners' transmission line ratings and transmission line rating methodologies with any transmission provider(s) upon request; (7) transmission providers to maintain a database of their transmission owners' transmission line ratings and transmission line rating methodologies on the transmission provider's Open Access Same-Time Information System (OASIS) site or another password-protected website; and (8) transmission providers to post on OASIS or another password-protected website any uses of exceptions or temporary alternate ratings.¹⁴ In addition, the Commission required transmission providers to explain their timelines for calculating or submitting AARs as part of their compliance filings.¹⁵

Pro forma OATT, attach. M, Definitions; *see also* Order No. 881, 177 FERC ¶ 61,179 at P 204.

¹¹ Order No. 881, 177 FERC ¶ 61,179 at P 255.

¹² “Uniquely determined” means that the transmission line ratings are determined based on assumptions that reflect the specific, finite duration of emergency ratings, as opposed to using assumptions used to calculate normal ratings. The Commission explained that, by requiring emergency ratings be uniquely determined, they would be based on assumptions that reflect the finite duration of the emergency ratings, as distinct from the assumptions of normal ratings that can be maintained indefinitely. *Id.* PP 294-295.

¹³ An emergency rating is “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.” *Pro forma* OATT, attach. M, Definitions; *see also* Order No. 881, 177 FERC ¶ 61,179 at P 293.

¹⁴ Order No. 881, 177 FERC ¶ 61,179 at PP 4-11.

¹⁵ *Id.* P 143.

II. Compliance Filings

4. Filing Parties state that the Phase I and II high-voltage direct current transmission facilities (Phase I/II HVDC-TF) interconnecting New England and Québec are owned by the Asset Owners, who, along with ISO-NE, are parties to the HVDC TOA, which formalizes the operating arrangements between the Asset Owners and ISO-NE for the Phase I/II HVDC-TF and under which the Phase I/II HVDC-TF are fully subject to the operational authority of ISO-NE.¹⁶ Filing Parties add that the Schedule 20A Service Providers are public utilities who have been granted rights to use the Phase I/II HVDC-TF by the Asset Owners under Schedule 20A and who have the sole authority to file changes to Schedule 20A-Common to section II of the ISO-NE Tariff under section 205 of the FPA. Filing Parties explain that features of the Phase I/II HVDC-TF covered by the HVDC TOA and Schedule 20A create unique challenges for compliance.¹⁷ Filing Parties note that the Asset Owners have no filing rights with respect to any portion of the ISO-NE Tariff, that the Schedule 20A Service Providers are transmission service providers that offer to re-sell transmission service on the Phase I/II HVDC-TF but have no role in establishing or modifying transmission line ratings or transmission line rating procedures for the Phase I/II HVDC-TF, and that ISO-NE is neither a transmission owner nor a transmission provider for the Phase I/II HVDC-TF but has operating authority for the facilities, including certain contractual rights for changing transmission line ratings and transmission line rating procedures for the Phase I/II HVDC-TF.¹⁸

5. Filing Parties note that because the Asset Owners have sold all use rights on the Phase I/II HVDC-TF, the Asset Owners do not have a tariff on file with the Commission for the Phase I/II HVDC-TF and that ISO-NE and the Asset Owners have determined that the HVDC TOA is the appropriate document subject to the Commission's jurisdiction to include Order No. 881 compliance requirements with respect to ratings and rating procedures.¹⁹ Additionally, Filing Parties state that the Schedule 20A Service providers propose to amend Schedule 20A-Common to include limited provisions of the *pro forma* Attachment M related to the provision of transmission service and OASIS postings that apply to the Schedule 20A Service Providers.²⁰ Thus, Filing Parties propose to bifurcate the requirements of the *pro forma* Attachment M between two new attachments, both

¹⁶ Filing, Transmittal Letter at 10.

¹⁷ *Id.* at 11.

¹⁸ These features mean that some compliance requirements fall on the Asset Owners and some compliance requirements fall on the Schedule 20A Service Providers.

¹⁹ Filing, Transmittal Letter at 3, 11-13.

²⁰ *Id.* at 14.

referred to as Attachment M – one in the HVDC TOA related to transmission ratings and rating procedures and the other in Schedule 20A-Common to ensure compliance with transmission rating transparency and transmission service – with targeted adjustments to reflect the nature of the Phase I/II HVDC-TF and Schedule 20A service over these facilities.

6. Filing Parties submit that the proposals in the instant filing are consistent with or superior to the *pro forma* Attachment M as it applies to the Phase I/II HVDC-TF and that the modifications are consistent with Order No. 881, which allowed for regional flexibility in order to achieve its goals.²¹

III. Notice of Filing and Responsive Pleadings

7. Notice of Filing Parties' filings were published in the *Federal Register*, 87 Fed. Reg. 45,309 (July 28, 2022), with interventions and protests due on or before August 12, 2022. IRH Management Committee filed timely motions to intervene in Docket Nos. ER22-2467-000 and ER22-2468-000.

IV. Discussion

A. Procedural Matters

8. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2022), the timely, unopposed motion to intervene serves to make the IRH Management Committee a party to this proceeding.

B. Substantive Matters

9. As discussed below, we find that Filing Parties' proposal partially complies with the requirements of Order No. 881. Accordingly, we accept Filing Parties' filings to be effective July 12, 2025, subject to further compliance, as discussed below.²²

10. As an initial matter, we find that Filing Parties' proposed tariff and HVDC TOA language complies with the following requirements of Order No. 881: (1) transmission providers must implement AARs for near-term transmission service requests on the transmission lines over which they provide transmission service; (2) transmission providers must implement seasonal line ratings for longer-term transmission service requests on the transmission lines over which they provide transmission service;

²¹ *Id.* at 11.

²² ISO-NE should submit its compliance filing in an eTariff submittal using Type of Filing Code 80 – Compliance Filing in the above referenced docket.

(3) transmission providers must use uniquely determined emergency ratings; (4) transmission providers must share their transmission owners' transmission line ratings and transmission line rating methodologies with any transmission provider(s) upon request; (5) transmission providers must maintain a database of their transmission owners' transmission line ratings and transmission line rating methodologies on the transmission provider's OASIS site or another password-protected website; and (6) transmission providers must post on OASIS or another password-protected website any uses of exceptions or temporary alternate ratings.²³ We address Filing Parties' compliance with the remaining requirements below.

1. AAR Timelines

11. In discussing how new forecast data should be incorporated into AAR calculations, the Commission required transmission providers to explain their timelines for calculating or submitting AARs as part of their compliance filings.²⁴ The Commission noted that transmission providers already manage similar timing issues with respect to load forecasts, forecasts for renewable generation, and generation bid deadlines, and that it may be that the deadlines for AAR calculation and submission are not significantly different from existing deadlines for submission of updates to generation supply offers and load.

a. Filings

12. Filing Parties do not explain their timelines for calculating or submitting AARs.

b. Commission Determination

13. We find that Filing Parties do not comply with the requirement in Order No. 881 to explain its timelines for calculating or submitting AARs.²⁵ However, we recognize that, because technical considerations for software and other needed implementation steps remain not fully known, these timelines may not be determined until closer to AAR

²³ ISO NE, Agreements and Contracts, HVDC Trans. Op, Agreement, attach. M (Transmission Line Ratings) (0.0.0). ISO NE, Transmission, Mkts. & Servs. Tariff, § II, Schedule 20A–Common, attach. M (Transmission Line Ratings) (0.0.0). Certain other requirements are specific to instances in which the transmission owner and transmission provider are not the same entity, or to RTOs/ISOs, and therefore Filing Parties need not demonstrate compliance with these requirements. *See* Order No. 881, 177 FERC ¶ 61,179 at PP 6 n.9, 330.

²⁴ *Id.* P 143.

²⁵ *See id.*

implementation and that additional time may be necessary to comply with this requirement. Accordingly, we direct Filing Parties to file, no later than November 12, 2024, eight months prior to Filing Parties' HVDC TOA Attachment M and Schedule 20A-Common Attachment M implementation date of July 12, 2025, a further compliance filing that provides this explanation.²⁶

2. Miscellaneous Issues

a. Effective Date

i. Filings

14. Filing Parties request that the proposed changes be made effective on September 20, 2022, or any subsequent date that the Commission may designate. Filing Parties propose an implementation date of July 12, 2025 in its Attachment M to the HVDC TOA.²⁷ Filing Parties also propose to specify an implementation date of July 12, 2025 in its Attachment M to Schedule 20A-Common.²⁸

ii. Commission Determination

15. We find that granting an effective date of September 10, 2022, as requested, could cause confusion because the proposed effective date of the compliance filing would then differ from the proposed July 12, 2025 implementation date mentioned in Attachment M to the HVDC TOA and Attachment M to Schedule 20A-Common. We therefore accept Filing Parties' compliance filings, to be effective July 12, 2025, the effective date specified in Attachment M to the HVDC TOA and the Attachment M to Schedule 20A-Common. This finding is without prejudice to any future filings by Filing Parties justifying an earlier effective date.

b. Other Miscellaneous Issues

i. HVDC TOA Proposal

16. Filing Parties state that there are a number of deviations from the *pro forma* Attachment M in the new Attachment M to the HVDC TOA to account for the

²⁶ ISO-NE should submit its compliance filing in an eTariff submittal using Type of Filing Code 80 – Compliance Filing in the above-referenced docket.

²⁷ Proposed HVDC TOA, attach. M.

²⁸ Proposed Schedule 20A-Common, attach. M.

characteristics of the Phase I/II HVDC-TF.²⁹ Filing Parties explain that various defined terms in Attachment M to the HVDC TOA are made specific to the “HVDC-TF.” For example, ISO-NE proposes the following definition of “Transmission Line Rating” (changes underlined):

“HVDC-TF Transmission Line Rating” means the maximum transfer capability of an HVDC-TF transmission line, computed in accordance with a written HVDC-TF 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.³⁰

17. Additionally, Filing Parties state that definitions in the HVDC TOA related to transmission service are defined by cross-reference to Schedule 20A-Common, where those terms are fully defined and that where appropriate, the term “Transmission Provider” has been replaced with “Asset Owner.”³¹ Finally, Filing Parties state that references have been added throughout to other parts of the HVDC TOA and any applicable ISO-NE Operating Documents.³² For example, Filing Parties propose to modify the *pro forma* Attachment M “Obligations of the Transmission Provider” section in the following manner (changes underlined):

Each Asset Owner ~~The Transmission Provider~~ must use uniquely determined Emergency HVDC-TF Ratings, as specified in any applicable ISO New England Operating Documents and as determined consistent with the rights and obligations of the Parties under this HVDC TOA, for contingency analysis ~~in the operations horizon~~ and in post-contingency simulations of constraints. Such uniquely determined Emergency HVDC-TF Ratings must also include separate AAR calculations for each Emergency HVDC-TF Rating duration used.³³

²⁹ Filing, Transmittal Letter at 12-13.

³⁰ Proposed Schedule 20A-Common, attach. M.

³¹ Filing, Transmittal Letter at 13.

³² *Id.*

³³ Proposed Schedule 20A-Common, attach. M.

ii. Schedule 20A-Common Proposal

18. Filing Parties propose to replace the *pro forma* OATT Attachment M term “Near-Term Service” with “Near-Term Phase I/II HVDC-TF Service.” Filing Parties state this will clarify that that term is limited to the Phase I/II HVDC-TF and that definitions related to transmission ratings and rating methodologies for the Phase I/II HVDC-TF are defined by cross-reference to the HVDC TOA, where those terms are fully defined. In addition, Filing Parties state that, where appropriate, the term “Transmission Provider” has been replaced with “Schedule 20A Service Provider.”³⁴

c. Commission Determination

19. We find Filing Parties’ proposed revisions to definitions in Attachment M to the HVDC TOA and Schedule 20A-Common are consistent with or superior to the *pro forma* OATT Attachment M’s definitions and therefore accept them.³⁵ Specifically, we find that Filing Parties’ proposed definitions are consistent with or superior to the definition for transmission line rating used in Order No. 881’s *pro forma* OATT Attachment M because the revised definitions account for the unique ownership and governance structure of the Phase I/II HVDC-TF.³⁶

³⁴ Filing, Transmittal Letter at 15.

³⁵ The Commission in Order No. 881 noted that some public utility transmission providers may have provisions in their existing *pro forma* OATTs or other documents subject to the Commission’s jurisdiction that the Commission has deemed to be consistent with or superior to the *pro forma* OATT. The Commission stated that, where these provisions would be modified by the final rule, transmission providers must either comply with the requirements adopted in the final rule or demonstrate that these previously approved variations continue to be consistent with or superior to the *pro forma* OATT, as modified by the final rule. Order No. 881, 177 FERC ¶ 61,179 at P 363.

³⁶ Order No. 881, 177 FERC ¶ 61,179 at P 44.

The Commission orders:

(A) Filing Parties' compliance filings are hereby accepted, to be effective July 12, 2025, subject to further compliance, as discussed in the body of this order.

(B) Filing Parties are hereby directed to submit a further compliance filing, no later than November 2024, explaining its AAR timelines, as discussed in the body of this order.

By the Commission.

(S E A L)

Debbie-Anne A. Reese,
Deputy Secretary.