

170 FERC ¶ 61,209
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Neil Chatterjee, Chairman;
Richard Glick and Bernard L. McNamee.

ISO New England Inc.
Participating Transmission Owners Administrative
Committee

Docket No. ER19-1951-000

ORDER ON COMPLIANCE

(Issued March 19, 2020)

1. On May 22, 2019, ISO New England Inc. (ISO-NE), joined by the Participating Transmission Owners Administrative Committee (PTO AC) on behalf of the New England Participating Transmission Owners (PTOs) (collectively, Filing Parties) submitted proposed revisions to the ISO-NE Transmission, Markets and Services Tariff (Tariff) in compliance with the requirements of Order Nos. 845 and 845-A,¹ which amended the Commission's *pro forma* Large Generator Interconnection Agreement (LGIA) and *pro forma* Large Generator Interconnection Procedures (LGIP).² As discussed below, we find that Filing Parties' filing partially complies with the requirements of Order Nos. 845 and 845-A. Accordingly, we accept Filing Parties' compliance filing, to become effective as of the date of this order, and direct Filing Parties to submit a further compliance filing within 120 days of the date of this order.

¹ *Reform of Generator Interconnection Procedures and Agreements*, Order No. 845, 163 FERC ¶ 61,043 (2018), *errata notice*, 167 FERC ¶ 61,123, *order on reh'g*, Order No. 845-A, 166 FERC ¶ 61,137 (2019), *errata notice*, 167 FERC ¶ 61,124, *order on reh'g*, Order No. 845-B, 168 FERC ¶ 61,092 (2019).

² The *pro forma* LGIP and *pro forma* LGIA establish the terms and conditions under which public utilities that own, control, or operate facilities for transmitting energy in interstate commerce must provide interconnection service to large generating facilities. Order No. 845, 163 FERC ¶ 61,043 at P 6.

I. Background

2. On April 19, 2018, the Commission issued Order No. 845, which revised the Commission's *pro forma* LGIA and the *pro forma* LGIP to improve certainty for interconnection customers, promote more informed interconnection decisions, and enhance the interconnection process. The Commission stated that it expects that these reforms will provide interconnection customers better information and more options for obtaining interconnection service, and as a result, there will be fewer overall interconnection requests and fewer interconnection requests failing to reach commercial operation. The Commission also stated that it expects that, as a result of these reforms, transmission providers will be able to focus resources on those interconnection requests most likely to reach commercial operation.³ In Order No. 845-A, the Commission generally upheld the reforms it required in Order No. 845 but granted certain requests for rehearing and clarification.

3. In Order No. 845, the Commission adopted 10 different reforms in three categories to improve the interconnection process. First, in order to improve certainty for interconnection customers, the Commission: (1) removed the limitation that interconnection customers may exercise the option to build the transmission provider's interconnection facilities⁴ and stand alone network upgrades⁵ only in instances when the transmission provider cannot meet the dates proposed by the interconnection customer;⁶

³ *Id.* P 2; Order No. 845-A, 166 FERC ¶ 61,137 at P 1.

⁴ Transmission provider's interconnection facilities are "all facilities and equipment owned, controlled or operated by the Transmission Provider from the Point of Change of Ownership to the Point of Interconnection as identified in Appendix A to the Standard Large Generator Interconnection Agreement, including any modifications, additions or upgrades to such facilities and equipment. Transmission Provider's Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades." *Pro forma* LGIA art. 1 (Definitions).

⁵ Stand alone network upgrades are "Network Upgrades that an Interconnection Customer may construct without affecting day-to-day operations of the Transmission System during their construction. Both the Transmission Provider and the Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to the Standard Large Generator Interconnection Agreement." *Id.*

⁶ Order No. 845, 163 FERC ¶ 61,043 at P 85.

and (2) required that transmission providers establish interconnection dispute resolution procedures that allow a disputing party unilaterally to seek non-binding dispute resolution.⁷

4. Second, to promote more informed interconnection decisions, the Commission: (1) required transmission providers to outline and make public a method for determining contingent facilities;⁸ (2) required transmission providers to list the specific study processes and assumptions for forming the network models used for interconnection studies; (3) revised the definition of “Generating Facility” to explicitly include electric storage resources; and (4) established reporting requirements for aggregate interconnection study performance.⁹

5. Third, the Commission adopted reforms to enhance the interconnection process by: (1) allowing interconnection customers to request a level of interconnection service that is lower than their generating facility capacity; (2) requiring transmission providers to allow for provisional interconnection agreements that provide for limited operation of a generating facility prior to completion of the full interconnection process; (3) requiring transmission providers to create a process for interconnection customers to use surplus interconnection service¹⁰ at existing points of interconnection; and (4) requiring transmission providers to set forth a procedure to follow when assessing and, if necessary, studying an interconnection customer’s technology changes without affecting the interconnection customer’s queue position.¹¹

⁷ *Id.* P 3.

⁸ Contingent facilities are “those unbuilt Interconnection Facilities and Network Upgrades upon which the Interconnection Request’s costs, timing, and study findings are dependent, and if delayed or not built, could cause a need for Re-Studies of the Interconnection Request or a reassessment of the Interconnection Facilities and/or Network Upgrades and/or costs and timing.” *Pro forma* LGIP § 1 (Definitions).

⁹ Order No. 845, 163 FERC ¶ 61,043 at P 4.

¹⁰ Order No. 845 added a definition for “Surplus Interconnection Service” to section 1 of the *pro forma* LGIP and article 1 of the *pro forma* LGIA, defining the term as “any unused portion of Interconnection Service established in a Large Generator Interconnection Agreement, such that if surplus interconnection service is utilized the Interconnection Service limit at the Point of Interconnection would remain the same.” *Id.* P 459.

¹¹ *Id.* P 5.

II. Filing Parties' Compliance Filing

6. On May 22, 2019, Filing Parties submitted proposed revisions to the ISO-NE LGIP and ISO-NE *pro forma* LGIA in Schedule 22 of section II of the Tariff to comply with the requirements of Order Nos. 845 and 845-A. Filing Parties state that the proposed revisions largely reflect the Commission's amendments to its *pro forma* LGIP and *pro forma* LGIA with certain variations proposed under the standards established in Order No. 2003. As discussed further below, Filing Parties seek both independent entity variations and one revision under the "consistent with or superior to" standard.¹²

7. Filing Parties state that the ISO-NE LGIP and ISO-NE *pro forma* LGIA were customized at their inception to accommodate differences between ISO-NE's Tariff, markets, and operational needs and those of other regions. Filing Parties also state that, through Federal Power Act section 205 filings, the ISO-NE LGIP and ISO-NE *pro forma* LGIA have been further enhanced in the intervening years to address concerns unique to the region. Filing Parties state that the variations they are proposing in this filing are necessary to integrate the Commission's *pro forma* revisions adopted in Order Nos. 845 and 845-A to the constructs, definitions, and terminology that are unique to ISO-NE and that were previously accepted by the Commission for inclusion in the Tariff.¹³

8. Filing Parties request that the Commission make their proposed revisions effective upon issuance of its order accepting this filing.¹⁴

¹² Filing Parties May 22, 2019 Compliance Filing at 1-2 (citing *Standardization of Generator Interconnection Agreements and Procedures*, Order No. 2003, 104 FERC ¶ 61,103, at P 826 (2003), *order on reh'g*, Order No. 2003-A, 106 FERC ¶ 61,220, *order on reh'g*, Order No. 2003-B, 109 FERC ¶ 61,287 (2004), *order on reh'g*, Order No. 2003-C, 111 FERC ¶ 61,401 (2005), *aff'd sub nom. Nat'l Ass'n of Regulatory Util. Comm'rs v. FERC*, 475 F.3d 1277 (D.C. Cir. 2007)) (Filing).

¹³ *Id.* at 2.

¹⁴ *Id.*

III. Notice and Responsive Pleadings

9. Notice of Filing Parties' compliance filing was published in the *Federal Register*, 84 Fed. Reg. 24,770 (May 29, 2019), with interventions and protests due on or before June 26, 2019.¹⁵

10. The following parties submitted timely motions to intervene: Avangrid Networks, Inc.; Calpine Corporation; Clean Energy Entities;¹⁶ Dominion Energy Services, Inc.; EDF Renewables, Inc.; EDP Renewables North America LLC; Electric Power Supply Association; Enel Green Power North America, Inc.; Energy Storage Association (ESA); E.ON Climate & Renewables North America, LLC; Eversource Energy Service Company; Massachusetts Attorney General Maura Healey (Massachusetts Attorney General); National Grid; New England Power Pool Participants Committee (NEPOOL); NRG Power Marketing LLC; and Renewable Energy Systems Americas, Inc.. Clean Energy Entities, ESA, Massachusetts Attorney General, and NEPOOL filed protests. On July 11, 2019, Filing Parties filed an answer.

IV. Discussion

A. Procedural Matters

11. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2019), the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

12. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2019), prohibits an answer to a protest unless otherwise ordered by the decisional authority. We accept Filing Parties' answer because it has provided information that assisted us in our decision-making process.

B. Substantive Matters

13. As discussed below, we find that Filing Parties' filing partially complies with the requirements of Order Nos. 845 and 845-A. Accordingly, we accept Filing Parties' compliance filing, effective as of the date of this order, and direct Filing Parties to submit a further compliance filing within 120 days of the date of this order.

¹⁵ On June 7, 2019, the Commission extended the deadline for filing comments from June 12, 2019, to June 26, 2019. Notice Granting Extension of Time, Docket Nos. ER19-1949-000, et al. (June 7, 2019).

¹⁶ Clean Energy Entities include the American Wind Energy Association, the Solar Energy Industries Association, and the Solar Council.

1. Proposed Variations

14. As discussed further below, Filing Parties have requested certain variations from the Commission's requirements in Order Nos. 845 and 845-A. The Commission explained in Order No. 845 that such variations would be reviewed under the same standard allowed by Order No. 2003. The Commission explained that Order No. 2003 permits a Regional Transmission Organization/Independent System Operator (RTO/ISO) to seek "independent entity variations" for pricing and non-pricing provisions, and that RTOs/ISOs "shall have greater flexibility to customize [their] interconnection procedures and agreement to fit regional needs."¹⁷ The Commission in Order No. 2003 stated that this balanced approach recognizes that an RTO/ISO is less likely to act in an unduly discriminatory manner than a transmission provider that is a market participant; an RTO/ISO therefore has greater flexibility to customize its interconnection procedures and agreements to fit regional needs.¹⁸ The Commission has granted independent entity variations from rulemakings where an RTO/ISO demonstrates that the proposed variation: (1) is just and reasonable, and not unduly discriminatory or preferential; and (2) accomplishes the purposes of the order.¹⁹ It is not a sufficient justification to state that a variation conforms to current RTO/ISO practices or to the RTO's/ISO's tariff definitions and terminology.²⁰ Even if the transmission provider is an RTO/ISO, it must still justify its variations in light of the Commission's *pro forma* LGIP and/or *pro forma* LGIA.²¹ We will evaluate Filing Parties' proposed independent entity variations from the requirements of Order Nos. 845 and 845-A accordingly.

15. Additionally, because the PTOs, rather than ISO-NE, are sponsoring one of the variations,²² the Commission must evaluate that variation under the standard established

¹⁷ Order No. 845, 163 FERC ¶ 61,043 at P 825 (citing Order No. 2003, 104 FERC ¶ 61,103 at P 826).

¹⁸ Order No. 2003, 104 FERC ¶ 61,103 at P 827.

¹⁹ See, e.g., *ISO New England, Inc.*, 164 FERC ¶ 61,222, at P 9 (2018) (citing Order No. 2003, 104 FERC ¶ 61,103 at PP 26, 827; *Midcontinent Indep. Sys. Operator, Inc.*, 154 FERC ¶ 61,247, at P 20 (2016); *California Indep. Sys. Operator Corp.*, 140 FERC ¶ 61,070, at P 44 (2012)).

²⁰ *Midwest Indep. Sys. Operator, Inc.*, 139 FERC ¶ 61,219, at P 9 (2012).

²¹ See *PJM Interconnection, L.L.C.*, 108 FERC ¶ 61,025, at P 16 (2004), *reh'g denied*, 110 FERC ¶ 61,099 (2005).

²² The PTOs sponsor the proposed variation regarding oversight costs related to the option to build reform, which is discussed later in this order.

in Order No. 2003 for non-RTO/ISO transmission providers. In Order No. 2003, the Commission permitted non-RTO/ISO transmission providers to seek variations from the *pro forma* LGIP and/or *pro forma* LGIA if they were “consistent with or superior to” the terms of the *pro forma* LGIP and *pro forma* LGIA.²³ A transmission provider seeking a “consistent with or superior to” variation must demonstrate why its proposal is consistent with or superior to the *pro forma* LGIP and/or *pro forma* LGIA.²⁴ The Commission also permitted non-RTO/ISO transmission providers to justify a variation to the *pro forma* LGIA or LGIP based on regional reliability requirements and required transmission providers submitting such regional reliability variations to the Commission for approval to identify the proposed variations and explain why such variations are necessary.²⁵ We will evaluate Filing Parties’ PTO-sponsored proposed variation from the requirements of Order Nos. 845 and 845-A accordingly.

2. Interconnection Customer’s Option to Build

16. In Order No. 845, the Commission revised articles 5.1, 5.1.3, and 5.1.4 of the *pro forma* LGIA to allow interconnection customers to unilaterally exercise the option to build for stand alone network upgrades and the transmission provider’s interconnection facilities, regardless of whether the transmission provider can complete construction of such facilities by the interconnection customer’s proposed in-service date, initial synchronization date, or commercial operation date.²⁶ Prior to Order No. 845, this option to build was available to an interconnection customer only if the transmission provider did not agree to the interconnection customer’s preferred construction timeline.²⁷ The Commission stated in Order No. 845 that this reform of the option to build will “benefit the interconnection process by providing interconnection customers more control and certainty during the design and construction phases of the interconnection process.”²⁸

17. In Order No. 845-A, the Commission granted rehearing and clarification of certain aspects of the revised option to build. Specifically, the Commission revised the definition of stand alone network upgrade in the *pro forma* LGIP and *pro forma* LGIA to:

²³ Order No. 2003, 104 FERC ¶ 61,103 at P 26.

²⁴ *See, e.g., Nev. Power Co.*, 167 FERC ¶ 61,086, at P 3 (2019).

²⁵ Order No. 2003, 104 FERC ¶ 61,103 at P 826; Order No. 2003-A, 106 FERC ¶ 61,220 at P 45.

²⁶ Order No. 845, 163 FERC ¶ 61,043 at PP 85-87.

²⁷ Order No. 2003, 104 FERC ¶ 61,103 at P 353; *see also pro forma* LGIP § 5.1.3.

²⁸ Order No. 845, 163 FERC ¶ 61,043 at P 85.

(1) state that, when there is a disagreement, the transmission provider must provide the interconnection customer a written technical explanation outlining why the transmission provider does not consider a specific network upgrade to be a stand alone network upgrade;²⁹ and (2) clarify that the option to build does not apply to stand alone network upgrades on affected systems.³⁰ The Commission also made revisions to article 5.2 of the *pro forma* LGIA to allow transmission providers to recover oversight costs related to the interconnection customer's option to build.³¹ Specifically, the Commission revised *pro forma* LGIA article 5.2 to state that "Interconnection Customer shall pay Transmission Provider the agreed upon amount of [\$ PLACEHOLDER] for Transmission Provider to execute responsibilities enumerated to Transmission Provider under Article 5.2." The Commission included the bracketed placeholder for the transmission provider and interconnection customer to negotiate the oversight cost amount and to "clearly state" that amount "in the LGIA."³² In addition, the Commission clarified that the revised option to build provisions apply to all public utility transmission providers, including those that reimburse the interconnection customer for network upgrades.³³

a. **Filing Parties' Compliance Filing**

i. **Revisions to the Definition of 'Stand Alone Network Upgrades'**

18. Filing Parties propose two conforming changes in the definition of "Stand Alone Network Upgrades" as independent entity variations. First, consistent with Order No. 845-A's clarification that "the option to build does not apply to stand alone network upgrades on affected systems," Filing Parties propose to delete "Affected System" from the list of parties that must mutually agree to the identification of an upgrade as stand alone.³⁴ Second, Filing Parties propose to revise the "Stand Alone Network Upgrades" definition to specify that the 15-day period for the system operator to provide a written

²⁹ Order No. 845-A, 166 FERC ¶ 61,137 at P 68.

³⁰ *Id.* P 61.

³¹ *Id.* P 75.

³² *Id.*

³³ *Id.* P 33.

³⁴ Filing at 18 (citing ISO-NE LGIP at § 1 (deleting from "Stand Alone Network Upgrades" definition "and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements"); ISO-NE LGIA at art. 1 (definition of Stand Alone Network Upgrades)).

explanation for why an upgrade is not considered a stand alone network upgrade is 15 “Business Days” (as opposed to calendar days). Filing Parties state that this proposed revision is consistent with the construct of the ISO-NE LGIP and *pro forma* LGIA, which generally specifies business days for time periods that are less than 30 days.

ii. Additional Milestones

19. Filing Parties seek an independent entity variation to revise ISO-NE *pro forma* LGIA article 5.2(1) to add milestones for tracking an interconnection customer’s progress toward interconnection when the option to build is exercised. Specifically, Filing Parties propose in *pro forma* LGIA article 5.2(1) that the interconnection customer shall commit in the LGIA to a schedule for the completion of and provide the ISO-NE with evidence of proceeding with: (a) engineering and design of interconnecting transmission owner’s interconnection facilities and stand alone network upgrades, (b) procurement of necessary equipment and ordering of long lead time material, and (c) construction of the interconnecting transmission owner’s interconnection facilities and stand alone network upgrades. Filing Parties state that the commitments reflected in these milestones do not impose additional burdens on interconnection customers pursuing the option to build. Filing Parties explain that the milestone dates would reflect the interconnection customer’s schedule for meeting its commercial operation date (a schedule required already by ISO-NE LGIP section 11.3.1.2) with the existing consequences for missing these deadlines. Filing Parties state that the milestones also are consistent with those that apply to interconnection customers that waive the facilities study under ISO-NE LGIP section 7.5.³⁵

20. Filing Parties contend that tracking certain milestones will help ISO-NE understand the interconnection customer’s commitment toward achieving interconnection and better ensure that the option is not being exercised to avoid deposit requirements when there is no immediate intent to move forward with development. Filing Parties state that the proposed variation meets the Commission’s objective of providing the interconnection customer with control over the schedule for the design and construction of its facilities, while balancing ISO-NE’s interest in ensuring that projects continue to move toward interconnection without increasing uncertainties for other projects in the queue.³⁶

21. In light of the proposed milestones, Filing Parties propose to clarify in ISO-NE *pro forma* LGIA article 5.2(5) that, prior to the commencement of construction, the interconnection customer shall provide to ISO-NE any changes in the construction schedule that is reflected in *pro forma* LGIA Appendix B. Filing Parties also propose to

³⁵ *Id.* at 15.

³⁶ *Id.* at 16.

revise ISO-NE *pro forma* LGIA articles 5.2(9) and 5.2(10) to clarify the timing for the existing requirement that the interconnection customer transfer ownership and control of the interconnection facilities and stand alone network upgrades that it builds to the interconnecting transmission owner. Filing Parties' proposed revisions state that the interconnection customer shall transfer ownership and control of those facilities to the interconnecting transmission owner prior to the interconnection customer's requested in-service date. ISO-NE states that these revisions are necessary so that the facilities are fully under ISO-NE's operational authority before they are ready to be used to obtain backfeed power.³⁷

iii. Upgrades Not Subject to the Option to Build

22. Filing Parties seek an independent entity variation for proposed revisions to ISO-NE *pro forma* LGIA article 5.1.3 to specify a circumstance when the option to build is unavailable. Specifically, Filing Parties propose to revise ISO-NE *pro forma* LGIA article 5.1.3 to make the option to build unavailable for a stand alone network upgrade or interconnecting transmission owner's interconnection facility if constructing such a facility involves the moving or outage of existing transmission equipment, except for the outage necessary to connect or tie in the completed facilities to the existing system. Filing Parties state that the proposed variation will address disagreements among New England stakeholders that could become more prevalent with the removal of the Order No. 2003 option to build trigger.³⁸ As an example, Filing Parties state that a new line that ordinarily qualifies as an interconnecting transmission owner's interconnection facility or stand alone network upgrade would not be eligible for the option to build when the new line needs to be installed in an existing right of way of the transmission owner and the installation requires the dismantling, moving, and rebuilding of an existing line on the same right of way, regardless of whether that new line is located beyond the point of interconnection. Filing Parties state that the extent of required coordination of the outages of the existing line and the safety concerns regarding the construction and installation of the new line in the same right of way are such that the day-to-day operations of the transmission owner always would be affected.³⁹

³⁷ *Id.*

³⁸ *Id.* at 17 (citing *ISO New England Inc.*, 162 FERC ¶ 61,058, at PP 26-41 (2018)).

³⁹ *Id.*

iv. **Recovery of Oversight Costs**

23. Filing Parties seek the next variation under the “consistent with or superior to” standard.⁴⁰ Filing Parties note that, in Order No. 845-A, the Commission revised *pro forma* LGIA article 5.2 to include a dollar placeholder for transmission providers to recover the oversight costs related to the option to build.⁴¹ Rather than adopt the Commission’s inclusion of an estimated placeholder amount divided on a monthly basis and recovered from the interconnection customer, Filing Parties propose to charge an interconnection customer for the actual costs incurred by the interconnecting transmission owner to execute the responsibilities enumerated in ISO-NE *pro forma* LGIA article 5.2. Filing Parties propose to charge for actual costs consistent with ISO-NE *pro forma* LGIA article 12 under the assumption that spending and, therefore, the collection of fees will ramp up over the course of construction, subject to the audit and dispute resolution provisions in article 12.

24. Filing Parties state that recovering actual oversight costs is just and reasonable and consistent with how all other interconnection-related costs are recovered in the ISO-NE region. To justify the variation, Filing Parties state that they can apply the same logic that NEPOOL used in its Order No. 2003 compliance filing to justify deviations from the *pro forma* LGIA on transmission costs and credits. Filing Parties state that, in that compliance filing, NEPOOL argued that “generators do not pay for transmission service, so there are no transmission charges against which a credit contemplated by the *pro forma* LGIA could be applied.”⁴² Filing Parties state that, because the region’s cost allocation mechanisms “were established after lengthy litigation that need not (and should not) be revisited,” NEPOOL argued, and the Commission agreed, that it was appropriate to permit New England to continue its own pricing approach.⁴³ Similarly, Filing Parties state that the recovery of actual oversight costs related to the

⁴⁰ Filing Parties explain that, pursuant to the PTOs’ sole filing rights over cost recovery and financial obligation provisions, the PTOs jointly support the proposed revisions regarding oversight costs in ISO-NE *pro forma* LGIA article 5.2. Filing at 1 n.4. Filing Parties note that, in Order No. 845, the Commission found that, if a non-RTO/ISO seeks a variation for any reason, it must present its justification for the variations as “consistent with or superior to” the *pro forma* LIGA or *pro forma* LGIP. Filing at 6 (citing Order No. 845, 163 FERC ¶ 61,043 at P 43).

⁴¹ Filing at 18 (citing Order No. 845-A, 166 FERC ¶ 61,137 at PP 4, 75).

⁴² *Id.* at 19 (citing *New England Power Pool*, 109 FERC ¶ 61,155, at P 84 (2004)).

⁴³ *Id.* (citing *New England Power Pool*, 109 FERC ¶ 61,155 at PP 84-85).

interconnection customer's exercising its option to build is consistent with New England's existing, Commission-approved market design.⁴⁴

25. Filing Parties state that requiring interconnection customers to pay only actual oversight costs satisfies the Commission's requirement that variations are consistent with or superior to the *pro forma* LGIA. Filing Parties state that interconnection customers will benefit from this structure because they will avoid paying more than the actual costs of oversight, in contrast to paying a negotiated amount that could exceed actual costs incurred. Similarly, Filing Parties state that the timing of payment of any oversight costs will more closely track the financing and construction of a large generating facility, thereby reducing the risk of a developer paying a monthly fee for oversight costs that are never incurred because a project does not go forward. Filing Parties state that charging only actual costs incurred will provide interconnection customers the rights outlined in ISO-NE *pro forma* LGIA article 12 (i.e., they will receive a final account that reconciles the costs of the oversight activities with any amounts collected with a right to dispute any charges). Filing Parties claim that charging actual oversight costs at the outset, rather than including a placeholder figure in the ISO-NE *pro forma* LGIA, has numerous benefits to the ISO-NE interconnection process. Filing Parties contend that this provision will facilitate the orderly development and execution of LGIAs by providing a consistent approach across the region and reducing the risk of protracted negotiations (or the filing of unexecuted LGIAs), which could introduce inefficiencies into the interconnection process.⁴⁵

b. Protests

26. NEPOOL opposes Filing Parties' proposed variation to provide for the recovery of actual costs associated with transmission owner oversight of an interconnection customer's exercise of its option to build. NEPOOL prefers the Commission's *pro forma* provision, which allows for a negotiated determination of such costs at a stated amount.⁴⁶ NEPOOL contends that, in Order No. 845-A, the Commission stated its intention that it "expect[ed] the transmission provider and interconnection customer to negotiate this amount and clearly state it in the LGIA."⁴⁷

⁴⁴ *Id.* (citing Tariff schedule 11 § 2 ("One hundred percent of Direct Interconnection Transmission Costs shall be the responsibility of the Generator Owner....")).

⁴⁵ *Id.*

⁴⁶ NEPOOL Protest at 2.

⁴⁷ *Id.* at 17 (citing Order No. 845-A, 166 FERC ¶ 61,137 at P 75).

27. NEPOOL adds that Filing Parties have failed to meet their burden of showing that the proposed deviation would be “consistent with or superior to” the *pro forma* requirement under the standard for deviations proposed by non-independent entities, which is required when the PTOs, not ISO-NE, sponsor a variation.⁴⁸

28. The Massachusetts Attorney General also argues that the Commission should reject this proposed variation as unjust and unreasonable. The Massachusetts Attorney General claims that the PTOs employ experienced professionals familiar with the extent and cost of the oversight. The Massachusetts Attorney General argues that allowing the PTOs to recover their actual costs unilaterally, with no limitation as to whether such costs are reasonable, gives PTOs no incentive to control those costs and risks imposing on the interconnecting generator large cost overruns for which it will have no recourse. The Massachusetts Attorney General contends that removing the requirement to determine a negotiated cost would create more uncertainty, not less, and would constitute another unreasonable barrier to the interconnection process.⁴⁹

c. Filing Parties’ Answer

29. Filing Parties argue that they have justified their proposed variation as consistent with or superior to the Commission’s *pro forma* LGIA language. Filing Parties contend that the variation meets this standard because the proposal will likely result in lower costs for New England customers and provide benefits associated with ISO-NE *pro forma* LGIA article 12.⁵⁰

30. With regard to the Massachusetts Attorney General’s argument that the oversight cost proposal should be rejected because the PTOs employ experienced professionals who are aware of potential oversight costs, Filing Parties respond that, in New England’s and the PTOs’ experience in the development of cost-estimating guidelines for transmission, it is nearly impossible to know at a project’s outset which issues might arise during design, engineering, and construction that could impact the amount of oversight

⁴⁸ *Id.* at 17-18. NEPOOL claims the Filing Parties’ transmittal letter is not clear about the fact that ISO-NE is not sponsoring this deviation. NEPOOL points out that note 4 of the transmittal letter states that the PTOs are exercising their FPA section 205 filing rights regarding this issue but that note 4 does not state ISO-NE’s position regarding this deviation. NEPOOL understands that only the PTOs sponsor this deviation.

⁴⁹ Massachusetts Attorney General Protest at 9-10.

⁵⁰ ISO-NE Answer at 21.

and its cost.⁵¹ Filing Parties explain that, in many cases, construction will occur several years after execution of an LGIA, making it difficult to develop an accurate estimate of variables such as labor and material costs. Filing Parties state that, in the case of the option to build, PTOs will have to develop the project oversight costs figure with limited information on how the interconnection customer intends to design, engineer, and construct the project. Filing Parties argue that the unintended consequences of using stated costs, rather than actual costs, could be not only a shift in costs from interconnection customer to PTO, but also an increase in costs because costs will necessarily reflect uncertainties.⁵²

31. Filing Parties add that ISO-NE's entire interconnection process is set up to ensure that PTOs charge only reasonable costs to interconnection customers. Filing Parties claim that there is no incentive for a PTO to charge unreasonable costs for oversight because the LGIA provides interconnection customers with audit rights and the ability to dispute charges.⁵³

d. Commission Determination

32. We find that Filing Parties' proposed revisions to the ISO-NE LGIP and ISO-NE *pro forma* LGIA partially comply with the requirements of Order Nos. 845 and 845-A. Specifically, we find that Filing Parties' revisions comply with the requirement to allow interconnection customers to exercise unilaterally the option to build. However, we find that Filing Parties have not sufficiently justified their proposal to revise the "Stand Alone Network Upgrades" definition to specify that the 15-day period for the system operator to provide a written explanation for why an upgrade is not considered a stand alone network upgrade is 15 business days instead of 15 calendar days. Filing Parties state that this proposed revision is consistent with the construct of the ISO-NE LGIP and *pro forma* LGIA. Even if this were true, such consistency is not a sufficient justification for an independent entity variation.⁵⁴ Accordingly, within 120 days of the date of this order, we direct Filing Parties either to provide sufficient justification or to submit proposed Tariff revisions that make no modification to the 15-day period for the system operator to

⁵¹ *Id.* at 22 (citing ISO-NE, *Attachment D to ISO-New England Procedure 4* (Sept. 17, 2016), https://www.iso-ne.com/static-assets/documents/rules_proceeds/isone_plan/pp04_0/pp4_0_attachment_d.pdf (Project Cost Estimating Guidelines)).

⁵² *Id.* at 22-23.

⁵³ *Id.* at 23.

⁵⁴ *Midwest Indep. Sys. Operator, Inc.*, 139 FERC ¶ 61,219 at P 9 (explaining that an RTO/ISO must justify its variations in light of the Commission's *pro forma* language).

provide a written explanation for why an upgrade is not considered a stand alone network upgrade.

33. As discussed further below, Filing Parties also propose two independent entity variations and one variation under the “consistent with or superior to” standard. Because we reject this latter variation, as discussed further below, we direct Filing Parties to submit, within 120 days of this order, a further compliance filing to address the requirements of Order Nos. 845 and 845-A discussed herein.

34. We accept Filing Parties’ proposed independent entity variations in ISO-NE *pro forma* LGIA articles 5.2(1), 5.2(5), 5.2(9), and 5.2(10) and Appendix B of the *pro forma* LGIA to adopt milestones already required by the ISO-NE LGIP to track an interconnection customer’s progress toward interconnection. Because these milestones enhance ISO-NE’s ability to manage the interconnection process without imposing additional burdens on interconnection customers, given that the milestones are required already by ISO-NE LGIP section 11.3.1.2, we find that they are just and reasonable, are not unduly discriminatory or preferential, and accomplish the purposes of Order Nos. 845 and 845-A.

35. We reject Filing Parties’ proposed independent entity variation in ISO-NE *pro forma* LGIA article 5.1.3, which limits the interconnection customer’s ability to exercise the option to build under certain specified circumstances. Filing Parties argue that any movement or outage of existing transmission equipment would cause an impact on the day-to-day operations of the transmission owner, regardless of whether the transmission equipment was considered a stand alone network upgrade or a transmission owner’s interconnection facility. To begin with, we agree that the interconnection customer’s option to build does not apply to any network upgrade that affects day-to-day operations of the transmission owner’s system because such upgrades would, by definition, not qualify as stand alone network upgrades. However, Order Nos. 2003, 845, and 845-A require that transmission owner interconnection facilities be eligible for the interconnection customers to construct under the option to build. The Commission did not limit the option to build for those facilities in the same manner as it did for network upgrades that are not stand alone.⁵⁵ The only justification Filing Parties provide for the proposed variation is that they are concerned about disputes. We find that justification is not sufficient to demonstrate that preventing interconnection customers from constructing certain transmission owner interconnection facilities would accomplish the purposes of Order Nos. 845 and 845-A. Accordingly, we direct Filing Parties to submit a further compliance filing within 60 days of the date of this order with proposed Tariff revisions that remove this variation from ISO-NE *pro forma* LGIA article 5.1.3.

⁵⁵ Order No. 2003, 104 FERC ¶ 61,103 at P 353, Order No. 845, 163 FERC ¶ 61,043 at P 85, Order No. 845-A, 166 FERC ¶ 61,137 at P 68.

36. We reject the Filing Parties' PTO-sponsored proposed variation for transmission owners to recover the actual costs for their oversight responsibilities pursuant to ISO-NE *pro forma* LGIA article 5.2 because this proposal is not consistent with or superior to the oversight cost requirements in the Commission's *pro forma* LGIA. Specifically, the proposed provision is not consistent with Order No. 845-A, which requires "the transmission provider and interconnection customer to negotiate [the oversight cost] and clearly state it in the LGIA."⁵⁶ In addition, Filing Parties have not demonstrated that their proposal is consistent with or superior to the *pro forma* LGIA, especially in light of the Commission's statement in Order No. 845 that the purpose of allowing interconnection customers to exercise the option to build is to "benefit the interconnection process by providing interconnection customers with more control and certainty during the design and construction phase of the interconnection process."⁵⁷ Requiring the parties to agree upon a negotiated oversight cost upfront gives transmission owners an incentive to negotiate in good faith and control their oversight costs. We also note that under the proposal the negotiating parties are not precluded from agreeing to actual costs when cost estimation proves too difficult.

3. Dispute Resolution

37. In Order No. 845, the Commission revised the *pro forma* LGIP by adding new section 13.5.5, which establishes generator interconnection dispute resolution procedures that allow a disputing party to unilaterally seek non-binding dispute resolution.⁵⁸ The Commission established these new procedures because dispute resolution was previously unavailable when the parties did not mutually agree to pursue a binding arbitration under section 13.5 of the pre-Order No. 845 *pro forma* LGIP. The Commission further explained that participation in the new non-binding dispute resolution process in *pro forma* LGIP section 13.5.5 does not preclude disputing parties from pursuing binding arbitration after the conclusion of the non-binding dispute resolution process if they seek a binding result.⁵⁹

⁵⁶ Order No. 845-A, 166 FERC ¶ 61,137 at P 75 (emphasis added).

⁵⁷ Massachusetts Attorney General Protest at 10 (citing Order No. 845, 163 FERC ¶ 61,043 at P 85).

⁵⁸ Order No. 845-A, 166 FERC ¶ 61,137 at P 133; *see also pro forma* LGIP § 13.5.5.

⁵⁹ Order No. 845, 163 FERC ¶ 61,043 at P 139.

a. Filing Parties' Compliance Filing

38. Filing Parties propose to incorporate the *pro forma* LGIP revisions in section 13.5.5 of the ISO-NE LGIP with limited variations that recognize the three-party construct of the ISO-NE *pro forma* LGIA. Filing Parties explain that, unlike the Commission's *pro forma* LGIP, the ISO-NE LGIP includes ISO-NE as the system operator, the respective PTO as the interconnecting transmission owner, and the interconnection customer. Filing Parties explain that, although disputes seldom arise in New England, they can arise between or among any of these three parties. Filing Parties state that, therefore, the term "Transmission Provider" has been replaced with the words "the other Parties" throughout the provision except with respect to the requirement to appoint a neutral decision-maker, in which case the term has been replaced with "System Operator" because ISO-NE is the appropriate party to carry out this responsibility given its role as the RTO/ISO with responsibility of administering the interconnection procedures. Filing Parties add that, consistent with New England's three-party construct, references to "either Party" also have been replaced with "the Parties."⁶⁰

b. Commission Determination

39. We find that Filing Parties' proposed LGIP revisions regarding dispute resolution comply with the requirements of Order Nos. 845 and 845-A. Filing Parties' proposed revisions adopt the Commission's revised *pro forma* LGIP language with only variations to recognize that in ISO-NE there are three entities that may be parties to a dispute. We find that Filing Parties' proposed variations are just and reasonable, are not unduly discriminatory or preferential, and accomplish the purposes of Order No. 845 and 845-A because they accommodate the three-party structure of the ISO-NE *pro forma* LGIA.

4. Identification and Definition of Contingent Facilities

40. In Order No. 845, the Commission added a new definition to section 1 of the *pro forma* LGIP, providing that contingent facilities shall mean those unbuilt interconnection facilities and network upgrades upon which the interconnection request's costs, timing, and study findings are dependent, and if delayed or not built, could cause a need for restudies of the interconnection request or a reassessment of the interconnection facilities and/or network upgrades and/or costs and timing.⁶¹ The Commission also added new section 3.8 to the *pro forma* LGIP, which requires transmission providers to include, within section 3.8, a method for identifying the contingent facilities that they will provide to the interconnection customer at the conclusion of the system impact study and include

⁶⁰ Filing at 20.

⁶¹ Order No. 845, 163 FERC ¶ 61,043 at P 218; *see also pro forma* LGIP § 1 (Definitions).

in the interconnection customer's generator interconnection agreement.⁶² The Commission specified that the method must be sufficiently transparent to determine why a specific contingent facility was identified and how it relates to the interconnection request.⁶³ The Commission stated that this transparency will ensure that the method is applied on a non-discriminatory basis.⁶⁴ The Commission further required that transmission providers provide, upon the interconnection customer's request, the estimated network upgrade costs and estimated in-service completion date associated with each identified contingent facility when this information is readily available and not commercially sensitive.⁶⁵

a. Filing Parties' Compliance Filing

41. Filing Parties request independent entity variations related to the identification of contingent facilities and the definition of "Contingent Facilities" due to the differences in ISO-NE's interconnection queue process and its regional system planning process, through which ISO-NE already identifies contingent facilities and notifies interconnection customers. Specifically, Filings Parties state that only two types of facilities may qualify as contingent facilities in ISO-NE: (1) upgrades that are required to accommodate a higher-queued interconnection request, or (2) upgrades that have been identified as planned or proposed for the New England transmission system in the regional system plan. To accommodate its interconnection queue process, Filing Parties propose to revise the *pro forma* definition of contingent facilities as follows (with Filing Parties' proposed variation underlined):

Contingent Facilities shall mean those unbuilt Interconnection Facilities and Network Upgrades associated with an Interconnection Request with a higher Queue Position or a transmission project that is planned or proposed for the New England Transmission System upon which the Interconnection Request's costs, timing, and study findings are dependent, and if delayed or not built could cause a need for restudies of the Interconnection Request or a reassessment

⁶² Order No. 845, 163 FERC ¶ 61,043 at P 199.

⁶³ *Id.*; see also *pro forma* LGIP § 3.8.

⁶⁴ Order No. 845, 163 FERC ¶ 61,043 at P 200.

⁶⁵ *Id.* P 199; see also *pro forma* LGIP § 3.8.

of the Interconnection Facilities and/or Network Upgrades and/or cost and timing.⁶⁶

42. Filing Parties propose in new LGIP section 3.8 that ISO-NE shall identify contingent facilities before the execution of the LGIA by reviewing the interconnection facilities and network upgrades associated with an interconnection request with a higher queue position, or by reviewing the list of transmission projects planned or proposed for the New England transmission system, to identify those upgrades that are not yet in service but upon which the interconnection request's costs, timing, and study findings are dependent and, if delayed or not built, could cause a need for restudies of the interconnection request or a reassessment of the interconnection facilities and/or network upgrades and/or costs and timing. In addition, any contingent facilities identified during the evaluation of an interconnection request shall be documented in the interconnection system impact study or the LGIA. Filing Parties also propose in LGIP section 3.8 that ISO-NE shall provide, upon the request of the interconnection customer, the estimated interconnection facility and/or network upgrade costs and estimated in-service completion time for each contingent facility when that information is readily available and not commercially sensitive. Filing Parties state that this information will be made available, subject to Critical Energy Infrastructure requirements, on ISO-NE's website. Filing Parties state that their proposed variations are necessary to reflect the existing method that ISO-NE has been using to identify contingent facilities, which accounts for long-standing cost allocation arrangements in the region. Filing Parties assert that their proposed revisions to ISO-NE LGIP section 3.8 provide greater specificity for the method of identifying contingent facilities.⁶⁷

b. Commission Determination

43. We find that the revised provisions that identify and describe ISO-NE's method for determining contingent facilities, as Filing Parties propose in ISO-NE LGIP sections 1 and 3.8, partially comply with the requirements of Order Nos. 845 and 845-A. We also find that Filing Parties comply with the requirements related to providing estimated network upgrade costs and estimated in-service completion dates associated with contingent facilities to the interconnection customer.

44. We find that Filing Parties' adoption of the Commission's *pro forma* definition of contingent facilities, with modifications to reflect differences in ISO-NE's terminology and interconnection queue approach, complies with the requirements of Order Nos. 845 and 845-A. However, as specified in Order No. 845, transmission providers must include,

⁶⁶ Filing at 21.

⁶⁷ *Id.* at 20-22.

in section 3.8 of their LGIPs, a method for determining contingent facilities.⁶⁸ The Commission required that this method provide sufficient transparency to determine why a specific contingent facility was identified and how it relates to the interconnection request.⁶⁹ The Commission also required that a transmission provider's method to identify contingent facilities be transparent enough to ensure that it will be applied on a non-discriminatory basis.⁷⁰ Filing Parties' proposed Tariff revisions lack the requisite transparency required by Order Nos. 845 and 845-A because the proposed Tariff revisions do not detail the specific technical screens or analyses and the specific thresholds or criteria that ISO-NE will use as part of its method to identify contingent facilities. Without this information, an interconnection customer will not understand how ISO-NE will evaluate potential contingent facilities to determine their relationship to an individual interconnection request.⁷¹ Further, including provisions regarding specific thresholds or criteria in the ISO-NE LGIP will ensure ISO-NE's technical screens or analyses will be applied to interconnection requests on a consistent, not unduly discriminatory or preferential basis.

45. We therefore direct Filing Parties to describe in section 3.8 of the ISO-NE LGIP the specific technical screens and/or analyses that it will employ to determine which facilities are contingent facilities. Further, we also direct Filing Parties to describe the specific triggering thresholds or criteria, including the quantitative triggers, that are applied to identify a facility as a contingent facility. In Order No. 845, the Commission declined to implement a standard threshold or criteria, such as a specific distribution factor threshold, because different thresholds may be more appropriate for different queue types and geographical footprints.⁷² However, if, for instance, a transmission provider chooses to use a distribution factor analysis as a technical screen for determining how a new generating facility impacts the surrounding electrically-relevant facilities, its tariff must specify the triggering percentage impact that causes a facility to be considered contingent. Similarly, if a transmission provider relies on the system impact study to identify which facilities the new generating facility will impact, it must specify in its tariff which power system performance attributes (voltages, power flows, etc.) violated a

⁶⁸ Order No. 845, 163 FERC ¶ 61,043 at P 199.

⁶⁹ *Id.* P 200.

⁷⁰ *Id.*

⁷¹ *See pro forma* LGIP § 3.8 (“The method shall be sufficiently transparent to determine why a specific Contingent Facility was identified.”).

⁷² Order No. 845, 163 FERC ¶ 61,043 at P 220.

specific threshold of a facility⁷³ such that the transmission provider would conclude that the facility is contingent for the new generating facility. A transmission provider may use multiple screens or analyses as part of its method, but it must include a corresponding, specific triggering threshold or criterion to indicate how it will apply each screen or analysis.

46. Because Filing Parties have not provided the specificity outlined above and thus do not fully comply with the contingent facility requirements of Order Nos. 845 and 845-A, we direct Filing Parties to submit a further compliance filing, within 120 days of the date of this order, which adds in section 3.8 of the ISO-NE LGIP (1) the method ISO-NE will use to determine contingent facilities, including technical screens or analyses Filing Parties propose to use to identify these facilities and (2) the specific thresholds or criteria ISO-NE will use in its technical screens or analysis to achieve the level of transparency required by Order No. 845, as discussed above.

5. Transparency Regarding Study Models and Assumptions

47. In Order No. 845, the Commission revised section 2.3 of the *pro forma* LGIP to require transmission providers to maintain network models and underlying assumptions on either an Open Access Same-Time Information System (OASIS) site or a password-protected website. If the transmission provider posts this information on a password-protected website, a link to the information must be provided on its OASIS site. Revised *pro forma* LGIP section 2.3 also requires that “network models and underlying assumptions reasonably represent those used during the most recent interconnection study and be representative of current system conditions.”⁷⁴ In addition, the Commission revised *pro forma* LGIP section 2.3 to allow transmission providers to require interconnection customers, OASIS site users, and password-protected website users to sign a confidentiality agreement before the release of commercially sensitive information or critical energy infrastructure information (CEII).⁷⁵

48. In Order No. 845-A, the Commission reiterated that neither the Commission’s CEII regulations nor Order No. 845 precludes a transmission provider from taking necessary steps to protect information within its custody or control to ensure the safety

⁷³ For example, a range for facility per unit voltage may constitute a specific triggering threshold, beyond which the transmission provider will identify the facility as contingent.

⁷⁴ Order No. 845, 163 FERC ¶ 61,043 at P 236.

⁷⁵ *Id.* P 216; *see also pro forma* LGIP § 2.3.

and security of the electric grid.⁷⁶ The Commission also clarified that, to the extent any party would like to use the Commission's CEII regulations as a model for evaluating entities that request network model information and assumptions (prior to signing a non-disclosure agreement), it may do so.⁷⁷ The Commission further clarified that the phrase "current system conditions" does not require transmission providers to maintain network models that reflect current real-time operating conditions of the transmission provider's system. Instead, the network model information should reflect the system conditions currently used in interconnection studies.⁷⁸

a. Filing Parties' Compliance Filing

49. Filing Parties propose to include the language adopted by Order Nos. 845 and 845-A in ISO-NE LGIP section 2.3 with proposed independent entity variations and certain non-substantive conforming changes. First, Filing Parties propose to replace the *pro forma* LGIP section 2.3 language that states that models and assumptions shall be maintained "on either its OASIS site or a password-protected website" with language stating that ISO-NE shall maintain that information "on a secured location on [ISO-NE]'s website." ISO-NE states that this variation represents ISO-NE's current system for maintaining and providing access to base case data, including network models and underlying assumptions. Filing Parties explain that ISO-NE currently maintains this data at a secure location on the ISO-NE website with access available upon completion of the applicable information request process.⁷⁹

⁷⁶ Order No. 845-A, 166 FERC ¶ 61,137 at P 84 (citing Order No. 845, 163 FERC ¶ 61,043 at P 241).

⁷⁷ *Id.* P 85 (citing 18 C.F.R. § 388.113(g)(5)(i) (2019)).

⁷⁸ *Id.* P 88.

⁷⁹ Filing Parties state that following the completion of the applicable process, access to CEII materials is provided through individual-specific digital certificates issued by ISO-NE. Filing Parties explain that digital certificates represent electronic keys that serve to identify the person and provides that person access to the specific ISO-NE application, software, or database hosting the requested information or data. Filing at n.65.

50. Second, Filing Parties propose a variation by adding language requiring that ISO-NE's network models and underlying assumptions be representative of current system conditions "as of the most recent Interconnection Study." Filing Parties state that adding this language to its LGIP section 2.3 is consistent with Order No. 845-A, which clarified that network model information will reflect the system conditions as of the most recent interconnection study performed.⁸⁰

51. Filing Parties also propose conforming ministerial and other clean-up changes to ISO-NE LGIP section 2.3. Specifically, Filing Parties propose to move the provisions regarding OASIS posting requirements and the release of confidential information pursuant to confidentiality agreements into a new, separate paragraph in section 2.3 to improve readability.⁸¹

b. Commission Determination

52. We find that Filing Parties' proposed revisions regarding study models and assumptions comply with the requirements of Order Nos. 845 and 845-A. We agree with Filing Parties that their proposed revisions implement all of the transparency requirements for study models and assumptions required by Order Nos. 845 and 845-A. Filing Parties' variation regarding access to models and assumptions provides more specificity about how to access that information, consistent with ISO-NE's current practices. Filing Parties' proposed variation to clarify that current system conditions represented in the network models are based on those known as of the most recent interconnection study is consistent with Order No. 845-A, which clarified that network model information will reflect the system conditions as of the most recent interconnection study performed.⁸² Further, Filing Parties' proposed ministerial revisions simply reorganize some of the language in *pro forma* LGIP section 2.3 without changing its meaning. Accordingly, we find that Filing Parties' variations are just and reasonable, are not unduly discriminatory or preferential, and accomplish the purposes of Order Nos. 845 and 845-A.

6. Definition of Generating Facility

53. In Order No. 845, the Commission revised the definition of "Generating Facility" to include electric storage resources and to allow electric storage resources to interconnect pursuant to the Commission-jurisdictional large generator interconnection

⁸⁰ *Id.* at 23 (citing Order No. 845-A, 166 FERC ¶ 61,137 at P 88).

⁸¹ *Id.*

⁸² Order No 845-A, 166 FERC ¶ 61,137 at P 88.

processes. Specifically, the Commission revised the definition of “Generating Facility” in the *pro forma* LGIP and *pro forma* LGIA as follows:

Generating Facility shall mean Interconnection Customer’s device for the production *and/or storage for later injection* of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer’s Interconnection Facilities.⁸³

The Commission found that this definitional change will reduce a potential barrier to large electric storage resources with a generating facility capacity above 20 MW that wish to interconnect pursuant to the terms in the *pro forma* LGIP and *pro forma* LGIA.⁸⁴

a. Filing Parties’ Compliance Filing

54. Filing Parties propose revisions to section 1 of the ISO-NE LGIP and the ISO-NE *pro forma* LGIA to incorporate the definition of “Generating Facility” adopted by Orders Nos. 845 and 845-A without modification.⁸⁵

b. Commission Determination

55. We find that Filing Parties’ proposed revisions regarding the definition of a “Generating Facility” comply with the requirements of Order Nos. 845 and 845-A because ISO-NE adopts the Commission’s *pro forma* LGIP and *pro forma* LGIA provisions without modification.

7. Interconnection Study Deadlines

56. In Order No. 845, the Commission modified the *pro forma* LGIP to add sections 3.5.2 and 3.5.3, which require transmission providers to calculate and maintain on their OASIS sites or public websites summary statistics related to the timing of the transmission provider’s processing of interconnection studies and to update those statistics on a quarterly basis.⁸⁶ In these sections, the Commission included bracketed Tariff language to be completed by the transmission provider in accordance with the

⁸³ Order No. 845, 163 FERC ¶ 61,043 at P 275 (additions italicized); *see also pro forma* LGIP § 1 (Definitions).

⁸⁴ Order No. 845, 163 FERC ¶ 61,043 at P 275.

⁸⁵ ISO-NE, Tariff, § II, Schedule 22 (17.0.0), § 1, app. 6, § 1.

⁸⁶ Order No. 845, 163 FERC ¶ 61,043 at P 305; *see also pro forma* LGIP §§ 3.5.2, 3.5.3.

timelines established for the various studies in their LGIPs.⁸⁷ The Commission also revised the *pro forma* LGIP to add section 3.5.4 to require transmission providers to file informational reports with the Commission if a transmission provider exceeds its interconnection study deadlines for more than 25 percent of any study type for two consecutive calendar quarters.⁸⁸ In adopting these reporting requirements, the Commission found that the reporting requirements strike a reasonable balance between providing increased transparency and information to interconnection customers and not unduly burdening transmission providers.⁸⁹ In Order No. 845-A, the Commission revised *pro forma* LGIP section 3.5.3 to clarify that the data reporting and retention requirements begin in the first calendar quarter of 2020.⁹⁰

a. Filing Parties' Compliance Filing

57. Filing Parties propose revisions to the ISO-NE LGIP that add new sections 3.5.2, 3.5.3, and 3.5.4 that incorporate the *pro forma* language of Order Nos. 845 and 845-A without modification, except where required to specify a study timeline. Filing Parties propose revisions to ISO-NE LGIP section 3.5.2.1 to provide for a feasibility study completion deadline of 45 days, ISO-NE LGIP section 3.5.2.2 to provide for a system impact study completion deadline of 90 days, and ISO-NE LGIP section 3.5.2.3 to provide for a facilities study completion deadline of “ninety (90) Calendar Days for no more than +/- 20 percent cost estimate or one hundred eighty (180) Calendar Days for +/- 10 percent cost estimate.”⁹¹

58. In addition, to facilitate the data aggregation required under *pro forma* LGIP section 3.5.4(ii), Filing Parties propose to add language to ISO-NE LGIP sections 3.6 (formerly designated as section 3.5), 6.1, 7.2, and 8.1 to add an invoicing requirement for the interconnecting transmission owner and affected parties to submit their invoices to ISO-NE on a monthly basis and in the form and format specified by ISO-NE. Such

⁸⁷ *Id.*

⁸⁸ Order No. 845, 163 FERC ¶ 61,043 at P 305; *see also pro forma* LGIP § 3.5.4.

⁸⁹ Order No. 845, 163 FERC ¶ 61,043 at P 307.

⁹⁰ Order No. 845-A, 166 FERC ¶ 61,137 at P 107.

⁹¹ ISO-NE, Tariff, § II, Schedule 22 (17.0.0), §§ 3.5.2.1, 3.5.2.2, 3.5.2.3. In an order being issued in Docket No. ER19-1952-000 concurrently with this order, the Commission accepts Tariff revisions proposed by ISO-NE, NEPOOL, and PTO AC to change the amount of time for the feasibility study from 45 days to 90 days and the amount of time for the system impact study from 90 days to 270 days. *See ISO New England Inc.*, [OSEC PLEASE ADD CITATION] (2020).

invoices must include all employee and third-party hours expended toward the applicable interconnection studies.⁹²

b. Commission Determination

59. We find that Filing Parties' proposed revisions comply with the interconnection study deadline statistics and reporting requirements of Order Nos. 845 and 845-A. Filing Parties incorporate the Commission's *pro forma* LGIP sections 3.5.2, 3.5.3, and 3.5.4 without modification. In addition, Filing Parties' proposed revisions to add an invoicing requirement to applicable sections of the LGIP will facilitate the requirement for ISO-NE to aggregate the total number of employee-hours and third-party consultant hours expended toward interconnection studies, as required in *pro forma* LGIP section 3.5.4(ii). Accordingly, we find Filing Parties' proposed variations are just and reasonable, are not unduly discriminatory or preferential, and accomplish the purposes of Order Nos. 845 and 845-A.

8. Requesting Interconnection Service Below Generating Facility Capacity

60. In Order No. 845, the Commission modified sections 3.1, 6.3, 7.3, 8.2, and Appendix 1 of the *pro forma* LGIP to allow interconnection customers to request interconnection service that is lower than the proposed generating facility's capacity,⁹³ recognizing the need for proper control technologies and flexibility for transmission providers to propose penalties to ensure that the generating facility does not inject energy above the requested level of service.⁹⁴

61. The Commission required, in *pro forma* LGIP revised section 3.1, that transmission providers have a process in place to consider requests for interconnection service below the generating facility capacity. The Commission stipulated that such requests should be studied at the level of interconnection service requested for purposes of determining interconnection facilities, network upgrades, and associated costs, but that such requests may be subject to other studies at the full generating facility capacity to

⁹² Filing at 25.

⁹³ The term generating facility capacity is defined as "the net capacity of the Generating Facility and the aggregate net capacity of the Generating Facility where it includes multiple energy production devices." *Pro forma* LGIA art. 1 (Definitions).

⁹⁴ Order No. 845, 163 FERC ¶ 61,043 at P 367; *see also pro forma* LGIP §§ 3.1, 6.3, 7.3, 8.2, *pro forma* LGIP app. 1.

ensure safety and reliability of the system.⁹⁵ In addition, *pro forma* LGIP revised section 3.1 states that the interconnection customer is responsible for all study costs and interconnection facility and/or network upgrade costs required for safety and reliability. The Commission also required in *pro forma* LGIP revised section 3.1 that any necessary control technologies and/or protection systems be memorialized in the LGIA.

62. The Commission required, in *pro forma* LGIP revised sections 6.3, 7.3, and 8.2, that the feasibility, system impact, and facilities studies be performed at the level of interconnection service that the interconnection customer requests, unless the transmission provider is otherwise required to study the full generating facility capacity due to safety and reliability concerns. The Commission stated that, if the transmission provider determines that additional network upgrades are necessary based on these studies, it must specify which additional network upgrade costs are based on which studies and provide a detailed explanation of why the additional network upgrades are necessary.⁹⁶

63. Finally, the Commission revised sections 4.4.1 and 4.4.2 of the *pro forma* LGIP to allow an interconnection customer to reduce the size of its interconnection request either prior to returning to the transmission provider an executed system impact study agreement or an executed facilities study agreement.⁹⁷

a. Filing Parties' Compliance Filing

64. Filing Parties propose revisions in ISO-NE LGIP sections 3.1, 4.4.1, 6.3, and 7.2 and Appendix 1 to outline the process for interconnection customers to request interconnection service below the proposed generating facility's full capability.⁹⁸ Filing

⁹⁵ Order No. 845, 163 FERC ¶ 61,043 at PP 383-84.

⁹⁶ *Id.* P 384. The Commission clarified that, if the transmission provider determines, based on good utility practice and related engineering considerations and after accounting for the proposed control technology, that studies at the full generating facility capacity are necessary to ensure safety and reliability of the transmission system when an interconnection customer requests interconnection service that is lower than full generating facility capacity, then it must provide a detailed explanation for such a determination in writing to the interconnection customer. *Id.*

⁹⁷ *Id.* P 406; *see also pro forma* LGIP §§ 4.4.1, 4.4.2.

⁹⁸ Filing Parties explain that the defined term that matches “Generating Facility Capacity” is “Generating Facility.” Therefore, Filing Parties propose to replace the word “Capacity” in the term “Generating Facility Capacity” with “capability(ies).” Filing 12-13.

Parties state that, while the revisions closely follow the *pro forma* language adopted in Order Nos. 845 and 845-A, they reflect independent entity variations that are necessary to align these enhancements with previously accepted variations that are currently included in the ISO-NE LGIP. Filing Parties state that the revisions also add more specificity to the process and the scope of the evaluation to provide greater clarity to customers.⁹⁹

65. First, Filing Parties propose to delete the words “have a process in place” from the first sentence in *pro forma* LGIP section 3.1, which states that the “Transmission Provider shall have a process in place to consider requests for Interconnection Service below the Generating Facility Capacity.” Filing Parties explain that the proposed ISO-NE LGIP section 3.1 lays out the process itself, so indicating that the transmission provider shall have a process in place is unnecessary.¹⁰⁰

66. Second, Filing Parties also propose to revise *pro forma* LGIP section 3.1 to specify that the interconnection customer must propose the control technology to restrict the generating facility’s output to the requested interconnection service levels when it submits the request for interconnection service below the generating facility’s capability.¹⁰¹ Filing Parties contend that identification of the control technology must be a part of the generating facility’s design and not be left to be identified or designed in the interconnection studies to avoid additional interconnection study delays. Filing Parties state that this revision is consistent with improvements to ISO-NE’s interconnection process that were instituted in 2016, which require interconnection customers to engage in certain design work prior to the commencement of interconnection studies, to reduce study time.¹⁰² Filing Parties state that requiring interconnection customers to propose control technologies as part of their interconnection request, or as part of their request to reduce the requested level of interconnection service before the system impact study begins, does not preclude ISO-NE from identifying additional control technologies

⁹⁹ Filing at 26.

¹⁰⁰ *Id.*

¹⁰¹ Filing Parties state that the proposed control technologies also must be provided along with an interconnection customer’s request to reduce the requested level of interconnection service before the system impact study begins, pursuant to ISO-NE LGIP section 4.4.1 of the ISO-NE LGIP. *Id.* at 26 n.78.

¹⁰² *Id.* at 26 (citing ISO New England Inc., Filing, Docket No. 16-946-000, at 19-20 (filed Feb. 16, 2016)).

pursuant to ISO-NE *pro forma* LGIA article 6 that may be required to facilitate the interconnection of an interconnection customer's generating facility.¹⁰³

67. Third, to increase transparency, Filing Parties propose to specify in ISO-NE LGIP section 3.1, and corresponding ISO-NE LGIP sections 4.4.1, 6.3, and 7.2,¹⁰⁴ that ISO-NE's evaluation of a request for interconnection service below the proposed generating facility's capability will be studied at the requested interconnection service level to identify the network upgrades required to accommodate the service requested, and at the generating facility's full generating capability to assess the effectiveness of the control technology and the safety and reliability of the system. Filing Parties state that studying the effectiveness of the control technology ensures that the system is not adversely impacted by the injection of more energy by a generating facility than the amount of the interconnection service requested by an interconnection customer. To achieve this, Filing Parties propose to revise *pro forma* LGIP section 3.1 as follows:

These requests for Interconnection Service shall be studied at the level of Interconnection Service requested for purposes of Interconnection Facilities and Network Upgrades, and the requests shall but may be subject to other studies at the full Generating Facility Capacity capability to ensure acceptability of the proposed control technology to restrict the facility's output and the safety and reliability of the system, with the study costs borne by the Interconnection Customer.

68. In addition, Filing Parties state that given their proposal to add language requiring that the interconnection customer propose injection-limiting equipment that is subject to review in the interconnection system impact study, they propose to not include the following language from the Commission's *pro forma* LGIP section 3.1:

If after the additional studies are complete, Transmission Provider determines that additional Network Upgrades are necessary, then Transmission Provider must: (1) specify which additional Network Upgrade costs are based on which studies; and (2) provide a detailed explanation of why the

¹⁰³ *Id.* at 26-27.

¹⁰⁴ Filing Parties note that the revisions to ISO-NE LGIP sections 4.4.1, 6.3, and 7.2 reflect the changes made in *pro forma* LGIP section 4.4.2 because the ISO-NE LGIP does not contain a corresponding provision. For this same reason, Filing Parties' proposed revisions do not reflect the revisions to *pro forma* LGIP section 8.2. Filing at 27 n.81.

additional Network Upgrades are necessary. Any Interconnection Facility and/or Network Upgrade costs required for safety and reliability also will be borne by the Interconnection Customer.

Filing Parties argue that including these sentences in the ISO-NE LGIP is unnecessary because ISO-NE will only identify network upgrades necessary to accommodate the proposed generating facility at the requested interconnection service level. They add that, under their proposal, if the interconnection customer requests interconnection service below its generating facility's full capability, the generating facility will be studied at its full generating capability to determine the effectiveness of the proposed control technologies, and not for the purpose of determining the necessary upgrades.¹⁰⁵

69. Filing Parties also explain that, under the ISO-NE LGIP, interconnection customers have the option to waive the facilities study, allowing them to move through the interconnection process more quickly. Filing Parties state that, for this same reason, they do not follow the Commission's direction to add the new language in the Commission's *pro forma* LGIP section 8.2 (Scope of Interconnection Facilities Study), which states, "The Facilities Study will also identify any potential control equipment necessary to accommodate requests for Interconnection Service that are lower than the Generating Facility Capacity."¹⁰⁶

70. Finally, Filing Parties propose clarifying or clean-up changes to facilitate interconnection customers' requests for interconnection service at a level less than the proposed generating facility's full capability. For example, Filing Parties propose to revise certain definitions in ISO-NE LGIP section 1 and ISO-NE *pro forma* LGIA article 1. Filing Parties explain that the current "Network Resource Capability" definition mistakenly references a "gross" value at the point of interconnection. To correct this error, Filing Parties propose to delete the reference to "gross."¹⁰⁷ Filing Parties also add entry fields in the interconnection request form in ISO-NE LGIP Appendix 1 to facilitate

¹⁰⁵ *Id.* at 27 and n.82.

¹⁰⁶ *Id.* at 27 n.81.

¹⁰⁷ Filing Parties also propose to revise ISO-NE LGIP section 3.2.2.1 to delete "gross and," consistent with the revisions to the "Network Resource Capability" definition. *Id.* at 28 n.83.

the interconnection customer's identification of the specific values being requested for interconnection service compared with the actual capability of the facility.¹⁰⁸

b. Commission Determination

71. We find that Filing Parties' proposed Tariff revisions to allow an interconnection customer to request interconnection service below its full generating facility capability partially comply with the requirements of Order Nos. 845 and 845-A. We find that, except as discussed below, Filing Parties' proposed revisions comply with the Commission's directives that transmission providers have a process in place to consider requests for interconnection service below the full generating facility capacity and the requirements associated with that process.

72. Regarding Filing Parties' proposed independent entity variations, we accept Filing Parties' proposal to delete the words "have a process in place" from the first sentence of the Commission's *pro forma* LGIP section 3.1, which calls for the transmission provider to have a process in place for considering interconnection requests for interconnection service below the proposed generating facility's capability. As noted by Filing Parties, because proposed ISO-NE LGIP section 3.1 lays out the process itself, there is no need for the Tariff to indicate that the transmission provider shall have a process in place. Accordingly, we accept this variation because it is just and reasonable, is not unduly discriminatory or preferential, and accomplishes the purposes of Order Nos. 845 and 845-A.

73. We also accept Filing Parties' independent entity variation to specify in ISO-NE LGIP section 3.1 that interconnection customers must propose any necessary control technology along with a request for interconnection service below a generating facility's capability and cannot instead ask ISO-NE to identify the necessary control technology. As Filing Parties explain, this proposed revision recognizes ISO-NE's policy of requiring interconnection customers to engage in upfront design work so that subsequent interconnection studies can proceed more quickly. Unlike non-independent transmission providers, ISO-NE is tasked with operating a large and complicated interconnection process covering multiple states and PTOs, which increases the need to find ways to speed up the process. Accordingly, we find the proposed variation is just and reasonable, is not unduly discriminatory or preferential, and accomplishes the purposes of Order Nos. 845 and 845-A.

74. Further, we accept Filing Parties' independent entity variation to specify that ISO-NE's evaluation of the request for interconnection service below a proposed generating facility's capability will be studied at the requested interconnection service level to identify the network upgrades required to accommodate the service requested, and at the

¹⁰⁸ *Id.* at 28.

generating facility's full generating capability to determine the effectiveness of the proposed control technologies. We agree with Filing Parties that ISO-NE's evaluation of interconnection requests in this manner will allow ISO-NE to assess the effectiveness of the control technology as well as the safety and reliability of the system. We find that this revision is just and reasonable, is not unduly discriminatory or preferential, and accomplishes the purposes of Orders Nos. 845 and 845-A because it memorializes ISO-NE's decision always to exercise its discretion to conduct a study at full generating capability, as allowed by the language in *pro forma* LGIP section 3.1, which states that a request for interconnection service below the generating facility capacity "may be subject to other studies at the full Generating Capacity to ensure safety and reliability of the system."

75. We also accept Filing Parties' proposal not to adopt language from the Commission's *pro forma* LGIP section 3.1.¹⁰⁹ Filing Parties explain that, because they propose to determine network upgrades only in studies at the requested-service level, they do not need to specify which additional network upgrade costs are based on which full-generating-capability studies, nor provide a detailed explanation of why additional network upgrades are necessary. Similarly, Filing Parties state they do not need to address interconnection facility and/or network upgrade costs for safety and reliability because ISO-NE will not be identifying such upgrades. We accept these justifications because they are just and reasonable, are not unduly discriminatory or preferential, and accomplish the purposes of Order Nos. 845 and 845-A.

76. We reject Filing Parties' proposal to not follow the Commission's direction to add to LGIP section 8.2 language stating that the facilities study will also identify any potential control equipment for requests for interconnection service below capability. Filing Parties justify this variation by explaining that, under the ISO-NE LGIP, interconnection customers have the option of waiving the facilities study. Filing Parties' argument fails to recognize that facilities studies nevertheless may occur. Accordingly, we direct Filing Parties to submit, within 120 days of the date of this order, a further compliance filing that incorporates the required language to ISO-NE LGIP section 8.2.

77. In addition, we find that Filing Parties proposed Tariff revisions do not fully incorporate the *pro forma* LGIP language adopted by Order No. 845.¹¹⁰ Order No. 845 adopted the following language as the second sentence of the final paragraph in *pro forma* LGIP section 3.1:

These requests for Interconnection Service shall be studied at
the level of Interconnection Service requested for purposes of

¹⁰⁹ See *supra* P XX.

¹¹⁰ See Order No. 845-A, 166 FERC ¶ 61,137 at P 117.

Interconnection Facilities, Network Upgrades, *and associated costs*, but may be subject to other studies at the full Generating Facility Capacity to ensure safety and reliability of the system, with the study costs borne by the Interconnection Customer.¹¹¹

78. Accordingly, we direct Filing Parties to submit, within 120 days of the date of this order, a further compliance filing that incorporates the *pro forma* revisions to ISO-NE LGIP section 3.1, as required by Order No. 845.

79. Finally, we accept Filing Parties' proposed clean-up revisions (e.g., the correction of an error in the definition of "Network Resource Capability," as well as the revision of the interconnection request form to accommodate service below generating facility capability) because they are just and reasonable, are not unduly discriminatory or preferential, and accomplish the purposes of Order Nos. 845 and 845-A.

9. Provisional Interconnection Service

80. In Order No. 845, the Commission required transmission providers to allow all interconnection customers to request provisional interconnection service.¹¹² The Commission explained that interconnection customers may seek provisional interconnection service when available studies or additional studies, as necessary, indicate that there is a level of interconnection service that can occur to accommodate an interconnection request without the construction of any additional interconnection facilities and/or network upgrades, and the interconnection customer wishes to make use of that level of interconnection service while the facilities required for its full interconnection request are completed.¹¹³ To implement this service, the Commission revised the *pro forma* LGIP and *pro forma* LGIA to add a definition for "Provisional

¹¹¹ Order No. 845, 163 FERC ¶ 61,043 at P 347; *see also id.* P 367. The italics indicate language adopted by Order No. 845 that the Filing Parties' Tariff revisions failed to include. We recognize, however, that the *pro forma* LGIP that was available on the Commission's website failed to include that language.

¹¹² Order No. 845, 163 FERC ¶ 61,043 at P 438.

¹¹³ *Id.* P 441.

Interconnection Service”¹¹⁴ and for a “Provisional Large Generator Interconnection Agreement.”¹¹⁵

81. In addition, the Commission added *pro forma* LGIA article 5.9.2, which details the terms for provisional interconnection service.¹¹⁶ The Commission also explained that transmission providers have the discretion to determine the frequency for updating provisional interconnection studies to account for changes to the transmission system to reassess system capacity available for provisional interconnection service, and included bracketed Tariff language to be completed by the transmission provider, to specify the frequency at which they perform such studies in their *pro forma* LGIA.¹¹⁷ The Commission stated that interconnection customers are responsible for the costs for performing these provisional interconnection studies.¹¹⁸

a. Filing Parties’ Compliance Filing

82. Filing Parties propose to add the Commission’s *pro forma* definitions related to provisional interconnection service to the ISO-NE LGIP and ISO-NE *pro forma* LGIA with two independent entity variations. First, Filing Parties request an independent entity variation to revise the definition of “Provisional Interconnection Service” to make clear that this service is available only for energy-only interconnections (i.e., Network Resource Interconnection Service (NRIS)).¹¹⁹ Filing Parties state that this variation is necessary given ISO-NE’s existing methodology for allocating capacity service (i.e., Capacity Network Resource Interconnection Service (CNRIS)). Filing Parties explain that the level at which CNRIS is offered is based on the interconnection customer’s successful participation in the Forward Capacity Market, which includes completing all upgrades necessary to ensure system deliverability.¹²⁰ Filing Parties note that

¹¹⁴ *Pro forma* LGIP § 1 (Definitions); *pro forma* LGIA art. 1 (Definitions).

¹¹⁵ *Id.* The Commission declined, however, to adopt a separate *pro forma* provisional large generator interconnection agreement. Order No. 845, 163 FERC ¶ 61,043 at P 444.

¹¹⁶ *Id.* P 438; *see also pro forma* LGIP § 5.9.2.

¹¹⁷ Order No. 845, 163 FERC ¶ 61,043 at P 448.

¹¹⁸ *Id.*

¹¹⁹ Filing at 29-30 (citing ISO-NE, Tariff, § II, Schedule 22, § 1 (Definitions), and app. 6, art. 1 (Definitions)).

¹²⁰ *Id.* at 29.

interconnection customers requesting CNRIS may come online first as a network resource and begin receiving NRIS before completing the CNRIS requirements.¹²¹ Second, Filing Parties request an independent entity variation to the definition of “Provisional Interconnection Service” to make clear that provisional interconnection service is only available on a limited and temporary basis. Filing Parties state that this variation is consistent with clarifications in Order No. 845.¹²² Finally, Filing Parties propose minor deviations to the required definitions to conform the ISO-NE LGIP to existing Tariff language.

83. Filing Parties also propose to add article 5.9.2 to the ISO-NE *pro forma* LGIA to implement the changes set forth in Order Nos. 845 and 845-A with an independent entity variation to provide that provisional interconnection service must be requested before the system impact study begins.¹²³ Filing Parties state that this change is appropriate because, unlike the *pro forma* LGIP, the ISO-NE LGIP provides interconnection customers with the option to waive the facilities study and elect an expedited interconnection after completing the system impact study.¹²⁴ Filing Parties explain that, when an interconnection customer elects an expedited interconnection, it immediately proceeds to negotiating a standard LGIA (as opposed to a provisional form of the LGIA), pursuant to which it may request to interconnect under short-term limited operation prior to the completion of certain upgrades, to the extent that such limited operation is safe and reliable.¹²⁵ Filing Parties also propose to revise the *pro forma* language to make clear that provisional interconnection service is an optional procedure and will not alter the interconnection customer’s queue position and associated upgrade responsibilities.¹²⁶ Finally, Filing Parties insert language for the bracketed placeholder in the *pro forma* article 5.9.2, providing that it will study and update the maximum permissible output of

¹²¹ *Id.*

¹²² *Id.* (citing Order No. 845, 163 FERC ¶ 61,043 at P 439).

¹²³ *Id.* (citing ISO-NE, Tariff, § II, Schedule 22 (17.0.0), app. 6, art. 5 (Interconnection Facilities Engineering, Procurement, and Construction)).

¹²⁴ *Id.*

¹²⁵ *Id.*

¹²⁶ *Id.* at 29-30 (citing ISO-NE, Tariff, § II, Schedule 22 (17.0.0), app. 6, art. 5 (Interconnection Facilities Engineering, Procurement, and Construction)).

the generating facility under provisional service each time the conditions assumed in the supporting studies change.¹²⁷

b. Commission Determination

84. We find that Filing Parties' proposed Tariff revisions regarding provisional interconnection service in the ISO-NE LGIP and ISO-NE *pro forma* LGIA partially comply with the requirements of Order Nos. 845 and 845-A. Specifically, we accept Filing Parties' proposed independent entity variations to the definition of "Provisional Interconnection Service" because we find that they are just and reasonable, are not unduly discriminatory or preferential, and accomplish the purposes of Order Nos. 845 and 845-A. We make that finding for Filing Parties' proposed independent entity variation to limit provisional interconnection service to facilities requesting NRIS because provisional interconnection service is a limited interconnection service that the transmission provider can reliably provide without network upgrades,¹²⁸ and ISO-NE's provision of CNRIS requires completing necessary network upgrades. We make that finding for Filing Parties' proposed independent entity variation to state that provisional interconnection service is available only on a limited and temporary basis because the Commission clarified in Order No. 845 that provisional interconnection service cannot become permanent.¹²⁹

85. However, we find that Filing Parties' proposal to require interconnection customers to request provisional interconnection service before the system impact study does not accomplish the purposes of Order Nos. 845 and 845-A because Order No. 845 allows interconnection customers to enter into agreements for provisional interconnection service prior to the completion of the full interconnection process,¹³⁰ and the system impact study is a large part of that process. Furthermore, before the system impact study, an interconnection customer lacks definitive information on the composition of its cluster (e.g., whether there are any nearby projects that could contribute to the need for costly network upgrades) and the potential duration of the system impact study process. Filing Parties' proposed variation would force interconnection customers to decide whether to request provisional interconnection service (and thus make expenditures to construct their generating facilities) before receiving crucial information that may determine whether they choose to remain in the queue. Accordingly, we direct Filing Parties to submit,

¹²⁷ ISO-NE, Tariff, § II, Schedule 22 (17.0.0), app. 6, art. 5 (Interconnection Facilities Engineering, Procurement, and Construction).

¹²⁸ Order No. 845, 163 FERC ¶ 61,043 at P 440.

¹²⁹ *Id.* P 439.

¹³⁰ *Id.* P 424.

within 120 days of the date of this order, a further compliance filing that removes the following sentence from *pro forma* ISO-NE LGIA article 5.9.2: “Prior to the commencement of the Interconnection System Impact Study associated with a Large Generating Facility, an Interconnection Customer may request Provisional Interconnection Service.”

10. Surplus Interconnection Service

86. In Order No. 845, the Commission adopted *pro forma* LGIP sections 1, 3.3, and 3.3.1 and *pro forma* LGIA article 1 to establish surplus interconnection service, which the Commission defined as any unneeded portion of interconnection service established in an LGIA such that if the surplus interconnection service is utilized the total amount of interconnection service at the point of interconnection would remain the same.¹³¹ Surplus interconnection service enables a new interconnection customer to utilize the unused portion of an existing interconnection customer’s interconnection service within specific parameters.¹³² The Commission required transmission providers to revise their tariffs to include the new definition of surplus interconnection service in their *pro forma* LGIP and *pro forma* LGIA, and provide in the *pro forma* LGIP an expedited interconnection process outside of the interconnection queue for surplus interconnection service.¹³³ That expedited process must allow affiliates of the existing interconnection customer to use surplus interconnection service for another interconnecting generating facility and allow for the transfer of surplus interconnection service that the existing interconnection customer or one of its affiliates does not intend to use.¹³⁴ The transmission provider must perform reactive power, short circuit/fault duty, and stability analyses studies as well as steady-state (thermal/voltage) analyses as necessary to ensure evaluation of all required reliability conditions to provide surplus interconnection service and ensure the reliable use of surplus interconnection service.¹³⁵ The original interconnection customer must be able to stipulate the amount of surplus interconnection service that is available, designate when that service is available, and describe any other conditions under which surplus

¹³¹ *Id.* P 467; *see also pro forma* LGIP § 1; *pro forma* LGIA art. 1 (Definitions).

¹³² Order No. 845, 163 FERC ¶ 61,043 at P 467; Order No. 845-A, 166 FERC ¶ 61,137 at P 119.

¹³³ Order No. 845, 163 FERC ¶ 61,043 at P 467; *see also pro forma* LGIP §§ 3.3, 3.3.1.

¹³⁴ Order No. 845, 163 FERC ¶ 61,043 at P 483; *see also pro forma* LGIP § 3.3.

¹³⁵ Order No. 845, 163 FERC ¶ 61,043 at PP 455, 467.

interconnection service at the point of interconnection may be used.¹³⁶ When the original interconnection customer, the surplus interconnection service customer, and the transmission provider enter into agreements for surplus interconnection service, they must be filed by the transmission provider with the Commission, because any surplus interconnection service agreement will be an agreement under the transmission provider's open access transmission tariff.¹³⁷

a. Filing Parties' Compliance Filing

i. Proposed Definition of 'Surplus Interconnection Service'

87. Filing Parties propose to modify ISO-NE LGIP section 1 and ISO-NE *pro forma* LGIA article 1 to add a definition for "Surplus Interconnection Service."¹³⁸ Filing Parties propose to revise the *pro forma* definition as follows:

a form of Interconnection Service that allows an Interconnection Customer to use any Unused Capability ~~unnneeded portion~~ of Interconnection Service established in an ~~Large Generator~~ Interconnection Agreement for an existing Generating Facility that has achieved Commercial Operation, such that if Surplus Interconnection Service is utilized the total amount of Interconnection Service at the same Point of Interconnection would remain the same.¹³⁹

88. Filing Parties state that the proposed revisions clarify that surplus interconnection service is a form of interconnection service that relates back to the interconnection service under the original interconnection customer's interconnection agreement for a facility that is existing and commercial (as opposed to a portion of a facility that was never built).¹⁴⁰ Filing Parties state that the proposed revisions clarify that the amount of surplus interconnection service that will be made available to other interconnection customers is, as explained further below, the "Unused Capability" of interconnection

¹³⁶ *Id.* P 481.

¹³⁷ *Id.* P 499.

¹³⁸ ISO-NE, Tariff, § II, Schedule 22 (17.0.0), § 1, app. 6, art. 1.

¹³⁹ Filing at 33.

¹⁴⁰ *Id.* at 33-34 (citing Order No. 845, 163 FERC ¶ 61,043 at PP 472, 474, 481, 490; Order No. 845-A, 166 FERC ¶ 61,137 at P 146).

service established in the interconnection agreement. Filing Parties also state that the proposed revisions delete the term “Large Generator,” which will extend the procedures for surplus interconnection service to interconnection agreements established prior to Order No. 2003 and facilities that initially interconnected through state interconnection procedures. Finally, Filing Parties state that the revisions clarify that the point of interconnection for surplus interconnection service customers must be the same point of interconnection as that of the existing generating facility.¹⁴¹

89. Filing Parties state that the proposed independent entity variation is warranted due to ISO-NE’s existing interconnection framework. Filing Parties explain that generating facility interconnection customers have the option of two levels of interconnection service: CNRIS and NRIS. CNRIS is available for interconnection customers seeking to interconnect their generating facilities as capacity resources, up to the generating facilities’ CNR Capability, which is based on the generating facilities’ Capacity Supply Obligations obtained in the Forward Capacity Market. NRIS allows generating facilities to interconnect as “energy-only” resources up to their NR Capability. CNRIS and NRIS are available on a continuous basis up to the CNR Capability and NR Capability of the resource, respectively, to enable participation in ISO-NE’s real-time energy markets.¹⁴²

90. Filing Parties explain that, under the ISO-NE LGIP, CNRIS and NRIS are provided to a generating facility based on its capability (i.e., megawatts and electrical performance characteristics). Filing Parties state that, under ISO-NE’s existing material modification provisions, any request to increase the capability of an existing generating facility or change its operating characteristics requires a new interconnection request.¹⁴³ However, Filing Parties state that the original interconnection customer may have an established CNRIS or NRIS that exceeds the generating facility’s operating capabilities due to degradation of the facility over time or to the manner in which the facility operates.¹⁴⁴ Therefore, to avoid automatically triggering a new interconnection request, Filing Parties propose to revise “Unused Capability” to refer to the amount of CNRIS or NRIS that is demonstrably no longer being used (and has not been retired). Specifically, Filing Parties propose to revise ISO-NE LGIP section 1 and ISO-NE *pro forma* LGIA article 1 to add “Unused Capability” as a new term to be defined as follows:

(i) in the case of NR Interconnection Service at an existing, commercial Generating Facility, for Summer, the Summer

¹⁴¹ *Id.* at 33-34.

¹⁴² *Id.* at 31.

¹⁴³ *Id.* at 32 (citing ISO-NE LGIP at § § 1, 4.4).

¹⁴⁴ *Id.* at 34-35.

NR Capability minus the latest Seasonal Claimed Capability for Summer as corrected to 50 degrees F, and, for winter, the Winter NR Capability minus the latest Seasonal Claimed Capability for Winter as corrected to the 0 degrees F; and (ii) in the case of CNR Interconnection Service at an existing, commercial Generating Facility, for Summer, the Summer CNR Capability minus the latest Summer Qualified Capacity, and for Winter, the Winter CNR Capability minus the latest Winter Qualified Capacity.¹⁴⁵

91. Filing Parties explain that the amount of Unused Capability that an original interconnection customer may use or transfer to its affiliate or a third party to facilitate the interconnection of the new facility is the difference between the CNRIS or NRIS set forth in the LGIA for the existing generating facility and the facility's demonstrated generating capability. Filing Parties state that Seasonal Claimed Capabilities¹⁴⁶ represent a demonstration of the levels in each season at which a generating facility is capable of operating and are established pursuant to Tariff Section III.1.5. Filing Parties state that the Qualified Capacities¹⁴⁷ are based on the demonstrated Seasonal Claimed Capabilities in accordance to the Forward Capacity Market qualification process and represent the amounts for which the generating facility can take on a Capacity Supply Obligation. Filing Parties state that ISO-NE's proposed use of Qualified Capacities for generating facilities ensures that the surplus interconnection service extended at a given point of interconnection does not exceed the total CNRIS or NRIS established in the original interconnection customer's interconnection agreement and, therefore, does not trigger a new interconnection request pursuant to the material modification rules.¹⁴⁸

92. Filing Parties contend that this proposed construct improves market competition in that the surplus interconnection customer will be able to use the Unused Capability to support its facility's interconnection to the system and its participation in the New

¹⁴⁵ *Id.* at 35. See ISO-NE, Tariff, § II, Schedule 22 (17.0.0), § 1, and app. 6, art. 1.

¹⁴⁶ See ISO-NE, Tariff, § I.2.2 Definitions (127.0.0) (defining "Seasonal Claimed Capability" as the "summer or winter claimed capability of a Generator Asset or Generating Capacity Resource, [representing] the maximum dependable load carrying ability of the asset or resource, excluding capacity required for station use").

¹⁴⁷ See ISO-NE, Tariff, § I.2.2 Definitions (127.0.0) (defining "Qualified Capacity" as "the amount of capacity a resource may provide in the summer or winter in a Capacity Commitment Period, as determined in the Forward Capacity Market qualification processes").

¹⁴⁸ Filing at 35-36.

England markets. Filing Parties explain that, when the surplus interconnection service relates to NRIS, the surplus interconnection customer will be able to participate in New England's energy and ancillary services markets up to the Unused Capability that the original interconnection customer makes available to it. Filing Parties further explain that, when the surplus interconnection service relates to CNRIS, the surplus interconnection customer will be able to seek to qualify to participate in the Forward Capacity Market and acquire a Capacity Supply Obligation, in accordance with the Forward Capacity Market rules, up to the Unused Capability that the original interconnection customer makes available to it. Filing Parties state that, because the surplus interconnection customer's new generating facility's qualification in the Forward Capacity Market will be supported by the Unused Capability of the original interconnection customer, there will be no overlapping impact deliverability analysis; instead, the Unused Capability will support the surplus interconnection customer's resource's ability to acquire a Capacity Supply Obligation up to the Unused Capability upon clearing in the Forward Capacity Market.¹⁴⁹

(a) **Protests**

93. NEPOOL argues that Filing Parties' proposal fails to accomplish the final rule's purpose because it fails to make surplus interconnection service available "under a variety of circumstances," instead allowing for only continuous availability.¹⁵⁰ NEPOOL asks the Commission to reject the deviation and to order changes to the Tariff in conformance with NEPOOL's own proposal, which eliminates the deviation from Filing Parties' proposal.¹⁵¹ To support its claim, NEPOOL quotes the following language from Order No. 845:

The provisions addressed in this Final Rule will allow an existing interconnection customer to make a specified and limited amount of surplus interconnection service available at a particular interconnection point *under a variety of circumstances*, including, for example, on a continuous basis (i.e., a certain number of MW of surplus interconnection service always available for use by a co-located generating

¹⁴⁹ *Id.* at 36.

¹⁵⁰ NEPOOL Protest at 8. The Massachusetts Attorney General adopts the arguments set forth in the NEPOOL Protest. Massachusetts Attorney General Protest at 3.

¹⁵¹ NEPOOL Protest at 9.

facility), or on a scheduled, periodic basis (i.e., a specified number of MW available intermittently)).¹⁵²

94. NEPOOL adds that the Commission's discussion of surplus interconnection service in Order No. 845 goes on to suggest that it would be unjust and unreasonable not to allow for availability of unused capability during periods when interconnection service is not being used by the original interconnection customer:

Consequently, it is possible for an original interconnection customer to have surplus interconnection service at a particular interconnection point because the generating facility capacity that the transmission provider originally studied pursuant to the pro forma LGIP may be in excess of the actual interconnection service required by the generating facility, *at least during some periods*. For these reasons, we find that, where proper precautions are taken to ensure system reliability, it would be unjust and unreasonable to deny an original interconnection customer the ability to transfer or use for another resource interconnection service.¹⁵³

95. NEPOOL notes that Order No. 845 provided examples of periodic service, including circumstances in which the underlying service is being used by peakers or intermittent generation such as wind and solar.¹⁵⁴ NEPOOL argues that its proposal is much closer to the Commission's intent because it modifies Filing Parties' definition of "Unused Capability" to allow for both continuous and periodic service under original NRIS interconnections.¹⁵⁵ NEPOOL agrees with Filing Parties that, for CNRIS, surplus interconnection service must be continuous to support an interconnection customer's participation in the Forward Capacity Market. NEPOOL argues, however, that continuous surplus interconnection service is not necessary to support an interconnection customer's participation in the energy market.¹⁵⁶

¹⁵² *Id.* at 9 (citing Order No. 845, 163 FERC ¶ 61,043 at P 472 (emphasis added by NEPOOL)).

¹⁵³ *Id.* at 11 (citing Order No. 845, 163 FERC ¶ 61,043 at P 471) (emphasis added by NEPOOL).

¹⁵⁴ *Id.* at 9-10 (citing Order No. 845, 163 FERC ¶ 61,043 at 281 n.835).

¹⁵⁵ *Id.* at 9.

¹⁵⁶ *Id.*

96. NEPOOL states that the Commission's intent to provide flexibility is also seen in the *pro forma* definition of "Surplus Interconnection Service," which is for "any unneeded portion" of existing interconnection service. NEPOOL argues that Filing Parties' deviation removes this flexibility by removing "any unneeded portion" from the definition, and by adding a definition of "Unused Capability." NEPOOL claims that these deviations limit surplus interconnection service to only a continuous basis for a specified megawatt amount, contrary to the Commission's intent.¹⁵⁷

97. NEPOOL states that allowing for periodic surplus interconnection service for NRIS would facilitate the integration of variable energy resources into the New England grid, in alignment with both Commission and state policies promoting access for renewable resources. For example, NEPOOL states that, under its own proposal an existing solar generator could add a storage device behind the inverter and thereby take advantage of previously unused capability. NEPOOL explains that the maximum rating of the inverter would automatically limit the output of the combined devices at the point of interconnection to the level that ISO-NE has previously determined necessary to protect reliability. NEPOOL states that allowing for this availability would support two goals of surplus interconnection service by (1) improving capabilities at existing generating facilities and (2) removing economic barriers to the development of complementary technologies such as electric storage resources and furthering other important federal and state energy policies. NEPOOL argues that this use would not be allowed under the ISO-NE proposal because such use by variable energy resources would target capability that is available only on a periodic basis (in the example above, each night).¹⁵⁸

98. Regarding the potential accommodation of periodic surplus interconnection service outside the queue, NEPOOL points out that Filing Parties have proposed to study limiting devices or control technologies for new customers that request service below capacity. NEPOOL argues that the need for such studies does not justify Filing Parties' deviations. NEPOOL contends that, although an outside-the-queue process will increase the difficulty of ISO-NE's system of coordination of studies and planning, this does not mean that ISO-NE is incapable of implementing a new process that ensures coordination and carries out the Commission's intent.¹⁵⁹

99. The Massachusetts Attorney General argues that Filing Parties' proposal to limit surplus interconnection service to only when it is available continuously is contrary to the language and intent of Orders Nos. 845 and 845-A and will limit rather than expand

¹⁵⁷ *Id.* at 11.

¹⁵⁸ *Id.* at 12.

¹⁵⁹ *Id.* at 16-17.

interconnection opportunities.¹⁶⁰ The Massachusetts Attorney General asks the Commission to reject Filing Parties' proposal and adopt NEPOOL's proposal.¹⁶¹

100. Clean Energy Entities also support NEPOOL's proposal, arguing that the availability of continuous surplus interconnection service is a relatively rare situation and one in which the magnitude of unused service is usually small.¹⁶² Clean Energy Entities contend that, in all other cases, the unused capability on the transmission system will continue to be unused and the inefficiencies identified by the Commission will remain unaddressed, thereby largely defeating the purpose of the reform.¹⁶³

101. Clean Energy Entities contend that, although some resources run only a certain number of hours, they have interconnection rights that have already been studied by ISO-NE at full output. Clean Energy Entities argue that, given those rights, it is immaterial in what hours the original interconnection customer chooses to use those interconnection rights.¹⁶⁴ Clean Energy Entities contend that the Commission recognized in Order No. 845 that consistent with the requirements of Order 2003, transmission providers assume that each interconnection customer is fully utilizing its interconnection service when studying other requests for new interconnections.¹⁶⁵

102. ESA argues that ISO-NE should allow periodic surplus interconnection service in relation to both NRIS and CNRIS. ESA explains that other RTOs and ISOs, such as Midcontinent Independent System Operator, Inc. (MISO), have found that surplus interconnection service may be applied similarly to its capacity interconnection service if the existing generator already has that capacity interconnection service.¹⁶⁶ ESA contends that, to the extent that a surplus interconnection service request does not

¹⁶⁰ Massachusetts Attorney General Protest at 3.

¹⁶¹ *Id.* at 6.

¹⁶² Clean Energy Entities Protest at 4-5.

¹⁶³ *Id.* at 10.

¹⁶⁴ *Id.* at 6.

¹⁶⁵ *Id.* at 11 (citing Order No. 845, 163 FERC ¶ 61,043 at P 468).

¹⁶⁶ ESA Protest at 3 (citing MISO, Compliance Filing, Docket No. ER19-1823-001 at § 2.3.2.1 (filed May 21, 2019)).

exceed a generator's existing CNRIS level, ISO-NE should provide a pathway for surplus interconnection service to remain compliant with Order No. 845.¹⁶⁷

(b) Filing Parties' Answer

103. Filing Parties contend that none of the protesters' arguments negate that their proposal for surplus interconnection service presents an independent entity variation that meets the objectives of Order No. 845 and is fully implementable in conjunction with ISO-NE's current interconnection and market constructs.¹⁶⁸ Filing Parties note that, in Order No. 845-A, the Commission clarified that "the Commission did not intend to limit the manner in which RTOs/ISOs may seek independent entity variations with respect to surplus interconnection service" and that "it was not appropriate to limit the flexibility of independent entities to request independent entity variations."¹⁶⁹ Filing Parties allege that protestors contradict this ruling by seeking to limit their flexibility.

104. Filing Parties argue that, contrary to protestors' arguments, surplus interconnection service must be on a continuous basis to support participation in the ISO-NE markets and to ensure that the generating output at the point of interconnection does not exceed the maximum level allowed under the original interconnection customer's LGIA.¹⁷⁰ Filing Parties point out that both CNRIS and NRIS allow generators to offer into the markets, up to their capability, at any time.¹⁷¹ Filing Parties explain that, therefore, they propose a construct whereby both the original interconnection customer and the surplus interconnection service customer can offer into the market at the same time without the risk of exceeding the capability established in the LGIA for the original interconnection customer's generating facility, consistent with Order No. 845.¹⁷² Filing Parties argue that NEPOOL's proposal does not eliminate this risk.

105. Filing Parties disagree with protestors' contention that, by definition, Filing Parties' surplus interconnection service proposal does not allow the service "under a

¹⁶⁷ *Id.* at 3-4.

¹⁶⁸ Filing Parties Answer at 3.

¹⁶⁹ *Id.* at 5 (citing Order No. 845-A, 166 FERC ¶ 61,137 at PP 140-141).

¹⁷⁰ *Id.* at 7.

¹⁷¹ *Id.* at 7-8.

¹⁷² *Id.* at 8 (citing Order No. 845, 163 FERC ¶ 61,043 at P 472 ("[S]urplus interconnection service cannot exceed the total interconnection service already provided by the original interconnection customer's LGIA.")).

variety of circumstances.” Filing Parties argue that Order No. 845 did not define the circumstances under which the service must be provided; it only noted periodic service as one possible example.

106. Filing Parties assert that, if the Commission finds their proposal just and reasonable, it need not address the merits of NEPOOL’s proposal, which Filing Parties claim is not implementable. Filing Parties state that, in the stakeholder process, ISO-NE argued that NEPOOL’s proposal did not address issues such as how parties would manage periodic surplus interconnection service in real time, the existing material modifications rules, study prioritization, and coordination with other Order No. 845 provisions. Filing Parties also note that NEPOOL (1) acknowledges that Filing Parties raise a valid concern about the need to coordinate the review of surplus interconnection service requests with transmission planning, (2) indicates that “it could be challenging for ISO-NE to implement Surplus Interconnection Service as intended by Order Nos. 845/845-A,” and (3) suggests further stakeholder processes.¹⁷³ Filing Parties counter that extensive studies outside the queue are not compatible with an active queue, which requires clear rules. Filing Parties claim that there is no way to establish the appropriate conditions to apply to requests for periodic surplus interconnection service and that such requests must be entered into the queue.¹⁷⁴

(c) Commission Determination

107. We find that Filing Parties’ proposed Tariff revisions regarding surplus interconnection service partially comply with the requirements of Order Nos. 845 and 845-A. Specifically, as discussed below, we accept Filing Parties’ proposed definition for “Surplus Interconnection Service,” as it applies to customers with CNRIS, in compliance with the requirements of Order Nos. 845 and 845-A, and their request for an independent entity variation to limit the availability of surplus interconnection service to only continuously available CNRIS. However, in relation to NRIS, we find that the Filing Parties have not demonstrated that ISO-NE’s market rules, definition of “material modification,” and related provisions require ISO-NE to offer only continuously available surplus interconnection service to NRIS customers. Therefore, we reject Filing Parties’ proposed independent entity variation for surplus interconnection service for NRIS.

108. With regard to surplus interconnection service, the Commission previously acknowledged that there are “substantial regional variations in the potential availability of surplus interconnection service and existing or prospective processes that would

¹⁷³ *Id.* at 19 (citing NEPOOL Protest at 16-17).

¹⁷⁴ *Id.* at 20.

facilitate its use.”¹⁷⁵ The Filing Parties explain that under the ISO-NE tariff, both CNRIS and NRIS resources can offer their full capability at any time. Therefore, to accommodate the current ISO-NE market rules, the Filing Parties have proposed to allow surplus interconnection service in an amount not to exceed the difference between the CNR Capability and the NR Capability levels set forth in an existing generating facility’s interconnection agreement and its demonstrated capabilities. As a result, Filing Parties’ proposal limits the availability of surplus interconnection service to only that level of service that is continuously available, thereby precluding periodic service.

109. Several parties argue in favor of requiring ISO-NE to provide surplus interconnection service on a periodic basis. For example, NEPOOL asserts that Filing Parties are wrong to forgo periodic surplus interconnection service just because they perceive difficulty in its implementation (like studying control technologies outside the queue). ESA argues that ISO-NE can offer periodic surplus interconnection service in relation to CNRIS because other RTOs have proposed to do so.

110. The Commission accepted ISO-NE’s interconnection construct as an independent entity variation.¹⁷⁶ Filing Parties’ proposal regarding surplus interconnection service for CNRIS is consistent with that construct as well as ISO-NE market rules. Therefore, with respect to CNRIS, we accept Filing Parties’ proposal to limit the availability of surplus interconnection service to only that level of service which is continuously available because it allows generators to fulfill their must-offer obligation to the energy market at any time. Filing Parties have demonstrated that implementing periodic surplus interconnection service for CNRIS customers is not consistent with ISO-NE’s existing market rules. Filing Parties explain that a generator that wishes to participate in ISO-NE’s Forward Capacity Market must seek CNRIS and that the amount of CNRIS that the generator is ultimately granted is based on the generator’s capacity supply obligation that has cleared the forward capacity auction.¹⁷⁷ Cleared generators are then required, when physically available, to offer at least their capacity supply obligation into the day-ahead and real-time energy market for the duration of the year-long capacity commitment period.¹⁷⁸ Therefore, Filing Parties’ proposal to limit the availability of surplus interconnection service from interconnection customers with CNRIS to only that level of service which is continuously available is consistent with the existing capacity supply

¹⁷⁵ Order No. 845, 163 FERC ¶ 61,043 at P 467.

¹⁷⁶ *See ISO New England Inc.*, 161 FERC ¶ 61,123 (2017).

¹⁷⁷ Filing at 31.

¹⁷⁸ ISO-NE, Tariff, § III, § 13.6.1.1.1 (39.0.0) (“Energy Market Offer Requirements”). If a resource is physically available at a level less than its capacity supply obligation, then it must offer into the markets at that level.

obligation that attaches to CNRIS. Accordingly, we disagree with arguments that there is periodic surplus interconnection service available for CNRIS customers.

111. However, in relation to NRIS, we find that the Filing Parties have not demonstrated that ISO-NE's market rules, the definition of "material modification," and related provisions prevent ISO-NE from offering periodic surplus interconnection service to NRIS customers. In particular, while ISO-NE's current market rules impose a must-offer obligation on customers with CNRIS, there is no such obligation for NRIS customers. Filing Parties also claim that surplus interconnection service must be on a continuous basis because ISO-NE's existing interconnection service construct allows generators with NRIS to offer continuously into the real-time market.¹⁷⁹ But, unlike CNRIS, ISO-NE's current market rules do not impose a must-offer obligation on generators with NRIS, and Filing Parties have not explained why ISO-NE cannot accommodate offers made on a periodic basis from resources with NRIS, including combined offers, so long as such offers are limited to the NRIS available at the point of interconnection. Furthermore, we note that ISO-NE already proposes to accommodate co-located facilities at a single point of interconnection via limiting devices.¹⁸⁰ We find that Filing Parties have not demonstrated that the proposed definition of "Surplus Interconnection Service," which is based on Unused Capability and limits the availability of surplus interconnection service for NRIS customers, accomplishes the purposes of Order No. 845.

112. Therefore, we direct Filing Parties to submit within 120 days of the date of this order a further compliance filing either to provide sufficient justification for their independent entity variation that limits the availability of surplus interconnection service for customers with NRIS, or to propose Tariff revisions that adopt the *pro forma* definition of "Surplus Interconnection Service" for NRIS customers.

ii. Proposed Interconnection Process for Surplus Interconnection Service

113. Filing Parties propose new LGIP sections 3.3 and 3.3.1 to specify the request and evaluation process for surplus interconnection service. Filing Parties propose in ISO-NE LGIP section 3.3 to specify that surplus interconnection service allows an existing interconnection customer whose generating facility is already interconnected to the ISO-NE system and in commercial operation to use or transfer surplus interconnection service at the existing facility's point of interconnection. Filing Parties propose that surplus interconnection service may be available for any Unused Capability of interconnection

¹⁷⁹ Filing Parties Answer at 7-12.

¹⁸⁰ *Id.* at 11-12.

service established in the existing generating facility's interconnection agreement and could be for NRIS or CNRIS.¹⁸¹

114. Filing Parties state that proposed ISO-NE LGIP section 3.3 specifies the circumstances under which surplus interconnection service is available. The proposed section states that surplus interconnection service is available when the proposed interconnection can be accomplished without a new interconnection request (i.e., it is not an increase in NRIS or CNRIS, or a material modification to the existing facility) or network upgrades.¹⁸² The proposed section also clarifies that surplus interconnection service is not available in the case of a retirement or repowering of an existing facility.¹⁸³

115. Filing Parties assert that, for ISO-NE to provide surplus interconnection service in an expedited manner outside of the interconnection queue, a request for surplus interconnection service cannot constitute a material modification, which requires a new interconnection request.¹⁸⁴ Filing Parties explain that their proposal achieves this in two ways. First, Filing Parties explain that the amount of surplus interconnection service available is the Unused Capability, which ensures that there is no increase in the capabilities established in the interconnection agreement. Second, Filing Parties state that ISO-NE will use the existing material modification framework for accommodating technological changes¹⁸⁵ to confirm that the proposed interconnection of the surplus interconnection customer's new facility will not adversely impact the reliability and operating characteristics of the New England transmission system. Filing Parties explain that, consistent with this approach, a request to modify the existing generating facility by adding the surplus interconnection customer's new device will be granted if no adverse impact can be confirmed by an analysis performed in fewer than 10 business days. Filing Parties state that, like today, interconnection customers can work with their equipment manufacturers to assess the potential impacts of the technology change and submit an analysis (e.g., analysis comparing the performance of the resource before and after the requested change) along with the request for surplus interconnection service

¹⁸¹ Filing at 36.

¹⁸² *Id.* (citing Order No. 845, 163 FERC ¶ 61,043 at P 473).

¹⁸³ *Id.* at 37 (citing Order No. 845, 163 FERC ¶ 61,043 at PP 473, 503).

¹⁸⁴ *Id.* (citing Order No. 845-A, 166 FERC ¶ 61,137 at P 152 (explaining that "Order No. 845 did not change the existing material modification definition, which determines whether an interconnection customer's proposed change will cause it to lose its queue position"))).

¹⁸⁵ *Id.* (citing ISO-NE LGIP § I.2.2 (defining Material Modification); ISO New England Inc., Filing, Docket No. ER16-946-000, at 23-24 (filed Feb. 16, 2016)).

demonstrating non-materiality for ISO-NE's consideration. Filing Parties explain that this analysis, along with the interconnection studies associated with the existing generating facility, may support the proposed change.

116. Filing Parties add that additional, limited analysis will be performed within the 10 business days to confirm that the proposed modification to the existing generating facility to accommodate the surplus interconnection customer's new facility does not cause an adverse impact. Filing Parties state that modifications of the existing generating facility to accommodate the request for surplus interconnection service for which the analysis cannot be completed within 10 business days will require a new interconnection request, like other material modifications.¹⁸⁶

117. Filing Parties state that, like the *pro forma* revisions, proposed ISO-NE LGIP section 3.3 provides the original interconnection customer, or its affiliate, priority to use surplus interconnection service. Filing Parties add that the original interconnection customer may choose to allow a third party to use surplus interconnection service.¹⁸⁷ Filing Parties state that, to avoid any potential misunderstanding or disagreements, proposed LGIP section 3.3 requires the original interconnection customer's written consent where its affiliate or a third party requests the surplus interconnection service.

118. Filing Parties propose to revise the *pro forma* language of LGIP section 3.3.1 to specify that the original interconnection customer's interconnection agreement will be replaced with a new interconnection agreement (based on the *pro forma* LGIA in ISO-NE LGIP Appendix 6) among ISO-NE, the interconnecting transmission owner, the original interconnection customer, and the surplus interconnection customer to recognize both the existing, commercial generating facility and the new facility electing to use the surplus interconnection service. ISO-NE explains that because surplus interconnection service is inherently derived from the original interconnection customer's interconnection service under its LGIA, a new single interconnection agreement governing both facilities is necessary so that the underlying requirements set forth in the interconnection agreement for operations, maintenance, etc., that are designed to ensure system reliability apply equally to each device. Filing Parties contend that because four-party agreements will deviate from the three-party construct of the ISO-NE *pro forma* LGIA, Filing Parties will file them with the Commission, consistent with the requirements of Order No. 2003.¹⁸⁸

¹⁸⁶ *Id.* at 37-38.

¹⁸⁷ *Id.* at 38 (citing Order No. 845, 163 FERC ¶ 61,043 at P 495).

¹⁸⁸ *Id.* (citing Order No. 2003 at P 915).

(a) Protests

119. NEPOOL argues that Filing Parties' proposal would inhibit expedited use of surplus interconnection service outside the interconnection queue, contrary to the requirements of Order Nos. 845 and 845-A. NEPOOL argues that to provide for more efficient use of unused interconnection service, Order No. 845 requires "transmission providers to provide an expedited process for interconnection customers to utilize or transfer surplus interconnection service at a particular point of interconnection."¹⁸⁹ NEPOOL notes that Order No. 845 requires that this process take place outside of the interconnection queue.¹⁹⁰ NEPOOL argues that contrary to the requirement of Order No. 845, Filing Parties' proposal does not allow for surplus interconnection service in cases where the studies required would trigger a new interconnection request by virtue of being deemed a material modification of the original interconnection request.

120. NEPOOL states that its proposal, in contrast, would allow for only those limitations provided for under Order Nos. 845 and 845-A, including the limitation of requiring no new network upgrades.¹⁹¹ NEPOOL states that to the extent that there is any other similar language in Filing Parties' proposal for surplus interconnection service, the Commission should direct Filing Parties to remove the restriction and conform the language to the Commission's intent for an expedited process outside the interconnection queue.¹⁹²

121. The Massachusetts Attorney General states that Filing Parties' proposal to disallow surplus interconnection service in instances where the new use is considered a material modification is contrary to the language and intent of Orders Nos. 845 and 845-A and will limit rather than expand interconnection opportunities.¹⁹³ The Massachusetts Attorney General states that it is clear that Filing Parties' proposal does not create a new

¹⁸⁹ NEPOOL Protest at 13 (citing Order No. 845, 163 FERC ¶ 61,043 at P 486).

¹⁹⁰ *Id.*

¹⁹¹ *Id.* (citing Order No. 845-A, 166 FERC ¶ 61,137 at P 138). NEPOOL states that its proposal would also add the following language to the end of the quoted paragraph from ISO-NE LGIP § 3.3.1: "The reactive power, short circuit/fault duty, stability, and steady-state analyses for [S]urplus Interconnection Service will identify any additional Interconnection Facilities necessary and confirm that no new Network Upgrades are necessary." NEPOOL claims this language recognizes the Commission's limitation of no new network upgrades for surplus interconnection service. *Id.* at 14 n.26.

¹⁹² *Id.* at 14.

¹⁹³ Massachusetts Attorney General Protest at 3.

interconnection process outside the queue; instead, the proposal limits eligible surplus interconnection service requests to only those requests that are so immaterial that they would not need to be added to the queue in the first place. The Massachusetts Attorney General argues that it is “a safe bet” that many requests for surplus interconnection service will take more than 10 days to study and thus will be relegated to the end of the queue.¹⁹⁴ The Massachusetts Attorney General also claims that given the Commission’s intent to create a new interconnection service outside the queue, the material modification limitation is an impermissible narrowing of the intended scope of the new service.¹⁹⁵

122. Clean Energy Entities contend that ISO-NE’s material modification criteria are too limited to allow for a reasonable evaluation of whether adding a new surplus interconnection generator would materially impact others on the grid. In particular, Clean Energy Entities take issue with the imposition of the requirement that any analysis must be completed within 10 business days.¹⁹⁶ They argue that this requirement shows a disregard for the distinction that the Commission sought to highlight between the queue and the surplus interconnection service review process because the 10-business-day rule is only concerned with the impact that an analysis could have on “the cost or timing of any Interconnection Studies or upgrades *associated with an Interconnection Request with a later queue priority date.*”¹⁹⁷ Clean Energy Entities state that, because the Commission intended that the review of surplus service requests could occur without affecting interconnection customers in the queue, there should be no need for the 10-business-day limit.¹⁹⁸ Clean Energy Entities argue that ISO-NE should provide a clear and detailed process for this evaluation, including specifics about how a surplus interconnection request will be studied.¹⁹⁹

¹⁹⁴ *Id.* at 7.

¹⁹⁵ *Id.* at 8.

¹⁹⁶ Clean Energy Entities Protest at 17.

¹⁹⁷ *Id.* (citing ISO-NE LGIP, § I (defining “Material Modification”) (emphasis added by Clean Energy Entities)). Clean Energy Entities also note that ISO-NE states in its compliance filing that “a request to modify the existing Generating Facility by adding the Surplus Interconnection Service Customer’s new device will be granted if no adverse impact can be confirmed by an analysis performed in less than 10 Business Days.” *Id.* (citing Filing at 37).

¹⁹⁸ *Id.*

¹⁹⁹ *Id.* at 14.

123. Clean Energy Entities also contend that the 10-business-day limit is not aligned with what other RTOs are contemplating.²⁰⁰ For instance, they claim that MISO's proposed compliance allows for 90 days to complete a study of a request, while Southwest Power Pool, Inc. (SPP) "will use reasonable efforts to complete the study within 60 Calendar Days."²⁰¹ They claim these examples show a reasonable amount of time to complete an analysis of the electrical impact of the addition of a customer to an existing point of interconnection. They state that the Commission should reject ISO-NE's 10-business-day limit as inadequate to complete the kind of evaluation contemplated under Order No. 845.²⁰²

124. Clean Energy Entities state that the imposition of the material modification test leads to outcomes that the Commission has identified as unjust and unreasonable because the Commission stated in Order No. 845 that "where proper precautions are taken to ensure system reliability, it would be unjust and unreasonable to deny an original interconnection customer the ability either to transfer or use for another resource surplus interconnection service."²⁰³ Clean Energy Entities note that under ISO-NE's proposal, a surplus interconnection customer could potentially take proper precautions but still fail to pass the material modification test if the analysis of its request could not be performed in fewer than 10 business days. As a result, they state, ISO-NE would deny the request for surplus interconnection, an outcome that the Commission has identified as unjust and unreasonable.²⁰⁴

125. ESA argues that Filing Parties propose that surplus interconnection service may be proposed only after an interconnection study determines that the service request is not a material modification.²⁰⁵ ESA contends that because a test for material modification requires study of impacts on the existing interconnection queue, ISO-NE's proposal amounts to a requirement that surplus service be studied within the queue.²⁰⁶ ESA argues

²⁰⁰ *Id.* at 17.

²⁰¹ *Id.* (citing MISO, Compliance Filing, Docket No. ER19-1823-000, section 3.3.1.2 (May 10, 2019) and SPP, Compliance Filing, Docket No. ER19-1954, at 15 (May 22, 2019)).

²⁰² *Id.*

²⁰³ *Id.* at 18 (citing Order No. 845, 163 FERC ¶ 61,043 at P 471).

²⁰⁴ *Id.*

²⁰⁵ ESA Protest at 4 (citing Filing at 37).

²⁰⁶ *Id.*

that the Commission addressed this concern in the rehearing order by asserting that surplus interconnection service is “only available up to the level that can be accommodated without requiring the construction of new network upgrades” and declining further analysis of reliability impacts.²⁰⁷ ESA states that, in Order No. 845, the Commission rightfully premised surplus interconnection service on existing generators’ full use of their existing interconnection service.²⁰⁸

(b) Filing Parties’ Answer

126. Filing Parties argue that ISO-NE’s interconnection procedures have always set forth a material modification framework to promote queue discipline, and ISO-NE must respect those rules.²⁰⁹ In response to protestors’ claims that Filing Parties’ proposal does not offer an expedited process outside the queue, Filing Parties argue that it does. Filing Parties explain that when the existing 10-business-day study for material modifications reveals that the requested service will not cause a significant adverse impact to the New England transmission system, ISO-NE will grant the request outside the queue process, without further study. Filing Parties clarify that ISO-NE will presume that surplus interconnection service requests will be processed outside the queue unless the results of the 10-business-day test “cannot definitely confirm that the requested service would have no adverse impacts requiring upgrades.”²¹⁰ Filing Parties further clarify that when the study cannot determine whether network upgrades are required, the customer can modify the request and resubmit, or ISO-NE can process the request through the queue.²¹¹ In sum, Filing Parties argue that the 10-business-day study process will achieve the objective of Order No. 845 to provide surplus interconnection service on an expedited basis when network upgrades are not required.

127. Regarding the longer study time frames proposed by other RTOs, Filing Parties state that its material modification study will further expedite requests because customers will need to wait only 10 business days, not 60 or 90, to find out whether their requests are eligible for expedited treatment.²¹²

²⁰⁷ *Id.* (citing Order No. 845-A, 166 FERC ¶ 61,137 at P 138).

²⁰⁸ *Id.* (citing Order No. 845, 163 FERC ¶ 61,043 at P 487).

²⁰⁹ Filing Parties Answer at 16.

²¹⁰ *Id.* at 14 n.42.

²¹¹ *Id.* at 15.

²¹² *Id.* at 16.

(c) **Commission Determination**

128. We find that Filing Parties' proposed interconnection process for surplus interconnection service partially complies with the requirements of Order Nos. 845 and 845-A.²¹³ Specifically, we find that Filing Parties' revised language in LGIP sections 3.3 and 3.3.1 includes most of the necessary *pro forma* language that describes an expedited interconnection process outside of the interconnection queue, allows affiliates of the original interconnection customer to use surplus interconnection service, allows the original interconnection customer to transfer surplus interconnection service to third parties, and identifies the studies necessary for surplus interconnection service. Because Filing Parties' proposed interconnection process meets the above requirements of Order Nos. 845 and 845-A, we find that these elements of the proposal comply with Order Nos. 845 and 845-A.

129. However, Filing Parties propose, without justification, language that differs in one respect from the Commission's requirements related to the process for analyzing surplus interconnection service requests. Specifically, *pro forma* LGIP section 3.3.1 states that "analyses for Surplus Interconnection Service will identify any additional Interconnection Facilities and/or Network Upgrades necessary." The language Filing Parties propose in ISO-NE LGIP section 3.3.1 instead states that the analyses will "confirm the Surplus Interconnection Service request can be accommodated without the need for additional upgrades and a new Interconnection Request." Furthermore, Filing Parties explain in their transmittal letter (but do not specify in proposed Tariff revisions) that ISO-NE will limit the analysis it performs under LGIP section 3.3.1 of requests for surplus interconnection service to its existing 10-business-day material modification framework for accommodating technological changes.²¹⁴ We agree with protesters that argue that ISO-NE's 10-business-day analysis may be inadequate to complete the evaluation required under Order No. 845, which must identify whether additional interconnection facilities and/or network upgrades are necessary to provide surplus interconnection service. Filing Parties explicitly acknowledge that in certain situations, the results of ISO-NE's 10-business-day analysis may not definitively confirm that the requested surplus interconnection service would have no adverse impacts requiring upgrades, in which case the request for surplus interconnection service would need to be pursued as a

²¹³ Order No. 845, 163 FERC ¶ 61,043 at PP 477, 486.

²¹⁴ Filing Parties state that, consistent with the existing material modification framework, a request to modify an existing generating facility by adding the surplus interconnection customer's new device will be granted only if no adverse impact can be confirmed by an analysis performed in less than 10 business days. Filing at 37.

new interconnection request.²¹⁵ We are concerned that based on the approach described in their transmittal, Filing Parties do not comply with the requirement outlined in *pro forma* LGIP section 3.3.1 that the transmission provider's analysis *will* identify any additional interconnection facilities and/or network upgrades necessary for surplus service. Accordingly, we direct Filing Parties to submit, within 120 days of the date of this order, a further compliance filing that revises section 3.3.1 of its LGIP to make clear that ISO-NE will not limit studies for surplus interconnection service to 10 business days, and will continue to study a surplus interconnection service request, without requiring a new interconnection request, until it determines whether any additional interconnection facilities and/or network upgrades necessary for surplus interconnection service.

130. Regarding the other independent entity variations proposed in ISO-NE LGIP section 3.3.1 (e.g., four-party agreements for surplus interconnection service), we find that the variations are just and reasonable, are not unduly discriminatory or preferential, and accomplish the purposes of Order Nos. 845 and 845-A because they accommodate ISO-NE's current structure as well as elements of Filing Parties' proposal, accepted elsewhere in this order.

11. Material Modifications and Incorporation of Advanced Technologies

131. In Order No. 845, the Commission modified section 4.4.2(c) of the *pro forma* LGIP to allow an interconnection customer to incorporate certain technological advancements to its interconnection request, prior to the execution of the interconnection facilities study agreement,²¹⁶ without risking the loss of its queue position. The Commission required transmission providers to develop and include in their LGIPs a definition of permissible technological advancements that will create a category of technological changes that, by definition, do not constitute a material modification and, therefore, will not result in the loss of queue position.²¹⁷ In addition, the Commission modified section 4.4.6 of the *pro forma* LGIP to require transmission providers to insert a technological change procedure that includes the requisite information and process that

²¹⁵ Filing Parties Answer at 14-15 and n.42.

²¹⁶ While the Commission clarified that interconnection customers may submit a technological advancement request up until execution of the facilities study agreement, the Commission stated that it will permit transmission providers to propose rules limiting the submission of technological advancement requests to a single point in the study process (prior to the execution of a facilities study agreement), to the extent the transmission provider believes it appropriate. Order No. 845, 163 FERC ¶ 61,043 at P 536.

²¹⁷ *Id.*

the transmission provider will follow to assess whether an interconnection customer's proposed technological advancement is a material modification.²¹⁸

132. The Commission required that the technological change procedure specify what technological advancements can be incorporated at various stages of the interconnection process and clearly identify which requirements apply to the interconnection customer and which apply to the transmission provider.²¹⁹ Additionally, the technological change procedure must state that, if the interconnection customer seeks to incorporate technological advancements into its proposed generating facility, it should submit a technological advancement request, and the procedure must specify the information that the interconnection customer must submit as part of that request.²²⁰

133. The Commission also required that the technological change procedure specify the conditions under which a study will or will not be necessary to determine whether a proposed technological advancement is a material modification.²²¹ The Commission explained that the technological change procedure must also state that, if a study is necessary to evaluate whether a particular technological advancement is a material modification, the transmission provider shall clearly indicate to the interconnection customer the types of information and/or study inputs that the interconnection customer must provide to the transmission provider, including, for example, study scenarios, modeling data, and any other assumptions.²²² In addition, the Commission required that the technological change procedure explain how the transmission provider will evaluate the technological advancement request to determine whether it is a material modification.²²³

134. Further, the Commission required that the technological change procedure outline a time frame of no more than 30 days after the interconnection customer submits a formal technological advancement request for the transmission provider to perform and complete any necessary additional studies.²²⁴ The Commission also found that, if the transmission

²¹⁸ *Id.*; see also *pro forma* LGIP § 4.4.6.

²¹⁹ Order No. 845, 163 FERC ¶ 61,043 at P 519.

²²⁰ *Id.*

²²¹ Order No. 845-A, 166 FERC ¶ 61,137 at P 155.

²²² Order No. 845, 163 FERC ¶ 61,043 at P 521.

²²³ *Id.*

²²⁴ *Id.* P 535.

provider determines that additional studies are needed to evaluate whether a technological advancement is a material modification, the interconnection customer must tender a deposit, and the transmission provider must specify the amount of the deposit in the transmission provider's technological change procedure.²²⁵ In addition, the Commission explained that, if the transmission provider cannot accommodate a proposed technological advancement without triggering the material modification provision of the pro forma LGIP, the transmission provider must provide an explanation to the interconnection customer regarding why the technological advancement is a material modification.

135. In Order No. 845-A, the Commission clarified that: (1) when studies are necessary, the interconnection customer's technological change request must demonstrate that the proposed incorporation of the technological change will result in electrical performance that is equal to or better than the electrical performance expected prior to the technological change and will not cause any reliability concerns; (2) if the interconnection customer cannot demonstrate in its technological change request that the proposed technological change would result in equal or better electrical performance, the change will be assessed pursuant to the existing material modification provisions in the pro forma LGIP; (3) information regarding electrical performance submitted by the interconnection customer is an input into the technological change study, and this factor alone is not determinative of whether a proposed technological change is a material modification; and (4) the determination of whether a proposed technological change (that the transmission provider does not otherwise include in its definition of permissible technological advancements) is a material modification should include an analysis of whether the proposed technological change materially impacts the timing and costs of lower-queued interconnection customers.²²⁶

a. Filing Parties' Compliance Filing

136. Filing Parties request an independent entity variation to forgo adopting the *pro forma* Order No. 845 requirements related to material modifications and the incorporation of advanced technologies. Filing Parties argue that ISO-NE's existing material modification process, as approved by the Commission in 2016, meets or exceeds Order No. 845's stated objectives.²²⁷ In particular, Filing Parties explain that its existing construct explicitly defines what constitutes a material modification, delineates the

²²⁵ *Id.* P 534. The Commission set the default deposit amount at \$10,000 but stated that a transmission provider may propose a reasonable alternative deposit amount in its compliance filing and include justification supporting this alternative amount. *Id.*

²²⁶ Order No. 845-A, 166 FERC ¶ 61,137 at P 155.

²²⁷ Filing at 40 (citing *ISO New England Inc.*, 155 FERC ¶ 61,031 (2016)).

process for expeditiously assessing material modification requests, and demarcates the points at which interconnection customers can make changes to a proposed project without triggering a materiality review.²²⁸

137. Filing Parties explain that interconnection customers are currently able to update their technical data without triggering a materiality review up to the commencement of the system impact study and can do so as a non-material modification at any time after the completion of the system impact study if the material assessment can be completed within 10 business days.²²⁹ Filing Parties state that, under this construct, the expectation is placed on the interconnection customer to work with its equipment manufacturer to assess the potential impacts of the technological change, and to submit that analysis along with the material modification requests for ISO-NE's consideration.²³⁰ Filing Parties state that any materiality assessment that cannot be completed within 10 business days is automatically deemed a material impact given its delay on a lower-queued project.²³¹ Filing Parties note that ISO New England Planning Procedure No. 5-6 specifies when proposed modifications could be considered material relative to the various stages in the interconnection process.

b. Commission Determination

138. We accept Filing Parties' request for an independent entity variation regarding material modifications and the incorporation of advanced technologies because we find that it is just and reasonable, is not unduly discriminatory or preferential, and accomplishes the purposes of Order Nos. 845 and 845-A. We find that Filing Parties' current process prior to the system impact study, which allows customers to make technological changes without any type of assessment, exceeds Order No. 845's requirements. Further, in Order No. 845, the Commission gave transmission providers discretion to propose rules limiting the submission of technological advancement requests to a single point in the study process (prior to the execution of a facilities study agreement).²³² Filing Parties' current process allows material modifications after the start of the system impact study if these modifications can be assessed within 10 business days. To facilitate this assessment, ISO-NE provides guidelines regarding the types of changes that may be considered a material modification and accepts third-party

²²⁸ Filing at 39-40.

²²⁹ *Id.* See also ISO-NE, Tariff, § II, Schedule 22 (17.0.0), §§ 4.4.1, 7.4.

²³⁰ Filing at 40.

²³¹ *Id.*

²³² Order No. 845, 163 FERC ¶ 61,043 at P 536.

assessments of the technological change. Accordingly, we find that Filing Parties' current process appropriately allows interconnection customers to incorporate technological changes to their interconnection request that do not materially modify the interconnection request.

12. Other Issues Raised by Filing Parties

a. Proposed Non-Substantive Revisions

139. Filing Parties propose to implement, throughout the Tariff, section II, Schedule 22, non-substantive revisions that reflect variations from the Commission's *pro forma* LGIP and *pro forma* LGIA revisions adopted in Order Nos. 845 and 845-A. First, Filing Parties propose to replace "Transmission Provider" in the Commission's *pro forma* LGIP and *pro forma* LGIA because, under Schedule 22, both ISO-NE and the PTOs have responsibilities in the interconnection process that are assigned to the "Transmission Provider." Filing Parties propose to revise the Commission's *pro forma* language to specify which of the entities has the responsibility covered by the particular provision. Filing Parties state that the proposed revisions also continue the current structure in Schedule 22, which provides that ISO-NE is the lead party responsible for the interconnection process, studies, and the overall operation and reliability of the system. Second, Filing Parties propose to replace the terms "Transmission Provider's Transmission System" and "coordinated region" in the Commission's *pro forma* documents with "Administered Transmission System," consistent with the defined term used in New England. Third, Filing Parties explain that the term "Generating Facility Capacity" is not a defined term in Schedule 22, which instead uses the terms "Large Generating Facility" and "Generating Facility." As noted above, Filing Parties explain that the defined term that matches "Generating Facility Capacity" is "Generating Facility." Therefore, Filing Parties propose to replace the word "Capacity" in the term "Generating Facility Capacity" with "capability(ies)."²³³

²³³ Filing 12-13. Filing Parties state that their revisions also reflect the following ministerial changes: (1) the Table of Contents in the ISO-NE LGIP has been revised to reflect the addition of section 3.3 and to shift all subsequent subsections and update their respective cross-references throughout the ISO-NE LGIP and ISO-NE *pro forma* LGIA; and (2) the transition provisions of ISO-NE LGIP section 5.1 have been updated to include placeholders for the new effective date so that interconnection studies that commence before the new provisions submitted in this filing become effective will be conducted pursuant to the previous version of the rules. *See* Filing at 13 n.35.

b. Commission Determination

140. We find that these revisions, as proposed by Filing Parties, are just and reasonable, are not unduly discriminatory or preferential, and accomplish the purposes of Order Nos. 845 and 845-A.

The Commission orders:

(A) Filing Parties' compliance filing is hereby accepted, to become effective as the date of this order, as requested, subject to a further compliance filing, as discussed in the body of this order.

(B) Filing Parties are hereby directed to submit a further compliance filing, within 120 days of the date of this order, as discussed in the body of this order.

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.