

149 FERC ¶ 61,212
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Cheryl A. LaFleur, Chairman;
Philip D. Moeller, Tony Clark,
and Norman C. Bay.

ISO New England Inc.

Docket Nos. ER14-2583-000
ER14-2583-001

ORDER ON COMPLIANCE FILING

(Issued December 8, 2014)

1. On August 4, 2014, as amended on October 21, 2014, ISO New England Inc. (ISO-NE), New England Power Pool Participants Committee, and the Participating Transmission Owners' Administrative Committee¹ (together, the Filing Parties) jointly submitted, pursuant to section 206 of the Federal Power Act (FPA),² revisions to ISO-

¹ The Participating Transmission Owners include: Town of Braintree Electric Light Department; Central Maine Power Company; Maine Electric Power Company; Chicopee Electric Light Department; Connecticut Municipal Electric Energy Cooperative; Connecticut Transmission Municipal Electric Energy Cooperative; Emera Maine (Bangor Hydro Division); The City of Holyoke Gas and Electric Department; Green Mountain Power Corporation; Hudson Light and Power Department; Massachusetts Municipal Wholesale Electric Company; Middleborough Gas and Electric Department; New England Power Company; New Hampshire Electric Cooperative, Inc.; New Hampshire Transmission, LLC; Northeast Utilities Service Company (on behalf of its affiliates Connecticut Light and Power Company, Western Massachusetts Electric Company, and Public Service Company of New Hampshire); NSTAR Electric Company; Taunton Municipal Lighting Plant; Town of Norwood Municipal Light Department; Town of Reading Municipal Light Department; United Illuminating Company; Unitil Energy Systems, Inc. and Fitchburg Gas and Electric Light Company; Vermont Electric Power Company; Vermont Electric Cooperative, Inc.; Vermont Transco, LLC; Vermont Public Power Supply Authority; and Town of Wallingford, Connecticut Department of Public Utilities Electric Division.

² 16 U.S.C. §§ 824d, 824e (2012).

NE's Small Generator Interconnection Procedures (SGIP) and Small Generator Interconnection Agreement (SGIA) in Schedule 23 of the ISO-NE Open Access Transmission Tariff (ISO-NE OATT) to comply with the requirements of Order No. 792 (compliance filing).³ In this order, we accept the proposed compliance filing to become effective December 8, 2014, as requested, as discussed below.

I. Background

2. In Order No. 2006,⁴ the Commission established a *pro forma* SGIP and a *pro forma* SGIA for the interconnection of small generation resources no larger than 20 megawatts (MW). The *pro forma* SGIP describes how an interconnection customer's interconnection request (application) should be evaluated, and includes three alternative procedures for evaluating an interconnection request. These procedures include the Study Process, which can be used by any generating facility, and two procedures that use certain technical screens to quickly identify any safety or reliability issues associated with proposed interconnections: (1) the Fast Track Process for certified small generating facilities no larger than 2 MW; and (2) the 10 kilowatt (kW) Inverter Process for certified inverter-based small generating facilities no larger than 10 kW.

3. Order No. 792 amends the Commission's *pro forma* SGIP and *pro forma* SGIA⁵ adopted in Order No. 2006 as follows: (1) incorporating provisions in the *pro forma* SGIP that provide an interconnection customer with the option of requesting from the transmission provider a pre-application report providing existing information about system conditions at a possible point of interconnection;⁶ (2) revising the 2 MW threshold for participation in the Fast Track Process included in section 2 of the *pro forma* SGIP;⁷ (3) revising the *pro forma* SGIP customer options meeting and the supplemental review following failure of the Fast Track screens so that supplemental review is performed at the discretion of the interconnection customer and includes

³ *Small Generator Interconnection Agreements and Procedures*, Order No. 792, 78 Fed. Reg. 73,240 (Dec. 5, 2013), 145 FERC ¶ 61,159 (2013), *clarified*, Order No. 792-A, 146 FERC ¶ 61,214 (2014).

⁴ *Standardization of Small Generator Interconnection Agreements and Procedures*, Order No. 2006, FERC Stats. & Regs. ¶ 31,180, *order on reh'g*, Order No. 2006-A, FERC Stats. & Regs. ¶ 31,196 (2005), *order granting clarification*, Order No. 2006-B, FERC Stats. & Regs. ¶ 31,221 (2006) (Order No. 2006).

⁵ See 18 C.F.R. § 35.28(f) (2014).

⁶ Order No. 792, 145 FERC ¶ 61,159 at PP 37-40.

⁷ *Id.* PP 102-110.

minimum load and other screens to determine if a small generating facility may be interconnected safely and reliably;⁸ (4) revising the *pro forma* SGIP facilities study agreement to allow the interconnection customer the opportunity to provide written comments to the transmission provider on the upgrades required for interconnection;⁹ (5) revising the *pro forma* SGIP and the *pro forma* SGIA to specifically include energy storage devices;¹⁰ and (6) clarifying certain sections of the *pro forma* SGIP and the *pro forma* SGIA.¹¹ The reforms were adopted to ensure that interconnection time and costs for interconnection customers and transmission providers are just and reasonable and to help remedy undue discrimination, while continuing to ensure safety and reliability.

4. Order No. 792 requires each public utility transmission provider to submit a compliance filing within six months of the effective date of Order No. 792 to demonstrate that it meets the requirements of the Final Rule.¹² Filings adopting the revised SGIP and SGIA without variation are to be filed under section 206 of the FPA.¹³ The Commission stated that it would consider variations from the Final Rule.¹⁴ In Order No. 792-A, the Commission clarified that a public utility transmission provider may submit a filing under FPA section 205¹⁵ demonstrating “that either a variation that has not been previously approved by the Commission, or a previously-approved variation from the [Order No. 2006] *pro forma* language that has been substantively affected by the reforms adopted in the Final Rule, meets one of the standards for variance provided for in the Final Rule, including independent entity variations, regional reliability variations, and variations that are ‘consistent with or superior to’ the Final Rule.”¹⁶

⁸ *Id.* PP 117, 141-148,156-161.

⁹ *Id.* PP 203-209.

¹⁰ *Id.* PP 227-231.

¹¹ *Id.* PP 235-236, 260-261.

¹² *Id.* P 269.

¹³ Order No. 792-A, 146 FERC ¶ 61,214 at P 2.

¹⁴ Order No. 792, 145 FERC ¶ 61,159 at P 270.

¹⁵ 16 U.S.C. § 824d (2012).

¹⁶ Order No. 792-A, 146 FERC ¶ 61,214 at P 3. *See also* Order No. 792, 145 FERC ¶ 61,159 at PP 273-274.

5. The Commission permits regional transmission organizations (RTOs) and independent system operators (ISOs) to seek “independent entity variations” from the *pro forma* SGIP and SGIA. Such entities may be treated differently because an RTO or ISO has different operating characteristics depending on its size and location and is less likely to act in an unduly discriminatory manner than a transmission provider that is also a market participant. The RTO or ISO therefore has greater flexibility to customize its interconnection procedures and agreements to accommodate regional needs.¹⁷

II. Compliance Filing

6. Filing Parties propose revisions to Schedule 23 of the ISO-NE OATT to comply with the Commission’s Order Nos. 792 and 792-A by incorporating the *pro forma* revisions set forth in Order No. 792 with the following limited variations: (1) raising the pre-application report fee from \$300 to \$500; (2) lowering the fast-track eligibility threshold; (3) preserving provisions of ISO-NE’s current SGIP study process that allow interconnection customers to review and comment on required upgrades identified in the facilities study; (4) requiring a new interconnection request for the addition of energy storage capability to an existing small generating facility or for a pending interconnection request; (5) accommodating requests for interconnection service through ISO-NE’s SGIP rather than the LGIP; and (6) other minor clarifications and ministerial modifications. Filing Parties request that their proposed changes become effective upon issuance of the Commission’s order in this proceeding.

III. Notice of Filing and Responsive Pleadings

7. Notice of the compliance filing was published in the *Federal Register*, 79 Fed. Reg. 46,789 (2014), with interventions and protests due on or before August 25, 2014.

¹⁷ *Id.* P 274. See also *Standardization of Generator Interconnection Agreements and Procedures*, Order No. 2003, FERC Stats. & Regs. ¶ 31,146, at PP 822-827, *order on reh’g*, Order No. 2003-A, FERC Stats. & Regs. ¶ 31,160 (2003), *order on reh’g*, Order No. 2003-B, FERC Stats. & Regs. ¶ 31,171 (2004), *order on reh’g*, Order No. 2003-C, FERC Stats. & Regs. ¶ 31,190 (2005), *aff’d sub nom. Nat’l Ass’n of Regulatory Util. Comm’rs v. FERC*, 475 F.3d 1277 (D.C. Cir. 2007), *cert. denied*, 552 U.S. 1230 (2008).

8. Timely motions to intervene were filed by NRG Power Marketing LLC, GenOn Energy Management, LLC, and Dominion Resources Services, Inc.¹⁸ On August 27, 2014, Exelon Corporation filed an out-of time motion to intervene.
9. On October 6, 2014, under delegated authority, Commission Staff issued a letter informing Filing Parties that their filing was deficient and requested additional information (Deficiency Letter).
10. On October 21, 2014, Filing Parties submitted their response to the Deficiency Letter (Deficiency Letter Response).
11. Notice of Filing Parties' Response was published in the *Federal Register*, 79 Fed. Reg. 64,378 (2014), as supplemented by an errata notice, with interventions and protests due on or before November 5, 2014. None were filed.

IV. Discussion

A. Procedural Matters

12. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2014), the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding. Pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214(d) (2014), the Commission will grant the late-filed motion to intervene of Exelon Corporation given its interest in the proceeding, the early stage of the proceeding, and the absence of undue prejudice or delay.

B. Substantive Matters

13. We find that the Filing Parties' compliance filing, as amended by their Deficiency Letter Response, complies with Order No. 792. Accordingly, we will accept the Filing Parties' compliance filing to be effective the date of this order's issuance.¹⁹

¹⁸ On behalf of Dominion Energy Marketing, Inc., Dominion Nuclear Connecticut, Inc., and Dominion Manchester Street, Inc.

¹⁹ The tariff record filed in Docket No. ER14-2583-000 (Filing Parties' compliance filing) contains language identical to language in the tariff record filed in Docket No. ER14-2583-001 (Filing Parties' Deficiency Letter Response). For purposes of processing in eTariff, we will accept the tariff record in Docket No. ER14-2583-000 and reject the tariff record filed in Docket No. ER14-2583-001.

1. Pre-Application Report

14. In Order No. 792, the Commission required each public utility transmission provider to provide interconnection customers the option to request a pre-application report that would contain readily available information about system conditions at a point of interconnection in order to help that customer select the best site for its small generating facility.²⁰

15. To the extent readily available, the pre-application report must include, among other items: (1) total capacity (in MW) of substation/area bus, bank or circuit based on normal or operating ratings likely to serve the proposed point of interconnection; (2) existing aggregate generation capacity (in MW) interconnected to a substation/area bus, bank or circuit (i.e., amount of generation online) likely to serve the proposed point of interconnection; (3) aggregate queued generation capacity (in MW) for a substation/area bus, bank or circuit (i.e., amount of generation in the queue) likely to serve the proposed point of interconnection; and (4) available capacity (in MW) of substation/area bus or bank and circuit likely to serve the proposed point of interconnection (i.e., total capacity less the sum of existing aggregate generation capacity and aggregate queued generation capacity).²¹

16. In order to resolve uncertainty about the precise location of the point of interconnection and expedite the pre-application report process, the Commission required interconnection customers requesting a pre-application report to submit a written request form that includes, among other items, project contact information, project location, and generator type and size.²² Customers are required to submit a non-refundable fee along with the written request form to compensate the transmission provider for the cost of compiling the pre-application report. Transmission providers are required to provide the pre-application report within 20 business days of receiving the completed request form and payment of the fee.²³

²⁰ Order No. 792, 145 FERC ¶ 61,159 at P 37.

²¹ See section 1.2.3 of the *pro forma* SGIP for the complete list of items in the pre-application report.

²² Order No. 792, 145 FERC ¶ 61,159 at P 56. See section 1.2.2 of the *pro forma* SGIP for the complete list of items in the pre-application report request form.

²³ *Id.* P 51. See also section 1.2.2 of the *pro forma* SGIP.

17. The Commission adopted a \$300 fee as the default pre-application report fee in the *pro forma* SGIP. Order No. 792 allows transmission providers to propose a different fixed cost-based fee for preparing pre-application reports, supported by a cost justification, as part of their compliance filings.²⁴

a. Compliance Filing

18. Filing Parties propose revisions to the ISO-NE OATT allowing an interconnection customer to submit a formal written request for a pre-application report.²⁵ Filing Parties propose that this pre-application report will provide, among other things: (1) the total capacity (in MW) of substation/area bus, bank or circuit based on normal or operating ratings likely to serve the proposed point of interconnection; (2) the existing aggregate generation capacity (in MW) interconnected to a substation/area bus, bank or circuit (i.e., amount of generation online) likely to serve the proposed point of interconnection; and (3) the aggregate queued generation capacity (in MW) for a substation/area bus, bank or circuit (i.e., amount of generation in the queue) likely to serve the proposed point of interconnection.²⁶

19. Filing Parties propose a \$500 non-refundable fee for pre-application report requests.²⁷ Filing Parties assert that the \$300 default fee is not sufficient to cover the costs to the ISO and the applicable Participating Transmission Owner²⁸ for processing the pre-application report request. Filing Parties explain that a multitude of Participating Transmission Owners' (including transmission and distribution-owning companies, and publicly-owned municipalities that own transmission and distribution) involvement is essential to preparing the pre-application report because they are uniquely equipped to assist ISO-NE in addressing matters of the distribution system.²⁹

²⁴ *Id.* PP 45-46.

²⁵ ISO-NE, Transmission, Markets and Services Tariff, Schedule 23, § 1.2.2 (5.0.0) (Pre-Application).

²⁶ ISO-NE, Transmission, Markets and Services Tariff, Schedule 23, §§ 1.2.3.1, 1.2.3.2, 1.2.3.3 (5.0.0) (Pre-Application).

²⁷ Transmittal Letter at 12.

²⁸ ISO-NE defines Participating Transmission Owner as a transmission owner that is a party to the Transmission Operating Agreement. ISO-NE, Transmission, Markets and Services Tariff, § 1.2.2. (50.0.0) (Definitions).

²⁹ Transmittal Letter at 12.

20. Filing Parties state that under Schedule 23 of the ISO-NE OATT, ISO-NE is responsible for administering the pre-application report process and coordinating the production of the pre-application report, and the Participating Transmission Owners are responsible for compiling the readily available information required to complete the report and perform the function of providing a complete report.³⁰ Filing Parties state that ISO-NE determined that its responsibilities in this process involve multiple employees, including a project manager, an interconnection process administrator and technical engineering staff, spending a total of 2.5-3 hours at an approximate total cost of \$250-300.³¹ Filing Parties state that each of the Participating Transmission Owners has different organizational structures, workflows, work allocations, and cost breakdowns. They state that preparing a pre-application report involves multiple functional departments and employees, including a manager, engineer, analyst and potentially the use of legal staff, spending a total of 4-5 hours at an approximate total cost of \$400-500.³² Filing Parties state that a breakdown of the actual hours and varying hourly rates for the preparation of the pre-application report would result in a fee higher than the proposed \$500. However, as Order No. 792 set a default fee of \$300 for a single entity compiling the readily available information required to complete a pre-application report, Filing Parties represent that ISO-NE and the Participating Transmission Owners applied the \$300 toward the time and resources that the Participating Transmission Owners will spend in completing the report, and added only \$200 to be applied towards the time and resources that ISO-NE will spend in administering the pre-application report.³³

21. Filing Parties also propose to revise section 1.2.2 of the *pro forma* SGIP to require ISO-NE to provide a copy of the pre-application report request form to the interconnecting transmission owner within two business days of receiving the request so that it can initiate the collection of the information necessary to provide the report to the interconnection customer in a timely manner. Filing parties contend that incorporating a deadline for the pre-application report similar to one already imposed on ISO-NE for interconnection requests protects the interconnection customer and helps to keep the process moving.³⁴

³⁰ Deficiency Letter Response, attach. A at 1.

³¹ *Id.* at 2.

³² *Id.* at 2.

³³ *Id.*

³⁴ Transmittal Letter at 12-13.

22. Filing Parties propose to revise section 1.2.3 of the *pro forma* SGIP to identify the Interconnecting Transmission Owner's responsibility for determining whether the point of interconnection specified in a pre-application report request is on a distribution facility that is subject to the ISO-NE Tariff.³⁵ If the interconnecting transmission owner determines that the point of interconnection is on a distribution facility, Filing Parties' proposed revision to section 1.2.3 of the *pro forma* SGIP requires the interconnection customer to follow the applicable state process. Filing Parties argue that this variation is consistent with the variations the Commission already approved in Sections 1.1.1 and 1.3.1 of the SGIP, which limit Schedule 23 applicability and require an interconnection customer to follow the applicable state process when seeking to interconnect to a local distribution facility.³⁶

b. Commission Determination

23. We accept Filing Parties' proposed pre-application report process as compliant with Order No. 792. Filing Parties' revisions provide a formal process for interconnection customers to request a pre-application report. We also find that Filing Parties' proposal complies with Order No. 792's requirement that all pre-application reports contain, among other things, (1) the total capacity (in MW) of substation/area bus, bank or circuit based on normal or operating ratings likely to serve the proposed point of interconnection; (2) the existing aggregate generation capacity (in MW) interconnected to a substation/area bus, bank or circuit (i.e., amount of generation online) likely to serve the proposed point of interconnection; and (3) the aggregate queued generation capacity (in MW) for a substation/area bus, bank or circuit (i.e., amount of generation in the queue) likely to serve the proposed point of interconnection.³⁷ We also accept Filing Parties' proposed \$500 nonrefundable fee for pre-application reports. Filing Parties have shown that this proposed fee more closely reflects both ISO-NE's and the applicable Participating Transmission Owner's costs to process pre-application reports and provide the incremental information required in the pre-application report.³⁸

³⁵ ISO-NE, Transmission, Markets and Services Tariff, Schedule 23, § 1.2.3 (5.0.0) (Pre-Application).

³⁶ *Id.*

³⁷ *See* SGIP § 1.2.3.

³⁸ *See* Order No. 792, 145 FERC ¶ 61,159 at 46.

2. Fast Track Threshold

24. In Order No. 792, the Commission modified section 2.1 of the *pro forma* SGIP to adopt revised eligibility thresholds for participation in the Fast Track Process. The new criteria are based on individual system and generator characteristics. Specifically, the Fast Track eligibility threshold for inverter-based machines that are either certified or have been reviewed or tested by the transmission provider and are determined to be safe to operate will be based on Table 1 below.³⁹

Table 1: Fast Track eligibility for inverter-based systems

Line Voltage	Fast Track Eligibility Regardless of Location	Fast Track Eligibility on a Mainline ⁴⁰ and ≤ 2.5 Electrical Circuit Miles from Substation ⁴¹
< 5 kilovolt (kV)	≤ 500 kW	≤ 500 kW
≥ 5 kV and < 15 kV	≤ 2 MW	≤ 3 MW
≥ 15 kV and < 30 kV	≤ 3 MW	≤ 4 MW
≥ 30 kV and ≤ 69 kV	≤ 4 MW	≤ 5 MW

25. The Commission maintained the Fast Track eligibility threshold for synchronous and induction machines at 2 MW.⁴² Additionally, Fast Track eligibility is limited to those projects connecting to lines at 69 kV and below.⁴³

³⁹ Order No. 792, 145 FERC ¶ 61,159 at PP 103-104.

⁴⁰ For purposes of this table, a mainline is the three-phase backbone of a circuit. It will typically constitute lines with wire sizes of 4/0 American wire gauge, 336.4 kcmil, 397.5 kcmil, 477 kcmil and 795 kcmil. One circular mil (cmil) is the area of a circle with a diameter of one mil (one mil is one-thousandth of an inch). Conductor sizes are often given in thousands of circular mils (kcmil). One kcmil = 1,000 cmil.

⁴¹ An interconnection customer can determine this information about its proposed interconnection location in advance by requesting a pre-application report pursuant to section 1.2 of the *pro forma* SGIP.

⁴² Order No. 792, 145 FERC ¶ 61,159 at P 106.

a. **Compliance Filing**

26. Filing Parties revise the Fast Track process eligibility criteria to be based on individual system and generator characteristics, as set forth in Order No. 792.⁴⁴ Filing Parties also propose revising the ISO-NE OATT to include the Fast Track eligibility criteria for inverter-based systems, which is almost entirely consistent with the criteria in Order No. 792.⁴⁵ For all synchronous and induction machines, consistent with Order No. 792, Filing Parties propose that these resources must be below 2 MW to be eligible for the Fast Track Process.⁴⁶

27. Filing Parties depart from the *pro forma* SGIP by seeking to limit Fast Track eligibility to those projects connecting to lines *below* 69 kV, instead of “at 69 kV and below,” as required by Order No. 792.⁴⁷ Filing Parties explain that, in New England, facilities rated 69 kV or higher are used for regional transmission service, so this eligibility limit is important because interconnection to such facilities would need to be studied to determine the impacts on the transmission system, which the Fast Track Process screens are not designed to evaluate.⁴⁸ They argue that this deviation is consistent with the independent entity variation standard recognized under Order No. 792.⁴⁹ Filing Parties proposed ministerial revisions to section 3.1 of the ISO-NE SGIP

⁴³ *Id.* P 107.

⁴⁴ Transmittal Letter at 13.

⁴⁵ Compare ISO-NE, Transmission, Markets and Services Tariff, Schedule 23, § 2.1 (5.0.0) (Applicability) with Order No. 792, 145 FERC ¶ 61,159 at P 103 and SGIP § 2.1.

⁴⁶ Compare ISO-NE, Transmission, Markets and Services Tariff, Schedule 23, § 2.1 (5.0.0) (Applicability) with Order No. 792, 145 FERC ¶ 61,159 at P 106 and SGIP § 2.1.

⁴⁷ Compare ISO-NE, Transmission, Markets and Services Tariff, Schedule 23, § 2.1 (5.0.0) (Applicability) and Transmittal Letter at 13 with Order No. 792, 145 FERC ¶ 61,159 at P 107 and SGIP § 2.1.

⁴⁸ Transmittal Letter at 13-14.

⁴⁹ *Id.* at 14.

that are consistent with section 1.1 of the *pro forma* SGIP to avoid inconsistencies and unnecessary confusion regarding eligibility for the Fast Track Process under the ISO-NE Tariff.⁵⁰

b. Commission Determination

28. We find Filing Parties' proposed revisions to be consistent with the *pro forma* applicability and eligibility language adopted in Order No. 792.⁵¹ We also accept as permissible under the Commission's independent entity variation standard Filing Parties' proposal to limit Fast Track eligibility to requested interconnections to lines below 69 kV. We recognize that, under the ISO-NE Tariff, transmission lines at 69 kV fall under ISO-NE's definition for regional transmission facilities.⁵² Consistent with the Commission's reasoning in Order No. 792, we find that the costs and system modifications of interconnections to regional transmission facilities, which are rated at 69 kV and above in ISO-NE, "are likely significant enough that generators may benefit from the more thorough estimate developed through the Study Process."⁵³

3. Fast Track Customer Options Meeting and Supplemental Review

29. In Order No. 792, the Commission adopted modifications in section 2.3 of the *pro forma* SGIP to the customer options meeting to be held following the failure of any of the Fast Track screens.⁵⁴ In particular, the Commission required the transmission provider to offer to perform a supplemental review of the proposed interconnection without condition, whereas prior to Order No. 792, the determination of whether to offer to perform the supplemental review was at the discretion of the transmission provider.

⁵⁰ *Id.*; ISO-NE, Transmission, Markets and Services Tariff, Schedule 23, § 3.1 (5.0.0) (Applicability); *see* SGIP § 1.1.

⁵¹ Order No. 792, 145 FERC ¶ 61,159 at PP 102–110.

⁵² *See* ISO-NE, Transmission, Markets and Services Tariff, § II.49 (0.0.0) (Definition of PTF).

⁵³ Order No. 792, 145 FERC ¶ 61,159 at P 107.

⁵⁴ Order No. 792, 145 FERC ¶ 61,159 at P 117.

30. In Order No. 792, the Commission modified the supplemental review by including three screens: (1) the minimum load screen; (2) the voltage and power quality screen; and (3) the safety and reliability screen.⁵⁵

31. The minimum load screen adopted in section 2.4.4.1 of the *pro forma* SGIP examines whether the aggregate generating capacity, including the proposed small generating facility capacity, is less than 100 percent of the minimum load within the line sections bounded by automatic sectionalizing devices upstream of the proposed small generating facility. The Commission found that, with respect to solar photovoltaic generation systems with no battery storage, the relevant minimum load value to be used in the minimum load screen is the daytime minimum load. For all other types of generation, the relevant minimum load value is the absolute minimum load. In the event that a transmission provider is unable to perform the minimum load screen because minimum load data are not available, or cannot be calculated, estimated, or determined, the Commission required the transmission provider to provide the reason(s) it is unable to perform the screen.

32. The voltage and power quality screen adopted in section 2.4.4.2 of the *pro forma* SGIP examines three things: (1) whether the voltage regulation on the line section can be maintained in compliance with relevant requirements under all system conditions; (2) whether voltage fluctuation is within acceptable limits; and (3) whether the harmonic levels meet Institute of Electrical and Electronics Engineers (IEEE) Standard 519 limits.⁵⁶

33. The safety and reliability screen adopted in section 2.4.4.3 of the *pro forma* SGIP examines whether the proposed small generating facility and the aggregate generation capacity on the line section create impacts to safety or reliability that cannot be adequately addressed without application of the Study Process. The Commission required the transmission provider to give due consideration to a number of factors (such as whether operational flexibility is reduced by the proposed small generating facility) in determining potential impacts to safety and reliability in applying the safety and reliability screen.

⁵⁵ *Id.*

⁵⁶ *See* IEEE Standard 519, IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems.

34. The Commission revised, in sections 2.4.1 through 2.4.4 of the *pro forma* SGIP, the procedures for initiating, processing, and communicating the results of the supplemental review. Among other things, the Commission provided that the interconnection customer may specify the order in which the transmission provider will complete the three supplemental screens in section 2.4.4.⁵⁷

a. Compliance Filing

35. The ISO-NE OATT provides that if an interconnection request cannot be approved without a supplemental or additional study, ISO-NE shall convene a customer options meeting, where ISO-NE shall offer to perform a supplemental review.⁵⁸ Filing Parties propose revisions to clarify that the supplemental review will entail a minimum load screen, voltage and power quality screen, and safety and reliability screen.⁵⁹ Filing Parties' proposal also clarifies that these screens will be conducted in the order specified by the interconnection customer.⁶⁰

b. Commission Determination

36. We find that Filing Parties' proposed revisions comply with Order No. 792's requirements regarding the Fast Track customer options meeting and supplemental review. Filing Parties' proposed revisions allow an interconnection customer to request that ISO-NE perform a supplemental review without condition. We find that Filing Parties have complied with Order No. 792's requirement to adopt the minimum load screen, the voltage and power quality screen, and the safety and reliability screen.⁶¹ We find that Filing Parties' proposed revisions regarding these screens incorporate the technical specifications set forth by Order No. 792 in the *pro forma* OATT. Lastly, as required by Order No. 792, Filing Parties' proposal allows an interconnection customer to specify the order in which ISO-NE will complete these three supplemental screens.

⁵⁷ Order No. 792, 145 FERC ¶ 61,159 at P 164.

⁵⁸ ISO-NE, Transmission, Markets and Services Tariff, Schedule 23, §§ 2.3, 2.3.2 (5.0.0) (Customer Options Meeting).

⁵⁹ *Id.* §§ 2.4.4.1, 2.4.4.3 (5.0.0) (Supplemental Review).

⁶⁰ *Id.* § 2.4.2.

⁶¹ *See* Order No. 792, 145 FERC ¶ 61,159 at P 117.

4. Review of Required Upgrades

37. In Order No. 792, the Commission revised the *pro forma* SGIP facilities study agreement to allow interconnection customers to provide written comments on the required upgrades identified in the facilities study so that interconnection customers would have a meaningful opportunity to review upgrades associated with their projects and engage in a meaningful dialogue with the transmission provider.⁶² The Commission required the transmission provider to include the interconnection customer's written comments in the final facilities study report.⁶³ The Commission also revised the *pro forma* SGIP facilities study agreement to include a meeting between the transmission provider and the interconnection customer within 10 business days of the interconnection customer receiving the draft interconnection facilities study report to discuss the results of the interconnection facilities study.⁶⁴

38. In addition, the Commission found that interconnection customers are entitled to review the supporting documentation for the facilities study because the interconnection customer is funding the study. The Commission also found that transmission providers are entitled to collect all just and reasonable costs associated with producing the facilities study, including any reasonable documentation costs.⁶⁵

39. The Commission noted that the transmission provider is not under an obligation to modify the facilities study after receiving the interconnection customer's comments. The transmission provider makes the final decision on upgrades required for interconnection because the transmission provider is ultimately responsible for the safety and reliability of its system.⁶⁶

a. Compliance Filing

40. Filing Parties state that, consistent with variations previously approved by the Commission under the independent entity standard, the existing ISO-NE OATT deviates from the *pro forma* SGIP in that it already provides interconnection customers the opportunity to review and comment on the results of each interconnection study,

⁶² Order No. 792, 145 FERC ¶ 61,159 at P 203.

⁶³ See section 9.0 of the *pro forma* SGIP facilities study agreement.

⁶⁴ See section 10.0 of the *pro forma* SGIP facilities study agreement.

⁶⁵ Order No. 792, 145 FERC ¶ 61,159 at P 204.

⁶⁶ *Id.* P 207.

including the upgrades required to accommodate the requested interconnection.⁶⁷ Specifically, Filing Parties argue that section 3 of ISO-NE SGIP already incorporates language that is identical to *pro forma* revisions that Order No. 792 adopts in the facilities study agreement. Filing Parties argue that maintaining these provisions in the ISO-NE SGIP, instead of the facilities study agreement, is appropriate because the details regarding the facilities study and associated report are found in the ISO-NE SGIP and not the ISO-NE SGIA. Filing Parties argue that this deviation is consistent with the Commission's independent entity variation standard.⁶⁸

b. Commission Determination

41. We accept Filing Parties' proposal to deviate from Order No. 792's revisions to the facilities study agreement and find that ISO-NE's SGIP complies with Order No. 792's requirements regarding the review of required upgrades. ISO-NE's interconnection facilities study procedures provide for the interconnection customer and appropriate affected parties to provide written comments on the draft interconnection facilities study report, which ISO-NE shall include in the final report.⁶⁹ ISO-NE's SGIP also permits an interconnection customer to request the supporting documentation, with work papers, and databases or data developed in the preparation of the interconnection facilities study.⁷⁰ Accordingly, we find this deviation to be consistent with the *pro forma* SGIP.

5. Interconnection of Storage Devices

42. In Order No. 792, the Commission revised the *pro forma* SGIP to explicitly account for the interconnection of storage devices in order to ensure that storage devices are interconnected in a just and reasonable and not unduly discriminatory manner.⁷¹

⁶⁷ Transmittal Letter at 14 (citing ISO-NE, Transmission, Markets and Services Tariff, Schedule 23, §§ 3.3.4, 3.4.5, 3.5.4 (3.0.0) (Meeting with Parties)).

⁶⁸ *Id.*

⁶⁹ *See* ISO-NE, Transmission, Markets and Services Tariff, Schedule 23, §§ 3.5.3, 3.5.4 (5.0.0) (Interconnection Facilities Study Procedures).

⁷⁰ *See id.* § 3.5.3.

⁷¹ Order No. 792, 145 FERC ¶ 61,159 at P 227.

Specifically, the Commission revised the definition of small generating facility to explicitly include storage devices.⁷²

43. The Commission also revised section 4.10.3 of the *pro forma* SGIP to clarify that the term “capacity” of the small generating facility in the *pro forma* SGIP refers to the maximum capacity that a device is capable of injecting into the transmission provider’s system for the purpose of determining whether a storage device may interconnect under the SGIP rather than the Large Generator Interconnection Procedures (LGIP) and/or whether it qualifies for the Fast Track Process.⁷³ However, the Commission clarified that when interconnecting a storage device, a transmission provider is not precluded from studying the effect on its system of the absorption of energy by the storage device and making determinations based on the outcome of these studies.⁷⁴

44. The Commission further revised section 4.10.3 of the *pro forma* SGIP to require the transmission provider to measure the capacity of a small generating facility based on the capacity specified in the interconnection request, which may be less than the maximum capacity that a device is capable of injecting into the transmission provider’s system. However, the transmission provider must agree, with such agreement not to be unreasonably withheld, that the manner in which the interconnection customer proposes to limit the maximum capacity that its facility is capable of injecting into the transmission provider’s system will not adversely affect the safety and reliability of the transmission provider’s system.⁷⁵ For example, the Commission stated that an interconnection customer with a combined resource (e.g., a variable energy resource combined with a storage device) might propose a control system, power relays, or both for the purpose of limiting its maximum injection amount into the transmission provider’s system.⁷⁶

⁷² *Id.* P 228. The Commission revised the definition in Attachment 1 (Glossary of Terms) of the SGIP and Attachment 1 (Glossary of Terms) of the SGIA as follows: “The 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.”

⁷³ *Id.* P 229. For example, a storage device capable of injecting 500 kW into the grid and absorbing 500 kW from the grid would be evaluated at 500 kW for the purpose of determining if it is a small generating facility or whether it qualifies for the Fast Track Process.

⁷⁴ *Id.*

⁷⁵ *Id.* P 230.

⁷⁶ *Id.*

45. Finally, the Commission revised section 4.10.3 of the *pro forma* SGIP to allow the transmission provider to consider an output higher than the limited output, if appropriate, when evaluating system protection impacts. The Commission stated that in the Study Process, the transmission provider has the discretion to study the combined resource using the maximum capacity the small generating facility is capable of injecting into the transmission provider's system and require proper protective equipment to be designed and installed so that the safety and reliability of the transmission provider's system is maintained.⁷⁷ Similarly, the Commission stated that in the Fast Track Process, the transmission provider may apply the Fast Track screens or the supplemental review screens using the maximum capacity the small generating facility is capable of injecting into the transmission provider's system in a manner that ensures that safety and reliability of its system is maintained.⁷⁸

a. Compliance Filing

46. Filing Parties propose to revise the definition of "Generating Facility" in the same manner as Order No. 792 to include explicitly energy storage devices.⁷⁹ Additionally, Filing Parties propose to revise section 4.10.3 of ISO-NE's SGIP to clarify that "maximum capacity" refers to the generating facility's capabilities to inject *energy* as well as capacity into the system.⁸⁰

47. Filing Parties also propose revising section 1.5.4 (Modifications) of the SGIP and the definition of interconnection request in the SGIP and SGIA to clarify that a new interconnection request will be required for the addition of energy storage capability to an existing small generating facility or to an interconnection request that is pending in the ISO-NE interconnection queue.⁸¹ Filing Parties argue that, by clearly defining the mechanism through which such changes will be reviewed, the proposed revisions

⁷⁷ *Id.*

⁷⁸ *Id.*

⁷⁹ ISO-NE, Transmission, Markets and Services Tariff, Schedule 23, Attachment 1 (5.0.0) (Glossary of Terms).

⁸⁰ Transmittal Letter at 17; ISO-NE, Transmission, Markets and Services Tariff, Schedule 23, § 4.10.3 (5.0.0) (Evaluation of a Small Generating Facility Interconnection Request).

⁸¹ Transmittal Letter at 17.

increase transparency in the process. Filing Parties therefore reason that the proposed revisions are consistent with or superior to the *pro forma* language.⁸²

b. Commission Determination

48. We find that Filing Parties' proposed revisions comply with Order No. 792's requirements regarding the interconnection of storage devices. Filing Parties' proposed revisions to the definition of "Generating Facility" will also apply to small generating facilities for the purposes of ISO-NE's SGIP/SGIA. Furthermore, we accept ISO-NE's proposed revision to consider maximum energy capability in addition to maximum capacity capability when evaluating small generating facility interconnection requests under section 4.10.3 as consistent with or superior to Order No. 792's revisions to the *pro forma* SGIP. We find that consideration of both maximum energy and capacity capability is appropriate in light of ISO-NE's interconnection service construct. We also find ISO-NE's proposed clarification that a new interconnection request will be required for the addition of energy storage capability to an existing small generating facility to be consistent with the Commission's *pro forma* SGIP because it will increase transparency in the review process for modifications to interconnection requests.

6. Network Resource Interconnection Service

49. In Order No. 792, the Commission revised section 1.1.1 of the *pro forma* SGIP to require interconnection customers wishing to interconnect a small generating facility using Network Resource Interconnection Service to do so under the LGIP and to execute the large generator interconnection agreement.⁸³ The Commission explained that this requirement was included in Order No. 2006⁸⁴ but was not made clear in the *pro forma* SGIP. To facilitate this clarification, the Commission also required the addition of the definitions of Network Resource and Network Resource Interconnection Service to Attachment 1, Glossary of Terms, of the *pro forma* SGIP.⁸⁵

⁸² *Id.*

⁸³ Order No. 792, 145 FERC ¶ 61,159 at PP 232, 235.

⁸⁴ Order No. 2006, FERC Stats. & Regs. ¶ 31,180 at P 140.

⁸⁵ Order No. 792, 145 FERC ¶ 61,159 at PP 232, 235.

50. The Commission stated in Order No. 792 that it did not intend to require revisions to interconnection procedures that have previously been found to be consistent with or superior to the *pro forma* SGIP and *pro forma* SGIA with regard to this Order No. 2006 requirement or permissible under the independent entity variation standard.⁸⁶

a. **Compliance Filing**

51. Filing Parties request to deviate from the *pro forma* SGIP and SGIA by not adopting the revisions clarifying the requirement that a small generating facility requesting Network Resource Interconnection Service apply through the LGIP.⁸⁷ ISO-NE argues that these revisions would introduce inconsistencies and significant confusion within the interconnection service construct previously accepted by the Commission for New England, given that ISO-NE does not provide the *pro forma* Network Resource Interconnection Service.⁸⁸ Filing Parties argue that ISO-NE's SGIP, unlike the *pro forma* SGIP, can accommodate requests for interconnection service commensurate with what the Commission's revisions were intended to provide, and if interconnection customers with small generating facilities were required to go through the ISO-NE LGIP they would unnecessarily be subject to more milestones and increased study deposit requirements than they would under the ISO-NE SGIP.⁸⁹

52. Filing Parties also propose not to adopt the corresponding definitions of "Network Resource" and "Network Resource Interconnection Service" because ISO-NE relies on two levels of interconnection service, previously accepted by the Commission, that differ from the *pro forma* interconnection service. Filing parties argue that adopting the Network Resource Interconnection Service revisions would introduce inconsistencies and significant confusion to ISO-NE's existing interconnection service construct accepted by the Commission.⁹⁰

⁸⁶ *Id.* P 236. *See also id.* PP 273-274.

⁸⁷ Transmittal Letter at 15.

⁸⁸ *Id.* at 16.

⁸⁹ *Id.*

⁹⁰ *Id.* at 15-16.

b. Commission Determination

53. We accept Filing Parties' proposal not to adopt Order No. 792's revisions to the *pro forma* SGIP regarding Network Resource Interconnection Service. We find that, in the case of ISO-NE, Order No. 792's requirement that interconnection customers wishing to interconnect a small generating facility using Network Resource Interconnection Service do so under the LGIP is not appropriate because an interconnection customer may receive Network Resource Interconnection Service and Capacity Network Interconnection Service under either the LGIP or SGIP. We note that the Commission has approved existing definitions in ISO-NE's interconnection services and found their associated deviations from the *pro forma* SGIP/SGIA permissible under the independent entity variation standard.⁹¹

7. Additional Deviations

a. Compliance Filing

54. Filing Parties propose to replace several terms used in the *pro forma* revisions in Order No. 792 with terms that clarify ISO-NE and the Participating Transmission Owners' respective roles and responsibilities and are consistent with the current structure of ISO-NE's Schedule 23. Filing Parties state that the existing Schedule 23 contains numerous such variations approved by the Commission under the independent entity standard and that these variations are consistent with or superior to the *pro forma* language in that they provide greater clarity and transparency.⁹²

55. Filing Parties propose minor clarification and ministerial modifications to the revisions to the *pro forma* SGIP and SGIA in Order No. 792. Filing Parties explain that they intend these changes "to align the new *pro forma* language with the definitions, terminology and construct of the ISO-NE SGIP and SGIA previously accepted by the Commission and correct certain inconsistencies."⁹³

b. Determination

56. We accept Filing Parties' proposed minor clarification and ministerial modifications to the *pro forma* SGIP and SGIA revisions in Order No. 792 pursuant to the independent entity variation. We find that these changes are appropriate in order to

⁹¹ *ISO New England, Inc.*, 126 FERC ¶ 61,080, at P 17 (2009).

⁹² Transmittal Letter at 11.

⁹³ *Id.* at 17-18.

align the new *pro forma* language with the definitions, terminology, and construct of the ISO-NE SGIP and SGIA previously accepted by the Commission.

The Commission orders:

(A) Filing Parties' compliance filing in Docket No. ER14-2583-000 is hereby accepted, effective December 8, 2014, as discussed in the body of this order.

(B) Filing Parties' tariff record in Docket No. ER14-2583-001 is hereby rejected, as discussed in the body of this order.

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.