



# The Commonwealth of Massachusetts

## DEPARTMENT OF PUBLIC UTILITIES

D.P.U. 17-164

April 8, 2020

Joint Petition of Fitchburg Gas and Electric Light Company d/b/a Unitil, Massachusetts Electric Company and Nantucket Electric Company d/b/a National Grid, and NSTAR Electric Company and Western Massachusetts Electric Company d/b/a Eversource Energy for approval of a proposed revision of Section 3.4.1 of the Standards of Interconnection of Distributed Generation Tariff.

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### ORDER ON REVISIONS TO SECTION 3.4.1 OF THE STANDARDS OF INTERCONNECTION OF DISTRIBUTED GENERATION TARIFF

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## I. INTRODUCTION AND PROCEDURAL HISTORY

On September 28, 2011, the Department of Public Utilities (“Department”) opened an investigation on its own motion into distributed generation (“DG”) interconnection. DG Interconnection, D.P.U. 11-75 (2011). Through this investigation the Department, among other things, established a DG Working Group (“Working Group”). D.P.U. 11-75-A at 4, 7. On September 14, 2012, the Working Group submitted its final report in D.P.U. 11-75 which, in part, recommended that a group study process “be initiated on feeders with multiple applications where system upgrades would be extensive.” D.P.U. 11-75, Final Report from Massachusetts DG Interconnection Working Group, at 15. In 2015, the Department approved a model interconnection tariff which included a group study provision at Section 3.4.1, designed as a 12-month pilot, commencing from the effective date of the tariff. D.P.U. 11-75-G. Section 3.4.1 allowed the impact studies of two or more proposed DG facilities (by the same or different interconnecting customer(s)) in a common study area to be performed at the same time, instead of each application undergoing such study separately.

On October 20, 2017, Fitchburg Gas and Electric Light Company d/b/a Unitil (“Unitil”); Massachusetts Electric Company and Nantucket Electric Company, each d/b/a National Grid (“National Grid”); and NSTAR Electric Company and Western Massachusetts Electric Company, each d/b/a Eversource Energy (“Eversource”)<sup>1</sup> (individually “Distribution Company”

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<sup>1</sup> The Department approved the corporate consolidation of Western Massachusetts Electric Company with and into NSTAR Electric Company pursuant to G.L. c. 164, § 96. NSTAR Electric Company and Western Massachusetts Electric Company, D.P.U. 17-05, at 28-55 (2017). The legal name of Eversource’s electric distribution company in Massachusetts is now NSTAR Electric Company; it continues to do business as Eversource Energy.

and collectively “Distribution Companies”) filed proposed revisions to Section 3.4.1 of the Standards of Interconnection of Distributed Generation Tariff (“DG Interconnection Tariff”); these revisions relate to group study.<sup>2,3</sup> If approved, the proposed revised Section 3.4.1 would be a permanent addition to the DG Interconnection Tariff, replacing the group study pilot, which took place from June 1, 2015 through May 31, 2016 (“Pilot Period”). The Department has docketed this matter as D.P.U. 17-164.

On October 26, 2017, the Attorney General of the Commonwealth of Massachusetts (“Attorney General”) filed a notice of intervention pursuant to G.L. c. 12, § 11E(a). The following entities have submitted comments in this docket: the Attorney General, Pope Energy; Borrego Solar Systems, Inc.; Syncarpha Capital, LLC; Nexamp, Inc.; the Distribution Companies; the Department of Energy Resources (“DOER”); and the Northeast Clean Energy Council (“NECEC”), on behalf of its member companies as well as the Coalition for Community Solar Access, MAssSolar, the Solar Energy Business Association of New England, and the Solar Energy Industries Association (collectively the “Clean Energy Parties”).

Following receipt of initial comments on January 19, 2018, and responses by the Distribution Companies to the Department’s first set of information requests on March 14, 2018, the Department held a technical conference on November 8, 2018. At the technical conference,

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<sup>2</sup> The electric distribution companies’ DG Interconnection Tariffs are as follows: (1) Fitchburg Gas and Electric Light Company d/b/a Unitil - M.D.P.U. No. 269; (2) Massachusetts Electric Company and Nantucket Electric Company, each d/b/a National Grid - M.D.P.U. No. 1320; and (3) NSTAR Electric Company d/b/a Eversource Energy - M.D.P.U. No. 55.

<sup>3</sup> Section 3.4.1 of the DG Interconnection Tariff is commonly known as “group study” and will be referenced in this Order as the “Group Study Provision.”

the Department requested that the Distribution Companies file a further revised Group Study Provision and encouraged the Distribution Companies to collaborate with stakeholders prior to making the filing. The Distribution Companies agreed to work collaboratively with stakeholders to file a revised Group Study Provision by mid-December 2018. Following the Department's grant of two Motions for Extension of Time,<sup>4</sup> the Distribution Companies filed a revised Group Study Provision on March 1, 2019 ("Revised Group Study Proposal").<sup>5</sup> On March 6, 2019, the Department noticed the Revised Group Study Proposal filing and sought initial and reply comments.<sup>6</sup> After receipt and review of the Revised Group Study Proposal and all comments, the Department held a second technical conference on June 11, 2019. At the technical conference, stakeholders expressed a desire to again work collaboratively with the Distribution Companies on proposed consensus revisions to the Revised Group Study Proposal. On July 17, 2019 the Distribution Companies filed a document identifying two discrete areas of consensus reached with the Clean Energy Parties regarding revisions to the Revised Group Study Proposal.

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<sup>4</sup> On December 19, 2018, the Distribution Companies filed their first motion to extend the deadline to file a Revised Group Study Proposal to January 31, 2019, which the Department granted on December 20, 2018. On January 30, 2019 the Distribution Companies filed their second motion to extend the deadline to file a Revised Group Study Proposal to March 1, 2019, which the Department granted on February 7, 2019.

<sup>5</sup> The Distribution Companies' filing consists of (1) an explanatory filing letter, (2) a redlined version of the Revised Group Study Proposal marked to show revisions from their initial Group Study Proposal, and (3) a clean version of the Revised Group Study Proposal. This Revised Group Study Proposal is marked as Exhibit JDT-2; the Distribution Companies' Initial Proposal is marked as Exhibit JDT-1.

<sup>6</sup> While the Department has considered all comments filed in this docket, the comments included in the "summary of comments" sections below are only those filed in the initial and reply period noticed on March 6, 2019.

## II. DISTRIBUTION COMPANIES' PROPOSALS

On October 20, 2017, the Distribution Companies filed a proposed Group Study Provision ("Initial Proposal") similar to the original Group Study Provision implemented during the Pilot Period, but incorporating modifications based on lessons learned from the Pilot Period (Exh. JDT-1 at 4; Distribution Companies Initial Proposal at 1). On March 1, 2019, the Distribution Companies filed a Revised Group Study Proposal incorporating information from stakeholder comments, discussions at the November 8, 2018 technical conference, and collaboration with stakeholders to identify areas of consensus (Distribution Companies' March 1, 2019 Filing Letter at 2).

The Distribution Companies contend that the Revised Group Study Proposal includes revisions that strike a fair and reasonable balance between the Distribution Companies and the interconnecting customers' process needs (Distribution Companies' March 1, 2019 Filing Letter at 2). The Distribution Companies contend that while the Revised Group Study Proposal was filed by the Distribution Companies only, meaningful progress was made with stakeholders (Distribution Companies' March 1, 2019 Filing Letter at 2). In the Revised Group Study Proposal filing the Distribution Companies highlight changes from the Initial Proposal concerning the treatment of time frames, removal from the group, project changes and extension requests, preceding studies, cost allocation for common system modifications, and affected system operator ("ASO") studies (Distribution Companies' March 1, 2019 Filing Letter at 2-3). The Distribution Companies state that their proposal, if adopted, would allow them to form a group for two or more interconnection applications in a common study area that have not commenced an impact study (Distribution Companies Reply Comments at 21). Additionally, the

Distribution Companies state that any in-progress impact studies for applications in the queue in a common study area would be considered a preceding study (Distribution Companies Reply Comments at 21).

### III. INCLUSION OF GROUP STUDY IN THE DG INTERCONNECTION TARIFF

Comments received following the Distribution Companies' filing of the Revised Group Study Proposal and discussions at the June 11, 2019 technical conference indicate general support for inclusion of a Group Study Provision in the DG Interconnection Tariff, while simultaneously highlighting remaining issues of concern not resolved through stakeholder collaboration on the Revised Group Study Proposal. The Department agrees that based on activity during the Pilot Period and stakeholder feedback received through this docket, a Group Study Provision is an efficient and effective mechanism to include in the DG Interconnection Tariff. We appreciate stakeholders' efforts to collaborate on an agreed upon Group Study Provision but understand that for certain topics stakeholders could not reach consensus.

The Department has the authority to approve, deny, or approve with modifications the Revised Group Study Proposal. Joint Petition of Electric Distribution Companies for Approval of Model SMART Provision, D.P.U. 17-140-A at 13 (2018). As such, we approve the Distribution Companies' Revised Group Study Proposal subject to the modifications outlined below.

### IV. AREAS OF CONSENSUS

The Clean Energy Parties and the Distribution Companies achieved consensus in several areas. The Clean Energy Parties' initial Comments include a section entitled "Areas of



Conceptual Agreement” in which the Clean Energy Parties communicate their support for the Department’s approval of the following aspects of the Revised Group Study Proposal:

- (1) batching groups within 40 days of the first group notification, as it pertains to Section 3.4.1(a);
- (2) a scoping meeting to be held within 20 days of the end of the group window, as it pertains to Section 3.4.1(b);
- (3) a ten-day window for group members to notify the Distribution Company they wish to proceed and a requirement for the Distribution Company to issue the group study agreement to all remaining members within a defined time period, as it pertains to Section 3.4.1(c);
- (4) providing individual group members with the opportunity to demonstrate compliance with tariff requirements rather than requiring group consent in all instances, as it pertains to Section 3.4.1(e); and
- (5) allowing the costs of common system modifications to be allocated by the approved maximum export capacity of any DG plus energy storage system (“ESS”),<sup>7</sup> as it pertains to Section 3.4.1(g).

(Clean Energy Parties Comments at 12-13).

The Clean Energy Parties make additional suggestions/requests for three of these “Areas of Conceptual Agreement.” For Section 3.4.1(a), the Clean Energy Parties argue that it is crucial that the group window be limited to the acceptance of completed interconnection applications within that time period (Clean Energy Parties Comments at 12-13). The Distribution Companies are agreeable to this revision and clarify that if an application is received in the group window,

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<sup>7</sup> DOER also expressed support for the Distribution Companies’ proposed common system modification allocation regarding combined DG plus ESS export capacity (DOER Comments at 3).

and the Distribution Company does not deem that application complete within the group window, that application would not be included in the group even if it is subsequently deemed complete after the group window closes (Distribution Companies Reply Comments at 26). With the Distribution Companies' clarification, the Department considers this addition an area of conceptual agreement.

For Section 3.4.1(c), the Clean Energy Parties express their preference for the Distribution Companies to proceed prior to the expiration of the ten-day notification period if the group unanimously notifies the Distribution Company of its desire to proceed (Clean Energy Parties Comments at 13). The Distribution Companies claim that this option would be administratively burdensome (Distribution Companies Reply Comments at 13). On balance, the Department finds it unnecessary to require the Distribution Companies to proceed as outlined by the Clean Energy Parties, but encourages the Distribution Companies to make reasonable efforts to do so if they receive unanimous group consent prior to the expiration of the ten days.

Finally, for Section 3.4.1(g), the Clean Energy Parties request broadening of the proposed language to include all inverter-based export schemes, not just those that include an ESS (Clean Energy Parties Comments at 13). The Distribution Companies adamantly oppose this broadening (Distribution Companies Reply Comments at 26). The Department finds that, at this time, it does not have sufficient information to approve broadening of this language.

Following the June 11, 2019 technical conference, the Distribution Companies and the Clean Energy Parties continued discussions to determine if they could identify further areas of agreement. The Distribution Companies filed the results of these on July 17, 2019 detailing two additional areas of agreement. Specifically, the Distribution Companies and the Clean Energy

Parties propose to change the term “solar” in Section 3.4.1(g) to “inverter-based generation” and to replace the phrase “mutually agreeable Time Frame” from Section 3.4.1(h) with “35-days” (Distribution Companies July 17, 2019 Letter at 7). The Department finds these changes reasonable.

After review and consideration, we approve the sections of the Revised Group Study Proposal outlined above and in the “Areas of Conceptual Agreement” in the Clean Energy Parties’ Comments, including the agreed upon addition in Section 3.4.1(a), and we direct the Distribution Companies to revise the DG Interconnection Tariff accordingly. The Distribution Companies shall also revise the DG Interconnection Tariff to reflect the consensus revisions filed on July 17, 2019, changing the term “solar” in Section 3.4.1(g) to “inverter-based generation” and replacing the phrase “mutually agreeable Time Frame” from Section 3.4.1(h) with “35-days.”

## V. GROUP STUDY TIME FRAMES

### A. Introduction

In their Revised Group Study Proposal, the Distribution Companies address time frames in a number of ways (Exh. JDT-2). Specifically, the Revised Group Study Proposal includes a window for the closure of the group, deadlines for the delivery and execution of the group study agreement, a time frame for the Distribution Companies to complete the group study, and time frames for the delivery of an executable interconnection service agreement (“ISA”) (Exh. JDT-2, §§ 3.4.1(a), (c), (d), and (h)). The proposed time frames are specific and do not require mutual agreement (Revised Group Study Proposal; Distribution Companies July 17, 2019 Letter at 7). Under the Revised Group Study Proposal, group study time frames would not be subject to the

time frame enforcement metric (“TEM”) established pursuant to Department Order

D.P.U. 11-75-F (Exh. JDT-2, § 3.4.1(d)).<sup>8</sup>

B. Summary of Comments

1. Time Frames for Study Completion

While the Clean Energy Parties appreciate the incorporation of specified time frame goals in the Revised Group Study Proposal, they contend that the time frames proposed by the Distribution Companies are too long and that the structure of the group categories is problematic (Clean Energy Parties Comments at 7). The Clean Energy Parties propose shorter study time frames and argue that the ability to opt-in to a detailed study should be preserved with a separate time frame and a ten-percent cost envelope (Clean Energy Parties Comments at 7).<sup>9</sup>

The Distribution Companies contend that (1) their proposed time frames for completion of a group study are supported by experience with standard process complex projects, (2) their proposed time frames combine the time necessary for an impact and detailed study, and (3) in all cases, the proposed time frames are less than the total study processing time that the Distribution Companies would have for two interconnection customers’ projects processed outside of the Group Study Provision (Distribution Companies Reply Comments at 12-13). The Distribution Companies also note that for projects outside of group study where the system modifications are

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<sup>8</sup> The Department established the TEM consistent with the Legislature’s directive “to develop a standard interconnection timeline for the interconnection of distributed generation facilities.” St. 2012, c. 209, § 49; G.L. c. 164, § 1I. The TEM is incorporated into each Distribution Company’s DG Interconnection Tariff.

<sup>9</sup> The Clean Energy Parties also propose that the Department consider incorporating construction timeframes (Clean Energy Parties Comments at 8). The Department does not have enough information at this time to consider construction timeframes.

estimated to cost \$1 million or more, the time frames for both the impact and detailed studies are by mutual agreement. The Distribution Companies further note that the proposed Group Study Provision includes specified time frames, even though by the nature of being a group study any system modifications for multiple projects are likely to be greater than \$1 million (Distribution Companies Reply Comments at 12). The Distribution Companies argue that since the development of interconnection solutions and cost estimates for multiple projects will be more complicated than that of a single project, group study time frames must account for the variability and complexity in performing a group study (Distribution Companies Reply Comments at 13). Finally, the Distribution Companies allege the proposed time frames are reasonable and balance the interconnecting customers' need for more process transparency with the Distribution Companies' need for sufficient time to perform the work required to determine safe and reliable interconnection solutions for a group of projects (Distribution Companies Reply Comments at 13).

## 2. Timeline Enforcement Mechanism

The Attorney General, the Clean Energy Parties, and DOER argue that the Group Study Provision should be subject to the TEM (Attorney General Comments at 2-3; DOER Reply Comments at 2; Clean Energy Parties Comments at 5). The Clean Energy Parties contend that the TEM is critically important as a monitoring and enforcement mechanism and that the Distribution Companies have had time to become familiar with the TEM since they are currently subject to it for individual interconnection application review (Clean Energy Parties Comments at 5). Moreover, the Clean Energy Parties stress that the Distribution Companies have yet to pay a penalty under the TEM and, rather than exempt group study from the TEM, the TEM should be

made more stringent and more meaningful as the Distribution Companies gain more experience processing and conducting interconnection studies (Clean Energy Parties Comments at 5-6). The Clean Energy Parties also argue that a TEM exemption would make group study time frames nonbinding from a reporting and transparency perspective, which would undermine the rationale for incorporating time frames into the DG Interconnection Tariff (Clean Energy Parties Comments at 6). Additionally, the Clean Energy Parties and DOER express concern that exempting group study from the TEM will create an incentive for the Distribution Companies to prioritize projects that are subject to the TEM over group study since the Distribution Companies could face consequences only for exceeding study time frames for projects subject to the TEM (DOER Reply Comments at 2; Clean Energy Parties Comments at 6).

The Distribution Companies propose exempting group study from the TEM, as it was during the Pilot Period (Distribution Companies March 1, 2019 Filing Letter at 3). The Distribution Companies contend that they are evaluated by standards other than the TEM in the interconnection context. Specifically, the Distribution Companies argue they are evaluated on (1) the integrity of their distribution infrastructure, (2) the time it takes to review applications, (3) the accuracy of cost estimation, (4) the level of customer service, (5) their effectiveness, and (6) their ability to ensure that distribution customers and DG developers are each fairly allocated the costs for every DG project that is subject to the interconnection application process (Distribution Companies Reply Comments at 9). The Distribution Companies further allege that the group study process is more complex than the study of any individual project and that there are factors outside of their control that influence whether time frames can be met (Distribution Companies Reply Comments at 9). Moreover, the Distribution Companies contend that applying

the TEM to group study would be unfair and counterproductive since group study is continuing to be developed and the Distribution Companies have not tested or experienced the process contained in the Revised Group Study Proposal (Distribution Companies Reply Comments at 10). Furthermore, the Distribution Companies argue they are not proposing to change the TEM; they seek to maintain the existing TEM, which does not currently apply to group study projects (Distribution Companies Reply Comments at 10).

C. Analysis and Finding

1. Time Frames for Study Completion

The Department seeks to establish an efficient and effective group study process that includes timely processing of interconnection applications and ensures the safety and reliability of the electric power system (“EPS”). We recognize that one purpose of the Group Study Provision is to provide timelier processing of interconnection applications; however, we also recognize that this process is novel and may have complex and unknown variables. At this time, we are convinced that the Distribution Companies proposed time frames are sufficiently based on available data from processing individual applications and that setting shorter time frames without real data to support those time frames could hinder the success of the group study process. As such, we approve the time frames proposed by the Distribution Companies for inclusion in the Group Study Provision and fully expect that the Distribution Companies will meet those time frames and improve upon them whenever possible. To the extent data shows that a shorter time frame would be reasonable, the Department will reassess the time frames included in the Group Study Provision.

## 2. Timeline Enforcement Mechanism

The Department acknowledges commenters' concerns with group study being exempt from the TEM, including lack of accountability and the potential for the Distribution Companies to prioritize projects that are subject to the TEM (Attorney General Reply Comments at 2-3; DOER Reply Comments at 2; Clean Energy Parties Comments at 6). We also recognize the Distribution Companies' concerns regarding lack of data and experience with the dynamic and complex group study process (Distribution Companies Reply Comments at 9-10). Thus, to strike a reasonable balance, group study will be exempt from the TEM for a period of one year to allow for time to fully implement and adjust business practices for the group study process. Group study will be subject to the TEM beginning one year from the date of the issuance of this order, unless exigent circumstances warrant a different outcome.<sup>10</sup> In the interim, the Department expects the Distribution Companies to meet the approved time frames, and, if time frames are not met, affected interconnecting customers may bring a dispute under Section 9, Dispute Resolution Process, of the DG Interconnection Tariff.

Additionally, we direct the Distribution Companies to submit an informational filing with the 2021 TEM filings. That filing shall include (1) an explanatory filing letter; (2) the number of group studies conducted; (3) the total capacity (MW AC) for each of the group studies; (4) the total time to complete each group study; (5) the number of project applicants in each group; (6) the number of projects per group; and (7) information for each group on any and all Distribution Company directed holds, including, but not limited to, (a) if and when the

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<sup>10</sup> The first group study data subject to the TEM shall be included in the 2022 TEM filings.



Distribution Companies put the group on hold, (b) the length of each hold, and (c) the reason the hold was instituted.

## VI. COST ESTIMATES FOR IMPACT AND DETAILED STUDIES

### A. Introduction

Currently, an interconnecting customer in the standard process must undergo an impact study and may undergo a detailed study at its election or if the Distribution Company finds that the system modifications to the EPS are substantial. An ISA executed at the conclusion of an impact study (“Early ISA”) provides an estimate for the cost of system modifications within 25 percent of the actual cost and an ISA executed following a detailed study provides an estimate within ten percent of the actual cost. Interconnection Tariff, § 3.4, Exhs. E, F, G. The Revised Group Study Proposal combines the impact and detailed study process and provides for a 25-percent cost estimate only (Revised Group Study Proposal, Exh. JDT-2).

### B. Summary of Comments

The Clean Energy Parties seek to preserve the current impact and detailed study approach with their respective 25-percent and ten-percent cost envelopes and argue that a blanket 25-percent cost envelope that applies to all group sizes and types is unacceptably high for a combined impact and detailed study (Clean Energy Parties Comments at 5; Clean Energy Parties Reply Comments at 2). The Clean Energy Parties allege that maintaining an avenue for ten-percent cost certainty is essential in allowing groups and group members to make informed decisions about their projects’ economic feasibility, especially when contemplating system modification costs (Clean Energy Parties Comments at 5). Furthermore, the Clean Energy Parties assert that groups should have the option to elect a detailed study and that there should be

a second set of time frames for detailed studies that is tiered for complex and non-complex groups (Clean Energy Parties Comments at 7-8).

The Distribution Companies allege that combining the impact and detailed study will accelerate the group study process and that the 25-percent cost envelope allows the necessary degree of flexibility to develop estimates for interconnections within the proposed time frames (Distribution Companies Reply Comments at 7). The Distribution Companies further suggest that a 25-percent cost envelope is a fair and reasonable compromise given that a majority of interconnecting customers choose this option in the Early ISA context and that preserving a ten-percent cost envelope could elongate study times (Distribution Companies Reply Comments at 7). The Distribution Companies claim that the increase in construction costs and construction time frames since the cost envelopes in the DG Interconnection Tariff were first instituted show that a 25-percent cost envelope across the board is reasonable (Distribution Companies Reply Comments at 7). Furthermore, the Distribution Companies allege that permitting detailed studies and Early ISAs to exist within the same group would complicate and slow the group study process (Distribution Companies Reply Comments at 7).

Moreover, the Distribution Companies contend that the Clean Energy Parties' recommendation to implement tiered cost estimate percentages based on the size and complexity of the group is not feasible (Distribution Companies Reply Comments at 8). According to the Distribution Companies, determining a group's level of complexity in order to assign the group to a tier cannot be done prior to the conclusion of the impact study (Distribution Companies Reply Comments at 8). Finally, the Distribution Companies argue that the size of a group does not necessarily correlate to the complexity of a study and/or interconnection because smaller

groups, at times, may be more complex than larger groups (Distribution Companies Reply Comments at 8).

C. Analysis and Findings

The Clean Energy Parties voice concerns with eliminating the option for groups to choose a detailed study path that would provide the necessary, greater cost certainty to determine a project's economic feasibility (Clean Energy Comments at 5; Clean Energy Parties Reply Comments at 2). The Distribution Companies express concerns with having Early ISAs and detailed studies in one group causing significant delays, and they argue that increases in the costs of construction and construction time frames since the cost envelopes in the DG Interconnection Tariff were first implemented show that a 25-percent cost envelope across the board is reasonable (Distribution Companies Reply Comments at 7). The Department seeks to strike a balance between these opposing, valid concerns. Thus, in addition to the proposed 25-percent cost estimate envelope for a combined impact and detailed study process, groups may opt-in, through unanimous group consent, to a detailed study process with a cost estimate envelope of 15 percent.

If a group opts-in to a detailed study track, group members assume the risk that the Distribution Company may not meet the time frame for study completion set forth in the DG Interconnection Tariff and they proceed under the condition that the time frame will not be subject to the TEM even after one year from this order, when the combined impact and detailed study track is subject to the TEM. Within two business days of the expiration of the ten-day period for group members to notify the Distribution Company if they want to proceed under Section 3.4.1(c), the Distribution Company shall provide notification to the proceeding group

members that the group has five business days to provide the Distribution Company with an executed detailed study consent form. An executed detailed study consent form shall notice to the Distribution Company the group's unanimous decision to proceed with separate impact and detailed studies, to obtain a cost estimate for system modifications within 15 percent of the actual cost. The Distribution Company shall issue the group study agreement to remaining group members within 15 days of the expiration of the opportunity to opt-in to separate impact and detailed studies.

The Distribution Companies shall revise the DG Interconnection Tariff to include the above provisions and the following exhibits: (1) a group study agreement; (2) a combined impact and detailed study agreement; and (3) a detailed study consent form.

## VII. PRECEDING STUDY

### A. Introduction

The Revised Group Study Proposal defines a preceding study as a study "in process" from the effective date of the fully executed study agreement through the effective date of a fully executed ISA (Exh. JDT-2, § 1.2). The Revised Group Study Proposal states that the Distribution Company may include a preceding study for an individual project as part of a group interconnection solution if the Distribution Company determines that there is a compelling business, engineering, safety, or reliability reason for the group interconnection solution to supersede the individual solution (Exh. JDT-2, § 3.4.1d).

### B. Summary of Comments

The Clean Energy Parties contend that an interconnecting customer with a preceding study should be given the choice to opt-in to a subsequent group study or group interconnection

solution (Clean Energy Parties Comments at 9). The Clean Energy Parties maintain that a project with a preceding study should only be affected with its consent and that forced participation in the group study or solution would be unfair (Clean Energy Parties Reply Comments at 6). Further, the Clean Energy Parties claim that requiring group participation would create uncertainty, compromise the independent study process, threaten project viability, further delay the development of projects, and have a chilling effect on the deployment of DG resources (Clean Energy Parties Comments at 9; Clean Energy Parties Reply Comments at 6).

DOER supports the Clean Energy Parties' proposal that preceding individual studies retain the option to join a subsequent group study (DOER Reply Comments at 3). DOER argues that mandating individual studies to join a group study could create significant project uncertainty and would be inconsistent with the current queue process identified in the DG Interconnection Tariff (DOER Reply Comments at 3).

The Distribution Companies contend that their proposed language is intended to facilitate interconnection solutions that maintain safety and reliability, use resources efficiently, and support cost effectiveness by reducing multiple overlapping interconnection solutions that result in duplicative infrastructure (Distribution Companies Reply Comments at 14-15). The Distribution Companies argue that their proposal would not apply to an interconnecting customer that has an ISA, and would apply only in cases where the Distribution Company determines that there is a compelling business, engineering, safety, or reliability reason to impose a group interconnection solution on an interconnecting customer with a preceding study (Distribution Companies Reply Comments at 15). In that regard, the Distribution Companies claim that their proposal balances the interest of all parties (Distribution Companies Reply Comments at 15).

C. Analysis and Findings

The Department recognizes that the Distribution Companies' proposal seeks to maintain safety and reliability of the EPS, use resources efficiently, and reduce overlapping interconnection solutions (Distribution Companies Reply Comments at 14). However, the Distribution Companies' "compelling business and engineering" reasons may not always align with the goals of an interconnecting customer. Interconnecting customers desire certainty to ensure project viability and there may be times when an interconnecting customer would prefer to move forward in the interconnection process despite possible cost and efficiency gains from joining a group interconnection solution. As such, in the absence of a Distribution Company's safety or reliability concerns, the Department finds that an interconnecting customer with a preceding study shall have the option to opt-out of a subsequent group interconnection solution. While the Department does not adopt the Distribution Companies' proposal allowing a Distribution Company to invoke compelling "business or engineering" reasons to impose a group interconnection solution on an interconnecting customer with a preceding study, the Department finds that a Distribution Company should notify an interconnecting customer with a preceding study of the potential risks of not participating in a subsequent group interconnection solution and allow that interconnecting customer to determine its preferred interconnection track. A Distribution Company is not required to offer an interconnecting customer with a preceding study the option to opt-out of a subsequent group interconnection solution if a Distribution Company identifies a compelling safety or reliability reason for a group interconnection solution to supersede an individual solution.

Thus, the Department directs the Distribution Companies to revise the DG Interconnection Tariff to include, as an exhibit, a single-page document that offers an interconnecting customer with a preceding study for which the Distribution Company determines there is a compelling business or engineering reason to impose a subsequent group interconnection solution, the option to opt-out of the subsequent group interconnection solution and resume the interconnection process individually. The Distribution Companies may include with the preceding study opt-out agreement a brief, single-page, project specific, explanation of the risks and benefits associated with opting out, including the potential business or engineering risks that the interconnecting customer may incur in the absence of joining the group interconnection solution. An interconnecting customer that does not opt-out, agrees to be part of the group interconnection solution and accepts the potential for time delays.<sup>11</sup> An interconnecting customer that opts-out assumes the risks detailed in the project specific explanation of risks and benefits.

Immediately upon identification of a compelling business or engineering reason for a group interconnection solution to supersede a preceding interconnection customer's individual solution, the Distribution Company shall present the interconnecting customer with a preceding study with the opt-out agreement. That interconnecting customer shall have five business days from the date of receipt to execute the agreement and choose to opt-out of the group interconnection solution. If the agreement is not executed within five business days, the interconnecting customer with a preceding study shall be part of the group interconnection

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<sup>11</sup> If the interconnecting customer later drops out of the group interconnection solution, its interconnection application shall be considered withdrawn.

solution. The Department approves the preceding study provisions in the Revised Group Study Proposal if a Distribution Company identifies a compelling safety or reliability reason for a group interconnection solution to supersede an interconnecting customer with a preceding study's individual solution.

## VIII. PROJECT CHANGES

### A. Introduction

The Revised Group Study Proposal bars project changes that increase the cost share of a group study or require modifications for other group members, unless the Distribution Company and all group members agree in writing to allow such a change (Exh. JDT-2, § 3.4.1(i)). The Revised Group Study Proposal does, however, include an "Equipment Exception" that allows interconnecting customers to submit in-kind equipment changes without group consent if initially proposed equipment is no longer available (Exh. JDT-2, § 3.4.1(i)). Project change requests other than an Equipment Exception suspend the group time frame for the applicable step in the interconnection process (Exh. JDT-2, § 3.4.1(i)). If a change request is rejected by the Distribution Company solely because of group impact, the group member requesting the change must either (1) obtain and deliver to the Distribution Company evidence of group consent or (2) if the impact is solely an increase to the cost of studies and/or system modifications, the group member may accept the individual risk and pay the entirety of the increase (Exh. JDT-2, § 3.4.1(i)).

### B. Summary of Comments

The Clean Energy Parties recommend inclusion of a single, one-time project change opportunity, which would be limited to certain types of changes, for all group members at the



end of the study process (Clean Energy Parties Comments at 12). The Distribution Companies argue that they cannot identify any specific project change that would not require review from the appropriate technical group for verification of the level of impact (Distribution Companies Reply Comments at 23). The Distribution Companies contend that project changes require additional review time to determine whether there is impact to ongoing studies, system modeling, interconnection solutions, and/or costs, and whether the changes require further review by ISO New England Inc. ("ISO-NE")<sup>12</sup> (Distribution Companies Reply Comments at 23). The Distribution Companies assert that they must reserve the right to put the processing of the group on hold to verify the potential impacts (Distribution Companies Reply Comments at 23).

C. Analysis and Findings

Given the time involved in the group study process and the probability that there will be changes in the availability of equipment during the process, we understand stakeholders' desire to have the option to request project changes (Clean Energy Parties Comments at 11-12).

However, we also heard through written comments and discussion at technical conferences that stakeholders are concerned that allowing an individual group member to request project changes introduces the risk for delays for the entire group. Furthermore, the Department agrees that the Distribution Companies must be allowed time to review project change requests to determine how a requested change could impact ongoing studies, system modeling, interconnection

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<sup>12</sup> ISO-NE is a not-for-profit, private corporation that serves as the regional transmission organization ("RTO") for New England. ISO-NE operates the New England bulk power system and administers New England's wholesale electricity market. Investigation Into The Need For Additional Capacity In NEMA/Boston, D.P.U. 12-77, at 1 n.1 (2013).

solutions, or costs, and whether the changes require further review by ISO-NE (Distribution Companies Reply Comments at 23). As the entities responsible for the safety and reliability of the EPS, the Distribution Companies must ensure that any changes do not introduce new system impacts.

At this time, the Department finds that the provisions related to project changes under Section 3.4.1(i) of the Revised Group Study Proposal provide sufficient balance of accommodating project changes and facilitating a safe and efficient process for interconnection.

As such, the Department approves Section 3.4.1(i) of the Revised Group Study Proposal.

However, we note that the process related to project changes generally is currently under investigation in a separate docket, Distributed Generation Interconnection, D.P.U. 19-55.<sup>13</sup>

Should the Department identify more efficient methods to accommodate project changes without risk of unfair delay to other group members, the Department may direct further revisions to Section 3.4.1(i) in D.P.U. 19-55 or another docket, as appropriate.

## IX. SHARING CONFIDENTIAL, BUSINESS-SENSITIVE INFORMATION

### A. Introduction

The Revised Group Study Proposal authorizes the sharing of each group member's contact information and project details with other group members (Exh. JDT-2, § 3.4.1(m)). The Distribution Companies further propose that they may, but shall not be required to, copy all

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<sup>13</sup> On May 22, 2019, the Department opened D.P.U. 19-55 to investigate the interconnection of DG in Massachusetts, pursuant to the DG Interconnection Tariff and Distributed Generation Interconnection, D.P.U. 11-75-E (2013). In D.P.U. 19-55, the Department is reviewing the current standards and procedures by which DG facilities are interconnected to the EPS. D.P.U. 19-55, Vote and Order at 1 (2019).

group members on communications sent to or received from any group member (Exh. JDT-2, § 3.4.1(m)).

B. Summary of Comments

The Clean Energy Parties request that an individual customer's single-line diagrams and three-line diagrams not be shared with other members of the group (Clean Energy Parties Comments at 11). The Clean Energy Parties contend that these diagrams represent proprietary information of interconnecting customers and businesses and sharing such information between competitors is unacceptable (Clean Energy Parties Comments at 11).

The Distribution Companies reject the Clean Energy Parties' assertion that single-line and three-line diagrams include sensitive business information (Distribution Companies Reply Comments at 19). The Distribution Companies maintain that restrictions on sharing can create unnecessary administrative burdens, may cause additional delays, and may unfairly position the Distribution Companies to determine what can and cannot be shared (Distribution Companies Reply Comments at 19-20). The Distribution Companies further contend that their proposal allows group projects to be processed more efficiently (Distribution Companies Reply Comments at 20).

At the June 11, 2019 technical conference, the Distribution Companies and stakeholders engaged in substantive discussions on this issue that clarified their existing positions. Many stakeholders support allowing only redacted design drawings to be shared with the group (Group 1 Minutes at 2; Group 4-6 Minutes at 1-2).

C. Analysis and Findings

Consistent with the general stakeholder consensus identified at the June 11, 2019 technical conference, the Department finds that the Distribution Companies are authorized to share each group member's contact information and project details with other members participating in the group, except for unredacted versions of one-line diagrams, three-line diagrams, and any other design drawing submitted by a group member (Group 1 Minutes at 2; Groups 4 and 6 Minutes at 1-2). Along with unredacted diagrams, interconnection customers shall submit to the Distribution Companies redacted copies of design diagrams that can be shared with the group, if necessary. The Department directs the Distribution Companies to develop a procedure to protect proprietary information in the form of one-line diagrams, three-line diagrams, and any other design drawings submitted by a group member.<sup>14</sup>

X. AFFECTED SYSTEM OPERATOR STUDIES

A. Introduction

The Revised Group Study Proposal states that interconnecting customers are responsible for all costs of any studies required to evaluate the impact of the interconnection of a facility on an affected system (Exh. JDT-2, § 3.4.1(l)). The Distribution Companies further propose that interconnecting customers enter into agreements directly with the ASO, unless the Distribution Companies elect to collect the study costs and system modification costs and pass-through to the applicable ASO (Exh. JDT-2, § 3.4.1(l)). The Revised Group Study Proposal states that the Distribution Companies will coordinate but not be responsible for the timing of any ASO study

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<sup>14</sup> The Distribution Companies do not need to include this procedure in the DG Interconnection Tariff or submit it to the Department.

costs or system modifications (Exh. JDT-2, § 3.4.1(l)). Finally, the proposal states that facilities are only authorized to interconnect once ASO requirements have been met and all system modifications are constructed and operational (Exh. JDT-2, § 3.4.1(l)).

B. Summary of Comments

The Clean Energy Parties contend that the Revised Group Study Proposal fails to clarify or address the uncertainty regarding ASO study coordination (Clean Energy Parties Comments at 9-10). The Clean Energy Parties emphasize the need for the group study process to address (1) the timing of ASO studies in relation to independent or group distribution studies, (2) the amount of time allowed for completing the ASO studies, (3) the ASO study structure, and (4) the technical trigger (Clean Energy Parties Reply Comments at 2).

DOER acknowledges that while the processes required by an ASO may be outside of the Distribution Companies' control, the DG Interconnection Tariff should ensure that the Distribution Companies provide transparency to all external processes and events that impact the time frames of interconnecting DG resources (DOER Reply Comments at 4). DOER submits that transparency can be improved in several ways, including Distribution Companies' providing the following: ASO communications to all group study members; information on the criteria used for defining an area of study to all participants; where an ASO study is triggered, all communications to group study members regarding impacts on the interconnection process; and reports to the Department on ASO processes and time frame impacts (DOER Reply Comments at 4).

The Distribution Companies contend that their proposed revisions are limited in scope and are intended to facilitate collection of ASO study costs (Distribution Companies Reply

Comments at 18). The Distribution Companies maintain that they have no control over ASO requirements (Distribution Companies Reply Comments at 18). Furthermore, the Distribution Companies state that the ASO requirements continue to change and evolve over time as ISO-NE and transmission operators are asked to study and mitigate, if necessary, impacts related to accommodating increasing amounts of large DG resources (Distribution Companies Reply Comments at 18). The Distribution Companies argue that imposing ASO requirements beyond their control is inappropriate, but they maintain their commitment to work closely with ASOs and provide timely updates (Distribution Companies Reply Comments at 18-19).

C. Analysis and Findings

The Department is currently investigating issues related to ASO studies in D.P.U. 19-55. On September 25, 2019, the Hearing Officer in that docket issued a memorandum outlining interim guidance on ASO studies. D.P.U. 19-55, Hearing Officer Memorandum (September 25, 2019) (“ASO Interim Guidance”). The ASO Interim Guidance sets forth transparency and notification requirements related to potential and ongoing ASO studies, including requirements to communicate the potential need for an ASO study to the Department and potentially affected DG applicants, and to provide the Department and affected DG applicants with timely and relevant information and updates. While it is in effect, the ASO Interim Guidance shall apply to group study.

Furthermore, the Department has conducted significant additional process on the topic of ASO studies in D.P.U. 19-55. The Department, therefore, expects to address issues concerning ASO studies either in D.P.U. 19-55 or a separate docket, and not within the instant proceeding. As such, at this time, the Distribution Companies shall not include any language in the Group

Study Provision concerning ASO studies, beyond reiteration of the language currently included in the DG Interconnection Tariff at Section 3.4(b) and Exhs. E, F.

XI. CONCLUSION

We approve the Distribution Companies' Revised Group Study Proposal subject to the modifications set forth above. Accordingly, the Distribution Companies shall jointly file a revised model DG Interconnection Tariff within fifteen business days of this Order.

XII. ORDER

Accordingly, after notice, comment, and due consideration, it is

ORDERED: That the proposed revisions to Section 3.4.1 of the Standards of Interconnection of Distributed Generation Tariff jointly filed by Fitchburg Gas and Electric Light Company d/b/a Unitil, Massachusetts Electric Company and Nantucket Electric Company, each d/b/a National Grid, and NSTAR Electric Company d/b/a Eversource Energy on March 1, 2019, to be modified and amended consistent with the directives contained herein, are APPROVED; and it is

FURTHER ORDERED: That Fitchburg Gas and Electric Light Company d/b/a Unitil, Massachusetts Electric Company and Nantucket Electric Company, each d/b/a National Grid, and NSTAR Electric Company d/b/a Eversource Energy shall comply with all directives contained in this Order.

By Order of the Department,

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/s/  
Matthew H. Nelson, Chair

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/s/  
Robert E. Hayden, Commissioner

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/s/  
Cecile M. Fraser, Commissioner



An appeal as to matters of law from any final decision, order or ruling of the Commission may be taken to the Supreme Judicial Court by an aggrieved party in interest by the filing of a written petition praying that the Order of the Commission be modified or set aside in whole or in part. Such petition for appeal shall be filed with the Secretary of the Commission within twenty days after the date of service of the decision, order or ruling of the Commission, or within such further time as the Commission may allow upon request filed prior to the expiration of the twenty days after the date of service of said decision, order or ruling. Within ten days after such petition has been filed, the appealing party shall enter the appeal in the Supreme Judicial Court sitting in Suffolk County by filing a copy thereof with the Clerk of said Court. G.L. c. 25, § 5.