

**COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF PUBLIC UTILITIES**

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, NSTAR Electric) D.P.U. 17-164
Company and Western Massachusetts Electric Company,)
d/b/a Eversource Energy, for Approval of a Proposed Revised)
Version of Section 3.4.1 of the Standards of Interconnection)
of Distributed Generation Tariff)

REPLY COMMENTS OF THE ELECTRIC DISTRIBUTION COMPANIES

I. INTRODUCTION

Fitchburg Gas and Electric Light Company, d/b/a Unitil, Massachusetts Electric Company and Nantucket Electric Company, d/b/a National Grid, NSTAR Electric Company d/b/a Eversource Energy (“Eversource”) (the “Distribution Companies” or “EDCs”) are pleased to provide the following comments in reply to initial comments offered in this proceeding by Northeast Clean Energy Council (“NECEC”) on behalf of its member companies and other interested parties (together, the “Clean Energy Parties”). The Clean Energy Parties’ initial comments address the revised proposal offered by the EDCs to include a new Group Study¹ option in their respective Standards for Interconnection of Distributed Generation tariffs (each, an “Interconnection Tariff”).

The original Group Study provision was negotiated through the Massachusetts Distributed Generation Interconnection Working Group (“Working Group”) in Distributed Generation Interconnection, D.P.U. 11-75. The Department of Public Utilities (“Department”) had initially

¹ Capitalized terms used but not defined herein shall have those meanings ascribed in the Interconnection Tariff and/or the EDC’s Group Study proposal, as applicable.

opened that docket to review the interconnection process and established the Working Group to make recommendations. D.P.U. 11-75-A, at 4. The Working Group was tasked with creating a more efficient and effective interconnection process. D.P.U. 11-75-A, at 4. At the direction of the Department, the EDCs filed a model interconnection tariff in 2014, which included the original Group Study provision in Section 3.4.1. The original Group Study provision was designed as a 12-month pilot, commencing from the effective date of the tariff. The Group Study pilot ran from June 1, 2015 to May 31, 2016 (the “Pilot Period”).

On October 20, 2017, the EDCs filed a joint petition seeking the Department’s approval of a revised version of the Group Study provision in Section 3.4.1 of the Interconnection Tariff. The Department docketed this matter D.P.U. 17-164. The Distribution Companies revisions reflected lessons learned through the Distribution Companies’ implementation and experience carrying out the Group Study pilot. The EDC’s petition was the subject of comments from interested parties, discovery and a technical session.

In the wake of the technical session, the EDCs and industry stakeholders,² including NECEC, conducted meetings and conference calls to revise the EDC’s proposal. After extensive collaboration, several conference calls and in-person meetings with the stakeholders, on March 1, 2019, the Distribution Companies submitted the revised Group Study proposal. The EDC’s comments herein reply to the initial comments submitted by the Clean Energy Parties on March 20, 2019.

² Industry stakeholders that engaged in this process with the Distribution Companies included representatives from the Northeast Clean Energy Council, Borrego Solar Systems, Inc., Cypress Creek Renewables, Syncarpha Capital, LLC, Sunpower Corp., and Nexamp, Inc.

II. SUMMARY OF CLEAN ENERGY COMMENTS AND EDC REPLY

The Clean Energy Parties' initial comments claim the Distribution Companies' proposed revisions do not address study delays, provide no assurance related to when a subsequent study would actually begin and potentially invite even greater delays by: (1) forcing most projects out of the shorter timelines of independent study; (2) creating additional uncertainty and delays because of the likely possibility of re-studies being triggered by uncoordinated project changes; and (3) allowing group studies to halt and delay independent study projects in front of them in the queue (Clean Energy Parties Comments at 2-3).

Additionally, the Clean Energy Parties claim projects will no longer be able to pursue more accurate cost estimates and the Distribution Companies' revisions fail to address the issue of timing of the distribution studies in relation to the transmission impact analyses currently required by ISO-NE for projects over one megawatt AC, the amount of time allowed for completing these transmission impact analyses, and confirmation that a transmission analysis should cover the same independent project or group as the distribution study (Clean Energy Parties Comments at 3). Lastly, the Clean Energy Parties raised concerns over how the revised Group Study provisions will affect projects currently in the interconnection queue (*id.*).

Although the EDCs appreciate the perspective of the Clean Energy Parties in seeking Group Studies more quickly and with more precise cost estimates, it fails to acknowledge the common responsibilities of the EDCs to ensure that customers with applications to interconnect distributed generation ("DG") in a Common Study Area receive thorough review while maintaining the safety and reliability of the electrical grid (and individuals that must interface with these DG facilities during construction and operation). Indeed, the Clean Energy Parties' comments did not mention safety or reliability at all. Although the EDCs are confident the Clean

Energy Parties want their projects to interconnect safely to the electric power system and operate in a reliable manner, the EDCs primary responsibility is to ensure that same level of seamless operation of the electric system for all of their distribution customers. The EDCs also need to balance the interest of developers to only pay costs for interconnection that the developers believe are warranted, with the interests of distribution customers to not pay costs to interconnect DG that should rightfully be borne by the customer that caused such costs to be incurred.

The EDCs proposed their initial revised Group Study in 2017 after weighing the potential benefits of continuing to offer Group Studies, in light of the many challenges experienced by both the EDCs and applicants during the Pilot Period to offer their customers an efficient means of reviewing multiple interconnection applications to interconnect in a Common Study Area. Those benefits, centered around reviewing applications in a Common Study Area in conjunction with each other to determine the collective system impacts of multiple interconnections in the same area in the same review process and providing a mechanism to share common modification costs, were counterbalanced with implementation challenges due to the dynamic nature of the process, including individual customer requests for multiple study iterations, project changes, extensions and other individual Group member delays, including missed deadlines. Where multiple Interconnecting Customers were involved, it was very difficult during the Pilot Period to obtain consensus from customers on a scope of work, time frames and navigate delays caused by the customers, with the EDCs refereeing conflicts between Interconnecting Customers in several instances.

Since the Pilot Period, the complexity of studying and interconnecting multiple projects in a Common Study Area have been compounded by increased: (1) demand for interconnection due in large part to the SMART program; (2) size and complexity of projects, including changes in

operation characteristics by the introduction of new technology (e.g., battery storage); (3) saturation of the electrical grid; and (4) evolving participation by ISO-New England and the Federal Energy Regulatory Commission (“FERC”) as it pertains to distributed energy resources. These issues are expected to increase the length and complexity of the Group Study prompting additional revisions by the Distribution Companies. Several of these challenges require ISO-NE and/or Affected Systems’ operators (other EDCs, transmission companies, and/or municipal light companies) to perform studies to determine impacts to the Affected Systems in order to authorize safe and reliable interconnection. Because the Affected Systems’ studies are not performed by the interconnecting Distribution Company, the EDCs are without effective means to influence the timing of these studies or their results. Indeed, this challenge is true for many recent applications that are reviewed outside of a Group Study process, which highlights the growing dissonance between the Interconnection Tariff language negotiated during the 2012-2014 timeframe and the steady acceleration of distribution generation in the Commonwealth since that time. Accordingly, interconnection costs and timing have become more complex.

The Distribution Companies’ revised Group Study proposal was carefully crafted to strike a fair and reasonable balance between the Distribution Companies and the interconnecting customers’ process needs. The revised Group Study proposal addresses a number of concepts that the Department, Distribution Companies and/or stakeholders’ discussed at the Technical Session or during the subsequent stakeholder discussions, including a proposal to establish timeframes to perform Group Studies, while keeping Group Studies outside of the Timeline Enforcement Mechanism (“TEM”), as they were during the Pilot Period (and are under the currently effective TEM). The EDCs proposal is designed to get each applicant through the Group Study process with an Interconnection Service Agreement (“ISA”) that will provide for safe and reliable service

for them (and the EDC's other customers), and equitable cost allocation between Group Study applicants (and the EDC's other customers), as quickly as possible given the factors mentioned earlier that are beyond the control of the EDCs.

III. ISSUE BY ISSUE RESPONSE

A. Issue 1: Combination of Impact and Detailed Studies and Associated 25% Cost Envelope (Definition of Group Study, Section 1.2)

EDC Proposed Language:³

“Group Study” shall mean a single modified combined Impact and Detailed Study that may be performed at the same time for a Group, instead of each Interconnection Application undergoing such study separately (either sequentially or in parallel as determined by the Company). The Group Study will produce an estimate for the cost of System Modifications to the Company's EPS within +/- 25%. The Company may elect to commence a Group Study before or after the Preceding Study, if any, is completed.

Clean Energy Parties' Comment

The Clean Energy Parties assert the Distribution Companies' proposed estimate for the cost of System Modifications to the Company's EPS within +/- 25% is unacceptably high for a combined impact and detailed study requirement that would apply to all group sizes and types. The Clean Energy Parties recommend a study results with a detailed study that provides +/- 10% accuracy.

The Clean Energy Parties support preserving the existing 25% cost envelope that is the standard for impact studies under the Interconnection Tariff for system modifications driven by larger, more complex groups. However, the Clean Energy Parties do not support the elimination of the option of a detailed study that would provide an estimate within a 10% cost envelope.

³ All references to the “EDC Proposed Language” in these comments are from the EDC's March 1, 2019 revised Group Study language.

EDC Response

Under Section 3.4(g) of the Interconnection Tariff, Interconnecting Customers who wish to execute an ISA at the conclusion of the Impact Study (“Early ISA”) agree to be bound by the +/- 25% System Modification costs. A large majority of Interconnecting Customers elect to execute an Early ISA. The Distribution Companies’ proposal to combine the Impact Study and the Detailed Study will expedite the Group Study process; however, the +/- 25 percentage envelope allows the Distribution Companies the necessary degree of flexibility in developing estimates for these complex interconnections within the specific time frames proposed by the EDCs. The Distribution Companies made clear during the stakeholder collaboration that the EDCs would only consider proposing specific time frames if there was a compromise on cost estimate caps. Given that the Interconnection Tariff already provides for instances in which a 25% +/- cost estimate is acceptable, which a significant number of Interconnection Customers take advantage of in order to obtain an Early ISA, this compromise is fair and reasonable. Additionally, requiring the Distribution Companies to be held to a +/- 10 percent cost estimate could further elongate the study time, so the Distribution Companies can be comfortable issuing a multi-million-dollar construction cost estimate and being held at +/- 10 percent. Given the substantial increase in construction costs, as well as construction time frames, the Distribution Companies have observed since the cost envelopes in the Interconnection Tariff were first put in place, the +/- 25 percent is reasonable.

Further, the Clean Energy Parties’ proposal to allow for Interconnecting Customers the option to have a Detailed Study completed further complicates the process. Allowing some Group members to have a Detailed Study performed while other Group members wish to execute an Early ISA will complicate and slow down the Group Study process.

The Clean Energy Parties also advocate for the “larger, more complex” groups to be one tier with +/- 25 percent System Modification cost estimates and everyone else to be in the second tier with +/- 10 percent System Modification cost estimates. The Clean Energy Parties’ recommendation to have tiered cost estimate percentages depending on the size and complexity of the group is not workable. Prior to the conclusion of the Impact Study, the Distribution Companies will not be able to discern the level of complexity to assign a Group into a “tier.” Additionally, the size of a Group does not directly tie to the complexity of a study and/or interconnection and the converse is true as well. Smaller Groups at times may be more complex than “larger” Groups.

B. Issue 2: Complete Removal of Group Study Time Frames from the Time Frame Enforcement Metric (Section 3.4.1d)

EDC Proposed Language:

d) The Company shall not be required to conduct any Group Study without receiving full payment for such study from the Group. Once each Group member executes the Group Study agreement and pays the costs thereof, the Company will conduct the Group Study in accordance with the processing Time Frames below. The Company will provide updates to the Group as soon as practicable if the Company’s study will not be completed within the estimated Time Frames below. The Group Study Time Frames shall not be subject to the Company’s Time Frame enforcement metric established pursuant to Department order D.P.U. 11-75-F.

Clean Energy Parties’ Comment

The Clean Energy Parties state “the TEM as the only standard utilities are required to meet, they have no incentive to over-perform against it...” and “the TEM should not be watered down any further via an exemption for group studies.” Further, the Clean Energy Parties advocate the TEM should instead be made more stringent and more meaningful as the utilities continue to gain more experience.

EDC Response

The Distribution Companies reject the Clean Energy Parties' assertion that the TEM should apply to Group Studies. On its face, their statement that the TEM is the "only standard" the distribution companies are required to meet when processing interconnected applications underscores that the DG developers are focused much more on the time it takes to process an application rather than ensuring that the resulting interconnection ensures the safety and reliability of the electrical system. The TEM is not the "only standard" the distribution companies are required to meet, and judged by, in the context of interconnection. They are judged by (1) whether interconnections do not undermine 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; and (5) their effectiveness; and (6) their ability to ensure that distribution customers and DG developers are each fairly allocated the costs for each and every DG project that is subject to the interconnection application process, among other factors.

By its nature, the Group Study process is more dynamic and complex than the study of any individual project. There are a number of factors outside of a Distribution Companies' control that influence whether such timeframes can be met – such as, without limitation, a change in the composition of the group, individual project change and extension requests (both concepts which NECEC and other industry stakeholders wanted to retain in the Group Study provision) all of which could result in scope changes and re-studying. Unlike the individual project tracks subject to TEM, the Group Study process is continuing to be developed. In fact, the EDC's revised Group Study proposal is the first instance in which the EDCs have offered Time Frames for the Group

Study process – a process which, in this version, has not been tested or experienced by the EDCs.⁴ As such, it would be unfair and counterproductive to impose an enforcement mechanism on the Distribution Companies as they continue to work to improve and streamline the process for the benefit of their customers.

From its inception, the TEM has not included projects subject to mutually agreed upon timeframes, such as Group Studies, and does not presently include any track that would cover aggregate Time Frames for the study of multiple projects (the TEM is based on individual project review). Investigation into Distributed Generation Interconnection, D.P.U. 11-75-F Order at 9, fn. 12 (2014). The EDCs are not proposing to change the TEM – rather, the EDCs seek to maintain the existing TEM, which does not currently apply to Group Study projects. Given the increased level of complex projects, grid saturation, and, in growing instances, the likely need for substantial distribution system reconfiguration (i.e., possible raising of primary distribution delivery voltages to provide more distribution capacity, running multiple feeders down a public way, etc.), making Group Studies subject to the TEM is even more unreasonable. The potential application of penalties to a relatively new process for the EDCs (for which they are continuing to develop), that has unique complexities (some of which are not within the means of the EDCs to fully control) would be unjust and unfair, particularly in the context of a service whereby the EDC is attempting to ensure the safety and reliability of the electric power system. Therefore, Group Studies should continue to remain exempt from TEM. The EDCs offer to process Group Studies within specified

⁴ The process and associated timeframes for individual simplified, expedited, and standard projects were initially established by the Department in Distributed Generation, D.T.E. 02-38-B (2004), and have undergone some iterations through the years. The TEM was established in Distributed Generation Interconnection, D.T.E. 11-75-F (2014), approximately 10 years after the Distribution Companies had been processing individual projects subject to Interconnection Tariff timeframes. In contrast, the Group Study provision was only a 12 month pilot that has expired, with the first iteration of process improvements being proposed by the Distribution Companies through their Group Study petition being considered in this docket. This EDC's Group Study proposal includes new concepts, which have not been tested, including specific Time Frames, group formation windows, project change processes.

Time Frames, while keeping them out of the TEM, is a fair compromise to allow both the EDCs and developers to work toward improving the process (in this instance, completing the study process pursuant to a time frame established at the outset of the application review process as opposed to the mutual agreement that was in effect prior to the EDC's proposed revisions).

C. Issue 3: Length of Time and Project Categories in the Proposed Table of Study Time Frames (Section 3.4.1d)

EDC Proposed Language:

Equal to or less than 3 Interconnection Applications with an aggregate Nameplate Capacity of equal to or less than 10 MW and estimated aggregate System Modifications less than \$1,500,000.00
100 days

Equal to or less than 5 Interconnection Applications with an aggregate Nameplate Capacity of equal to or less than 25 MW and estimated aggregate System Modifications less than \$1,500,000.00
125 days

Over 5 Interconnection Applications, over 25 MW of cumulative Nameplate Capacity, or any Group Study with estimated aggregate System Modifications \$1,500,000.00 or more
160 days

Clean Energy Parties' Comment

The Clean Energy Parties claim the timeframe goals in the Distribution Companies' proposed revisions are substantially too long, and the structure of the group categories is problematic. Further, the Clean Energy Parties support establishing a baseline of time frames for the most basic group impact studies much closer to the existing 55 business day study period for single, standard-process independent study projects, stepping up from there based on group size and complexity. The Clean Energy Parties recommend developing the time frames into two tables (for which a 25% cost envelope would apply), and the other containing time frames for additional and optional Detailed Studies (for which a 10% cost envelope would apply) as follows:

Impact Study Timelines

Group Study equal to or less than 3 Interconnection Applications with an aggregate Nameplate Capacity of equal to or less than 10 MW AC
75 days

Group Study equal to or less than 5 Interconnection Applications with an aggregate Nameplate Capacity of equal to or less than 25 MW AC
100 days

Group Study over 5 Interconnection Applications, over 25 MW AC of cumulative Nameplate Capacity
125 days

Detailed Study Timelines

Group Study with estimated aggregate substation modifications less than \$1,500,000
30 days

Group Study with estimated aggregate substation modifications greater than \$1,500,000
60 days

EDC Response

The Standard Process Complex Project process for a single project per the Interconnection Tariff allows 60 business days for the Impact Study and 60 business days for the Detailed Study when the System Modifications include substation work and are expected to cost \$200,000 or more. Interconnection Tariff at Table 4, n. 4, 5. For projects where the System Modifications are estimated to cost \$1 million or more, the Time Frames for both the Impact and Detailed Studies are by mutual agreement. *Id.* By the nature of being a Group Study any System Modifications for multiple projects are likely to include substation work and be greater than \$1 million, and would require both the impact and detailed study reviews.⁵

The EDC's proposed Time Frame for Group Study combines the time for Impact Study and Detailed Study. In all cases, the EDC's proposed Time Frames for the Group Study is less

⁵ Even where substation work is not required and costs are less than 1 million, the EDCs have 85 business days to study a single project under the standard (non-complex) process. *See* Interconnection Tariff at Table 3; this includes Impact and Detailed Study time.

than the total study processing time that the EDCs would have for two interconnection customers' projects under the Interconnection Tariff, and in some cases less than the processing time for even a single project. The Clean Energy Parties proposed revisions to the single study format proposed, i.e. separate impact and detail study for Group Study, with separate time frames is not acceptable to the EDCs for the reasons articulated at Section A above.

The development of interconnection solutions and cost estimates for the multiple projects will be more complicated than that of a single project. Group Study time frames must take into account the dynamic nature of groups, and the inherent variability and complexity in performing a Group Study. The Distribution Companies believe the proposed time frames and single study format 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.

D. Issue 4: Impacts on Preceding Studies (Final Paragraph of Section 3.4.1d)

EDC Proposed Language:

Where there is a preceding Interconnecting Customer(s) with a proposed Facility in an area that becomes the subject of a Group Study, any individual interconnection solution(s) determined by an Impact and/or Detailed Study that would require modifications to the Company's EPS that include feeder reconfigurations or new feeders may be superseded by the Group Study interconnection solution. This shall apply when a Group Study solution is being developed as part of an ongoing Group Study (or has been determined by such Group Study) and the Company in its sole discretion, prior to the execution of the preceding Interconnecting Customer's Interconnection Service Agreement, determines that there is a compelling business, engineering, safety or reliability reason for the Group interconnection solution to supersede the individual solution(s). In such case, the Company may suspend any applicable Time Frames for the preceding Interconnecting Customer until the Group Study has been completed, including the issuance of an Interconnection Service Agreement.

Clean Energy Parties' Comment

Clean Energy Parties claim the new language and its consequences are unacceptable. Specifically, Clean Energy Parties claim the revised language would allow utilities to pause in-study independent projects and make them subject to the group study schedule, which would create substantial delays and could add costs. Clean Energy Parties support giving the preceding study the sole discretion to opt-in and join a group study/solution that forms behind it.

EDC Response

The EDC's new language relative to Interconnecting Customers with a Preceding Study (i.e., preceding Interconnecting Customer) is intended to enable the EDCs to provide interconnection solutions for an area that maintains safety and reliability, uses resources efficiently, and supports cost effectiveness for customer-funded system modifications. This language is necessary because preceding Interconnecting Customers may be provided with an individual interconnection solution that is subsequently determined to be unnecessary, inconsistent, or in conflict with the interconnection requirements of the Group. For instance, an individual solution proposed for a preceding Interconnecting Customer could potentially be built only to be removed later in place of a new solution for the Group - for example a 13.8kV line extension could serve a particular site, however the Group solution finds that a new 34.5kV substation would be most effective to serve the area, requiring the 13.8kV extension to be removed. Such a result would not only be an inefficient use of time, material and human resources for the construction of the system modifications, but would also impose extra costs on all parties involved (i.e., the preceding Interconnecting Customer would be paying the full amount for the individual solution, with no cost sharing, and the subsequent Group members would be paying for that solution to be removed in addition to new modifications). Similarly, multiple overlapping

solutions for preceding Interconnecting Customers and Group members may result in duplicative infrastructure which could create more complex electrical infrastructure, adding unnecessary complexity to the operational characteristics of the system.

The EDC's language attempts to balance the interest of the individual preceding Interconnecting Customer, the Group, and the EDCs – specifically, these provisions would not apply to any preceding Interconnecting Customer that has received an ISA and, further, would only apply in those cases where the EDC determined that there is a compelling business, engineering, safety or reliability reason for the Group interconnection solution to supersede the preceding Interconnecting Customer's individual solution. The EDCs do not expect or intend that every preceding Interconnecting Customer's interconnection processing will be put on hold pending the completion of a Group Study/solution.

E. Issue 5: Added Language on Affected System Operators, Including Transmission Providers and ISO-NE (Section 3.4.11)

EDC Proposed Language:

- 1) Interconnecting Customers will be directly responsible to potentially Affected System operators, including, without limitation, transmission providers and ISO-NE, for all costs of any studies required to evaluate the impact of the interconnection of the Facility(ies) on the Affected Systems, and any resulting requirements (if any), such as, without limitation, design and construction of transmission and/or distribution system modifications to the Affected Systems' electric power system(s). Interconnecting Customers will also be responsible for all costs of any modifications or changes to the Company's EPS that are necessitated as a result of the Affected System operator's requirements. The foregoing costs are in addition to the Company's System Modification costs identified in the Company's studies and/or agreements, as applicable. Affected System operator studies and resulting requirements are outside the scope of the distribution Company's studies, and may interrupt, toll or otherwise affect applicable Time Frames, including, without limitation, with respect to the completion of the studies, issuance of Interconnection Service Agreements, and may also interrupt, toll or otherwise affect the Company's construction schedule.

The Interconnecting Customer will enter into agreements directly with the Affected System operator, unless the Company, in its sole discretion, elects to collect the

Affected System operator(s) estimated study costs and/or system modification costs (if applicable) in the Company's agreement(s). In the latter case, where the Company elects to collect the Affected System Operator(s) costs, the costs will be included in the Company's agreements but will be passed-through to Affected System operator(s). The Interconnecting Customer(s) shall be responsible for the actual cost of any Affected System operator studies, transmission and distribution system modifications, and requirements, notwithstanding any cost caps or limitations applicable to the Company's estimate for its studies and/or System Modifications under this Interconnection Tariff or respective agreements. The Company may include an attachment to the study and/or interconnection agreements, as applicable, with any special conditions relative to Affected Systems.

The Company will coordinate but shall not be responsible for the timing of the Affected System operator studies or system modifications (if any). The Company shall have no liability whatsoever to any Interconnecting Customer for the Affected System operator studies, system modifications, or requirements. The Facility shall not be authorized to interconnect unless and until the Affected System operator requirements have been met and all system modifications are constructed and operational.

Clean Energy Parties' Comment

The Clean Energy Parties claim the Distribution Companies' new proposed tariff language fails to clarify or address the uncertainty, confusion, and delays that surround this situation. Further, the Clean Energy Parties claim the EDCs did not propose a solution to, the three most important outstanding issues, which are (1) the timing of the transmission impact analyses in relation to the independent or group distribution studies, (2) the amount of time allowed for completing these analyses, and (3) confirmation that for efficiency, their structure should mirror the same independent or group structure as the distribution study. These transmission impact analyses are completed by the transmission-owner side of the distribution companies, but there are no existing requirements placed on them (ISO-NE's only requirement is that they be satisfactorily submitted with the notification and be approved by the ISO-NE/NEPOOL Reliability Committee). The Clean Energy Parties recommend, since transmission impact analyses are completed by the

transmission-owner side of the distribution companies⁶, some bounding requirements around the timing of and amount of time for these analyses should be enforced.

Further, the Clean Energy Parties recommend the Distribution Companies/transmission owners work with ISO-NE on a new, more technical and data-driven trigger for transmission analyses (instead of the one MW AC project size) for the future, with the opportunity for stakeholder input. Additionally, the triggers and analyses should be made publicly available.

Finally, the Clean Energy Parties assert Section (l) contains “broad and expansive language” amounting to a disclaimer of any role in or responsibility for any impacts from Affected System operator coordination which raises significant concerns for project proponents, including an unbounded ‘off-ramp’ for Affected System operator studies and requirements to “interrupt, toll or otherwise affect applicable Time Frames” for study completion, ISA issuance, and construction schedule. It also introduces a blanket protection against potential liability related to Affected System operator studies, modifications, and requirements. The Clean Energy Parties request that the Department give close scrutiny to the language proposed in Section (l) and provide directives to the Distribution Companies on the above-mentioned issues and on Affected System operator coordination.

EDC Response

The stakeholders suggestion that the EDCs have proposed “substantial” new language on Affected System operators fails to recognize that these concepts (with the exception noted below) are addressed throughout the Interconnection Tariff (e.g., Standard Process, Section 3.4.b; Table 3,

⁶ The EDCs note that the distribution companies do not have a transmission-owner *side*; rather, the transmission owner is a separate legal entity, and may be affiliated with the distribution company. Additionally, not all Affected System operator studies are performed by the distribution company’s transmission affiliate – for instance, the Affected System operator study being performed in National Grid’s territory for western/central Massachusetts includes nine (9) Affected System Operators.

n. 1), including, without limitation, in part, in the pilot Group Study provision (Tariff, n. 3 and Section 3.4.1.k). The EDC's proposed language does include limited new provisions relative to Affected System operator requirements intended to improve the process such as allowing the EDCs (at their discretion) the means to collect Affected System operator costs in lieu of requiring the EDC's customers to enter into direct and separate cost agreements with the Affected System operators. Given the likelihood that Groups will form in areas of high saturation and/or that their aggregate generation will be significant (i.e., in excess of 5MW) it is particularly important that Affected System operators' requirements are included in the Group Study provision.⁷

The stakeholders have made general comments (but have not offered specific revisions) stating that the Affected System operator language in the Interconnection Tariff should propose solutions to the timing of these studies as well as the format (i.e. mirror the same structure as the distribution studies). The EDCs have no control over Affected System operator requirements and, as such, these are areas that are complex and cannot be managed through the Interconnection Tariff. Similarly, these study requirements have and continue to evolve over time as the ISO-NE and other transmission operators in New England are being asked to study (and mitigate, if necessary) the larger scale impacts of EDC connected DG (as opposed to generation connected directly to the transmission system) such as reverse power flow onto the bulk transmission system and the provision of new retail delivery points (e.g., new/upgraded substations, transformers) to provide the distribution capacity necessary to accommodate greater amounts of large DG projects interconnecting to the EDC's power systems. While the EDCs recognize and understand that these issues are ripe for stakeholder discussion, imposing requirements on the EDCs for matters beyond

⁷ This issue was also discussed during the Technical Session. *See* Technical Session transcript at 57--59 and 135-140.

their control is inappropriate and will not improve the process. However, the EDCs are committed working closely with the Affected System operators to provide timely study and system modification updates.

F. Issue 6: Sharing of Confidential Business Information (Section 3.4.1m)

EDC PROPOSED LANGUAGE

m) Group members understand and agree that the Company is authorized to share each Group member's contact information and project details with other members participating in the Group. The Company may, but shall not be required to, copy all Group members on communications sent to or received from any Group member, including, without limitation, pursuant to subsections i) and j) above.

Clean Energy Parties' Comment

The Clean Energy Parties claim the sharing of proprietary information between competitors is unacceptable, and this is a significant concern. The Clean Energy Parties request the Department add to this section specific restrictions prohibiting the sharing of business sensitive information, including single-line and three-line diagrams and other design drawings, new technological solutions, and any other business-sensitive information such as land-lease rates.

EDC Response

In order to perform a Group Study with administrative efficiency and process transparency, developers must assent to share their contact information and project details with other members participating in the Group. Historically, the project details shared would not have included land lease rates so the Clean Energy Parties' concern in this regard is unfounded.⁸ Indeed, during the Pilot Period (and to date), the EDCs had authority under the Interconnection Tariff to share contact information and project details with other Group members. Specifically, without limitation,

⁸ The information shared between Group members does not include land-lease rates – the application does not even include land-lease rates. Additionally, the Distribution Companies reject the Clean Energy Parties' assertion that single-line and three-line diagrams include sensitive business information.

Section 10 of the Interconnection Tariff already authorizes the Distribution Companies to share this information and specifically provides: “If an Interconnecting Customer’s project qualifies for a Group Study, the Company is authorized to share Interconnecting Customer’s contact information and project details with other Interconnecting Customers also involved in the Group Study.” The Distribution Companies added this language into the Group Study provision to provide additional transparency. Imposing restrictions on this sharing process creates unnecessary administrative burdens on the EDCs, could cause delays in the process, and unfairly puts the risk on the EDCs to determine what information is shareable.

The EDCs do not recall any Group member applicant refusing to share information or expressing concerns with this aspect of the process during the Pilot Period. The Clean Energy Parties’ desire for a more expedited Group Study process is wholly at odds with their unsupported concern over protecting developer information. It is necessary that the EDCs have the ability to share information between Group members to foster transparency and to process Group projects efficiently.

G. Issue 7: How an Updated Group Study Section to the Interconnection Tariff, if Adopted, Would Affect Current Projects in the Interconnection Queue

Clean Energy Parties’ Comment

There is currently is no proposal for how the updated group study provisions would affect projects currently in the interconnection queue. The Clean Energy Parties recommend projects moving forward need to be subject to the revised provisions. Lastly, the Clean Energy Parties assert, at minimum, once the group study provisions under consideration here are finalized and ultimately adopted, the distribution companies should be subject to the timelines and rules of this tariff for all in-process and new group studies.

EDC Response

If adopted, the Group Study provision would be applicable as of the date the Department approves it for effect, i.e., the EDC may form a Group, for two or more interconnection applications in the queue for proposed facilities in a Common Study Area that have not commenced an Impact Study. Any in-progress Impact Study for applications in the queue in the Common Study Area would be considered a Preceding Study. The EDCs do not see a need to include any special provisions to address how the Group Study provisions, once approved, would be applied to projects in the interconnection queue.

H. Issue 8: Project Changes (section 3.4.1i)

EDC PROPOSED LANGUAGE:

- i) If any Group member requests a project change during the Group interconnection process, any potential need for additional information, documentation, time, fees, or the removal of that project from the Group shall be determined by the Company in accordance with Section 3.5 and the Company-specific technical standards. In addition to the requirements of Section 3.5, project changes that will delay the Group Study or the construction of Common System Modifications, or increase the cost share of such study or modifications for other members (collectively “Member Impact”), will not be allowed for any Group member unless the Company and all Group members agree to the project change(s) in writing, with the limited exception that a project change request that is solely to replace Facility equipment (in-kind, with no other requested changes) because the initially proposed equipment is no longer available will not require Group member consent (“Equipment Exception”). Project change requests will suspend the Company’s Time Frame for the applicable step in the interconnection process for the Group and each individual Group member.
- 1) A Group member will make a project change request by providing the Company with the necessary information and documentation for the Company to evaluate the project change and, except if it is an Equipment Exception, evidence of Group consent to the change request (“Change Request”). Upon receipt of a completed Change Request, the Company will, within 20 days of thereof, communicate to the Group member any study requirements, and estimated cost and time frames, if applicable (“Change Study”).
- 2) The Group member shall notify the Company within 10 days whether it will move forward with the Change Study, which notice shall include evidence of Group consent to the Change Study (except if it is an Equipment Exception) and payment

for the estimated study costs. If the Group member fails to notify the Company in accordance with this provision, the Change Request will be withdrawn, and the Company will continue to process the Group member's Interconnection Application as-is.

- 3) If the Group member moves forward with the Change Study, the Company will provide notice to the Group member of its determination on the Change Request within 10 days after the completion of any required studies ("Change Request Determination").
 - i. A Group member with an Equipment Exception Change Request that has been approved by the Company will be responsible for any increased cost of System Modifications (common and individual).
 - ii. Except as set forth in item i. above, if the Company's determination is that the Change Request is not allowed solely because of Member Impact then the Group member requesting the project change shall either
 - (a) obtain and deliver to the Company evidence of Group consent to the Change Request, or,
 - (b) if the Member Impact is solely increased cost of studies and/or System Modifications, agree, at the individual Group member's sole risk, to pay the entirety of such increase in which case Group consent is not required.
 - iii. A Group member shall have 10 days from the Change Study Request Determination to notify the Company that it wishes to proceed with the Change Request and, if applicable, to comply with items ii.(a) and ii.(b).

If the Group member does not meet the requirements above, the Change Request will be deemed withdrawn, and the Company will continue processing that Group member's Interconnection Application as-is.

Clean Energy Parties' Comment

Clean Energy Parties assert the currently proposed process for making changes to system design that do not alter the project's operating characteristics, is not optimally designed and is likely to result in inefficient, uncoordinated stops and restudies in the study process. The Clean Energy Parties recommend the inclusion of a single, one-time project change opportunity (limited to only certain types of changes) for all group members at the end of the study process.

EDC Response

The EDCs understand that applicants may want or need to make project changes during the Group Study process. However, project changes can impact the process for other Group members, e.g. increased study time and/or interconnection costs. The revised Group Study proposal includes a process by which a Group member can request a project change (Section 3.4.1.i) which attempts to mitigate an individual Group member's impact to the process and to other Group members (i.e. costs, processing delays) by requiring the Distribution Companies and the Group's consent (with limited exceptions). Allowing a Group member a single one-time project change without this consent does nothing to improve the Group Study process and perpetuates the issues that the EDCs identified during the pilot Group Study.

Additionally, all project change requests need to be verified and reviewed by the EDCs as would be the case for any single project under the Interconnection Tariff. The EDCs cannot identify any specific change that would not require a review from the appropriate technical group to verify the change is not significant or would not have impact to ongoing studies, system modeling, interconnection solutions, and/or costs. Some changes may also require additional review by ISO-NE if specific project details have already been submitted to them for approvals. The EDCs require time to perform these reviews and must reserve the right to put the processing of the Group projects on hold.

I. Issue 9: Issuance of ISAs (section 3.4.1h)

EDC Proposed Language:

h) Once the Group Study is completed it shall be distributed to the Group, and the Group member(s) shall have 15 days to notify the Company whether they wish to proceed through the remainder of the interconnection process ("Notice Period"). If the Company identifies Facilities in the Group that would not require Common System Modifications independent of whether or not the other Group members' Facilities move forward with interconnection, those Interconnecting Customer(s) will move forward with the interconnection process outside of the Group. Provided

the Group membership does not change, the Company will send an executable Interconnection Service Agreement to each Group member within 15 days of the end of the Notice Period if the Group has equal to or less than 3 Interconnection Applications, within 25 days if the Group has over 3 but less than 5 Interconnection Applications, and within a mutually agreeable Time Frame if the Group has more than 5 Interconnection Applications. The Company may include conditions or requirements relating to the Group interconnection (including, without limitation, costs) in the Interconnection Service Agreement in a separate attachment and/or existing attachments.

Clean Energy Parties' Comment

The Clean Energy Parties propose to delete the reference to a "Mutually Agreeable" time frame for the issuance of ISAs at the conclusion of a Group Study and replace this text with "35 days". The Clean Energy Parties claims it is a reasonable expectation for members of the largest groups to receive an executable agreement from the Company no later than seven full weeks following the conclusion of the study.

EDC Response

Upon review of the Clean Energy Parties' proposal for this issue, the EDCs agree to delete the reference to a "mutually agreeable" time frame for the issuance of ISAs at the conclusion of a Group Study and replace the text with "35 days".

J. Issue 10: Eversource Review of One Interconnection Application on a Substation or Feeder at a Time

The Interconnection Tariff provides the EDCs the discretion to study interconnection applications in the manner that each EDC has determined is the best means to achieve the requested interconnections in a safe and reliable manner. Unlike the sequential review of projects, when projects are processed in parallel, subsequent projects in the queue are studied, and system modifications determined, with the assumption that prior projects will be interconnected. Neither approach is inherently better than the other, the EDCs, have to consider the number of projects in the study queue, the number awaiting execution of issued ISAs, and the number awaiting final

payment on executed ISAs (which typically stretches for 6-9 months in most cases as the current Interconnection Tariff allows) and determine how best to move forward.

As the safety and reliability of the EDC's electric system is of paramount importance. The EDCs discretion to perform studies in the manner that EDC determines necessary to determine safe and reliable interconnection solutions, should not be restricted. However, the EDCs all agree that the Group Study provides a specific mechanism to process multiple projects to be studied at once with up-front cost sharing, and will improve consistency among the EDCs.

K. Issue 11: National Grid Restarting Group Studies Without Approved Tariff Language

National Grid is not currently performing any group distribution studies in central and western Massachusetts as the Clean Energy Parties suggest. National Grid processed multiple individual Impact Studies in parallel in this area. Additionally, because this area is experiencing high volumes of DG saturation, consistent with good utility practice, National Grid analyzed (and continues to analyze) the impact of the area DG on the distribution system holistically, as applicable, as well as on an individual DG project basis. These "area" studies are not group studies, but rather are used and necessary to analyze how to provide additional distribution system capacity in areas where the system is experiencing high levels of saturation and/or has capacity constraints (i.e. at or near existing level of capacity). This is the only way to achieve safe and reliable interconnections and an efficient distribution interconnection solution(s) for this highly saturated area. The implementation of the Group Study provisions, as may be approved by the Department, will not affect the on-going studies in this area or the manner in which National Grid is analyzing the area impacts.

Additionally, the DG in the central/western MA area has prompted a significant transmission study. This transmission study is performed by the Affected System operator

(proposed as a “cluster study”) and is not subject to the requirements of the Interconnection Tariff, including, without limitation, any Group Study provisions. This Affected System operator cluster study is separate from distribution Impact Studies under the Interconnection Tariff.

L. Miscellaneous

The Clean Energy Parties’ comments identify a number of areas of conceptual agreement which include a few additional requests by the Clean Energy Parties for revisions to the EDC’s proposed Group Study provision. Clean Energy Parties Comments at 12-13. The EDCs address the Clean Energy Parties’ specific requests for revisions as follows:

- Section 3.4.1.a: The EDCs would be agreeable to limit the Group Window to the acceptance of completed Interconnection Applications. For purposes of clarity and to avoid any misinterpretation, this would mean that if an application is received in the Group Window, but the EDC does not deem that application complete (which, under the Interconnection Tariff, the EDC has 10 days to do) 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.
- Section 3.4.1.c.: The EDCs do not agree with the Clean Energy Parties requested change to the process as it unnecessarily complicates the proposed time frame and will create additional administrative burdens on the EDCs. The Clean Energy Parties’ desire to potentially gain a few days in the process is grossly outweighed by the administrative burden that will be placed on the EDCs to track notices from the Group members and to implement a non-standard time frame in the Group Study process,

- Section 3.4.1.g.: With the limited exception noted below, the EDCs do not agree that any changes should be made to this section. The inclusion of the ESS Export Scheme itself is an EDC compromise, and the Clean Energy Parties have not offered any compelling reason that the proposal should be expanded or modified at this time.⁹ Specifically, without limitation, the EDCs made it clear during the stakeholder collaboration that it would not consider any on-site load for the purposes of export limiting schemes for a number of reasons, including that load is not constant, load is not a factor in determining study or system modification requirements, it would be administratively difficult to administer cost allocations taking into account load variables, and would unfairly shift the required system modification upgrade costs to remaining group members (where, if that customer were processed outside of a group, the individual customer would be responsible for these costs).

The EDCs do agree that the reference to solar should be changed to “inverter-based DG facility” and did not intend to limit this provision to solar technologies.

III. CONCLUSION

The EDCs appreciate NECEC and other industry stakeholders’ willingness over the past few months to discuss these issues in good faith with an eye toward compromise solutions. Overall, however, the EDCs have a fundamental difference of opinion with the Clean Energy Parties in several key areas of Group Study management, and respectfully request the Department defer to the EDCs perspective on such issues noted herein.

⁹ The EDCs note that they do not consider inverters with factor de-rated capacity to be an export limiting scheme, but would consider the de-rated capacity as the capacity upon which allocations are based if the de-rated capacity has been manufacture certified with a nameplate set at the de-rated capacity.

Respectfully Submitted,

DISTRIBUTION COMPANIES

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LIGHT COMPANY d/b/a UNITIL**

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