COMMONWEALTH OF MASSACHUSETTS

DEPARTMENT OF PUBLIC UTILITIES

Investigation by the Department of Public Utilities On Its Own Motion Into Electric Distribution Companies' (1) Distributed Energy Resource Planning and (2) Assignment and Recovery of Costs for the Interconnection of Distributed Generation.	)))))))	D.P.U. 20-75

REPLY COMMENTS OF THE INTERSTATE RENEWABLE ENERGY COUNCIL, INC. ON THE DISTRIBUTED ENERGY RESOURCE PLANNING PROPOSAL

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I. Introduction

On October 22, 2020, the Department of Public Utilities (the "Department" or "DPU") issued a Vote and Order Opening Investigation ("Order") in the above-captioned docket. In the Order, the Department proposed a new distributed energy resource planning process and cost allocation procedures ("Straw Proposal") and invited comments on the Straw Proposal and related cost allocation issues. The Interstate Renewable Energy Council, Inc. ("IREC"); the Department of Energy Resources ("DOER"); the Office of the Attorney General ("AGO"); Massachusetts Electric Company and Nantucket Electric Company d/b/a National Grid ("National Grid"); Fitchburg Gas and Electric Light Company d/b/a Unitil ("Unitil"); NSTAR Electric Company d/b/a Eversource Energy ("Eversource"); the Northeast Clean Energy Council, Inc. ("NECEC"); the Solar Energy Business Association of New England ("SEBANE"); Pope Energy; and Zero-Point Development, Inc. filed initial comments on December 23, 2020. JCD Solar Consulting, LLC d/b/a Melink Solar Development; BlueHub Capital; and the Low-Income Weatherization and Fuel Assistance Program Network filed initial comments on December 17, 2020. IREC now files these reply comments to respond to issues raised by the other parties' initial comments.

Generally, it appears that all parties are supportive of new methodologies for allocating interconnection upgrade costs. In particular, there is widespread support for the Department to require EDCs to conduct infrastructure planning and identify capital improvement projects that would facilitate DG interconnection. Part of this Capital Investment Projects (or "CIP") program would involve allocating the costs for those upgrades across interconnecting DER benefitting from the new infrastructure through a CIP fee, while also sharing some of those costs with ratepayers whom also benefit. The parties also widely recognized that the small projects that go

through simplified process should simply pay a small, per-kW fee to fund the occasional upgrades triggered by those projects.

IREC observes that all parties seem to be moving in a generally consistent direction here. We are focusing our comments on a limited set of specific issues where we disagree with other commenters, where we observe that the issue needs clarification, or there seems to be the chance of building cohesion among commenters.

IREC is not positioned at this time to dive deeply into the specific details of the distribution system planning process that the EDCs and parties have proposed in their comments. However, the details here are critical to get right, as they will impact both what projects ultimately move ahead, as well as how much transparency and deliberation goes into evaluating those projects and appropriately allocating their costs amongst the various beneficiaries. Although we think parties are putting quality proposals together, we are concerned that structuring a well-thought-through distribution system planning process that adequately integrates DERs and helps to prepare the distribution system for a future with massive vehicle and building electrification may require more time and effort.

Our sense here is that while this process started as a vitally necessary conversation about how to allocate interconnection costs and advance badly needed capacity upgrades to alleviate queue backlogs, it has grown into a more significant conversation about how to appropriately plan for the necessary evolution of the distribution system to accommodate not only more distributed generation, but dramatic load growth due to transportation and building electrification. IREC offer this observation to suggest to the Department that it may want to step back and map out a clearer strategy here. There is an immediate and significant need to address cost allocation and widespread party support for getting some of these projects underway so that

capacity can be made available. We encourage the Department to consider a near-term avenue for getting some of these upgrades moving, while also spending a bit more time to ensure that on a future-looking basis the Commonwealth is conducting distribution planning in a manner that will ensure the system is upgraded to accommodate the rapidly changing demands on it in the most efficient and fair manner possible.

Finally, we emphasize that now is the time to be forward-looking and ambitious in meeting Massachusetts' climate goals. This docket provides an opportunity to truly revolutionize grid planning in the Commonwealth with an eye toward integration of DER to benefit everyone, not just DER developers and the EDCs. The Department and stakeholders should not shy away from this important and achievable goal. We agree with some of the commenters that mitigation of grid impacts with technologies, such as through curtailment programs, can be useful to postpone the need for some upgrades, but there is much more to be done. The reality is that significant grid upgrades are necessary to meet Massachusetts' climate goals, and now is the time to move ahead.

II. There should be a single, per-kW-of-export upgrade fee paid by all simplified process projects.

As we explained in our initial comments, simplified process projects should pay only one relatively low, per-kW fee to contribute to any upgrades necessary to support interconnection of those projects.[1] Simplified process projects should pay *only* this fee to cover *all* upgrades that might be necessary, and simplified projects that are non-exporting should be exempt from the fee altogether (because they have virtually no impact on the need for upgrades, as explained in more

[1] MA Dept. Pub. Utils., Dkt. 20-75, Comments of the Interstate Renewable Energy Council, Inc. on the Distributed Energy Resource Planning Proposal ("IREC Comments") at 11-13 (Dec. 23, 2020).

detail below). We recommend that the fee be set annually by dividing upgrade costs reasonably attributable to simplified process projects in the previous year by the amount of simplified process export anticipated for the coming year.[2]

Such a fee represents the most reasonable policy for allocating costs for these small projects. Simplified process projects are generally residential and small commercial solar that, unlike larger wholesale or community-scale projects, cannot relocate to take advantage of more favorable grid conditions. Massachusetts residents should have an opportunity to manage their energy bills by placing a small solar system on their home or business.[3] This can be best achieved by ensuring that no individual simplified process project ends up facing unaffordable upgrade charges.

We emphasize again that the point of payment of the single, per-kW fee is to ensure that *all* simplified process projects have equal access to interconnect, regardless of whether they end up being the trigger of an upgrade. The Department should reject National Grid's proposed approach that there be a cap on what upgrades the simplified process fee would cover,[4] which could leave occasional customers unable to interconnect at all due to high upgrade costs that could otherwise be shared. Indeed, if such an occurrence would indeed be "rare," as National Grid suggests,[5] it makes for a better policy to have those occasional one-time high costs shared

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[2] *See id.* at 11-12.

[3] IREC acknowledges that many Commonwealth residents do not own their own homes or have the privilege of having a suitable space for onsite DERs. For these reasons we actively support community solar and other programs to extend access to clean energy for all citizens. Those projects are beyond the scope of this limited proposal for simplified projects.

[4] *See* MA Dept. Pub. Utils., Dkt. 20-75, National Grid Comments on Straw Proposal ("National Grid Comments") at 27 (Dec. 23, 2020).

[5] *See id.*

among all simplified process projects. We also seek clarification on Unitil's suggestion that "[a]dditional costs (not covered by the Simplified Common System Modification Fee) would also be assessed to individual Interconnecting Customer as required for their application."[6] We are not opposed to additional expected costs like applications fees being charged, of course, but once a customer pays the simplified process upgrade fee, they should not be assessed any further distribution upgrade charges.

Also, the simplified process fee should cover all (or nearly all) possibly triggered and contributed-to distribution upgrades, not just certain categories. National Grid and Unitil suggest that the fee for simplified process projects cover only a narrow list of upgrades, leaving other triggered upgrades to be borne by individual simplified process customers.[7] Limiting application of the simplified process upgrade fee program to a narrow set of upgrades would create a significant barrier to certain, unlucky customers, as would a cap on the upgrade costs the fee would cover. At most, the simplified upgrade fee program could specifically exclude certain customer-specific upgrades, as described by National Grid, like line extensions beyond those allowed by the EDC's policies for load customers, certain single-to-three phase conversions, and costs related to the "Simplified on a Network" process.[8]

Finally, we agree with Eversource's recommendation that the simplified process fee be calculated to cover only those upgrades that are usually necessary to accommodate simplified

[6] MA Dept. Pub. Utils., Dkt. 20-75, Fitchburg Gas and Electric Light Company d/b/a Unitil Comments on Straw Proposa ("Unitil Comments") at 10 (Dec. 23, 2020).

[7] National Grid Comments at 28; Unitil Comments at 10.

[8] *See* National Grid Comments at 28-29.

process projects, and that the cost of upgrades that support the grid at large should not be included when setting the simplified process fee.[9]

III. Many questions regarding allocation of CIP costs remain unresolved, and the Department should engage an outside expert to facilitate resolution of this key issue.

The parties' initial comments revealed two things: (1) everyone agrees that there would be multiple beneficiaries of CIP upgrades beyond DER, and (2) no commenter provided a clear solution on how to allocate the costs of the upgrades relative to the benefits, though many ideas were presented. For example, Unitil stated generally that costs should be fairly allocated, but did not propose a cost allocation methodology.[10] Eversource's proposal is limited to bulk substation upgrades.[11] National Grid's proposal suggests a need to allocate costs based on geographic zones and across time.[12] On the other hand, NECEC proposed allocating 70 percent of CIP upgrades to support DER to ratepayers, though it did not provide analysis of why that allocation is appropriate.[13] All of these comments provide useful insight into how CIP costs might be allocated, but do not create a comprehensive and well-justified framework for the process. Thus, a key issue the Department must address here is how to create the framework for how CIP costs will be allocated.

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[9] MA Dept. Pub. Utils., Dkt. 20-75, Initial Comments of NSTAR Electric Company d/b/a Eversource Energy ("Eversource Comments") at 24 (Dec. 23, 2020).

[10] Unitil Comments at 6-7.

[11] Eversource Comments at 18-19.

[12] National Grid Comments at 3-4.

[13] *See* MA Dept. Pub. Utils., Dkt. 20-75, The Northeast Clean Energy Council Inc.'s Comments on the Department's Straw Proposal Regarding Distributed Energy Resource Planning and Methods for the Assignment of Costs Associated with Distributed Generation Interconnection ("NECEC Comments") at 15 (Dec. 23, 2020).

In light of the lack of cohesive vision here, IREC recommends that the Department hire an outside expert to develop a framework for identifying CIP benefits and allocating CIP costs. This is the best approach here because it will give the Department one idea to work with, and stakeholders one comprehensive proposal to critique, as opposed to trying to harmonize the varying and sometimes disparate ideas currently presented by the commenters, which the consultant would have the benefit of considering from the comments in the record. We recommend that this process involve the expert providing a detailed written proposal of a metric and justification for the approach, and then a workshop or comment period so that stakeholders might provide input before a final approach is adopted.

Several parties responded to Question IV(1)(d), regarding "whether there should be a cap on the dollar-per-kW billed to each Facility that benefits from the Capital Investment Project." IREC generally opposes a set cap on the CIP Fee. As described in IREC's initial comments, a well-designed CIP planning process that does not overestimate DER deployment, results in an optimal capital investment level, and omits projects that would prove uneconomic is critical to ensuring fairness to both ratepayers and Interconnection Customers. The concerns expressed by NECEC in support of a cap, relating to the cost impacts to Interconnection Customers, would be better addressed through a planning process that results in a well-designed CIP Fee. In the event the CIP Fee is too high for the market to bear, and particularly where upgrades produce benefits to ratepayers and not just Interconnection Customers, the costs should be allocated accordingly.

IREC also agrees with the AGO's comments that it will be important to track CIP utilization to ensure that the EDCs do not overbuild under this program.[14] As currently

[14] MA Dept. Pub. Utils., Dkt. 20-75, Massachusetts Office of the Attorney General Comments on Vote and Order Opening Investigation ("AGO Comments") at 11 (Dec. 23, 2020).

proposed, with guaranteed funding of the CIP projects from either DER or ratepayers, there is a risk the EDCs will overestimate need. Tracking and reporting on this issue – and perhaps adopting performance metrics and accountability mechanisms – will help avoid this.

IV. In general, upgrade fees should be allocated based on export capacity, not nameplate capacity.

The commenters largely agree that cost allocation fees (including the CIP fee, CSM fee, and simplified process fee) should be allocated on a per-kW basis. However, there is disagreement on whether the fee should be allocated based on nameplate or export capacity.[15] As we explained in our initial comments, the cost of most upgrades should be allocated based on kW of export, not based on nameplate capacity.[16] Only a more limited universe of upgrades, such as protection upgrades, are impacted by a DER facility's nameplate capacity. Thus, the fees should be allocated based on actual impact, taking into account a project's export capacity.

As explained above for simplified process fees, where the costs of upgrades are allocated across many projects, the easiest approach would be to allocate the fee on a per-kW-of-export basis, even though that means some impact of a project's nameplate capacity would not be captured in the allocation. This approach would be the easiest to administer and is reasonable in light of the fact that most grid impacts come from a project's export.

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[15] *See* Eversource Comments at 26 (Eversource apparently supports use of export capacity consistent with its tariff, section 3.4.1(h). Its comments include contradictory sentences, one saying the CSM fee should be based on nameplate, and the other saying export. The context indicates Eversource meant to support use of export capacity.); Unitil Comments at 10, 13 (supporting nameplate); MA Dept. Pub. Utils., Dkt. 20-75, Department of Energy Resources Comments on Distributed Energy Resource Planning and Assignment and Recovery of Costs for the Interconnection of Distributed Generation ("DOER Comments") at 19, 29 (Dec. 23, 2020) (proposing combination).

[16] *See* IREC Comments at 15.

For CIP fees, export impact should also be taken into account when allocating fees. Because most upgrade impacts come from a project's export capacity, it would clearly be problematic to allocate non-export projects a pro rata share of the CIP fee based on nameplate capacity. The Department thus should identify a method for allocating costs to non-export projects only for upgrades that are impacted by nameplate capacity. For example, if it is possible to identify (or at least estimate) which upgrades are specifically related to nameplate capacity (e.g., protection upgrades), that subset of costs could be allocated to projects based on their nameplate capacity, as DOER recommends for the CSM fee.[17] However, depending on the effort required to identify nameplate-impacted upgrades, the administrative burden of making the assessment may not make this approach a reasonable one and a set fee for non-export could be considered.

V. Upgrades eligible for cost allocation programs (including CIP, CSM, and simplified project upgrades) should not be limited to certain categories of upgrades.

Like with cost allocation for simplified process, discussed above, upgrades eligible for other cost allocation programs, including the CIP and CSM programs and a reimbursement program, should not be limited to specific upgrade types. We agree with Unitil that cost allocation programs should be designed with flexibility in mind to ensure that the best upgrade for a given situation is always available.[18] There is little risk to ratepayers because proposed upgrades will still require Department approval for reasonableness. Meanwhile, keeping open what kind of upgrades may be included for cost allocation will provide the benefit of allowing EDCs to be creative and efficient in grid upgrades. Also, avoiding unnecessary limits on the

[17] *See* DOER Comments at 29.

[18] *See* Unitil Comments at 3.

upgrades allowed will avoid the need to revise the cost allocation procedures if it becomes clear that certain upgrades not included on the allowed list are required. However, as noted above, it is important that the Department undertake a process to ensure that the distribution system planning process, which will be utilized to determine which upgrades are needed, and how the costs for them should be allocated, is very well designed to capture the nature of the changing distribution system and the many different factors that are driving the need for upgrades beyond just the interconnection of DERs.

VI. A key component of developing CIP projects will be ensuring there is an effective stakeholder process.

A well-developed stakeholder process is necessary to both guide the EDCs' planning generally and to identify appropriate CIP projects specifically. In response to the Order's request for EDC input on the planning process,[19] Eversource was the only EDC to address the idea of stakeholder input in the planning process. Specifically, Eversource discussed generally what different stakeholders could contribute to the process but did not specify the steps of the process or further detail on what the process would look like.[20] In addition, DOER and the AGO each provided more detailed input on the stakeholder process.

Both DOER and the AGO rightly emphasize the importance of including stakeholder input on the planning process that leads to identification of CIP upgrades.[21] In particular, DOER notes the benefits of coordinating the CIP planning process with other long-term planning

[19] *See* MA Dept. Pub. Utils., Dkt. 20-75, Vote and Order Opening Investigation ("Order"), Att. A ("Straw Proposal") at 13 (Oct. 22, 2020).

[20] *See* Eversource Comments at 47-48.

[21] DOER Comments at 14-16; AGO Comments at 4-6.

processes and proceedings.[22] IREC supports the ideas behind these proposals, which will promote transparency and facilitate the broad range of input necessary for optimal planning outcomes.

We note that DOER and the AGO's proposals stop at the point of defining and guiding the planning process. IREC recommends that stakeholders similarly be included in the subsequent process to identify which CIP upgrades are approved and how those costs are allocated. For both steps of the process, we support the AGO's recommendation to engage a subject matter expert to facilitate the stakeholder engagement,[23] which we have seen prove beneficial in other states.

We agree with Eversource that the Department will need to define timelines and action goals to ensure the annual process is successful.[24] In particular, the Department should identify milestones for steps of the process, prescribe points in the process when workshops will be beneficial, and set aside time for public comment on recommendations arising from the stakeholder process. While we recognize that this seems like a lot for a stakeholder group to timely achieve, year after year, a clearly defined process with specific timelines and expert guidance will ensure that this significant task is achieved.

Finally, as our comments above recognize, there is an urgent need for an interconnection upgrade solution, and that is somewhat in tension with the complexities associated with properly reforming distribution system planning. Both are very important. In light of this, we encourage the Department to evaluate whether there can be near-term steps taken, perhaps with a more

[22] DOER Comments at 14.

[23] *See* AGO Comments at 6.

[24] *See* Eversource Comments at 48.

streamlined stakeholder process, that get some additional capacity for new interconnections moving. This would provide the Department with adequate time to effectively build out a distribution system planning framework that ensures robust oversight of expenditures while also recognizing the significant new demands that are going to be placed on the system as a result of electrification and growing need for resilience. While the DER interconnection needs are great, distribution system planning needs to be truly integrated if it is going to manage these other demands in a cost effective manner with fair allocation of those costs.

VII. The Common System Modification Fee should be used for cost allocation until the CIP program is in place, and may be useful beyond that.

Many commenters debated the usefulness of the Common System Modification ("CSM") cost allocation approach, in light of other, likely more efficient cost-allocation mechanisms like the CIP program and group studies. It must be noted, however, that the CSM serves a different purpose than the CIP and group studies: to allocate expensive upgrades among a small group of projects that may not be studied at the same time. For example, the CSM could be useful where an upgrade not anticipated by the CIP planning process is triggered, but there are not enough proposed projects to do a group study and allocate costs. In such a case, if future projects come along and take advantage of the new upgrade, it is fair to allocate some of the costs to them through a CSM fee. Using the CSM as a "backup" cost allocation process would thus be beneficial, even if used infrequently.

That said, we recognize the EDCs' point that a CSM option for allocating costs could blunt price signals and lead to uneconomic upgrades.[25] Instead of doing away with the option altogether, however, we recommend that there be a process for identifying whether a proposed

[25] Eversource Comments at 25-26; National Grid Comments at 32-34; Unitil Comments at 12.

CSM is reasonable before allowing the DER project triggering the upgrade to take advantage of the cost allocation. Such a process should have clear criteria and be relatively streamlined, to reduce delays and administrative burdens. And if the proposed upgrade was found under the applicable criteria to be uneconomical, cost allocation would not be allowed, and the DER developer would have the choice between funding the full cost of the upgrade or withdrawing the project.

In any case, we recommend that the CSM be used now as a short-term tool to allow allocation of costs while the CIP program is ramping up. This will ensure that more projects can interconnect without facing insurmountable upgrade costs. The Department should require tracking of any upgrades funded through a CSM cost allocation mechanism. Then, once the CIP program is active, the Department and stakeholders can reevaluate the usefulness of CSM cost allocation, or whether it should be eliminated or modified. For example, DOER suggested that an alternative, once the CIP program is functioning, would be to allow unanticipated but useful upgrades to be approved outside the CIP process and the cost of those upgrades folded into the CIP fee and cost recovery process.[26]

In the end, the key here is to ensure that there are no substantial barriers to interconnection that could be eliminated by an additional, as-needed cost allocation method outside of the CIP and group study process.

[26] DOER Comments at 20.

VIII. Hosting capacity maps should include approved planned capacity.

The Straw Proposal's questions asked EDCs to provide information on how long it would take to update hosting capacity maps to reflect additional capacity from CIP projects.[27] In their responses, the EDCs discussed whether hosting capacity maps should show both actual and planned capacity. National Grid suggests that it could add a layer to its hosting capacity map to show capacity that would be made available from planned projects, and Eversource agreed that it was open to its maps showing planned capacity.[28] However, Unitil asserts that hosting capacity maps should show only built capacity.[29]

Once a CIP program is in place, the Department should require the EDCs to add a layer to their hosting capacity maps to show approved planned capacity. That is, hosting capacity maps should show capacity that would be available once approved CIP projects are built. Because the CIP projects would be the result of a long-range planning process and have received Department approval and guaranteed funding, it is of course extremely likely that the projects will be built, and thus their promised capacity can be relied upon when proposing future projects. Providing this information will allow DER developers to plan projects in parallel with planned capacity, and will make it more likely that planned capacity is used and paid for sooner, thereby reducing costs on ratepayers.

Finally, while we are strongly supportive of the Department's recent order that required the EDCs to develop hosting capacity analyses, we want to note that the Department should likely convene a more specific process to discuss these analyses to ensure that they are able to

[27] Straw Proposal at 13.

[28] National Grid Comments at 24; Eversource Comments, Att. Eversource IR-2.

[29] Unitil Comments at 8-9.

support the needs of interconnection customers in the state. Through IREC's participation in hosting capacity conversations in multiple other states, it is clear that not all models are created equal and that certain functionality, if not enabled, can render the maps nearly useless. The Department addressed certain minimum features (namely, frequency of update), but did not address other critical factors, like at what system level the results will be provided (they need to be at the line section or node to be meaningful), what types of hosting capacity constraints will be evaluated (i.e., voltage, thermal, protection, etc.), or how the results will be made available (in a downloadable and searchable format is essential for them to be truly useful for most developers). Hosting capacity maps can also play a key role in the distribution system planning process and thus we encourage the Department to engage more actively in ensuring the maps are adequate and useful and also to consider how they can actually be used to help identify and prioritize where upgrades should happen first.

IX. Conclusion

We conclude by reiterating the most important point underpinning this process: that successful implementation of a CIP program, with fair allocation of costs, is essential to Massachusetts meeting its ambitious clean energy goals. The CIP program, along with other cost allocation tools, has the potential to be revolutionary, but to assure its success, the Department must ensure that expectations of all parties are clear and that there is a well-defined path toward crafting the fine details of the program. Especially important will be identifying appropriate cost-allocation measures for different sizes of projects and establishing fair distribution of costs among those benefiting from improvements to the grid. Done right, Massachusetts' new cost allocation approach will improve the interconnection process for all parties directly involved, and will benefit each and every resident of the Commonwealth.

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Respectfully submitted,

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