

VIA EMAIL

December 23, 2020

Katie Zilgme, Hearing Officer
Department of Public Utilities
One South Station, Boston, MA 02110

RE: D.P.U. 20-75 Written Comments

Pursuant to the October 22, 2020 D.P.U. 20-75 investigation. The Department requested written comments on the Distribution Companies assignment and recovery of costs. Additionally, commenters were invited to identify and address other concepts within the scope of the Cost Allocation Straw Proposal and alternative Cost Allocation proposals submitted by other stakeholders. (DPU opening investigation at 7, section IV).

Zero-Point Development appreciates the opportunity to submit a brief set of comments in support of Cost Allocation proposals submitted by stake holders and address a potential issue in the interaction of concepts that are currently under discussion.

I. Multiple Beneficiaries:

The concept of assigning costs to Multiple Beneficiaries outside of the DG community has been previously contemplated as noted in the D.P.U. investigation “In instances of public policy or where other discernable beneficiaries are identified, costs might be assigned and recovered from other than just the entity responsible for the cost.” (DPU 20-75 opening investigation at 3, reference note 6). Since this and other renewable energy programs are directly associated with the Commonwealths public policies on reaching a carbon neutral future for the benefit of all. “These policies, which are designed to benefit all”. (NECEC Alternative Cost Allocation Proposal, at 2). It seems appropriate that a portion of the costs be socialized.

The achievement of the Commonwealths clean energy goals reach far beyond DG resources. “electrification may serve to leverage the investments made in a cleaner electric power system by using that clean electricity in vehicle and heating applications”. (Nstar Initial Comments, at 10). The system upgrades and refurbishments needed for DG will help to create an electric power system that can serve substantial new sources of load deferring upgrades that would have been required to serve those new loads. Benefits that the simple Cost Causation approach does not currently consider will extend far into the future.

In the Scott Maden attachment to Nstar Initial Comments, it is noted that Hawaii rules allow developers credit for upgrade deferrals and System improvement.

Any Cost Allocation method should recognize all beneficiaries. The Department should ensure that costs are recovered in a manner consistent with that recognition.

II. O&M:

In substantially all cases of an Interconnection Service Agreement the EDC retains the ownership of, and right to serve other customers from, the upgraded or newly installed circuits the DG applicant has paid 100% of and often use these new circuits to alleviate load issues on other circuits, deferring additional capital investment. The rate payers also benefit by not being subject to recovery of the initial capital investment and its associated profit margin.

O&M, safety and reliability may improve with system upgrades by lowering failure rates through replacement of aged infrastructure and the replacement of assets that no longer meet current safety standards. It seems inappropriate to assign the entire O&M cost to DG without the consideration of existing O&M costs, if at all.

Any O&M charge passed on to the DG facility(s) should consider improvements in reliability. Additionally, if the DG facility(s) pay 100% of the O&M, then in effect, pre-existing O&M charges would be transferred to the DG facilities. This is in opposition to the goal of enabling renewable energy, the commonwealths carbon goals, equitable recovery of costs from all beneficiaries, and cost causation in general. To accurately determine the O&M costs caused by an upgrade. The total O&M would need to be calculated and then reduced by the amount of pre-existing O&M, including O&M no longer required by retired assets whose removal was facilitated by the upgraded or new equipment before being assigned for recovery by all identified beneficiaries. The original O&M costs would stay in the rate base where it was.

III. Cost Causation. Aged infrastructure:

In practice, the current cost causation assigns the total cost of any needed change, to the DG facility or group of facilities. This method, however, does not take into consideration aged infrastructure that is not part of a current work plan but is near its end of life and/or no longer compliant with updated safety and reliability standards. Any future cost allocation method should take these into account when determining the actual cost “caused” by an upgrade.

By way of example. Good utility practice involves monitoring the health of substation transformers using dissolved gas analysis and other data to determine its remaining useful life. When a DG facility or Facility(s) exceed the thermal limit, if the transformer is near end of life, the cost that would have been incurred in the normal replacement of the transformer should be deducted from the total cost of the upgrade to properly determine the actual cost “caused” by the DG. If the transformer were not near end of life, a pro-rated value should be assigned. This prevents costs that already would have been part of existing asset management from being transferred to the DG facilities. The remaining costs representing the increased capacity would then be allocated as proposed by (NECEC Alternative Cost Allocation Proposal, Table 3: allocation matrix, at 20)

IV. Price signals and group study provisions:

The group study provision represents an important step forward in enabling renewable energy in the commonwealth. Multiple stake holder proposals make important points about both the group study provision and the preservation of price signals that incentivize applicants to perform due diligence on intelligently siting DG. (AGO proposal, at 16) (doer proposal, at 4) (Nstar Initial Comments, at 5, 7, and 12) (National Grid cost allocation proposal, at 5).

We believe that both are important components and would like the Department to solicit comments from stake holders on the following potential conflict.

The current implementation of the group study provision seems to be trending away from early applications of area studies as seen in the western mass cluster study. Namely, the combining of projects into a group based on que order and the level of upgrades triggered. While this new group study approach resolves the “first mover” issue. Without careful evaluation it may in fact eliminate some of the value of the information that is becoming available, such as remaining hosting capacity, transformer size, and the amount of generation already in the que. Forcing a correctly sited DG into the first mover position.

For example. A developer uses all the available data published by the EDC to determine a reasonable size for its DG project. Without the actual circuit models, it is reasonable to expect that the size of this project may need to be reduced once an impact study has fully evaluated the circuit parameters. If only 4 more applications are submitted after that, a group study can be formed which does not allow for any changes without unanimous consent. The first project is then unable to make adjustments to proceed without upgrades. It seems unlikely that the following projects would agree to allow the first project to make the necessary changes since doing that would reduce the overall capacity that the upgrade cost would be spread over. The first project, despite its attempt to utilize price signals and available data is then forced into the first mover position. A similar effect would occur if all projects in an area that have not received an ISA are grouped (National Grid cost allocation proposal, at 7). Group studies should start at the triggering project (NECEC Alternative Cost Allocation Proposal, at 21) but should be done after allowing the projects by que position to make design adjustments to proceed outside the group. Once that is accomplished the grouping of projects and enabled capacity would be used to address the “first mover” issue and costs would be recovered in an equitable manner as proposed at (NECEC Alternative Cost Allocation Proposal, Table 3: allocation matrix, at 20).

V. System upgrades in anticipation of DG Vehicle charging and the electrification of heating. CUPZ:

Since it would be difficult for either the EDCs' or DG developers to individually understand the larger scope of planning process or determine a fixed set of planning criteria in a rapidly changing technological landscape. Each proposal for parallel or anticipatory system upgrades should involve a full disclosure of the cost impact to DG in those areas and stakeholders be allowed to address any concerns as part of the "planning criteria, informed by stakeholders, for the distribution system assessment" (D.P.U. 20-75, Att A, at 5).

Zero-Point Development appreciates the Departments willingness to lead the effort in the creation of a Cost Allocation method that is effective in recognizing the benefits of achieving the Commonwealths goals. We also respectfully submit that adopting a new proposal is time critical and are willing to commit whatever resources are necessary to facilitate an expedient process.

Respectfully,

Zero-Point Development