

Information Request EDC-3-2

Request:

Refer to National Grid's response to EDC-1.

- (a) Please explain how National Grid arrived at the 40-60 percent figure when determining the percentage of EPS upgrade costs that should be recovered fully from distribution customers and not offset by CIP fees paid by interconnecting customers.
- (b) Please describe what factors the Company considered when determining whether a specific EPS upgrade should be allocated exclusively to distribution customers versus offset by CIP fees paid by interconnecting customers.

Response:

- (a) In its Response to EDC-1 at 9, National Grid explained its belief that up to 40 percent of the DG interconnection costs for the Group Studies in Central/Western MA identified in the Response should be allocated as system benefits to all electric distribution customers because of the enumerated multi-value benefits to all customers that would flow from the types of distribution system modifications National Grid currently contemplates, including enabling achievement of the Commonwealth's climate and clean energy goals. National Grid continued to refine its analysis based on the currently available information and in its presentation at the June 3, 2021 technical conference in this docket, slide 5, National Grid presented a revised proposed allocation of 40 percent to 60 percent of "Substation Costs" to all electric distribution customers.<sup>1</sup> National Grid arrived at this revised proposed cost allocation after it completed a preliminary review of the potential multi-value benefits associated with asset condition, reliability, and system capacity and performance for the currently anticipated scope of work associated with the Central/Western MA Group Studies and estimated at a high level the relative benefits that DG interconnecting customers and all electric distribution customers would receive from such work. The percent allocated to all electric distribution customers would differ

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<sup>1</sup> National Grid has proposed allocating Substation Costs to all electric distribution customers through the reconciling charge described in the Straw Proposal. Substation Costs include the cost of the substation transformer owned by New England Power Company ("NEP") and associated equipment installed on the low side of the substation transformer that are owned by Massachusetts Electric Company. The equipment installed on the high side of the substation transformer inside substations that are owned by NEP would be recovered through the Local System Plan as described in the Company's Response to EDC-3-4.

depending on the associated benefit of the system modification. Under the multi-value cost allocation framework proposed for the Group Studies, National Grid would perform a targeted asset condition review, identify potential issues, and exclude the replacement cost of such assets from the DG interconnecting customer costs. The replacement cost of such assets would be included in the 40 percent to 60 percent of costs to be charged to all electric distribution customers through the reconciling charge, reflecting the relative benefit all electric distribution customers would receive from the replacement of such assets.<sup>2</sup>

In refining its cost allocation analysis, National Grid also worked collaboratively with NECEC and representatives of the solar community to focus on enabling the interconnection of DG facilities in these Group Studies through multi-value infrastructure upgrades that will benefit DG developers and also provide significant system and climate benefits to all customers, including accelerating the achievement of the Commonwealth's enhanced clean energy and climate objectives through the enablement of transportation and building electrification load growth.<sup>3</sup>

The Group Studies are still in the early stages of engineering analysis. Following completion of the Group Studies and the associated transmission system impact study, National Grid will identify the distribution system modifications and transmission system upgrades required for each Group Study. National Grid will continue to focus on identifying multi-value infrastructure upgrades to the extent warranted by the engineering studies. If the Department approves a provisional planning process for the Group Studies, National Grid will submit formal cost allocation proposals for the Group Studies to the Department that will propose CIP fees to be allocated to DG projects and multi-value investments to be allocated to all electric distribution customers as determined by the outcome of the Group Studies.<sup>4</sup>

- (b) As noted in its response to (a), if the Department approves a provisional planning process for the Group Studies, National Grid will submit formal cost allocation proposals for the Group Studies to the Department that will propose CIP fees to be allocated to DG projects and multi-value investments to be allocated to all electric distribution customers as determined by the outcome of the Group Studies and based on who will benefit from such system upgrades. If a system upgrade would benefit specific interconnecting customers, National Grid would propose a CIP fee if a CIP fee were warranted.

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<sup>2</sup> Asset replacement work that is in National Grid's current five-year plan would be excluded from these costs.

<sup>3</sup> Joint Letter Provisional Plans Supplemental Comments, submitted to the Department on June 8, 2021.

<sup>4</sup> As previously explained, National Grid anticipates that it would take three to four months following completion of the Group Studies to develop and submit its provisional planning process to the Department.

The factors National Grid anticipates considering when determining whether a specific EPS upgrade should be allocated exclusively to electric distribution customers versus offset by CIP fees paid by interconnecting customers include whether a specific EPS upgrade would address multiple system drivers, such as asset condition, reliability, and system capacity and performance, in addition to state climate goals and DER enablement, or whether it would benefit only specific interconnecting customers.

As noted in response to (a), although it is premature to identify all of the factors National Grid would consider in proposing to allocate specific EPS upgrade costs to all electric distribution customers, as discussed in National Grid's response to EDC-1 at 9, the following are examples of EPS upgrades that could have multiple system drivers in addition to DER enablement, which National Grid would consider in determining whether to propose allocating the costs of such upgrades to all electric distribution customers as a multi-value investment:

1. Substation rebuilds which propose asset condition equipment replacements or items that require attention for continued operation and safety, as identified during field inspections.
2. Substation expansions which increase the Commonwealth's future capability to host new, un-forecasted load growth (e.g., a large warehouse, data center, other C&I customer, electric vehicles, and beneficial heat electrification) in regions that historically have seen low demand and/or low load growth.
3. Substation redundancy which will be utilized for faster restoration, reducing duration for transformer contingency events.
4. Voltage control technology which will be used to prevent load-based under-voltage events.
5. Reclosers and protective devices remote to the point of interconnection ("POI") which will be used to protect, isolate, and restore a system event regardless of load and generation served.
6. Other ancillary benefits to the Company's EPS that accompany any new construction (e.g., refreshed tree-trimming clearances, newer poles) that might not otherwise occur until a later planning cycle or when a failure occurs during a storm.