

February 15, 2021

BY ELECTRONIC MAIL

Luly E. Massaro, Commission Clerk
Rhode Island Public Utilities Commission
89 Jefferson Boulevard
Warwick, RI 02888

**RE: Docket 5077 – DG Interconnection Tariff
National Grid’s Cost Allocation Examples in Response to PUC’s Questions in Memo
Dated February 10, 2021**

Dear Ms. Massaro:

I have enclosed an electronic version of National Grid’s¹ responses to the PUCs cost allocation questions in the PUC’s memorandum in the above-referenced docket dated February 10, 2021.

Thank you for your attention to this matter. If you have any questions, please contact me at 781-907-2121.

Very truly yours,



Raquel J. Webster

Enclosures

cc: Docket 5077 Service List

¹ The Narragansett Electric Company d/b/a National Grid (“National Grid” or “Company”).

Docket No. 5077 - National Grid's Responses to the PUC's Cost Allocation Questions in the PUC's Memo Dated February 10, 2021

PUC's Questions:

Please provide examples of the following (even if it's made up). Each response should include the fact set applicable to that scenario, the criteria used to determine which provision applies, any necessary calculations and totals together with the relevant timing of the assessment of costs to the interconnecting customer and credits to the interconnecting customer (and from whom credits are sourced – one customer/socialized to entire customer base, etc.), if applicable:

- 1) A project that is covered entirely by Section 5.3, paragraphs 1 and 2 (sentence 1) (pure system modification for one customer)*
- 2) A project that is covered by Section 5.3, paragraphs 2,3 and 4 (subsequent renewable energy or commercial customer relies on the modification paid for by the first project) – be sure to provide the information for both the first customer and the subsequent customer.*
- 3) A project that is covered by Section 5.4, paragraph 1 (combination system modification and system improvement)*
- 4) A project that is covered by Section 5.4, paragraphs 2 and 3 (“accelerated modification”)*
- 5) A project that is covered by Section 5.4, paragraph 4 (“may provide an obvious future benefit to the Company EPS”)*
- 6) Which paragraph applies to a group study where multiple developers/projects are studied and assessed costs as part of a group? Please provide an example similar to the prior examples. What happens if a project that is part of a group study does not progress?*

Company's Responses:

Note: The Company will explain these hypothetical examples in more detail during the technical session.

For all the responses below assume that a 2 MW project requested connection to an existing single phase line which is a ½ mile from existing three phase. For a project of this size, three phase service is required. The project would then require a ½ mile single phase to three phase conversion and has an estimated upgrade (System Modification) cost of \$500k for this 2 MW stand-alone solar project.

- 1) Where the upgrade is solely for the one customer, that one customer pays the full \$500k.

- 2) Assume that the second customer (renewable DG or a commercial customer) requested interconnection to the ½ mile pole line halfway up, or ¼ mile from where the upgrade began and the new customer's request would not exceed the rating of the newly constructed three phase line. In this case, the costs would be split 50-50 at the ¼ mile point, but the rest of the line would still be the responsibility of the initial customer. Therefore, the first customer's costs would then be only \$375k, and the second customer's costs would be \$125k. The \$125k collected from the second customer would be refunded to the first customer resulting in the new lower cost to the first customer.
- 3) Assume, once the actual design is done, it is determined that the line has asset condition issues (i.e., poles and crossarms). Assume that the asset condition work (System Improvement) costs approximately \$100k for direct replacement. The DG site would be charged \$500k (Total Cost) -\$100k (System Improvement), or \$400k (net System Modification). The DG site pays the difference between what the Company would have paid to address the System Improvement component and the original System Modification estimate to interconnect.
- 4) For this case, assume that the line is predicted to be overloaded in year five and a project is shown in the budget forecast included in the Electric ISR Plan. The estimated cost to reconductor the single phase line is \$200k. The DG site would pay \$500k - \$200k + Acceleration Cost. The Acceleration Cost is the time value of money on advancing the \$200k project to the current year. This Accelerated Cost of the \$200k would be calculated as the time value of money similar to a revenue requirement model the Company uses for its non-wires alternative review.
- 5) Assume that within year seven of an area study recommendation, which is not yet in the Electric ISR plan since the Electric ISR provides a projected five-year budget, this line is predicted to be overloaded and a year seven project is identified within the study. The original System Modification estimate would not be affected at the time of executing an ISA for this project. If, in a future budget forecast in an approved ISR, the project would have normally moved forward, the Company would undertake an analysis as to how much, if any, could be refunded to the initial customer. Again, this would only occur within a future ISR filing that would include proposing any possible refund for a past project and until the work was approved under a future ISR, no monies would be refunded to the customer.
- 6) Depending on which issue is represented above, any of the answers could apply to a group where costs are allocated between members of the group. If there are common upgrades, the allocation for some of the costs could be on a pro-rata basis (i.e., per MW), or by physical distance. In every case, site specific costs would only be allocated to each site separately. As there is no actual Group Study process in the tariff (as there is in MA), there are not specific procedures to follow except to make sure every project's allocated

costs are fairly apportioned. If a project that is part of a group does not proceed, all other projects must absorb the total cost of the common upgrades.