

February 21, 2012

VIA HAND DELIVERY & ELECTRONIC MAIL

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

**RE: Docket 4296 – The Narragansett Electric Company, d/b/a National Grid
2012 System Reliability Procurement Plan
Responses to Record Requests**

Dear Ms. Massaro:

Enclosed are ten (10) copies of National Grid's¹ responses to Record Requests issued at the Commission's Technical Session on February 15, 2012, in the above-captioned proceeding.

Thank you for your attention to this filing. If you have any questions, please feel free to contact me at (401) 784-7288.

Very truly yours,



Jennifer Brooks Hutchinson

cc: Docket 4296 Service List
Jon Hagopian, Esq.
Steve Scialabba, Division

¹ The Narragansett Electric Company d/b/a National Grid.

Record Request 1

Request:

Please provide the expected load in MW for 2014 on the Tiverton 33F3 and 33F4 feeders.

Response:

The expected loads in 2014 on the 33F3 and 33F4 feeders are 8.9 MW and 10.0 MW, respectively.

Prepared by or under the supervision of: Ryan Constable and Christina Skursky

Record Request 2

Request:

Please provide the ratings in MW of the Tiverton 33F3 and 33F4 feeders, including but not limited to summer normal and summer emergency ratings.

Response:

The summer normal (SN), summer emergency (SE), winter normal (WN), and winter emergency (WE) ratings of the 33F3 and 33F4 feeders are shown in the table below:

Feeder	SN MW	SE MW (24Hr)	WN MW	WE MW (24Hr)
33F3	10.3	13.0	11.1	13.2
33F4	9.8	12.4	10.6	13.0

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Record Request 3

Request:

Based on your internal distribution system planning criteria, under summer peak load conditions, how much overloading for each of these feeders is allowed and for how long? Please answer in terms of both percentage and MW.

- a. The table on Page 6 of 20 of the 2012 SRP Report Supplement indicates that you will not need any load relief from feeder 33F3 until 2022. The table also indicates that the anticipated load relief from feeder 33F4 in 2014, 2015, 2016, and 2017 is 150 kW, 390 kW, 630 kW, and 860 kW respectively. Could these anticipated loads be shifted from feeder 33F3 to feeder 33F4? Why/why not?

Response:

The Company's distribution planning criteria considers two scenarios: normal and emergency conditions. Under summer normal peak load conditions, the Company plans to avoid 0% overload or 0 MW over the summer normal rating.¹ Under summer peak emergency conditions, the Company plans to allow 0% overload or 0 MW over the summer emergency ratings for 24 hours.² The emergency rating as compared to the normal rating is equipment dependent and does not calculate to a fixed percentage.

- a. No, based on geographic limitations of the feeders, there is one load shift that could be performed. The load shift would transfer approximately 0.7 MW between the feeders, resulting in loading levels on both circuits of approximately 96% of summer normal capability. However, National Grid does not recommend this action. This load transfer is 13.2 circuit miles from the source substation and in an area where voltage levels are difficult to maintain.³

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¹ Actual loads sometimes exceed summer normal ratings due to changes in actual versus predicted growth rates and the development of large spot loads.

² While summer emergency ratings are not allowed to exceed 100%, in some cases customers remain unserved.

³ A new feeder or non-wires alternative would mitigate the voltage issue at the remote ends of the 33F3 and 33F4 feeders.