

The Narragansett Electric Company  
d/b/a National Grid (Rhode Island Reliability Project)

EFSB Docket No. SB-2008-02

Rebuttal Testimony of  
David M. Campili, P.E.

June 4, 2009

1 Q. Please state your full name and business address.

2 A. My name is David M. Campilii. My business address is 40 Sylvan Road, Waltham, MA.

3 Q. Have you previously filed testimony in this matter?

4 A. Yes. I filed prefiled testimony in RIPUC Dkt. No. 4029 on February 20, 2009. I  
5 understand that the prefiled testimony from RIPUC Dkt. No. 4029 will be incorporated in  
6 this proceeding.

7 Q. What is the purpose of your rebuttal testimony?

8 A. The primary purpose of my testimony is to respond to the testimony of Gregory L. Booth,  
9 filed on April 6, 2009, on behalf of Rhode Island Division of Public Utilities and  
10 Carriers.

11 Q. Do you disagree with Mr. Booth's overall conclusion?

12 A. No. Similar to Mr. Booth, I support the Rhode Island Reliability Project ("RIRP") as  
13 described in Section 4 of the ER, and do not recommend the Underground Alternative  
14 which is described in Section 5.6 of the ER. This testimony is intended to clarify some of  
15 the issues raised by Mr. Booth regarding the cost estimate for the Underground  
16 Alternative.

17 Q. How is your testimony organized?

18 A. I will be referring to Mr. Booth's testimony and addressing issues with the underground  
19 estimate in the order that they are raised in his testimony.

20 Q. Please discuss interference with other utilities as it relates to the underground cost  
21 estimates.

1 A. On page 14, starting on line 9, Mr. Booth discusses the presence of other utilities which  
2 could affect the installed depth of the underground transmission installation. National  
3 Grid concurs that this is a potentially significant factor, and we have included some costs  
4 for over-excavation and trench shoring in the estimate. At this point, the route which has  
5 been selected is “representative” and has had limited underground utility investigation.  
6 Significant portions of the representative route are on rural roads which appear to have  
7 limited underground infrastructure, judging by the lack of visible manhole covers, gate  
8 boxes, etc. Other portions of the representative route appear to have more significant  
9 underground utilities in place. If underground transmission were to be pursued, a more  
10 detailed assessment of underground utilities would be performed as part of the final route  
11 selection process.

12 Q. Please discuss the quantity of 345 kV cable required to construct the underground  
13 alternative.

14 A. On page 15, starting on line 12, Mr. Booth states that the quantity of 345 kV cable is  
15 understated by as much as 17,000 feet due to scrap, slack, and splicing waste. A cost of  
16 \$4.4 million was assigned by Mr. Booth for this. We disagree with this item. When  
17 National Grid installs an underground transmission cable, we provide the cable  
18 manufacturer with “cut lengths” for each cable section, and each cable section is then  
19 provided on a dedicated reel. The cut lengths have an allowance for the additional cable  
20 necessary for splicing, and our typical cut length tolerance was included in the estimate.  
21 We have found this practice to be satisfactory for having enough cable, while minimizing

1 waste of expensive cable. We feel that Mr. Booth is overstating the amount of excess  
2 cable required.

3 Q. Please discuss the quantity of rock excavation included in the estimate.

4 A. On page 15, starting on line 24, Mr. Booth states that the quantity of rock removal may  
5 be underestimated. Given the limited amount of subsurface investigation performed at  
6 this stage, the amount of rock to be encountered is somewhat speculative. National Grid  
7 would concur that rock removal can have a significant effect on the duct bank installation  
8 cost. If an underground alternative were to be pursued, an early engineering activity  
9 would be to perform geotechnical investigation along potential routes to characterize rock  
10 removal quantities.

11 Q. Please discuss volatility in the material markets as it pertains to the underground  
12 transmission cable estimate.

13 A. On page 16, starting on line 7, Mr. Booth states that volatility in the raw material markets  
14 can have a significant effect on cable material costs. National Grid concurs with this. At  
15 the time that the estimates were prepared, costs for copper, petroleum, and lead (major  
16 constituents of underground transmission cable) were near historic highs. National Grid  
17 had requested estimating quotations at that time to reflect the effect of the higher material  
18 costs on the cable costs. These costs were used in preparing the estimate. Mr. Booth is  
19 correct in stating that true cable costs may not be known until the project was awarded.

20 Q. What is your overall assessment of Mr. Booth's testimony regarding underground  
21 transmission costs?

1 A. Mr. Booth does make some valid points with regard to the higher levels of uncertainty of  
2 underground transmission construction as compared to overhead line construction.  
3 Depending on how the upside and downside risks actually aligned on this project, the  
4 underground costs could be higher than National Grid's estimate, or lower than Mr.  
5 Booth's estimate. In either case, the underground transmission alternative's costs are  
6 significantly higher than the proposed Project.

7 Q. Do you have any other comments regarding Mr. Booth's testimony?

8 A. Yes. I would concur with Mr. Booth's conclusion on page 45 of his testimony that "the  
9 proposed [overhead] project is the lowest cost solution with the least harm that can be  
10 implemented in a timely manner."

11 Q. Does this conclude your testimony?

12 A. Yes.

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