Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Responses to the NEER's Seventh Set of Information Requests July 28, 2016 Exhibit NEER-7-1 Page 1 of 2

Information Request NEER-7-1

<u>Request</u>:

Please see attachment NEER-1-17(a), and provide the requested tables in a fully functional excel file with all formulas intact.

(a) Please provide a table that has Black and Veatch's estimated total nominal and undiscounted New England electricity cost reduction benefits from ANE for the years 2019-2038, total nominal and undiscounted New England volatility reduction benefits from ANE for the years 2019-2038 (as a separate entry than the electricity cost reduction benefits), total discounted New England electricity cost reduction benefits from ANE for the years 2019-2038 (discounting to 2016 with National Grid's proposed discount rate), total discounting to 2016 with National Grid's proposed discount rate), total discounting to 2016 with National Grid's proposed discount rate and as a separate value from the electricity cost reduction benefit, total discounted New England electricity cost reduction benefits from ANE for the years 2019-2038 (discounting to 2016 with National Grid's proposed discount rate), and total discounting to 2016 with a 9% discount rate), and total discounted New England volatility reduction benefits from ANE for the years 2019-2038 (again discounting to 2016 with a 9% discount rate and as a separate value from the electricity cost reduction benefits from ANE for the years 2019-2038 (again discounting to 2016 with a 9% discount rate and as a separate value from the electricity cost reduction benefit).

(b) In a separate table, please provide Black and Veatch's estimated New England monthly nominal and undiscounted electricity cost reduction benefits from ANE for all months in the years 2019-2038, monthly nominal and undiscounted volatility reduction benefits from ANE for all months in the years 2019-2038 (as a separate entry than the electricity cost reduction benefits), monthly discounted electricity cost reduction benefits from ANE for all months in the years 2019-2038 (discounting to 2016 with National Grid's proposed discount rate), monthly discounted volatility reduction benefits from ANE for all months in the years 2019-2038 (again discounting to 2016 with National Grid's proposed discount rate), monthly discounting to 2016 with National Grid's proposed discount rate and as a separate value from the electricity cost reduction benefit, monthly discounted electricity cost reduction benefits from ANE for all months in the years 2019-2038 (again discounting to 2016 with a 9% discount rate), and monthly discounted volatility reduction benefits from ANE for all months in the years 2019-2038 (again discounting to 2016 with a 9% discount rate), and monthly discounted volatility reduction benefits from ANE for all months in the years 2019-2038 (again discounting to 2016 with a 9% discount rate and as a separate value from the electricity cost reduction benefits from ANE for all months in the years 2019-2038 (again discounting to 2016 with a 9% discount rate and as a separate value from the electricity cost reduction benefit).

Response:

a) Please see Attachment NEER-7-1(a) (Highly Sensitive Confidential Information).

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b) Please refer to Attachment NEER-1-17(a) and Attachment NEER-1-13(a) (Highly Sensitive Confidential Information) for the total benefits, and daily gas price volatility savings benefits on a monthly basis in 2015\$.

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Nominal\$ (MM)				
Column	A	В	С		
		Total Annual Benefits - With ANE Only			
		Monthly Electric Price Reduced Daily Gas Price Volatili			
Line #	Year	Reduction Benefit	Benefit		
1	2019				
2	2020				
3	2021				
4	2022				
5	2023				
6	2024				
7	2025				
8	2026				
9	2027				
10	2028				
11	2029				
12	2030				
13	2031				
14	2032				
15	2033				
16	2034				
17	2035				
18	2036				
19	2037				
20	2038				

Nominal\$ (MM)

Total Annual Benefits - With ANE Only Monthly Electric Price Reduced Daily Gas Price Vol Line # Year Reduction Benefit Benefit 1 2016 Benefit Benefit 2 2017 2018 Benefit 3 2018 Source Source 4 2019 Source Source 5 2020 Source Source 6 2021 Source Source 7 2022 Source Source 8 2023 Source Source 9 2024 Source Source 10 2025 Source Source 11 2026 Source Source		
Line # Year Reduction Benefit Benefit 1 2016 2 2017 3 2018 4 2019 5 2020 6 2021 7 2022 8 2023 9 2024 10 2025		
1 2016 2 2017 3 2018 4 2019 5 2020 6 2021 7 2022 8 2023 9 2024 10 2025	latility	
2 2017 3 2018 4 2019 5 2020 6 2021 7 2022 8 2023 9 2024 10 2025		
3 2018 4 2019 5 2020 6 2021 7 2022 8 2023 9 2024 10 2025		
4 2019 5 2020 6 2021 7 2022 8 2023 9 2024 10 2025		
5 2020 6 2021 7 2022 8 2023 9 2024 10 2025		
6 2021 7 2022 8 2023 9 2024 10 2025		
7 2022 8 2023 9 2024 10 2025		
8 2023 9 2024 10 2025		
9 2024 10 2025		
10 2025		
11 2026		
12 2027		
13 2028		
14 2029		
15 2030		
16 2031		
17 2032		
18 2033		
19 2034		
20 2035		
21 2036		
22 2037		
23 2038		

Summary of Annual Benefits

Column	А	В	С

Total ANE Project Benefits Summary 2019-2038 (\$ Billions) Discounted at 7.06%

Line #		Levelized	Present Value
	Project	Annual Benefits	Total Benefits
1	Monthly Electric Price Reduction Benefit		
2	Reduced Daily Gas Price Volatility Benefit		
3	Total		

Total ANE Project Benefits Summary 2019-2038 (\$ Billions) Discounted at 9.00%

	Leve
Project	Annual
Monthly Electric Price Reduction Benefit	

- 4 5 Reduced Daily Gas Price Volatility Benefit
- 6 Total

Levelized Present Value Benefits Total Benefits