

Massachusetts Electric Company  
Nantucket Electric Company  
d/b/a National Grid  
D.P.U. 16-05  
Responses to the Town of Weymouth's First Set of Information Requests  
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Information Request TOW-1-001

**Request:**

Please refer to Investigation by the Department of Public Utilities Into the Means to Add Natural Gas Delivery Capacity to the New England Region, D.P.U. 15-37, at 45 (2015), which states: [A]n EDC must demonstrate that the proposed agreement compares favorably to the range of alternative reliable and least-cost resource options reasonably available to it at the time of acquisition or contract renegotiation. Such alternative options include all energy resources reasonably available in the market that have the potential to address the objective providing electricity at a reasonable cost and that compare favorably in terms of price and non-price factors. An EDC must demonstrate that its analysis evaluated all options using the same methodology and standards, with detail for all assumptions.

- (1) Please explain whether the Company considered allowing any alternatives to natural gas delivery and storage options (such as other energy resources, energy efficiency, and demand reduction strategies) to compete for consideration under the RFP and, if so, please describe the manner in which such alternatives were evaluated and the Company's conclusions; and
- (2) Please provide all documents related to the Company's determination to restrict competition under the RFP to natural gas delivery and storage proposals.

**Response:**

Please refer to Exhibit DPU-ANE-2-9.

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Information Request TOW-1-002

**Request:**

Please refer to the prefiled testimony of Timothy J. Brennan and John E. Alloca, Exhibit NGRID-TJB/JEA-1, at 60-65, discussion energy efficiency programs and renewable generation.

- (1) Please describe when, relative to the issuance of the RFP, the Company made the determination that energy efficiency programs and renewable generation are not reasonable alternatives for addressing the existing market imbalance;
- (2) Please describe the method and standards used by the Company for evaluating the potential for efficiency programs and renewable generation to address the existing market imbalance; and
- (3) Please provide all documents and data relied upon by the Company in determining that efficiency programs and renewable generation are not reasonable alternatives for addressing the existing market imbalance.

**Response:**

- (1) The Company made the determination that energy efficiency programs and renewable generation are not reasonable alternatives for addressing the existing market imbalance prior to the issuance of the RFP.
- (2) The method and standards used by the Company for evaluating the potential for efficiency programs are consistent with the method and standards required by the Department of Public Utilities in its energy efficiency guidelines. These guidelines can be found in D.P.U. 11-120. The Company is engaged in securing all cost-effective energy efficiency that is less expensive than supply as is required by the Green Communities Act and consistent with the requirements established by the Department of Public Utilities. As noted in the response to Information Requests DPU-ANE-2-22 and TOW-1-003, the focus on all cost-effective energy efficiency and demand response is not expected to provide savings sufficient to eliminate the need identified in this proceeding. Please see Exhibit NGRID-TJB/JEA-1, at 60-62 for the Company's explanation of its consideration of the potential for renewable generation to be a reasonable alternative to the Company's proposed agreements.
- (3) Please see the responses to Information Requests TOW-1-003 and DPU-ANE-2-22.

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Information Request TOW-1-003

**Request:**

Please refer to the prefilled testimony of Carol White, Exhibit NG-CSW-1, at 9.

- (1) Please describe the types of energy efficiency programs that delivered a peak load reduction of approximately 660 MW between 2010 and 2015;
- (2) Please explain in detail whether, and to what extent, the past performance of those programs is indicative of future performance, and identify and describe any assumptions underlying the conclusion that the anticipated future performance of those programs cannot materially affect the need for pipeline capacity;
- (3) Please identify and provide copies of each and every analysis forecasting future performance of energy efficiency and demand reduction programs in Massachusetts that is in the possession of the Company, and explain how each such analysis factored into the Company's conclusion that the anticipated future performance of those programs cannot materially affect the need for pipeline capacity; and
- (4) If the Company has itself performed an analysis of the future performance of energy efficiency or demand reduction programs, please provide all documents and data relied upon by the Company in performing such analysis.

**Response:**

- (1) The energy efficiency programs that delivered a peak load reduction of approximately 660 MW between 2010 and 2015 are all described in publicly available documents that have been filed with the Department of Public Utilities (the "Department") and are available on the Department's website and also on the Energy Efficiency Advisory Council's website.

The 2010 – 2012 Plan can be found at:

<http://ma-eeac.org/wordpress/wp-content/uploads/ElectricPlanFinalOct09.pdf>.

The 2013 – 2015 Plan can be found at:

[http://ma-eeac.org/wordpress/wp-content/uploads/ExhibitCompact\\_1StatewideElectricandGas\\_ThreeYearPlan\\_110212.pdf](http://ma-eeac.org/wordpress/wp-content/uploads/ExhibitCompact_1StatewideElectricandGas_ThreeYearPlan_110212.pdf)

- (2) The past performance of the energy efficiency programs implemented in 2010 through 2015 is not indicative of future performance. Incremental additional savings become more difficult to

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secure over time as standard practice evolves to reflect more energy efficient practices and as codes and standards become more stringent. For example, the Energy Independence and Security Act of 2007 established lighting energy efficiency standards that result in limited sales of incandescent light bulbs. That means that energy efficient lighting products will become the baseline and opportunities to address lighting energy efficiency will be limited.

As noted in Exhibit NG-CSW-1, at 9, 0.5 to 2.0 BCF of gas is needed to address the regional need for gas. 0.5 BCF is roughly equivalent to 2,500 MW. The demand savings from statewide energy efficiency efforts in 2016 – 2018 are expected to produce 577 MW in summer peak demand savings and 618 MW in winter peak demand savings, well short of the need, even at the low end of the range of the estimated amount. Energy efficiency efforts in MA are more aggressive than in any other state in the US and still will not come close to meeting this need.

(3) The statewide energy efficiency plans for 2016 – 2018 are the best source of projections about future energy efficiency program performance in MA. That information is available on the Energy Efficiency Advisory Council's website at the following link: <http://ma-eeac.org/plans-updates/>

(4) The Company has not performed an analysis of the future performance of energy efficiency or demand reduction programs in Massachusetts beyond what is provided in the 2016 – 2018 energy efficiency plans. Please see the linked document referenced in part 3 of this response.

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Information Request TOW-1-004

**Request:**

Please refer to Attachments AG-1-8(d) and AG-1-8(e) from D.P.U. 15-181, copies of which are included herewith as Exhibit A.

- (1) Please indicate whether the Company responded to Acadia Center's request to expand the scope and timeframe for the RFP and, if so, please provide a copy of the Company's response;
- (2) Please indicate whether any discussion occurred within the Company or between Company representatives and others regarding the possibility of expanding the scope or timeline for the RFP;
- (3) Provide copies of all documents and communications related to Acadia Center's request to expand the scope and timeframe for the RFP; and
- (4) Please explain why the RFP was not expanded to allow for competition from alternatives to natural gas delivery and storage options.

**Response:**

- (1) The Company did not receive the referenced correspondence from Acadia until November 13, 2015. That was the date that the Company and Eversource had established for submission of proposals and the Company in fact received proposals from 8 parties on that date. In its November 13 letter Acadia requested that the Company revise and reissue its RFP. The Company did not respond to that request.
- (2) The Company has no record of any such discussions and no specific recollection of any such discussions. As bids had already been submitted, it would have been disruptive to accommodate such a request from a party that had no apparent intent to submit a bid.
- (3) There are no such documents.
- (4) Please refer to Exhibit DPU-ANE-2-9.

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Information Request TOW-1-005

**Request:**

Please refer to Attachment AG-I-8(e) at 2 from D.P.U. 15-181.

- (1) Please describe in detail whether the Company agrees or disagrees with the Acadia Center's assertion that ISO-NE's regional forecasting "almost always predict[s] far higher energy and peak demand than actually occurs, even after ISO's adjustments for future energy efficiency;"
- (2) Please describe any discrepancies between the Company's historical predictions of energy and peak demand levels, or forecasts of such levels utilized by the Company, and actual use for the years 2010 through 2015; and
- (3) If discrepancies have occurred between the Company's forecasts, or the forecasts it has used, and actual energy and peak demand levels, please explain whether the method of forecasting future energy and peak demand levels has been modified to generate more accurate forecasts.

**Response:**

- (1) The ISO-NE ("ISO") publishes its annual forecast for loads in its annual Capacity, Energy, Load and Transmission ("CELT") Report. The ISO has an obligation to plan pursuant to North American Electric Reliability Corporation ("NERC") reliability standards and has an ultimate obligation to ensure grid reliability. The ISO is in the best position to discuss the specifics of these reports.
- (2) The tables below show the historical forecasts for Massachusetts Electric Company as compared to weather-adjusted actuals ('actuals'). These tables show that the Company has improved its forecasting efforts over time with recent variances being smaller than variances associated with older forecasts, and is effectively accounting for both energy efficiency and renewable energy efforts in the outlooks it creates.

Peak demand forecasts prior to 2013 on a comparable basis to current peak demand forecasts are no longer available. Projections of peak demand in 2014 and in 2015, as well as, actual peak demand in those years are provided below. As shown in that table, the Company's forecasting efforts have produced more accurate projections in recent years than in past years, reflecting improved forecasting efforts and better accounting for both energy efficiency and renewable energy.

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SALES, Calendar Year, Weather-Normals (GWh)									
Year	FORECAST (GWh)		ACTUALS, w/n * (GWh)	VARIANCE (GWh)			VARIANCE (%)		
	2010	2012		2010	2012	2014	2010	2012	2014
2010			21,294						
2011	21,537		21,301	236			1.1%		
2012	21,761		21,403	358			1.6%		
2013	22,309	21,333	21,250	1,059	83		4.7%	0.4%	
2014	22,716	21,512	21,103	1,613	409		7.1%	1.9%	
2015	22,987	21,615	21,283	2,291	919	587	10.0%	4.3%	2.8%

\* w/n: weather-adjusted to a 'normalized' year

PEAKS, Weather-Normal (MW)						
Year	FORECAST (MW)		ACTUALS, (MW)	VARIANCE (MW)		VARIANCE (%)
	2013	2014		2013	2014	
			4,743			
2014	4,736	4,567	4,621	115		2.4%
2015	4,783	4,623	4,554	229	69	4.8% 1.5%

(3) National Grid strives for continuous improvement in all of its efforts, including its forecasting efforts. It will continue to explore methods and data sources that will contribute to those efforts.

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Information Request TOW-1-006

**Request:**

On May 17, 2016, the Supreme Judicial Court entered judgment in the matter of *Kain v. Dept. of Environmental Protection*, 474 Mass. 278 (2016), requiring DEP to promulgate regulations establishing declining annual emission limits for sources that emit greenhouse gases. Has the Company performed any analysis of how the *Kain* decision will impact the need for expansion of natural gas delivery, as proposed in connection with this proceeding? Please explain what the anticipated implications of the *Kain* decision are with respect to the need for the Access Northeast project to support increased electric generating capacity.

**Response:**

The Department of Environmental Protection has not yet proposed or issued any regulations pursuant to *Kain v. Dept. of Environmental Protection*, and therefore the Company has not analyzed how the *Kain* decision may or may not impact the need for expansion of natural gas delivery, as proposed in connection with this proceeding.

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Information Request TOW-1-007

**Request:**

Please explain in detail how expansions of natural gas delivery capacity, such as is proposed in the Access Northeast project, to support increases electric generating capacity, are consistent with the *Global Warming Solutions Act*'s objective of reducing greenhouse gas emissions. In your response:

- (1) Please describe and provide any analysis the Company has performed regarding the direct or indirect impacts of the Access Northeast project on greenhouse gas emissions in Massachusetts;
- (2) Please provide all evidence upon which the Company relies to show that the Access Northeast project may have positive impacts on greenhouse gas reductions; and
- (3) Please explain whether, and to what extent, the proposed increase in pipeline capacity as a result of the Access Northeast project will directly or indirectly result in increased greenhouse gas emissions.

**Response:**

1-3. Black & Veatch has analyzed the direct impact of the Access Northeast project on greenhouse gas emissions from power generators in the New England market, and believes that the ANE project will reduce greenhouse gas emissions for the region. Please see Attachment NEER-1-1(g) (Highly Sensitive Confidential Information), which shows the annual greenhouse gas emissions for the Base Case and With ANE scenario. Over the 2019-2028 analysis period, the cumulative greenhouse gas reduction from power generation is approximately 0.85%.