Massachusetts Electric Company
Nantucket Electric Company
d/b/a National Grid
D.P.U. 16-05
Responses to the Attorney General's First Set of Information Requests
April 25, 2016
Exhibit AG-1-1
Page 1 of 1

<u>Information Request AG-1-1</u>

Request:

Refer to Exhibit NG-TJB/JEA-1, at page 17, lines 7-12:

- a. Please provide a detailed explanation of how National Grid will secure capacity on the Millennium Pipeline, the Tennessee Gas Pipeline ("Tennessee"), and the Iroquois Pipeline (collectively, "Upstream Pipelines") to deliver gas to Algonquin Gas Transmission, LLC ("Algonquin");
- b. Please provide a copy of all documents and communications related to the acquisition of capacity on the upstream pipelines, including all contracts and precedent agreements; and
- c. Please explain whether National Grid will seek the approval of the Department of Public Utilities ("Department") of its capacity contracts with the upstream pipelines. If no, why not?

Response:

- a. At this time, the Company has not proposed capacity on the Upstream Pipelines to deliver gas to Algonquin.
- b. There are no documents related to the acquisition of capacity on the Upstream Pipelines.
- c. If the Company determines that it will secure capacity on the Upstream Pipelines, it will seek the approval of the Department.

Massachusetts Electric Company
Nantucket Electric Company
d/b/a National Grid
D.P.U. 16-05
Responses to the Attorney General's First Set of Information Requests
April 25, 2016
Exhibit AG-1-2
Page 1 of 1

<u>Information Request AG-1-2</u>

Request:

Please identify the extent to which gas supply arrangements have been made to fill the firm transportation capacity to be acquired on Algonquin or Tennessee. Please provide a copy of all related communications and agreements.

Response:

The Company has not made gas supply arrangements to fill the firm transportation capacity to be acquired on Algonquin or Tennessee.

Massachusetts Electric Company
Nantucket Electric Company
d/b/a National Grid
D.P.U. 16-05
Responses to the Attorney General's First Set of Information Requests
May 2, 2016
Exhibit AG-1-3
Page 1 of 1

<u>Information Request AG-1-3</u>

Request:

Refer to Exhibit NG-TJB/JEA-1, at page 53, lines 13-15. Please provide a copy of all documents prepared in conjunction with the negotiations of the contracts for the Access Northeast Pipeline project ("ANE") and the Northeast Energy Direct project ("NED").

Response:

Please see Attachments AG-1-3(a) (HIGHLY SENSITIVE CONFIDENTIAL) and AG-1-3(b) (HIGHLY SENSITIVE CONFIDENTIAL).

Massachusetts Electric Company
Nantucket Electric Company
d/b/a National Grid
D.P.U. 16-05
Responses to the Attorney General's First Set of Information Requests
May 2, 2016
Exhibit AG-1-4
Page 1 of 1

<u>Information Request AG-1-4</u>

Request:

Refer to Exhibit NG-TJB/JEA-1, at page 58, lines 14-15:

- a. Please provide a complete copy of each bid received:
- b. Please provide a copy of all communications with each bidder before and after the bids were received;
- c. Please identify whether any potential bidder requested additional time to respond to the request for proposal ("RFP"), and provide any responsive documents; and
- d. Please provide a copy of all questions received related to the RFP and the Company's responses to each question.

Response:

- a. Please see Attachment AG-1-4(a)(1) and Attachments AG-1-4(a)(2) through AG-1-4(a)(10) (all HIGHLY SENSITIVE CONFIDENTIAL INFORMATION).
- b. Please see Attachment AG-1-4(b) (HIGHLY SENSITIVE CONFIDENTIAL INFORMATION).
- c. Yes. By e-mail dated November 13, 2015, Repsol Energy North America Corporation ("Repsol") requested additional time to submit a bid. However, in a subsequent e-mail, also dated November 13, 2015, Repsol withdrew such request and later submitted its bid by the required date. Please see Attachment AG-1-4(b) at page 68.
- d. Please see Attachment AG-1-4(c) (HIGHLY SENSITIVE CONFIDENTIAL INFORMATION), which provides questions from individual bidders. Please also see Attachment AG-1-4(d) (HIGHLY SENSITIVE CONFIDENTIAL INFORMATION) which provides the Company's November 5, 2015, response to questions received from bidders.

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(a)(1) Page 1 of 9

Jessica Buno

From: Allocca, John E. (Marketing)

Sent: Friday, November 13, 2015 12:23 PM

To: Prag, Janet A. (Marketing)

Subject: FW: EXTRNL SENDR || Requests for Proposals Pursuant to DPU 15-37

Attachments: Joint_Comments_on_MA_Utilities_Gas_Procurement.pdf; Appendix to MA Utilities Joint

RFP Comments_11122015.pdf

From: Amy Boyd [mailto:aboyd@acadiacenter.org]

Sent: Friday, November 13, 2015 9:51 AM

To: James.daly@eversource.com; Vaughn, John V.

Cc: edna.karanian@eversource.com; eric.soderman@eversource.com; Allocca, John E. (Marketing); Brennan, Timothy J.; Jaffe, Samara A. (Marketing); robert.hayden@state.ma.us; angie.oconnor@state.ma.us; jolette.westbrook@state.ma.us; matthew.beaton@state.ma.us; Ned.Bartlett@MassMail.State.MA.US; Judson, Judith (ENE) <judith.judson@state.ma.us> (judith.judson@state.ma.us); michael.caron@ct.gov; john.betkoski@ct.gov; arthur.house@ct.gov; katie.dykes@ct.gov; robert.klee@ct.gov; Marion.Gold@energy.ri.gov; margaret.curran@puc.ri.gov; Paul.Roberti@puc.ri.gov; herbert.desimone@puc.ri.gov; Meredith.Hatfield@nh.gov; martin.honigberg@puc.nh.gov; robert.scott@puc.nh.gov; kate.bailey@puc.nh.gov; ddonovan@nupowerllc.net; gselig@vermontenergyparks.com; Larry Aller

(larry.aller@nextsteplivinginc.com); fpullaro@renew-ne.org; jbesser@necec.org **Subject:** EXTRNL SENDR || Requests for Proposals Pursuant to DPU 15-37

Dear Sirs,

Please see the attached correspondence and appendix. Originals will follow by hard copy this afternoon.

Regards, Amy Boyd

Amy E. Boyd
Senior Attorney
Acadia Center
31 Milk Street, Suite 501
Boston, MA 02109-5128
aboyd@acadiacenter.org
Phone: (617) 742-0054 x102
Cell: (940) 367-4992
www.acadiacenter.org



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Via US Mail and Electronic Mail

November 13, 2015

James Daly, Vice President Energy Supply Eversource Energy 1 NSTAR Way, NE220 Westwood, MA 02090 John Vaughn, Vice President Energy Procurement National Grid 100 Old Country Road, 2nd Floor, Hicksville, NY 11801

Request for Proposals Pursuant to D.P.U. 15-37

Dear Mr. Daly and Mr. Vaughn:

Acadia Center, Next Step Living, Northeast Clean Energy Council, NuPower Thermal, RENEW Northeast, and Vermont Energy Parks recently learned of the October 23, 2015 Request for Proposals issued by Eversource Energy and National Grid, seeking "proposals for interstate capacity/gas supplies to further the goals of reduction of the cost of electricity and increasing the reliability of the New England electric system to benefit electric distribution customers." (RFP at 1) This RFP cites the October 2, 2015 Order by the Massachusetts Department of Public Utilities ("DPU") in D.P.U. 15-37 as the source of these electric utilities' authority to seek such contracts. We have significant concerns about the limited nature of and the timeframe for this RFP and the potential for projects solicited through it to be approved by the DPU, without adequate consideration of other options.

Specifically, by seeking only pipeline expansion projects, LNG supply, and storage of natural gas, the RFP omits from competition alternative, reliable, and low-cost resources that are available to National Grid and Eversource. As the attached Acadia Center analysis demonstrates, demand-side alternatives to additional gas capacity are likely more cost-effective, reduce costs of infrastructure, and have already reduced energy and peak demand sufficiently that the challenge D.P.U. 15-37 was intended to address is declining over time. Given that, in any filing for approval of long-term gas capacity contracts, the EDCs must make a showing to the DPU that they evaluated "all energy resources reasonably available in the market that have the potential to address the objective of providing electricity at a reasonable cost...", a solicitation seeking options to satisfy the needs of the electric grid must not bar the participation of electric resources. (Order at 45). A solicitation that restricts such competition cannot be considered a fair and reasonable procurement that places the interests of Massachusetts ratepayers ahead of the companies' shareholders.²

¹ We note that this Order has recently been appealed to the Supreme Judicial Court, and a final determination of the DPU's authority to approve such contracts is still months away.

² As the DPU noted, Eversource argued in its comments in D.P.U. 15-37 that EDCs should demonstrate that the proposed contract is the product of a fair and reasonable procurement solicitation process, and that shareholder interests are not placed ahead of ratepayer interests. (Order at 39) Because this RFP bars reasonably available alternatives, it fails under both points.

Accordingly, we seek to clarify that electric market alternatives such as energy efficiency, renewable energy, combined heat and power, demand response, electric storage, and other reasonably available resources may also participate in this RFP. We request that these resources be afforded the opportunity to participate through an extension of the response date by at least two months, broadening the scope of the RFP so that all resources can compete on an equal basis, and better publicity of the solicitation to allow reasonable competition.

The DPU Requires Consideration of Alternatives

In its October 2, 2015 Order, the DPU determined that it has the legal authority under G.L. c. 164, §94A to review and approve long-term contracts entered into by Electric Distribution Companies ("EDCs") for gas capacity. (Order at 19) In evaluating such contracts, the DPU notes that it will require EDCs to demonstrate "that the proposed agreement compares favorably to the range of alternative reliable and least-cost resource options reasonably available to it [the EDC] at the time of acquisition or contract renegotiation." (Order at 45). As the DPU clarified, "such alternative options include all energy resources reasonably available in the market that have the potential to address the objective of providing electricity at a reasonable cost and that compare favorably in terms of price and non-price factors." (Id.) Plainly, the universe of energy resources available to an EDC "in the market" extends well beyond natural gas, and should at least begin with electric resources.

We need only look to neighboring states to see that procurements of resources to address electric market prices need not focus solely on natural gas and exclude electric solutions. Connecticut's approach to addressing the same winter pricing and reliability issues that triggered D.P.U. 15-37 also enables alternative resources to compete. Connecticut has proposed separate RFPs, seeking both large-scale clean energy (up to 2,750 GWh per year) and small-scale clean energy, including demand response, energy efficiency, and energy storage, in addition to natural gas resources.³

It makes little sense for Massachusetts' RFP to ban or limit competition. Massachusetts EDCs have a longstanding commitment to energy efficiency and successful relationships with efficiency vendors, with whom they could easily partner for this venture as well. Renewable energy is also available for EDCs to procure at competitive prices, as demonstrated in the 2013 procurement of wind energy by Massachusetts EDCs, and the proposed joint RFP by Massachusetts, Connecticut and Rhode Island. The EDCs are also actively pursuing ways to engage in more active demand reduction and demand response – as evidenced in their 2016-2018 Energy Efficiency Investment Plans, filed with the DPU in recent weeks. Allowing demand response providers to compete in this RFP would only further support demand response initiatives in the efficiency plans. Enabling participation from energy storage providers would align with the goals of the recently announced Energy Storage Initiative by "[e]xpanding markets for storage technologies, and valuing storage benefits to clean energy integration, grid reliability, system wide efficiency, and peak demand reduction." Overall, expanding the scope of competition in this RFP would better align with the Baker Administration's emphasis on energy efficiency, demand response, and energy storage, and allow the Commonwealth to look to the future of energy and prioritize indigenous resources that provide local benefits.

³ CT Department of Energy & Environmental Protection's August 31, 2015 Notice of Proceedings and Opportunity for Public Comment, available at: https://cleanenergyrfpdotcom.files.wordpress.com/2015/09/notice-of-proceedings-and-opportunity-to-comment-08-31-15.pdf.

⁴ See: http://www.mass.gov/eea/docs/dpu/electric/13-147-initial-filing-9-20-13.pdf

⁵See: http://cleanenergyrfp.com/

⁶ http://www.mass.gov/eea/energy-utilities-clean-tech/renewa<u>ble-energy/energy-storage-initiative/</u>

Fair Consideration of Alternatives Requires More Time and Competition

In this RFP, the utilities limited their solicitation to a particular set of resources, gave notice to no other resources, and established a timeline so short that only their partners could submit timely responses. The RFP not only pre-judges the results by effectively barring competition, but also virtually guarantees that the Commonwealth's ratepayers will pay more than necessary to achieve a reliable winter energy supply.

The RFP seeks responses by noon on November 13, 2015, allowing, at most, three weeks for bidders to put together their application. Since the RFP was sent, as the cover letter indicates, only to "providers of gas infrastructure in New England," it is highly likely that only a narrow circle of potential bidders learned of the RFP with sufficient time to consider participation. Moreover, at least two potential providers, one of whom is in partnership with these utilities, already had proposals on the table and did not have to pull together any new information for the proposal. The most effective way for the EDCs to ensure that this procurement is transparent and avoids conflicts of interest, as required under the Order, is to open it up to competition from alternatives and provide a fair chance to compete, including extending the deadline and broadening notice.⁸

Other solicitations have allowed significantly more time for responses. For instance, ConEd's 2014 request for information, soliciting demand management alternatives in Brooklyn/Queens, had a two-month response window.⁹ Providing adequate time for informed and competitive responses did not slow down the process – in fact, the New York Public Service Commission issued an order approving the demand management program, including 52 MW of non-traditional solutions, less than three months after the RFI closed.¹⁰

In this circumstance, given the importance of providing a reliable electric system to ratepayers that meets state policy goals at the lowest cost, both now and in the future, the RFP should be reissued with terms that allow for competition (MW, MWh or MMBTU needed, rather than specifically cubic feet of natural gas) and allow at least two months for responses. Together with better public notice and distribution of the solicitation, this will allow the sort of competition that enables procurement of the most cost-effective and reliable resources.

Conclusion

The undersigned respectfully request that National Grid and Eversource re-issue the October 23, 2015 RFP to include consideration of all alternative, reliable and least-cost resource options that are available to the utilities. By broadening the terms to allow participation of electric market alternatives such as energy efficiency, renewable energy, combined heat and power, demand response, energy storage, and other reasonably available resources, extending the response date by at least two months, and better publicizing the solicitation to allow reasonable competition, these EDCs can ensure that Massachusetts is utilizing resources that benefit ratepayers and the Commonwealth.

⁷ Access Northeast, co-developed by Eversource, National Grid and Spectra Energy; as well as Tennessee Gas Pipeline Company's Northeast Direct Pipeline Project.

⁸ As the DPU noted in its Order, "[i]n satisfying the public interest standard set forth above, an EDC seeking Department review and approval of a gas contract must include with its filing materials that demonstrate a competitive and transparent procurement, that avoid conflicts of interest, and that allow for consideration of procurement by entities other than EDCs." (Order at 44).

⁹ The RFI issued on July 15, 2014, with submissions due September 15th.

http://www.coned.com/energyefficiency/Documents/Demand Management Project Solicitation-RFI.pdf

¹⁰ The PSC's Order in Case 14-E-0302 issued on December 12, 2014. See: http://breakingenergy.com/2014/12/22/ny-psc-approves-con-edison-bqdm-program/.

Sincerely,

Amy Boyd Senior Attorney Acadia Center <u>aboyd@acadiacenter.org</u> 617.742.0054 ext. 102

Larry Aller Business Development and Strategy Next Step Living

Janet Besser VP, Policy and Government Affairs Northeast Clean Energy Council

Daniel Donovan President NuPower Thermal, LLC Francis Pullaro Executive Director RENEW Northeast, Inc.

Gabriel Selig CEO Vermont Energy Parks, LLC

CC: (via email)

John Allocca, National Grid
Timothy Brennan, National Grid
Samara Jaffe, National Grid
Edna Karanian, Eversource Energy
Eric Soderman, Eversource Energy
Angela O'Connor, Chairman, Massachusetts DPU
Jolette Westbrook, Commissioner, Massachusetts DPU
Robert Hayden, Commissioner, Massachusetts DPU
Matthew Beaton, Secretary, Massachusetts EEA
Ned Bartlett, Undersecretary, Massachusetts EEA
Judith Judson, Commissioner, Massachusetts DOER
Robert Klee, Commissioner, Connecticut DEEP
Katie Dykes, Deputy Commissioner, Connecticut DEEP

Arthur House, Chairman, Connecticut PURA
John Betkowski III, Connecticut PURA
Michael Caron, Connecticut PURA
Marion Gold, Commissioner, Rhode Island OER
Margaret Curran, Chairman, Rhode Island, PUC
Paul Roberti, Commissioner, Rhode Island PUC
Herbert DeSimone, Commissioner, Rhode Island PUC
Meredith Hatfield, Director, New Hampshire Office of
Energy and Planning
Martin Honigberg, Chairman, New Hampshire PUC
Robert Scott, Commissioner, New Hampshire PUC
Kathryn Bailey, Commissioner, New Hampshire PUC

Procuring Demand-Side Resources

Appendix to "Requests for Proposals Pursuant to D.P.U. 15-37"

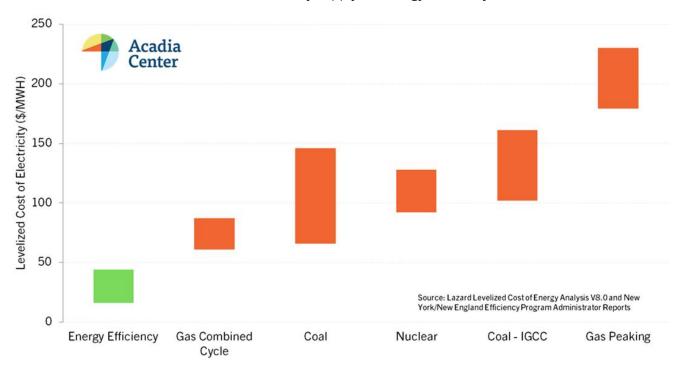
November 13, 2015



Energy Efficiency and Demand Reductions Are Cost-Effective

New England's investments in energy efficiency have already proven to be valuable in winter: without the demand reductions achieved since 2000, ratepayers would have paid an additional \$1.46B in winter 2014 alone. Moreover, efficiency in Massachusetts will cost around 4.5c/kWh in 2016-2018² – over three times cheaper than winter 2014, when the average price of wholesale supply jumped; well under half the cost of residential standard offer prices for this coming winter; and by far the most cost-effective resource we have.

Cost of new electricity supply vs. energy efficiency



¹Acadia Center's analysis of price and demand benefits of efficiency in ISO-NE demonstrated that in the winter of 2014, without savings from electric efficiency procurement, demand would have been 13.7% higher, wholesale electricity prices 24% higher, and electricity costs \$1.46 billion higher. Acadia Center, Winter Impacts of Energy Efficiency In New England, April 15, 2015, available at: http://acadiacenter.org/document/winter-impact-electric-efficiency.

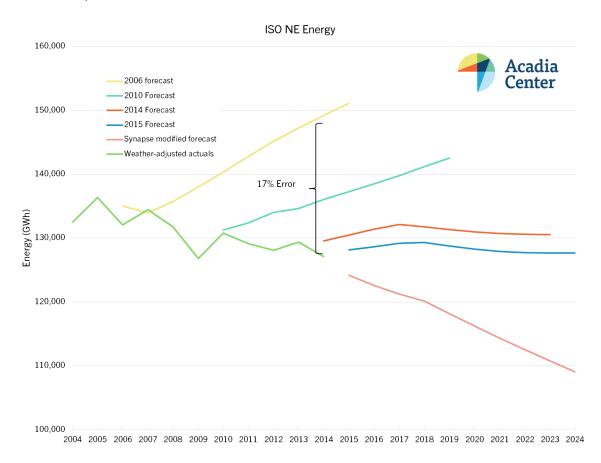
² 2016-2018 Draft EEIP, filed with DPU October 30, 2015, Term Sheet, Appendix D. Available at: http://www.pasettenet/uploads/Exhibit-1-Gas-and-Electric-PAs-Plan-2016-2018-with-App-except-App-U.pdf. ³ Eversource's winter rates are set at 10.394 c/kWh, with National Grid's at roughly 13c/kWh. *See, e.g.*http://www.gazettenet.com/news/specialcoverage/goinggreen/19214881-95/eversource-requests-winter-rate-hike-for-electricity-which-is-substantially-less-than-last-year

As the above chart demonstrates, efficiency procurement, even at levels that far exceed the Massachusetts energy efficiency programs, is far less expensive than purchasing new supply. Demand-side resources also offer other unique benefits that often make them the superior economic choice to any new supply-side energy resources. For example, passive demand resources can often provide both summer and winter peak shaving benefits, while new natural gas capacity will likely impact only winter peak prices.

Reduced demand also avoids new capital investments in lines, substations and power plants. In 2012, ISO-NE began conducting an annual forecast of the New England states' existing and planned energy efficiency investments to determine the impact on forecasted demand and the need for additional transmission. This forecast has led ISO-NE to project near zero growth in annual energy usage across the region and even negative annual energy usage in several New England states. Energy efficiency investments in the region have caused ISO-NE to indefinitely defer at least 10 planned regional transmission upgrades in Massachusetts and Vermont that would have cost ratepayers an estimated \$416 million. Because energy efficiency and other demand-side resources help optimize grid costs, benefits like savings on infrastructure should factor into the evaluation of the relative costs of resources that the Commonwealth has available.

Over-Estimating Energy & Peak Demand Can Lead to Over-Procurement

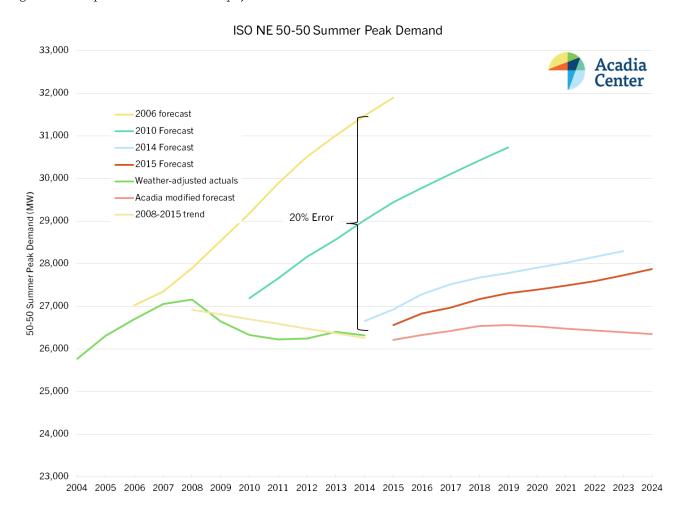
Acadia Center has recently compared historical energy and peak demand against ISO-NE's regional forecasting and discovered that their forecasts almost always predict far higher energy and peak demand than actually occurs, even after ISO's adjustments for future energy efficiency. The following chart compares actual energy consumption in the region over time to ISO-NE's energy forecasts. The forecasting bias is clear and significant, at a 17% error for 2014.





One source of the inaccuracy in ISO-NE's recent forecasts is the heavy discounting of future energy efficiency and distributed generation that occurs during the ISO-NE forecasting process. A recent study by Synapse Energy Economics examined the impact of those and other sources of inaccuracy and constructed a regional forecast that is likely to more accurately predict future demand, shown in the chart above.⁴

Acadia Center also constructed a revised regional forecast for summer peak demand. This corrected forecast, shown below, closely tracks recent historical data. These, or similar forecasts, should be used as the basis of the modeling scenarios for resource evaluation, proxy pricing, and selection for any procurement for energy resources conducted under D.P.U. 15-37. Otherwise Massachusetts seriously risks both overestimating the benefits that that the resources will provide, and procuring far more resources than are truly needed, with major negative consequences for electric ratepayers.

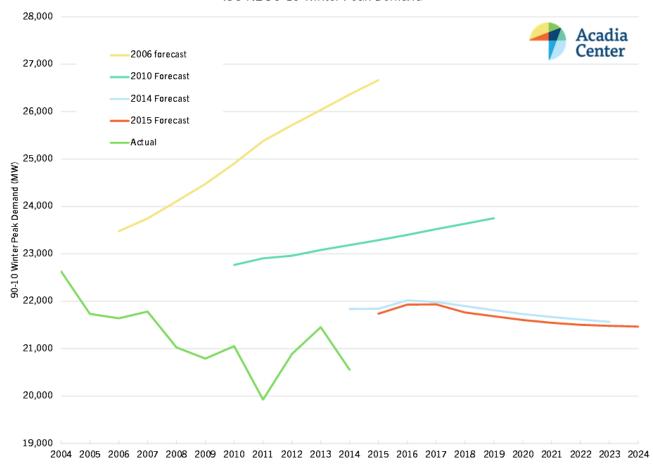


The next chart compares historical winter peak demand against ISO-NE's winter peak forecasts. Not only is the significant overestimation again present, but winter peak demand is trending lower and is also forecast to decrease in the future, suggesting that the challenge D.P.U. 15-37 intended to address is diminishing over time.

⁴ See Synapse Energy Economics, Inc., Challenges for Electric System Planning: Reasonable Alternatives to ISO-NE's Discounts for Uncertainty (July 24, 2015) (http://www.synapse-energy.com/sites/default/files/Challenges-for-Electric-System-Planning o.pdf).



ISO NE 90-10 Winter Peak Demand



Given that demand-side resources are cost-effective, reduce costs of electric infrastructure, and have already reduced energy and peak demand sufficiently that additional gas infrastructure may not be needed, such resources must play an important role in Massachusetts' energy future. A solicitation for resources to support electric reliability that restricts competition from these electric resources cannot be considered a fair and reasonable procurement that places the interests of Massachusetts ratepayers ahead of the utilities' shareholders.

For more information:

Amy Boyd, Senior Attorney, <u>aboyd@acadiacenter.org</u>, 617.742.0054 ext. 102 Peter Shattuck, Massachusetts Director, <u>pshattuck@acadiacenter.org</u>, 617.742.0054 ext. 103



Jessica Buno

From: Allocca, John E. (Marketing)

Sent: Friday, November 13, 2015 12:11 PM

To: Prag, Janet A. (Marketing)

Subject: FW: EXTRNL SENDR || Tennessee Gas Pipeline Company, L.L.C. Response to Notice of

Request for Proposals by National Grid (Confidential) - Attachments

Attachments: Attachment 9-D - Construction Report of Scott Long.pdf; Attachment 10-A - 2015

Annual Report.pdf; Attachment 10-B - Moody's Ratings Report.pdf; Attachment 10-C - S&P Ratings Report.pdf; Attachment 10-D - Fitch Ratings Report.pdf; Attachment 12-A - TGP Legal Matters.pdf; Attachment 2-A - Open Season, PowerServce Firm Service, Rate Schedule FT-PS.pdf; Attachment 2-B - FT-PS Pro Forma Service Agreement.pdf; Attachment 6-A - EDC RFP - Tennessee PowerServe PA.pdf; Attachment 9-A - Federal,

State and Municipal Permits.pdf; Attachment 9-B - LNG Storage Permits.pdf;

Attachment 9-C - Permitability Report of Mark Robinson.pdf

From: Mody, Sital K

Sent: Friday, November 13, 2015 11:47 AM

To: Allocca, John E. (Marketing); Brennan, Timothy J.; Jaffe, Samara A. (Marketing)

Cc: Mody, Sital K; Piczak, Christopher T (Todd)

Subject: EXTRNL SENDR | Tennessee Gas Pipeline Company, L.L.C. Response to Notice of Request for Proposals by

National Grid (Confidential) - Attachments

Dear John, Timothy, and Samara:

Attached please find <u>12 attachments</u> to the response of Tennessee Gas Pipeline Company, L.L.C. (TGP) to the Notice of Request for Proposals issued by National Grid as stated in previous email.

Please reply to this email to confirm your receipt of attachments. Take care,

Sital

Sital Mody

Vice President of Marketing & Business Development

Kinder Morgan - Tennessee Gas Pipeline, Southern Natural Gas Optimization

(office) (mobile)

Page 2 of 3

REDACTED

Jessica Buno

From: Allocca, John E. (Marketing) Sent: Thursday, April 14, 2016 8:37 AM To:

Prag, Janet A. (Marketing)

Subject: FW: EXTRNL SENDR || FW: Tennessee Gas Pipeline Company, L.L.C. Response to Notice

of Request for Proposals by National Grid (Confidential)

Attachments: RFP response - Kinder Morgan 4821-2068-0746 v.pdf

From: Mody, Sital K

Sent: Friday, November 13, 2015 11:50 AM

To: Allocca, John E. (Marketing); Brennan, Timothy J.; Jaffe, Samara A. (Marketing)

Cc: Mody, Sital K; Piczak, Christopher T (Todd)

Subject: EXTRNL SENDR | FW: Tennessee Gas Pipeline Company, L.L.C. Response to Notice of Request for Proposals

by National Grid (Confidential)

Please confirm receipt - sending in smaller files in case you can't receive 6MB

From: Mody, Sital K

Sent: Friday, November 13, 2015 10:46 AM

'Samara Jaffe' **To:** Allocca, John E. (Marketing)

Cc: Mody, Sital K; Piczak, Christopher T (Todd)

Subject: Tennessee Gas Pipeline Company, L.L.C. Response to Notice of Request for Proposals by National Grid

(Confidential)

CONFIDENTIAL

Dear John, Timothy, and Samara: Attached please find the Response of Tennessee Gas Pipeline Company, L.L.C. (TGP) to the Notice of Request for Proposals issued by National Grid for its electric distribution companies in Massachusetts and Rhode Island. Attached please find two separate Responses from TGP, one for the Massachusetts RFP and one for the Rhode Island RFP. Attachments are the same for each RFP and will be transmitted in separate emails. According to terms of the RFP and National Grid's response to parties' questions, a hard copy is being dispatched today via Federal Express for delivery tomorrow.

Please reply to this email, and to each email with attachments to confirm your receipt of TGP's Response.

We will look forward to hearing from you and to further discussions on TGP's Response.

Sincerely,

Sital Mody

Vice President of Marketing & Business Development

Kinder Morgan - Tennessee Gas Pipeline, Southern Natural Gas Optimization

(office) (mobile)

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(a)(10) Page 3 of 3

REDACTED

Massachusetts Electric Company and Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05

The Remainder of this Attachment Constitutes Highly Sensitive Confidential Information Protected from Public Disclosure

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(a)(2) Page 1 of 3

Jessica Buno

From: Allocca, John E. (Marketing)

Sent: Friday, November 13, 2015 12:13 PM

To: Prag, Janet A. (Marketing)

Subject: FW: EXTRNL SENDR || EDC Pipeline Capacity/Supply Procurement - Access Northeast

Project Proposal (MA)

Attachments: Access Northeast Project Proposal - MA.pdf

From: Scott, Emilee Mooney [mailto:EScott@rc.com]

Sent: Friday, November 13, 2015 11:44 AM

To: edna.karanian@eversource.com; eric.soderman@eversource.com; Allocca, John E. (Marketing); Brennan, Timothy J.;

Jaffe, Samara A. (Marketing) **Cc:** Miranda, Joey Lee

Subject: EXTRNL SENDR || EDC Pipeline Capacity/Supply Procurement - Access Northeast Project Proposal (MA)

All,

Attached please see the Access Northeast Project Proposal, offered by Algonquin Gas Transmission, L.L.C. Attachments are available in the data link below (which will expire in 21 days). Please confirm receipt at your earliest convenience. Emilee

Emilee Mooney Scott

Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103
Direct 860.275.8362 | Fax 860.275.8299
escott@rc.com | www.rc.com
Bio | Contact Card

Robinson+Cole

Boston | Hartford | New York | Providence | Stamford Albany | Los Angeles | Miami | New London

Emilee Scott of Robinson & Cole LLP has made the following file available for you to download.

NOTE: The file will expire 21 days (3 weeks) from the time stamp of this email, so follow the url above within that period to ensure you can download the file. This file is only temporary and you can contact the IT Help desk for assistance with downloading.

To download/save the zip file that contains your file please click below:

Data.zip

*please select 'save' when prompted - do not select 'open', your environment might not support this function with zip files

This data.zip file contains the following files:

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(a)(2) Page 2 of 3

Attachments for MA RFP Response.zip

If you have any technical questions or issues pertaining to this email, please contact us at (860)275-8298 or (888)727-2457 Toll-Free.

If you have trouble accessing the link above, copy and paste this url address into the address bar of your browser:

https://extranet.rc.com/fileout/F122Gw499097zYt365e/data.zip

Comments:

Attachments for Access Northeast Proposal - Massachusetts

Additional info:

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Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(a)(2) Page 3 of 3

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Massachusetts Electric Company and Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05

The Remainder of this Attachment Constitutes Highly Sensitive Confidential Information Protected from Public Disclosure

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(a)(3) Page 1 of 6

Jessica Buno

From: Allocca, John E. (Marketing)

Sent: Friday, November 13, 2015 12:06 PM

To: Prag, Janet A. (Marketing)

Subject: FW: EXTRNL SENDR || RE: GDF SUEZ Gas NA LLC Response to the October 23, 2015

Request for Proposals for Natural Gas Capacity, Liquefied Natural Gas and Natural Gas

Storage Procurement

From: Crane, Keith

Sent: Friday, November 13, 2015 12:00 PM

To: edna.karanian@eversource.com; eric.soderman@eversource.com; Allocca, John E. (Marketing); Brennan, Timothy J.;

Jaffe, Samara A. (Marketing)

Subject: EXTRNL SENDR || RE: GDF SUEZ Gas NA LLC Response to the October 23, 2015 Request for Proposals for

Natural Gas Capacity, Liquefied Natural Gas and Natural Gas Storage Procurement

Our financial statements will be forwarded separately as the file size exceeded your server capacity (Exhibit G).

Keith Crane Commercial Development Director GDF SUEZ Gas NA, LLC 1990 Post Oak Blvd., Suite 1900 Houston, TX 77056

Office: Cell:

From: Crane, Keith

Sent: Friday, November 13, 2015 10:57 AM

To: 'edna.karanian@eversource.com'; 'eric.soderman@eversource.com'; 'john.allocca@nationalgrid.com';

'timothy.j.brennan@nationalgrid.com'; 'samara.jaffe@nationalgrid.com'

Subject: GDF SUEZ Gas NA LLC Response to the October 23, 2015 Request for Proposals for Natural Gas Capacity,

Liquefied Natural Gas and Natural Gas Storage Procurement

Importance: High

Dear Eversource and National Grid:

Please find attached GDF SUEZ Gas NA's response to your RFP dated October 23, 2015. Please note that you may receive more than one email messages if for some reason the size of the attached files exceeds either of our email systems' limitations. Thank you.

<< File: GDF SUEZ EDC RFP Response November 13 2015 - Eversource National Grid.pdf >> << File: GSGNA EDC RFP Exhibits A-F.pdf >> << File: Exhibit G - Form of Base Contract.pdf >> << File: Exhibit I - ENGIE Credit Ratings.pdf >>

Keith Crane

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(a)(3) Page 2 of 6

Commercial Development Director GDF SUEZ Gas NA, LLC 1990 Post Oak Blvd., Suite 1900 Houston, TX 77056

Office: Cell:

Jessica Buno

From: Allocca, John E. (Marketing)

Sent: Friday, November 13, 2015 12:09 PM

To: Prag, Janet A. (Marketing)

Subject: FW: EXTRNL SENDR || GDF SUEZ Gas NA LLC Response to the October 23, 2015

Request for Proposals for Natural Gas Capacity, Liquefied Natural Gas and Natural Gas

Storage Procurement

Attachments: Exhibit G - Form of Base Contract.pdf; Exhibit I - ENGIE Credit Ratings.pdf; GSGNA EDC

RFP Exhibits A-F.pdf; GDF SUEZ EDC RFP Response November 13 2015 - Eversource

National Grid.pdf

Importance: High

From: Crane, Keith

Sent: Friday, November 13, 2015 11:57 AM

To: edna.karanian@eversource.com; eric.soderman@eversource.com; Allocca, John E. (Marketing); Brennan, Timothy J.;

Jaffe, Samara A. (Marketing)

Subject: EXTRNL SENDR | GDF SUEZ Gas NA LLC Response to the October 23, 2015 Request for Proposals for Natural

Gas Capacity, Liquefied Natural Gas and Natural Gas Storage Procurement

Importance: High

Dear Eversource and National Grid:

Please find attached GDF SUEZ Gas NA's response to your RFP dated October 23, 2015. Please note that you may receive more than one email messages if for some reason the size of the attached files exceeds either of our email systems' limitations. Thank you.

Keith Crane Commercial Development Director GDF SUEZ Gas NA, LLC 1990 Post Oak Blvd., Suite 1900 Houston, TX 77056

Office: Cell:

Page 4 of 6

REDACTED

Jessica Buno

From: Allocca, John E. (Marketing)

Sent: Friday, November 13, 2015 12:28 PM

To: Prag, Janet A. (Marketing)

Subject: FW: EXTRNL SENDR || RE: GDF SUEZ Gas NA LLC Response to the October 23, 2015

Request for Proposals for Natural Gas Capacity, Liquefied Natural Gas and Natural Gas

Storage Procurement on Behalf of Narragansett Electric

Attachments: Exhibit H - ENGIE Consolidated Financial Statements 2012-2015.pdf

From: Crane, Keith [mailto:Keith.Crane@gdfsuezna.com]

Sent: Friday, November 13, 2015 12:04 PM

To: Allocca, John E. (Marketing); Brennan, Timothy J.; Jaffe, Samara A. (Marketing)

Subject: EXTRNL SENDR || RE: GDF SUEZ Gas NA LLC Response to the October 23, 2015 Request for Proposals for Natural Gas Capacity, Liquefied Natural Gas and Natural Gas Storage Procurement on Behalf of Narragansett Electric

Please see attached Exhibit H, ENGIE S.A. historical financial statements.

Keith Crane
Commercial Development Director
GDF SUEZ Gas NA, LLC
1990 Post Oak Blvd., Suite 1900
Houston, TX 77056

Office Cell:

From: Crane, Keith

Sent: Friday, November 13, 2015 11:00 AM

To: 'john.allocca@nationalgrid.com'; 'timothy.j.brennan@nationalgrid.com'; 'samara.jaffe@nationalgrid.com'

Subject: RE: GDF SUEZ Gas NA LLC Response to the October 23, 2015 Request for Proposals for Natural Gas Capacity,

Liquefied Natural Gas and Natural Gas Storage Procurement on Behalf of Narragansett Electric

Our financial statements will be forwarded separately as the file size exceeded your server capacity (Exhibit G).

Keith Crane Commercial Development Director GDF SUEZ Gas NA, LLC 1990 Post Oak Blvd., Suite 1900 Houston, TX 77056 Office

From: Crane, Keith

Cell:

Sent: Friday, November 13, 2015 10:57 AM

To: 'john.allocca@nationalgrid.com'; 'timothy.j.brennan@nationalgrid.com'; 'samara.jaffe@nationalgrid.com'

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid

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Subject: GDF SUEZ Gas NA LLC Response to the October 23, 2015 Request for Proposals for Natural GBS Capacity, Liquefied Natural Gas and Natural Gas Storage Procurement on Behalf of Narragansett Electric Attachment AG-1-4(a)(3)

Page 5 of 6

Importance: High

Dear National Grid:

Please find attached GDF SUEZ Gas NA's response to your RFP dated October 23, 2015 on behalf of Narragansett Electric. Please note that you may receive more than one email messages if for some reason the size of the attached files exceeds either of our email systems' limitations. Thank you.

<< File: GDF SUEZ EDC RFP Response November 13 2015 - Narragansett.pdf >> << File: GSGNA EDC RFP Exhibits A-F.pdf</p>
>> << File: Exhibit I - ENGIE Credit Ratings.pdf >>

Keith Crane
Commercial Development Director
GDF SUEZ Gas NA, LLC
1990 Post Oak Blvd., Suite 1900
Houston TX 77056

Office Cell:

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(a)(3) Page 6 of 6

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Massachusetts Electric Company and Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05

The Remainder of this Attachment Constitutes Highly Sensitive Confidential Information Protected from Public Disclosure

Page 1 of 4

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Jessica Buno

From: Allocca, John E. (Marketing)

Sent: Friday, November 13, 2015 12:15 PM

To: Prag, Janet A. (Marketing)

Subject: FW: EXTRNL SENDR || CONFIDENTIAL - Bid in Response to National Grid's RFP Dated

October 23, 2015

Attachments: IGTS 2014 FERC FORM 2.pdf; IGTS CPL to AGT Response to MA_RI EDC RFP 11_13_

15.pdf; IGTS PA-Red-Line MA_RI EDC RFP 11_13_15.pdf; IGTS RTS Pro Forma Gas Transportation Contract.pdf; IGTS SONO Authorization to PNGTS for MA_RI EDC RFP

.pdf; IGTS SONO Response to MA_RI EDC RFP 11_13_15.pdf

From: Robert Perless

Sent: Friday, November 13, 2015 10:56 AM

To: Allocca, John E. (Marketing); Jaffe, Samara A. (Marketing); Brennan, Timothy J.

Cc: Scott Rupff; Todd White

Subject: EXTRNL SENDR | CONFIDENTIAL - Bid in Response to National Grid's RFP Dated October 23, 2015

Dear John,

Please find attached Iroquois bid response to the aforementioned RFP seeking natural gas capacity. Iroquois is submitting two (2) proposals to the RFP for two different paths to serve the Massachusetts and Rhode Island markets.

Should you have any questions regarding this submittal, please feel free to contact me. Please acknowledge receipt of this bid response with a return email.

Thank you.

Robert Perless, PE, PMP
Project Development Manager

Office FAX Cell

Jessica Buno

From: Allocca, John E. (Marketing)

Sent: Friday, November 13, 2015 12:15 PM

To: Prag, Janet A. (Marketing)

Subject: FW: EXTRNL SENDR || RE: Bid in Response to The Narragansett Electric Company's

(d/b/a National Grid) RFP Dated October 23, 2015

Attachments: IGTS_Tariff.pdf

From: Robert Perless

Sent: Friday, November 13, 2015 11:27 AM

To: Allocca, John E. (Marketing); Jaffe, Samara A. (Marketing); Brennan, Timothy J.

Subject: EXTRNL SENDR | RE: Bid in Response to The Narragansett Electric Company's (d/b/a National Grid) RFP Dated

October 23, 2015

John,

Due to size constraints, Iroquois is submitting its Tariff under a separate email.

Should you have any questions regarding this submittal, please feel free to contact me.

Robert Perless, PE, PMP

Project Development Manager

Office

FAX

From: Robert Perless

Sent: Friday, November 13, 2015 11:05 AM

To: 'Allocca, John E. (Marketing' < John. Allocca@nationalgrid.com>; 'Jaffe, Samara A. (Marketing'

<<u>Samara.Jaffe@nationalgrid.com</u>>; 'timothy.j.brennan@nationalgrid.com' <timothy.j.brennan@nationalgrid.com>

Subject: Bid in Response to The Narragansett Electric Company's (d/b/a National Grid) RFP Dated October 23, 2015

Dear John,

Please find attached Iroquois bid response to the aforementioned RFP seeking natural gas capacity. Iroquois is submitting two (2) proposals to the RFP for two different paths to serve the Massachusetts and Rhode Island markets.

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid

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Should you have any questions regarding this submittal, please feel free to contact me. Please acknowledge regarding this bid response with a return email.

Page 3 of 4

Thank you.

Robert Perless, PE, PMP
Project Development Manager
Office
FAX
Cell

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(a)(4) Page 4 of 4

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Massachusetts Electric Company Nantucket Electric Company REDACTED d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(a)(5)

Page 1 of 2

From: Mark Bering

Sent: Tuesday, November 03, 2015 2:01 PM

To: eric.soderman@eversource.com; Prag, Janet A. (Marketing)
Cc: edna.karanian@eversource.com; Allocca, John E. (Marketing)

Subject: RE: *Confidential: Massachusetts Electric Distribution Companies Request for Proposal -

October 23, 2015

Attachments: EDC RFP Response.pdf

Follow Up Flag: Follow up **Flag Status:** Flagged

Categories: Green Category

Attached is Millennium's response to the EDC RFP.

Thank you, ...Mark

Jessica Buno

From: eric.soderman@eversource.com [mailto:eric.soderman@eversource.com]

Sent: Friday, October 23, 2015 9:31 AM

Cc: edna.karanian@eversource.com; eric.soderman@eversource.com; John.Allocca@nationalgrid.com;

TIMOTHY.J.BRENNAN@nationalgrid.com; Samara.Jaffe@nationalgrid.com

Subject: *Confidential: Massachusetts Electric Distribution Companies Request for Proposal - October 23, 2015

Please see attached cover letter and request for proposals from the Massachusetts Electric Distribution Companies.

Please acknowledge receipt of both documents via email.

Thank you.

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Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(a)(6) Page 1 of 7

Jessica Buno

From: Prag, Janet A. (Marketing)
Sent: Thursday, April 14, 2016 1:54 PM

To: Prag, Janet A. (Marketing)

Subject: FW: EXTRNL SENDR || FW: CONFIDENTIAL: Bid in Response to National Grid's RFP

Dated October 23, 2015

Attachments: National Grid Bid Cover Letter.pdf; Attachment I NE Generation - Capacity Analysis.xlsx;

Attachment II EDC PA with PNGTS Comments.docx; Attachment III PNGTS Tariff.pdf

TransCanada's bid including first four attachments.

Janet A. Prag
Senior Contract Specialist
nationalgrid
100 E. Old Country Road
Hicksville, NY 11801
T:

From: Allocca, John E. (Marketing)

Sent: Friday, November 13, 2015 12:25 PM

To: Prag, Janet A. (Marketing)

Subject: FW: EXTRNL SENDR | FW: CONFIDENTIAL: Bid in Response to National Grid's RFP Dated October 23, 2015

From: Cynthia Armstrong [mailto:cynthia armstrong@transcanada.com]

Sent: Thursday, November 12, 2015 10:19 PM

To: Allocca, John E. (Marketing); Brennan, Timothy J.; Jaffe, Samara A. (Marketing)

Cc: Don Bell; Cynthia Armstrong; Dave Schultz; Amelia Cheung; Tim Stringer; Richard Bralow; Shane Saunders;

; Margaret Foulds; Iroquois Gas Transmission System (Perless, Rob)

Subject: EXTRNL SENDR | FW: CONFIDENTIAL: Bid in Response to National Grid's RFP Dated October 23, 2015

Dear John, Tim and Samara,

Please find attached PNGTS' bid in response to National Grid's Request for Proposal. We very much appreciate the opportunity to respond to National Grid's solicitation and look forward to discussing this opportunity further with you. A paper copy of our Proposal and a flash drive with the attachments has been mailed via USPS mail.

If you have any questions, please do not hesitate to contact me.

Thanks! Cynthia

Cynthia L. Armstrong

Director of Marketing and Business Development

Portland Natural Gas Transmission System

One Harbour Place, Suite 375

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(a)(6) Page 2 of 7

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cynthia_armstrong@transcanada.com
http://www.linkedin.com/in/cynthiarmstrong
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Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(a)(6) Page 3 of 7

Jessica Buno

From: Prag, Janet A. (Marketing)
Sent: Thursday, April 14, 2016 1:57 PM

To: Prag, Janet A. (Marketing)

Subject: FW: EXTRNL SENDR || FW: CONFIDENTIAL: Bid in Response to National Grid's RFP

Dated October 23, 2015

Attachments: Attachment IV PNGTS FTST Pro Forma.pdf; Attachment V PNGTS 2012 Financial

Statements incl audit report.pdf; Attachment VI PNGTS 2013 Financial Statements incl

audit report.pdf

TransCanada's bid including fifth, sixth and seventh attachments.

Janet A. Prag
Senior Contract Specialist
nationalgrid
100 E. Old Country Road
Hicksville, NY 11801
T:

F:

From: Allocca, John E. (Marketing)

Sent: Friday, November 13, 2015 12:25 PM

To: Prag, Janet A. (Marketing)

Subject: FW: EXTRNL SENDR || FW: CONFIDENTIAL: Bid in Response to National Grid's RFP Dated October 23, 2015

From: Cynthia Armstrong [mailto:cynthia armstrong@transcanada.com]

Sent: Thursday, November 12, 2015 10:19 PM

To: Allocca, John E. (Marketing); Brennan, Timothy J.; Jaffe, Samara A. (Marketing)

Cc: Don Bell; Cynthia Armstrong; Dave Schultz; Amelia Cheung; Tim Stringer; Richard Bralow; Shane Saunders;

; Margaret Foulds; Iroquois Gas Transmission System (Perless, Rob)

Subject: EXTRNL SENDR | FW: CONFIDENTIAL: Bid in Response to National Grid's RFP Dated October 23, 2015

Dear John, Tim and Samara,

Please find attached PNGTS' bid in response to National Grid's Request for Proposal. We very much appreciate the opportunity to respond to National Grid's solicitation and look forward to discussing this opportunity further with you. A paper copy of our Proposal and a flash drive with the attachments has been mailed via USPS mail.

If you have any questions, please do not hesitate to contact me.

Thanks! Cynthia

Cynthia L. Armstrong

Director of Marketing and Business Development

Portland Natural Gas Transmission System

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(a)(6) Page 4 of 7

One Harbour Place, Suite 375
Portsmouth, NH 03801
www.pngts.com
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cynthia armstrong@transcanada.com http://www.linkedin.com/in/cynthiarmstrong AOL IM:

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Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(a)(6) Page 5 of 7

Jessica Buno

From: Prag, Janet A. (Marketing)

Sent: Thursday, April 14, 2016 2:00 PM

To: Prag, Janet A. (Marketing)

Subject: FW: EXTRNL SENDR || FW: CONFIDENTIAL: Bid in Response to National Grid's RFP

Dated October 23, 2015

Attachments: Attachment VII PNGTS 2014 Financial Statements incl audit report.pdf; Attachment VIII

TransCanada 2014 Anual Report.pdf; PNGTS Response to NatGrid RFP Nov 2015.docx

TransCanada's bid including final attachments eight, nine and ten.

Janet A. Prag
Senior Contract Specialist
nationalgrid
100 E. Old Country Road
Hicksville, NY 11801
T:
F:

From: Allocca, John E. (Marketing)

Sent: Friday, November 13, 2015 12:25 PM

To: Prag, Janet A. (Marketing)

Subject: FW: EXTRNL SENDR || FW: CONFIDENTIAL: Bid in Response to National Grid's RFP Dated October 23, 2015

From: Cynthia Armstrong [mailto:cynthia armstrong@transcanada.com]

Sent: Thursday, November 12, 2015 10:19 PM

To: Allocca, John E. (Marketing); Brennan, Timothy J.; Jaffe, Samara A. (Marketing)

Cc: Don Bell; Cynthia Armstrong; Dave Schultz; Amelia Cheung; Tim Stringer; Richard Bralow; Shane Saunders;

; Margaret Foulds; Iroquois Gas Transmission System (Perless, Rob)

Subject: EXTRNL SENDR | FW: CONFIDENTIAL: Bid in Response to National Grid's RFP Dated October 23, 2015

Dear John, Tim and Samara,

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If you have any questions, please do not hesitate to contact me.

Thanks! Cynthia

Cynthia L. Armstrong

Director of Marketing and Business Development

Portland Natural Gas Transmission System

One Harbour Place, Suite 375

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Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(a)(6) Page 6 of 7

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http://www.linkedin.com/in/cynthiarmstrong
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Jessica Buno

From: Allocca, John E. (Marketing)
Sent: Thursday, April 14, 2016 8:35 AM

To: Prag, Janet A. (Marketing)

Subject: FW: EXTRNL SENDR | Response to MA Electric Distribution Companies Request for

Proposals

Attachments: Response to Massachusetts Department of Public Utilities.pdf

From: IAMPEN , KAREN

Sent: Friday, November 13, 2015 12:05 PM

To: edna.karanian@eversource.com; eric.soderman@eversource.com; Allocca, John E. (Marketing); Brennan, Timothy J.;

Jaffe, Samara A. (Marketing)

Cc: KELLY, STEVE; KEPNER, KODY; FREDERICK, ROBIN; bevis, randall (ext)

Subject: EXTRNL SENDR || Response to MA Electric Distribution Companies Request for Proposals

Please see attached response to request for proposals from the Massachusetts Department of Public Utilities Commission including proposed Base Contract and Transaction confirmation.

Please acknowledge receipt of documents via email. Paper copies will be mailed as instructed.

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Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(a)(8) Page 1 of 2

Jessica Buno

From: Allocca, John E. (Marketing)

Sent: Friday, November 13, 2015 12:17 PM

To: Prag, Janet A. (Marketing)

Subject: FW: EXTRNL SENDR | RFP - EDC Pipeline Capacity/Supply Procurement

Attachments: letter John Allocca EDC.pdf; letter Edna Karanian_EDC.pdf; RFP_Description of Logistical

Chain EDC.pdf; RFP Questions 8 to 12_SLNGaz.pdf; EDCs - Massachusetts Bid Form.pdf;

Term Sheet - Electric Distribution Companies (EDCs).pdf

From: Josee Béliveau

Sent: Friday, November 13, 2015 10:41 AM

To: Allocca, John E. (Marketing); edna.karanian@eversource.com

Cc: Rodney Semotiuk; Denis Larivée

Subject: EXTRNL SENDR | RFP - EDC Pipeline Capacity/Supply Procurement

Hello,

Please find attached the electronic version of the response to the EDC Pipeline Capacity/Supply Procurement RFP which was delivered to you today.

If you have any questions, please do not hesitate to communicate with Rodney Semotiuk, CEO at

Best regards,

Josée Béliveau, Executive Assistant

550, rue Sherbrooke Ouest, bureau 510, Tour Est, Montréal (QC) H3A 1B9

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www.slngaz.com

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This e-mail may contain confidential or privileged information. If you are not the intended recipient, please notify us immediately. Thank you.

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Massachusetts Electric Company and Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05

The Remainder of this Attachment Constitutes Highly Sensitive Confidential Information Protected from Public Disclosure

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Jessica Buno

From: Allocca, John E. (Marketing)

Sent: Friday, November 13, 2015 12:22 PM

To: Prag, Janet A. (Marketing)

Subject: FW: EXTRNL SENDR || CONFIDENTIAL: Bid in Response to National Grid's RFP Dated

October 23, 2015

Attachments: TCPL Response to National Grid RFP Nov 2015.pdf; Attachment 1 TCPL Precedent

Agreement.pdf; Attachment 2 TCPL Financial Assurances Agreement.pdf; Attachment 3 General Terms and Conditions.pdf; Attachment 4 FT Toll Schedule.pdf; Attachment 5 FT

Contract.pdf; Attachment 6 Financial Statement 2013.pdf; Attachment 7 Financial Statement 2014.pdf; Attachment 8 2014 Annual Report.pdf; Attachment 9 Credit Rating

DBRS.pdf; Attachment 10 Full Analysis S & P.pdf; Attachment 11 Credit Opinion

Moody's.pdf; National Grid Cover Letter.pdf

From: Don Bell [mailto:don_bell@transcanada.com]

Sent: Friday, November 13, 2015 10:30 AM

To: Allocca, John E. (Marketing); Brennan, Timothy J.; Jaffe, Samara A. (Marketing)

Cc: Dave Schultz; Cynthia Armstrong: Amelia Cheung: Tim Stringer; Richard Bralow; Shane Saunders; Iroquois Gas

Transmission System (Perless, Rob)

Gallagher, Helen

Subject: EXTRNL SENDR | CONFIDENTIAL: Bid in Response to National Grid's RFP Dated October 23, 2015

Dear John,

Further to my letter dated November 13, 2015 which accompanied the PNGTS bid in response to National Grid's Request for Proposal, please find attached TCPL's component of the Combined Bid. TCPL appreciates the opportunity to respond to National Grid's solicitation and looks forward to further discussions with you. A hard copy of TCPL's Proposal and flash drive with accompanying attachments has been sent to you via courier and Canada Post.

Don Bell

President, Portland Natural Gas Transmission System

Office: 416 869 2191

Cell: Fax:

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Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid

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Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(a)(9) Page 3 of 2



November 13, 2015

Mr. John Allocca National Grid 100 East Old Country Road Hicksville, New York, 11801 450 - 1st Street SW
Calgary AB
CA T2P 5H1
Tel:
Fax:
Email
Web: www.transcanada.com

Re: EDC Pipeline Capacity/Supply Procurement

Dear John,

Further to the letter from Portland Natural Gas Transmission System sent to you the evening of November 12, 2015 enclosing its package and responding to the RFP for EDC Pipeline Capacity/Supply Procurement, TransCanada PipeLines Limited ("TCPL") is enclosing its "Component" that forms part of the "Combined Bid" (as such terms are defined therein).

TCPL is pleased to be part of New England's energy infrastructure solutions and looks forward to working with National Grid, other electric distribution companies, the Massachusetts Department of Public Utilities and other New England states.

If you have any questions, please do not hesitate to contact me or Tim Stringer.

Yours Truly,

Dave Schultz

Vice-President, Commercial East Canadian Natural Gas Pipelines

cc: Don Bell, Tim Stringer, Cynthia Armstrong (PNGTS), Rob Perless (IGTS)

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Massachusetts Electric Company and Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05

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Jessica Buno

From: Allocca, John E. (Marketing)

Sent: Monday, November 23, 2015 2:04 PM

To: Prag, Janet A. (Marketing)

Subject: FW: *Confidential: Massachusetts Electric Distribution Companies Request for Proposal

- October 23, 2015

Attachments: MA EDC RFP Cover Letter - October 23, 2015.pdf; MA Electric Distribution Companies -

Request for Proposals - October 23, 2015.pdf

From: eric.soderman@eversource.com [mailto:eric.soderman@eversource.com]

Sent: Friday, October 23, 2015 9:31 AM

Cc: edna.karanian@eversource.com; eric.soderman@eversource.com; Allocca, John E. (Marketing); Brennan, Timothy J.;

Jaffe, Samara A. (Marketing)

Subject: *Confidential: Massachusetts Electric Distribution Companies Request for Proposal - October 23, 2015

Please see attached cover letter and request for proposals from the Massachusetts Electric Distribution Companies.

Please acknowledge receipt of both documents via email.

Thank you.

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October 23, 2015

To Providers of Gas Infrastructure in New England

On October 2, 2015, The Massachusetts Department of Public Utilities ("MDPU" or the "Department") issued a policy decision in D.P.U. 15-37, authorizing Massachusetts Electric Distribution Companies to propose innovative mechanisms to secure new natural gas capacity for the region to benefit electric customers (the "Order"). The Department determined in the decision that it has the legal authority under G.L. c. 164, § 94A ("Section 94A") to review and approve contracts filed by Electric Distribution Companies for pipeline capacity.

Consistent with the policy statement, Eversource and National Grid are issuing this Request for Proposals to solicit proposals for interstate capacity/gas supplies to further the goals of reduction of the cost of electricity and increasing the reliability of the New England electric system to benefit electric distribution customers. Eversource and National Grid may be referred to herein as "EDCs".

The Department stated in the Order that the Electric Distribution Companies must demonstrate that they have conducted a fair and reasonable procurement to identify potential alternatives (Order at 45). The Department also stated in its Order that the Electric Distribution Company must demonstrate that a proposed agreement results in net benefits for the Mass EDCs' customers and compares favorably to the range of alternative options reasonably available to it at the time of acquisition of the resource or contract negotiation (id).

In keeping with these statements, the Electric Distribution Companies must demonstrate that their proposed contracts and strategies for reducing the costs of electricity for their electric customers is the most appropriate alternative of the range of alternatives that may be leveraged to achieve reduced electricity costs while ensuring reliability for customers. Therefore, this RFP requests proposals

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for pipeline expansion projects, LNG supply alternatives, and regional storage projects for that purpose.

If the EDCs determine that proposals submitted in response to this RFP provide the necessary benefits to its retail electricity customers at a reasonable cost, they intend to negotiate with the selected Bidder(s) and to finalize a contract that will be filed with the MDPU for approval. Any such determination would be made individually by EDCs on behalf of their respective Electric Distribution Companies.

Multiple states within New England are considering the procurement of natural gas resources to improve electric supply reliability and to meet other goals. Although this RFP is issued on behalf of EDCs' electric customers, EDCs are committed to working to further the collective interests of the New England States to procure natural gas capacity resources on behalf of customers in the region. To the extent that other States or utilities pursue their own solicitation processes for natural gas resources, and if the goals of such States and utilities are aligned with the goals set forth in this RFP, EDCs may use proposals from this RFP as necessary to coordinate the procurement of natural gas resources to maximize customer benefits. EDCs also generally reserve the right to modify, withdraw and reissue this RFP at any time.

Proposals must be submitted by November 13th, 2015 at 12:00 P.M – EST in accordance with the terms of this RFP.

Sincerely,

James Daly Vice President Energy Supply Eversource Energy John Vaughn Vice President Energy Procurement National Grid

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NOTICE OF REQUEST FOR PROPOSALS (RFP)

NATURAL GAS CAPACITY, LIQUIFIED NATURAL GAS (LNG), AND NATURAL GAS STORAGE PROCUREMENT

INTRODUCTION

On October 2, 2015, The Massachusetts Department of Public Utilities ("MDPU" or the "Department") issued a policy decision in D.P.U. 15-37, authorizing Massachusetts Electric Distribution Companies to propose innovative mechanisms to secure new natural gas capacity for the region to benefit electric customers (the "Order"). The Department determined in the decision that it has the legal authority under G.L. c. 164, § 94A ("Section 94A") to review and approve contracts filed by Electric Distribution Companies for pipeline capacity. The Department also established a standard of review for such contracts and identified the filing requirements for such proposals.

Consistent with the policy statement, Eversource and National Grid are issuing this Request for Proposals to solicit proposals for interstate capacity/gas supplies to further the goals of reduction of the cost of electricity and increasing the reliability of the New England electric system to benefit electric distribution customers. Eversource and National Grid may be referred to herein as "EDCs".

The Department stated in the Order that the Electric Distribution Companies must demonstrate that they have conducted a fair and reasonable procurement to identify potential alternatives (Order at 45). The Department also stated in its Order that the Electric Distribution Company must demonstrate that a 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 negotiation (id). In keeping with these statements, the Electric Distribution Companies must demonstrate that their proposed contracts and strategies for reducing the costs of electricity for their electric customers is the most appropriate alternative of the range of alternatives that may be leveraged to achieve reduced electricity costs while ensuring reliability for customers. Therefore, this RFP requests proposals for pipeline expansion projects, LNG supply alternatives, and regional storage projects for that purpose.

BACKGROUND

If the EDCs determine that proposals submitted in response to this RFP are commercially reasonable and sufficiently sized to address region-wide electric supply cost and reliability concerns, they intend to negotiate with the selected Bidder(s) and to finalize a contract that will be filed with the MDPU for approval. Any such determination would be made individually by EDCs on behalf of their respective Electric Distribution

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Companies. It is anticipated that any contract(s) filed for approval with the MDPU would contain cost support of the associated proposed project(s) reflective of the cost that would apply to MA EDCs electric distribution customers based on such customers share of New England region-wide load.

Multiple states within New England are considering the procurement of natural gas resources to improve electric supply reliability and to meet other goals. Although this RFP is issued on behalf of EDCs' electric customers, EDCs are committed to working to further the collective interests of the New England States to procure natural gas capacity resources on behalf of customers in the region. To the extent that other States or utilities pursue their own solicitation processes for natural gas resources, and if the goals of such States and utilities are aligned with the goals set forth in this RFP, the EDCs may revise this RFP as necessary to coordinate the procurement of natural gas resources to maximize customer benefits. The EDCs also generally reserve the right to modify, withdraw and reissue this RFP at any time.

PROPOSAL DEADLINE

Proposals must be submitted by November 13th, 2015 at 12:00 P.M – EST. Applications or supporting documents received after that date and time will not be considered.

A. OBJECTIVE OF RFP

The primary objective of this RFP is to identify cost-effective resources that would function to increase the reliability of electric service and reduce electric costs for the benefit of the EDCs' electric customers. The primary firm gas supply resources solicited in this RFP are intended to be utilized by gas-fired generators in the New England region to improve regional electric supply reliability and lower the regional cost of retail electricity in substantial and timely Currently there are inadequate gas supplies and transportation infrastructure to meet generation requirements, which threatens the reliability of the grid, especially during cold winter weather. This RFP is designed to identify alternatives for alleviating those constraints and improving winter electric supply reliability at the lowest cost for customers, by allowing the EDCs to contract for primary firm natural gas resources, which may include Natural Gas Capacity, LNG, and/or Natural Gas Storage for the benefit of customers. Capacity and/or storage rights will be released by the EDCs to gas-fired generators for the purpose of ensuring a reliable supply of natural gas to power generation. The EDCs intend to have competitive bidding for capacity releases.

B. REQUIREMENTS

Each proposal is required to address all of the following:

1. Delivery and Receipt locations: Provide physical locations where natural gas will

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be delivered to and transported from, including but not limited to a description of the upstream supplies that would support the proposed resource. For pipeline project proposals, Bidders should discuss the liquidity at proposed receipt points as well as any known pipeline constraints upstream of such receipt points. For LNG proposals, Bidders should discuss the source of LNG supply including the country(ies) of origin and mode of transportation. Specifically, Bidders must supply a list of power generators within New England for which the delivery of primary firm gas supply is possible under the proposal, including identification of the volumes of gas than can be delivered to each facility under peak demand Bidders are responsible for the development of incremental conditions. infrastructure for the delivery of natural gas to generators in New England on a primary firm basis. A bidder shall submit receipt and delivery point MDQs. Bidders are encouraged to provide delivery point flexibility to the extent possible such that volumes of gas can be delivered to multiple generators within operational segments of the pipeline.

Given that the objective of this RFP is to benefit regional electric customers, Bidders are required to demonstrate that the proposal will provide reliable delivery of natural gas on a primary firm basis to multiple generating facilities on critical peak days across multiple load zones. Preference will be given to proposals that provide incremental delivery capacity that are most likely to yield substantial regional benefits to New England electric customers on an efficient, reliable and sustainable basis.

- 2. Service Type and Operational Flexibility: Bidder should indicate the type of service that will be provided and a detailed explanation of the operational flexibility afforded by the respective resource. The explanation of operational flexibility should set forth how the proposed project or service offering can meet the needs of gas-fired generation that frequently runs at a higher level during specific hours of the day (i.e. on-peak hours). The project or existing facility must be able to demonstrate that it can provide the required natural gas on a primary firm basis to generator delivery meters for the duration of the contract.
- 3. Quantity: EDCs may procure up to their respective load share of regional power demand for the natural gas resources, but the total quantity of natural gas resources purchased in the region through the expansion of this RFP and/or complimentary procurement processes undertaken by other States and utilities would not exceed 2,000,000 MMBtu/day nor shall be any individual project be less than 500,000 MMBtu/day. Accordingly, alternative proposals may be submitted for alternative total project facility and size configurations. Bidders should identify which generation facilities can be served at different levels of discrete investment. The proposal and each supply configuration should clearly delineate: i) the total project size; ii) the quantity already committed to other parties (via contracts, precedent agreements or other mechanisms); iii) the quantity, or range of quantities, offered to other entities; and, iv) the minimum quantity or range of quantities required to make each facility configuration

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economically viable. There is no limit to the number of alternate quantity proposals that may be included, but Bidders must clearly specify any implications to the proposed project, including but not limited to schedule and rate impacts associated with such scaling. Bidders should identify all service commencement dates applicable to all quantity proposals, including the quantity and associated service commencement date, as well as associated receipt and delivery points, specific to each phase of any proposals consisting of a multi-phased implementation of service.

Bids for LNG and storage must include both the MDQ and maximum annual quantity of commodity or storage space and indicate the extent to which reinjection can take place during the winter season. Bids including a liquefaction/injection component must also specify the point at which natural gas must be tendered for firm injection. Bids for LNG and storage must also include transportation via interstate pipeline to generators in New England on a primary firm basis.

- 4. Price: Each Bidder is required to provide the price of the resource, including but not limited to any fixed or variable charges that the customer would incur by executing a contract with the selected bidder. All Bids must specify the maximum rate to be charged for the services offered. Any bids based on cost of service must also specify a cap (maximum rate). Bidders must identify all relevant pricing terms including relevant price indices. In order to facilitate potential coordination in other states in which the EDCs New England affiliates offer distribution service, any bid must be applicable for incorporation into Precedent Agreements that may be submitted for regulatory approval in such states. Bidders are required to maintain all offers firm through December 31, 2015. Beyond such date, winning bid(s) are anticipated to be incorporated into an executed Precedent Agreement(s) subject to the terms and conditions therein.
- 5. <u>Contract Term and Renewal Rights:</u> Bidders are required to identify the expected in-service date of all Proposals as well as a guaranteed in-service date. Bidders are also required to specify the minimum required term (not less than 15 years but not to exceed 20 years) as well as corresponding renewal rights.
- 6. Pro-forma Contract/Precedent Agreements: Each Bidder is required to submit a contract or precedent agreement applicable and appropriate to the type of resource offered. A pro-forma precedent agreement is attached in Exhibit 1. Bidders who have not already tendered a form agreement must include a marked version showing any proposed changes to the Pro-forma Contract / Precedent Agreement with their bid, and it is assumed that Bidders would be willing to execute the marked-up pro-forma Contract/Precedent Agreement included in their bids. Alternatively, Bidders may provide a form of precedent agreement that has been approved previously by the MDPU or other New England jurisdiction with any markup changes proposed for a project bid under this RFP. Bidders are discouraged from proposing material changes to the Pro-forma

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Contract/Precedent Agreements. A Natural Gas Base Contract is attached in Exhibit B, which represents standard terms and provisions from the North American Energy Standards Board, Inc. (NAESB), for contracting for Natural Gas supplies. Additional Special Provisions have been outlined in Exhibit B, and EDCs reserve the right to further update all contract provisions, including but not limited to those related to financial parameters, legal proceedings, warranties, terminations and force majeure.

- 7. <u>Tariffs and Pro-forma Service Agreements</u>: Bidders should submit existing and proposed Tariffs and Pro-forma Service agreements. Bidders that are submitting proposals for LNG and Natural Gas Storage should submit Tariffs and Pro-forma Service agreements as well. Pipelines, LNG, and Natural Gas Storage Bidders should also submit provisions, if any, for No-Notice Service.
- 8. <u>Documentation of Experience with development and management of natural gas resources</u>: Bidders are required to document their experience in developing and managing natural gas resources, identifying the scope of the activities for which they were responsible, the companies they served, and the periods in which the services were provided. Bidders are requested to highlight their experience in the northeastern US market.
- 9. <u>Regulatory/Siting/Approvals/Timing:</u> Bidders are required to list all regulatory/siting approvals necessary from agencies at the Federal, State and Municipal levels that will be required for the proposed resource.
 - Bidders are required to itemize all of the physical assets and/or facilities that are required to provide the services proposed in response to this RFP, including a list of all permits required (to the extent not already obtained). Preference will be given to those bidders that can provide the expected benefits in a timely manner and with the highest probability of success.
- 10. <u>Audited Financial Statements</u>, <u>Annual Reports</u>, <u>and Credit Ratings</u>. Bidders should provide a copy of their audited financial statements with notes for at least the past three years and their most recent annual report with management's discussion and analysis. Bidders should also provide documentation of their current credit ratings from Moody's Investor Services, Standard and Poor's, or Fitch Ratings. Preference will be given to entities with a credit rating of investment grade or above and with a positive outlook.
- 11. <u>Business Condition and Financial Reports:</u> Bidders shall provide an overview of their firm, including corporate profile, ownership structure, and financial condition. Bidders should include how the project or service will be financed or supported, including but not limited to the financial instruments and structures the company will utilize in both development and operation of its resource proposal. Bidders should also be prepared to provide other relevant information relating to their

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qualifications, business and operations. Preference will be given to entities with substantial, proven operating experience and financial strength in providing the services offered under this RFP.

12. <u>Disclosure of Legal Matters and Conflicts of Interest</u>: Bidders shall provide details of any claims, disputes, litigation, FERC, SEC or state regulatory action, enforcement action, investigation or other legal proceedings relating to their firm or individual personnel referenced in the proposal (in their business capacity) in the three preceding years. Describe any activities or relationships in which the Bidder or its personnel are engaged with the EDCs or their affiliates, or which may constitute a conflict of interest in providing the services to the EDCs, and any claims or disputes with EDCs or any of their affiliates.

C. PROCEDURES AND BIDDER CERTIFICATION

All communications pertaining to this Notice must be submitted via e-mail with the subject line "EDC Pipeline Capacity/Supply Procurement" to the following:

Eversource:

Edna Karanian at: edna.karanian@eversource.com Eric Soderman at: eric.soderman@eversource.com

National Grid:

John Allocca at: John.Allocca@nationalgrid.com

Timothy Brennan at: TIMOTHY.J.BRENNAN@nationalgrid.com

Samara Jaffe at: Samara.Jaffe@nationalgrid.com

The following is the schedule (subject to change) for this RFP process:

Issue RFP	October 23, 2015
Bidder questions deadline	October 30, 2015
Proposals Due	November 13, 2015

SUBMISSION REQUIREMENTS

Responses to this RFP must be made in writing and be made by mail and electronically. All electronic and hardcopy proposals must be received by November 13th, 2015 at 12:00PM Eastern Time. EDCs will not accept by mail any proposal from a bidder sent as a follow up to its email proposal that differs from its email proposal.

Each proposal shall contain the full name and business address of the bidder

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and bidder's contact person and shall be signed by an authorized representative of the bidder. Each proposal must be submitted by an authorized representative of the bidder, and by its submission of its bid the bidder certifies that:

- The bidder has reviewed the RFP and all attachments and has investigated and informed itself with respect to all matters pertinent to the RFP and its proposal;
- The bidder's proposal is submitted in compliance with all applicable federal, state and local laws and regulations, including antitrust and anti-corruption laws;
- Each bid is being bid independently and that it the bid was prepared without knowledge of the substance of any other proposal being submitted by a non-affiliated bidder in response to this RFP;
- The bidder has not disclosed and will not disclose prior to any award hereunder, any information relating to its proposal which could have an effect on whether another bidder submits a proposal to this RFP, or on the contents of such proposal that another bidder would be willing to submit in response to this RFP, which may include, as an example, the fact that the bidder is submitting a proposal in response to this RFP, the bidder's proposal[s], the quantities of each product bid, the bidder's estimation of the value of a product, the bidder's estimation of the risks associated with supplying a product, and the bidder's preference for bidding on one or several products; and
- The bidder has bound any agents, consultants or other third parties retained or otherwise used in connection with the preparation and submission of its proposal to observe these same restrictions and requirements concerning its proposal and maintain the confidentiality of information concerning its proposal.

EDCs shall have the exclusive right to select or reject any or all of the proposals submitted at any time, for any reason. EDCs may also disregard any bid submission not in accordance with the requirements contained in this RFP. Further, EDCs expressly reserve the right, in their sole and absolute discretion (exercised individually), to seek clarifications of any submissions, to seek modifications to any submissions, to unilaterally change the schedule described herein or modify any of the rules and procedures set forth herein or subsequently issued, to terminate the process described herein, and to invite any (or none) of the Respondents to participate further in the process, all without prior notice.

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D. CONFIDENTIALITY

Bidder and EDCs agree to use commercially reasonable efforts to maintain the confidentiality of the Bidder's proposal. However, it is understood by all parties that any contract resulting from this procurement will need to be filed by EDCs for approval with the MDPU. The EDCs will also be required to disclose the details of any contract to their respective consultants as part of the analysis for these filings. It is also understood that a resulting contract may be filed or disclosed by a Bidder as part of the Bidder's regulatory filing and approval process. The confidentiality of commercially sensitive documents required to be filed at the MDPU or in other regulatory proceedings will be governed by applicable laws and regulations.

E. <u>EVALUATION OF PROPOSALS AND SELECTION PROCESS</u>

Once proposals are received, the proposals will be subject to a review, evaluation and selection process.

In order to obtain approval by the MDPU, an EDC must demonstrate that the proposed contract (1) results in net benefits for the Massachusetts Electric Distribution Company's customers at a reasonable cost, and (2) compares favorably to the range of alternative options reasonably available to the Electric Distribution Company at the time of acquisition of the resource or contract negotiation. An Electric Distribution Company must show that the price of the resource is competitive and that the contract satisfies other non-price factors such as reliability of service and diversity of supply. D.P.U. 15-37, October 2, 2015, p.43-44. Any selected Bidder is expected to fully support EDCs in their efforts to satisfy these requirements in order to receive MDPU approval.

All proposals will be evaluated on the price and non-price factors consistent with applicable MDPU policies, decisions and precedents.

F. REGULATORY APPROVAL

Any contract developed by the parties will be filed for approval with the MDPU and will not become effective unless approved by the MDPU. Should responses to this RFP be of a scale requiring approvals of related contracts in other states, Bidders agree to support the pursuit of regulatory approvals in those states. It is possible that the MDPU may condition approval of any contract that results from this RFP on approvals of related contracts in other states.

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EXHIBIT A

Precedent Agreement

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PRECEDENT AGREEMENT

This PRECEDENT AGREEMENT ("Precedent Agreement") is made and entered into this ____ day of _____, 2015 ("Effective Date"), by and between [TRANSPORTER], [STATE] [ENTITY TYPE] ("Transporter"), and [SHIPPER], a [STATE] [ENTITY TYPE] ("Shipper"). Transporter and Shipper are sometimes referred to individually as a "Party" and collectively as the "Parties."

WITNESSETH:

WHEREAS, Transporter owns and operates an interstate natural gas transmission system in (specify STATES);

WHEREAS, Shipper desires that Transporter expand such interstate natural gas transmission system and purchase firm natural gas transmission service under (insert applicable Tariff existing/new) in connection with the ______Project (the "Project");

WHEREAS, subject to the terms and conditions of this Precedent Agreement,

Transporter is willing to construct the Project and provide the firm transportation service
that Shipper desires;

NOW, THEREFORE, in consideration of the mutual covenants herein assumed, and intending to be legally bound, Transporter and Shipper agree as follows:

1. Transporter Obligations.

a) Subject to the terms and conditions of this Precedent Agreement, Transporter shall proceed with due diligence to obtain from all governmental and regulatory authorities authorizations necessary[y: (i)] for Transporter to construct, install, own, operate, and maintain the Project facilities, and, if applicable, abandon existing facilities, necessary to provide the firm transportation service

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contemplated herein ("Transporter's Authorizations")[, and (ii) for Transporter to perform its obligations as contemplated in this Precedent Agreement, including the obligation to seek authorization from the Federal Energy Regulatory Commission ("FERC") for receipt point flexibility as described in the following sentence.] [Placeholder - To be further defined] Furthermore, Transporter agrees to seek any necessary authorization or waiver from FERC that may be required to allow Shipper to release capacity to electric generators on a preferential basis.

- b) Transporter reserves rights to (i) file and prosecute any and all applications for such authorizations and, (ii) request for rehearing or court review, that are consistent with this Precedent Agreement, the FTSA (defined below in Paragraph 3) and the Negotiated Rate Agreement (in the form attached as Attachment A-2 hereto ("Negotiated Rate Agreement").
- c) Transporter agrees to (i) provide Shipper with an opportunity to review and comment on the text of Transporter's FERC application, before filing, and shall, in good faith, work with Shipper to address any concerns raised by Shipper with respect to such application, (ii) promptly notify Shipper in writing when each of Transporter's Authorizations is received, obtained, rejected or denied and, (ii) promptly notify Shipper in writing as to whether a Transporter Authorization that has been received or obtained is acceptable to Transporter.
 - During the term of this Precedent Agreement, Transporter agrees to use reasonable efforts to support and cooperate with, and to not oppose, obstruct or otherwise interfere with, Shipper in Shipper's efforts to obtain

Page 15 of 153

REDACTED

Shipper Authorizations as referenced below. The term of the Precedent

Agreement will commence on the Effective Date and continue until the

Precedent Agreement is terminated.

2. Shipper Obligations.

a) Subject to the terms and conditions of this Precedent Agreement, Shipper shall

proceed with due diligence to obtain all necessary and appropriate authorizations

and approvals from governmental and regulatory authorizations necessary for

Shipper to perform its obligations as contemplated in this Precedent Agreement,

the FTSA and the Negotiated Rate Agreement referenced in this agreement as

("Shipper's Authorizations").

b) Shipper reserves the right to file and prosecute applications for Shipper

Authorizations, and any court review, if necessary, in a manner it deems to be in

its best interest. Shipper agrees to promptly notify Transporter in writing when

each of Shipper Authorizations is received, obtained, rejected or denied.

c) Shipper shall promptly notify Transporter in writing as to whether each of Shipper

Authorizations that has been received or obtained is acceptable to Shipper.

d) During the term of this Precedent Agreement, Shipper agrees to use reasonable

efforts to support its obligations as contemplated by this Precedent Agreement.

Nothing herein shall be construed to limit or waive Shipper's rights to intervene or

protest any filing by Transporter to the extent Shipper determines in good faith

that such filing is not consistent with Transporter's obligations or Shipper's rights

under this Precedent Agreement, the FTSA or the Negotiated Rate Agreement.

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REDACTED

3. Firm Transportation Service Agreement ("FTSA").

a) FTSA. Subject to the conditions set forth herein, Shipper and Transporter agree that no later than XXX (to be specified) days following the date on which the FERC issues an order granting Transporter a certificate of public convenience and necessity to construct the Project facilities to allow Transporter to commence the construction of the Project (or such other mutually agreed date) Transporter and Shipper will execute the FTSA in the form attached as Attachment A-1 hereto under Rate Schedule _____ which (i) specifies a Maximum Daily Quantity ("MDQ") of XX,XXX Dth/d, exclusive of fuel requirements, effective on the Service Commencement Date (as determined in accordance with Paragraph 4 of this Precedent Agreement), (ii) specifies a primary term of [_____ (XX)] years commencing on the Service Commencement Date ("Primary Term"), (iii) specifies Primary Point(s) of Receipt at [_____ 1 and a Maximum Daily Receipt Quantity ("MDRQ") of XX,XXX Dth/d; (iv) specifies the following Primary Points of Delivery and Maximum Daily Delivery Quantities ("MDDQ"): [location description and meter number(s)]; and (v) incorporates the terms of the Negotiated Rate Agreement (the "FTSA"). (vi) Project shall provide details of any proposed Hourly flexibility. Transporter will accept its FERC certificate of public convenience and necessity to construct the Project facilities no later than TBD days after the execution of the FTSA between Transporter and Shipper.

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05

> Attachment AG-1-4(b) Page 17 of 153

REDACTED

b) Rate. Transporter and Shipper further agree that they will execute, in

accordance with Transporter's Tariff, the Negotiated Rate Agreement, consistent

with the terms of this Precedent Agreement, as set forth on Attachment A-2

hereto, subject to approval by the FERC, which shall become effective on the

Service Commencement Date.

c) Primary Term Extension. Not less than X months prior to the end of the Primary

Term, Shipper may, at its option, extend the Primary Term for up to 100% of the

MDQ for TBD years (each a "Primary Term Extension"). The applicable rates

during the term of such extension shall be as set forth in the Negotiated Rate

Agreement.

d) Renewal. Shipper shall have an evergreen right to extend the term of the FTSA

after the end of the Primary Term or the Primary Term Extension for all or any

portion of the MDTQ at the then-effective rate set forth in the Negotiated Rate

Agreement, subject to Shipper providing Transporter written notice at least _____

(TBD) months prior to the end of the Primary Term or Primary Term Extension,

as applicable, and subject to the right of first refusal ("ROFR") provisions as set

forth in Transporter's FERC Gas Tariff.

e) Right of First Refusal. Upon Transporter's termination of the FTSA at the end of

the Primary Term, Primary Term Extension or annual renewal terms, Shipper

shall have a Right of First Refusal pursuant to Transporter's Tariff to be

applicable, at Shipper's discretion, to all or a portion of the Shipper's MDTQ,

exercisable in accordance with the notice and other applicable provisions of the

Tariff.

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f) Most Favored Nation Right. Shipper shall have a Most Favored Nation Right as set forth in the Negotiated Rate Agreement.

4. Commencement of Service.

- a) Subject to the terms and conditions of this Agreement, Transporter and Shipper agree to execute and deliver the FTSA in accordance with the provisions of Paragraph 3 (FTSA) and subject to the Conditions Precedent stated in this Agreement. Unless Transporter and Shipper amend this Agreement otherwise, service under the Firm Transportation Agreement shall commence no later than [DATE] The Firm Transportation Agreement shall have a primary term ending _____(XX) years after the Commencement Date (the "Primary Term").
- 5. Design and Permitting of Project Facilities. Transporter will undertake with due diligence the design of the Project facilities and any other preparatory actions necessary for Transporter to complete and file its application(s) related to the Project with the FERC or other governmental authority as appropriate.
- 6. Construction of Project. Upon satisfaction of the conditions precedent set forth in Paragraphs 7 of this Precedent Agreement, or written waiver of the same by Transporter or Shipper, as applicable, Transporter shall proceed with due diligence to complete construction of the authorized Project facilities to implement the firm transportation service contemplated in this Precedent Agreement by [DATE].
- 7. <u>Conditions Precedent.</u> Commencement of service under the FTSA and Transporter's and Shipper's rights and obligations under the FTSA are expressly made subject to satisfaction of the following conditions precedent in this

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Paragraph 7 (only Transporter shall have the right to waive the conditions precedent set forth in Paragraph 7(a) and only Shipper shall have the right to waive the conditions precedent set forth in Paragraph 7(b)):

a) Transporter's Conditions Precedent.

- Transporter's receipt of approval, on or before [Date], from its Board of Directors, or similar governing body, to construct the Project facilities and/or to execute the FTSA;
- ii. Transporter's receipt, on or before [Date], of all Transporter'sAuthorizations pursuant to Paragraph 1;
- iii. Transporter's procurement, on or before [Date], of all rights-of-way, easements or permits necessary for the construction and operation of the Project facilities;
- iv. Transporter's completion of construction of the Project facilities and all other facilities required to render firm transportation service for Shipper pursuant to the FTSA, on or before [DATE]

b) Shipper's Conditions Precedent.

- Shipper's receipt of approval, on or before [DATE], from its Board of Directors, or similar governing body, to participate in the Project;
- Shipper's receipt and acceptance by [DATE], of any necessary Shipper Authorizations identified in accordance with Paragraph 2 of this Precedent Agreement;
- iii. Transporter's receipt by [DATE] of Transporter's Authorizations to provide the firm transportation service on the terms contemplated herein and in

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the FTSA and the Negotiated Rate Agreement, and to perform its other obligations contemplated herein; and

- iv. Transporter's completion of construction of the Project facilities and all other facilities required to render firm transportation service for Shipper pursuant to the FTSA, on or before [DATE]
- v. Receipt of Authorization from the FERC on or before [DATE] allowing Shipper to release capacity to electric generators on a preferential basis.
- With respect to each condition precedent set forth in Paragraph 7(a) of this Precedent Agreement, Transporter shall use commercially reasonable efforts to provide notice to Shipper within (TBD) days of the date that such condition precedent has been satisfied or waived. With respect to the conditions precedent set forth in Paragraphs 7(b)(i) and (ii) of this Precedent Agreement, Shipper shall use commercially reasonable efforts to provide notice to Transporter that such condition precedent has been satisfied or waived.
- d) Unless otherwise provided for herein, Transporter's Authorizations contemplated in Paragraph 1 of this Precedent Agreement and otherwise associated with the FTSA and Negotiated Rate Agreement contemplated by this Precedent Agreement must be issued in form and substance reasonably satisfactory to both Parties hereto; provided that this Paragraph 7(d) does not give rise to a termination right for either Party independent of Transporter's termination right pursuant to Paragraphs 9(a) and 10(a) or Shipper's termination right pursuant to Paragraphs 9(b) and 10(b) hereof. Transporter shall provide written notice to Shipper not later than (TBD) days after issuance of any of Transporter's

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Authorizations, and shall offer to meet with Shipper promptly upon the issuance of any such authorization(s) to discuss any concerns or issues related thereto. For purposes of this Precedent Agreement, Transporter's Authorizations shall be deemed satisfactory to Shipper if such Authorizations are consistent with the terms of this Precedent Agreement, the FTSA and the Negotiated Rate Agreement and do not impose conditions or obligations that adversely affect To the extent Shipper determines in Shipper's sole reasonable Shipper. judgment that the Transporter's Authorizations do not satisfy the requirements of the immediately preceding sentence, Shipper shall notify Transporter in writing not later than (TBD) days after receipt of Transporter's notice of such Authorizations, and shall detail the basis of such determination. Designated representatives of the Parties shall meet promptly and negotiate in good faith to reach mutual agreement on a reasonable modification or an agreeable alternative to address the unsatisfactory elements of such Authorizations, and each Party agrees to discuss in good faith any positions advanced by the other Party in accordance with the foregoing. All other governmental authorizations, approvals, permits and/or exemptions that Transporter must obtain must be issued in form and substance reasonably acceptable to Transporter. governmental approvals that Transporter is required by this Precedent Agreement to obtain must be duly granted by the FERC or other governmental agency or authority having jurisdiction, and must be final and no longer subject to rehearing or appeal; provided, however, Transporter may waive the requirement that such authorization(s) and approval(s) be final and no longer subject to

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rehearing or appeal. Transporter shall provide quarterly updates to Shipper regarding Transporter's progress in obtaining Transporter's Authorizations.

- 8. <u>Limitation of Liability</u>. NEITHER PARTY HERETO SHALL BE LIABLE FOR INCIDENTAL, SPECIAL, CONSEQUENTAL, PUNITIVE, EXEMPLARY, OR INDIRECT DAMAGES, BY STATUTE, IN TORT OR CONTRACT OR OTHERWISE.
- 9. Termination of Precedent Agreement for Failure of Conditions Precedent
 - Agreement have not been fully satisfied or waived by Transporter by the applicable dates specified therein or the Service Commencement Dates have not occurred by [DATE], and this Precedent Agreement has not been terminated pursuant to Paragraphs 10 or 11 hereof, then Transporter—may thereafter terminate this Precedent Agreement (and the FTSA, if executed), by providing (TBD) days' prior written notice of its intention to terminate to Shipper; provided, however, if the conditions precedent are satisfied, or waived by Transporter within such (TBD) day notice period, then termination notice of such agreements will be null and void. Transporter's termination right pursuant to this Paragraph 9(a) expires if it is not exercised within (TBD) days after the deadline giving rise to such termination right. In the event of such termination, Shipper shall have no financial or other obligation to Transporter.
 - Agreement have not been fully satisfied or waived by Shipper by the applicable dates specified therein or if Service Commencement Date has not occurred by [DATE] and this Precedent Agreement has not been terminated pursuant to

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Paragraphs 10 or 11 hereof, then Shipper may thereafter terminate this Precedent Agreement (and the FTSA, if executed) by providing (TBD) days' prior written notice of its intention to terminate to Transporter; provided, however, if the conditions precedent are satisfied, or waived by Shipper within such (TBD) day notice period (as applicable), then termination of such agreements will not be effective. Shipper's termination right pursuant to this Paragraph 9(b) expires if it is not exercised within (TBD) days after the deadline giving rise to such termination right. In the event of such termination, Shipper shall have no financial or other obligation to Transporter.

10. Additional Termination Rights.

- a) Transporter Termination Right.__In addition to the provisions of Paragraph 9 hereof, Transporter may terminate this Precedent Agreement (and the FTSA, if executed) by providing written notice of termination to Shipper if: (i) by the earlier of (a) the sixtieth (60th) day following the issuance of the FERC certificate for the Project, provided that no other material Transporter's Authorizations are outstanding, or (b) by [DATE], Transporter, in its sole and reasonable discretion, determines for any reasons that the Project contemplated herein is no longer economically viable; [or (ii) as of [DATE], substantially all precedent agreements, FTSAs or other contractual agreements for the firm service to be made available by the Project are terminated, other than by reason of commencement of service] In the event of such termination, Shipper shall have no financial or other obligation to Transporter.
- 11. <u>Shipper Termination Right.</u> In the event that (i) Transporter's certificates and authorizations from the FERC are not in form and substance reasonably satisfactory to

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REDACTED

Shipper, (ii) Shipper notifies Transporter in writing pursuant to Paragraph 7(d) that such Transporter's certificates and authorizations are not satisfactory, including the basis for such determination, and (iii) Transporter does not receive a subsequent order from the FERC prior to the deadline in Paragraph 7(a)(ii) eliminating such basis and rendering the same reasonable satisfactory to Shipper, Shipper may terminate this Precedent Agreement by providing (TBD) days' prior written notice of its intention to terminate to Transporter; provided that Shipper's termination right pursuant to this Paragraph 10(b) expires if it is not exercised within (TBD) days of the deadline in Paragraph 7(a)(ii). In the event of such termination, Shipper shall have no financial or other obligation to Transporter.

12. Termination upon Service Commencement Date. If this Precedent Agreement is not terminated pursuant to Paragraphs 9 or 10 hereof, then this Precedent Agreement will terminate by its express terms on the Service Commencement Date and thereafter Transporter's and Shipper's rights and obligations related to the transportation service contemplated herein shall be determined pursuant to the terms and conditions of the FTSA, the Negotiated Rate Agreement and Transporter's FERC Gas Tariff, as effective from time to time. Notwithstanding any termination of this Precedent Agreement pursuant to Paragraphs 9, 10 or 11 hereof, or otherwise, to the extent that a provision of this Precedent Agreement contemplates that one or both Parties may have further rights and/or obligations hereunder following such termination, the provision shall survive such termination as necessary to give full effect to such rights and/or obligations.

13. Creditworthiness.

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a) In exchange for Transporter's execution of this Agreement, the FTSA, the Negotiated Rate Agreement and any other related agreements, and as a condition precedent to Transporter's obligations pursuant to such agreements, Shipper shall satisfy the following credit assurance provisions as of the effective date of this Agreement, and shall have a continuing obligation to satisfy the credit assurance provisions of this Agreement throughout the term of this Agreement, and such provisions of the FTSA, the Negotiated Rate Agreement and any other related agreements as may be in effect from time to time.

- b) Shipper credit worthiness standards such as: [Shipper's senior unsecured debt or corporate credit rating is at least BBB- (outlook stable) by Standard & Poor's Financial Services LLC ("S&P") and at least Baa3 (outlook stable) by Moody's Investor Service ("Moody's") or equivalent rating from a nationally recognized statistical rating organization, registered with the Securities and Exchange FERC, and acceptable to Transporter; provided, however, that if Shipper is only rated by one agency, then only that rating shall be considered ("Credit Ratings"). For the purpose of this Paragraph 13(b), in the event of a split rating the lower rating applies.]
- c) If, at any time, Shipper does not meet the creditworthiness provisions of Paragraph 13(b), then Shipper shall provide to Transporter credit assurance in the form of either a guaranty from a guarantor which meets the creditworthiness standards in Paragraph 13(b), and in a form reasonably acceptable to Transporter, a letter of credit from an institution acceptable to Transporter and in a form reasonably acceptable to Transporter, or a cash security deposit, as

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follows: (i) during the first (_____) years of the Primary Term an amount equal to (TBD) months of reservation charges, and (ii) at the beginning of year _____ (____) and until the end of the Primary Term, an amount equal to (TBD) months of reservation charges. At end of the Primary Term and all subsequent extension periods, credit assurance (if any) shall then be based on Paragraph_____ of the General Terms & Conditions of Transporter's Tariff.

- d) The credit assurance provided to Transporter in this Paragraph 13 shall continue in effect until the earlier of (i) Shipper satisfies the Credit Ratings standards, (ii) the execution of a credit agreement to replace this provision, or (iii) the end of the Primary Term, and full payment of all undisputed balances and charges and resolution of any asserted claims with respect thereto has been made by Shipper.
- e) If Shipper does not remedy its failure to demonstrate or furnish acceptable credit assurance as required by this Paragraph 13 within (TBD) days of receipt of written notice of such failure from Transporter, then Transporter shall, in addition to any other remedy available under this Agreement, have the right to terminate this Agreement, the FTSA, and any other related agreements in accordance with the terms of Transporter's Tariff upon (TBD) days written notice to Shipper, provided that such Transporter notice of termination shall be null and void if Shipper has demonstrated or furnished the required credit assurance prior to the expiration of such (TBD) days written notice.

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- 14. <u>Amendments</u>. This Precedent Agreement may not be modified or amended unless the Parties execute written agreements to that effect.
- 15. <u>Prior Agreements.</u> This Precedent Agreement and its attachments, when executed, supersede all prior agreements and understandings, whether oral or written, with respect to the Project.
- Successors; Assignments. Any company which succeeds by purchase, merger, or consolidation of title to the properties, substantially as an entirety, of Transporter or Shipper, will be entitled to the rights and will be subject to the obligations of its predecessor in title under this Precedent Agreement. Otherwise, neither Shipper nor Transporter may assign any of its rights or obligations under this Precedent Agreement without the prior written consent of the other Party hereto, provided that such consent shall not be unreasonably withheld or delayed. Notwithstanding the foregoing, Transporter and Shipper shall each have the right, without obtaining the other Party's consent, to pledge or assign its rights under this Precedent Agreement and/or the FTSA as collateral security for indebtedness incurred by such Party or its affiliate.
- 17. No Third-Party Rights. Except as expressly provided for in this Precedent Agreement, nothing herein expressed or implied is intended or shall be construed to confer upon or give to any person not a Party hereto any rights, remedies or obligations under or by reason of this Precedent Agreement.
- 18. <u>Joint Efforts: No Presumptions.</u> Each and every provision of this Precedent Agreement shall be considered as prepared through the joint efforts of the Parties and shall not be construed against either Party as a result of the preparation or

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drafting thereof. It is expressly agreed that no consideration shall be given or

presumption made on the basis of who drafted this Precedent Agreement or any

specific provision hereof

19. Choice of Law. This Precedent Agreement shall be governed by, construed,

interpreted, and performed in accordance with the laws of the Commonwealth of

Massachusetts without recourse to any laws governing the conflict of laws.

20. Notice. Any notice and/or request provided for in this Agreement or any notice either Party

may desire to give to the other shall be transmitted in writing (overnight delivery, U.S. Mail,

or electronic mail) such that it is received before (TBD) p.m. time on the due date.

Transporter:

Shipper:

Notice is effective as of the date of confirmed receipt, or, in the absence of

confirmed receipt, as of the date actually received.

21. <u>Defined Terms.</u> When used in this <u>Precedent Agreement, and unless otherwise</u>

<u>defined herein, capitalized terms shall have the</u> meanings set forth in Transporter's

FERC Gas Tariff on file with the FERC, as amended from time to time.

22. Waivers. The waiver by either Party of a breach or violation of any provision of this

Precedent Agreement will not operate as or be construed to be a waiver of any

subsequent breach or violation hereof.

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23. <u>Counterparts.</u> This Precedent Agreement may be executed in any number of

counterparts, each of which will be an original, but such counterparts together will

constitute one and the same instrument.

24. <u>Headings</u>. The headings contained in this Precedent Agreement are for reference

purposes only and shall not affect the meaning or interpretation of this Precedent

Agreement.

25. Representations and Warranties. Each Party represents and warrants to each other

as follows:

- (i) Ability to execute and perform this Precedent Agreement.
- (ii) This Precedent Agreement has been duly executed and delivered by such Party.

26. Confidentiality and Disclosures.

(a) The substance and terms of this Precedent Agreement are confidential. Either Party

may disclose the substance and terms of this Precedent Agreement to its or its affiliate's

directors, officers, employees, representatives, agents, consultants, attorneys or auditors

("Representatives") who have a need to know the substance and terms of this Precedent

Agreement. Transporter and Shipper agree not to disclose or communicate, and will

cause their respective Representatives not to disclose or communicate, the substance or

terms of this Precedent Agreement to any other person, entity, firm, or corporation

without the prior written consent of the other Party, provided that either Party may

disclose the substance or terms of this Precedent Agreement as required by law, order,

rule or regulation of any duly constituted governmental body or official authority having

jurisdiction, subject to the condition that the disclosing Party first give the other Party five

TBD business days' notice of same or as much notice as possible under the

circumstances, so that a protective order or other protective arrangements may be

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REDACTED

sought. Notwithstanding the foregoing, the Parties acknowledge that (A) Transporter may, in its sole discretion, exercised reasonably, (i) file a copy of this Precedent Agreement with the FERC under seal in connection with the FERC certificate application, (ii) place on public file with the FERC a description of the terms of any negotiated rate prior to the commencement of firm transportation service under the FTSA, and (iii) use the terms and conditions of this Precedent Agreement (excluding any information proprietary to Shipper) in Transporter's preparation of the pro forma precedent agreement for other Shippers under the Project, and (B) Shipper, in its sole discretion, may provide Project information, including a copy of this Precedent Agreement, to the MDPU; provided Transporter or Shipper will request confidential treatment for any such filing or written disclosure of confidential information. Such filings will not constitute a breach of this confidentiality provision and will not require compliance with the foregoing five TBD day notice provision.

[signature page follows]

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REDACTED

27. Execution of Agreement. This Agreement may be executed by the Parties in separate counterparts, each of which when so executed and delivered will be an original, but all such counterparts will together constitute but one and the same instrument.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their duly authorized representatives as of the date first hereinabove written.

By:
Name:
Title:
By:
Name:
Title

REDACTED

Attachment A-1
Form of Rate Schedule _____
Firm Transportation Service Agreement

(To be attached)

REDACTED

Attachment A-2 Negotiated Rate Agreement

(To include critical provisions and representations related to rate and other negotiated anchor shipper clauses such as Most Favored Nation ("MFN"), which is intended to provide anchor shipper with longer term economic and service rights protection and benefits)

REDACTED

STATEMENT OF NEGOTIATED RATES (Footnotes)

Shipper Name: [SHIPPER]
FTSA: [INSERT CONTRACT NUMBER]
Term of Negotiated Rate:
Rate Schedule:
MDQ / Dth on the Service Commencement Date
Reservation Rate: Shipper shall pay a negotiated reservation rate of \$[] per Dth, per month of MDQ.
Commodity Charge:
Primary Receipt Point(s):
Primary Delivery Points:
Recourse Rate(s): The Recourse Rate(s) applicable to this service is the applicable maximum rate(s) stated on Transporter's Statement of Rates for Rate Schedule at the applicable time.
FOOTNOTES:
1/ This negotiated rate complies with Transporter's FERC Gas Tariff.
2/ This Negotiated Rate shall apply only to transportation service under this Contract No. [INSERT CONTRACT NUMBER], up to Shipper's specified MDQ, Primary Receipt Point and Primary Delivery Point designated herein, and any secondary receipt and delivery points available under Rate Schedule
3/ Construction cost caps - Bidders must submit how costs will be managed to ensure the best possible rate is achieved. A rate cap is required and a proposal to address construction cost under- and over-runs if construction of facilities are necessary.
4/ Notice Provisions - Proposals should include details on applicable notice provisions

REDACTED

- 5/ Transporter and Shipper agree that Contract No. [INSERT CONTRACT NUMBER] is a ROFR Agreement.
- 6/ Shipper shall pay a commodity charge which shall be (TBD).
- 7/ Renewal rates are described: Bidders should provide a description of renewal rate options at the end of the primary term.
- 8/ Most Favored Nations (MFN)

D. ..

Designed and included to protect project anchor shippers' economic position, in the event future projects are constructed and/or capacity is sold using the Projects' assets and resulting in a lower rate than the negotiated rate paid by anchor shippers.

 Identifies applicable project capacity, length of time such MFN is in effect, mechanism by which projects are compared and the resulting reduction in anchor shippers' Negotiated Rate, if a subsequent project is determined to render a lower rate.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their duly authorized representatives as of the date first hereinabove written.

oy
Name:
Γitle:
Зу:
Name:
Γitle:

REDACTED

EXHIBIT B

North American Energy Standards Board, Inc.

Natural Gas Base Contract

REDACTED

Base Contract for Sale and Purchase of Natural Gas

This Base Contract is entered into as of the following date:

The parties to this Base Contract are the following:

The parties to	uns base contract are the	e following.					
PARTY A	PARTY NAME	PARTY B			PARTY B		
	ADDRESS						
	BUSINESS WEBSITE						
	CONTRACT NUMBER						
	D-U-N-S® NUMBER						
☐ US FEDERAL:		☐ US FEDERAL:					
□ OTHER	TAX ID NUMBERS	☐ OTHER:					
Delaware	JURISDICTION OF ORGANIZATION						
☐ Corporation ☐ LLC		☐ Corporation	☐ LLC				
☐ Limited Partnership ☐ Partnership	COMPANY TYPE	☐ Limited Partnership	☐ Partnership				
☐ LLP ☐ Other		☐ LLP	☐ Other				
	GUARANTOR (IF APPLICABLE)						
Co	ONTACT INFORMATION	ON					
ATTN	- COMMERCIAL	ATTN					
TEL#:FAX#:							
EMAIL:		EMAIL:					
ATTN		ΔΤΤΝ					
TEL#:FAX#:	• SCHEDULING	ATTN TEL#: FAX#:					
EMAIL:		EMAIL:					
LINAL.		EMAIL.					
ATTN	■ CONTRACT AND	ATTN	-				
TEL#:FAX#:	LEGAL NOTICES	ATTNFAX#:					
EMAIL:		EMAIL:					
			<u>.</u>				
ATTN TEL#:FAX#:	- CREDIT	ATTN	EAV#.				
<u> </u>	OKEDII	TEL#:FAX#: EMAIL:					
EMAIL:							
ATTN TEL#: FAX#:	 TRANSACTION 	ATTNF	- A V.W.				
	CONFIRMATIONS		-AX#:				
EMAIL:	COUNTING INFORMAT	EMAIL:					
-		1					
ATTN	INVOICES	ATTN	- A V.H.				
TEL#:FAX#:	■ PAYMENTS ■ SETTLEMENTS	TEL#:F	-AX#:				
EMAIL:	- SETTLEWENTS	EMAIL:					
BANK: ABA:	WIRE TRANSFER	BANK:					
ACCT:	NUMBERS	ACCT:	<u> </u>				
OTHER DETAILS:	(IF APPLICABLE)	OTHER DETAILS:					
ATTN:	CHECKS	ATTN:					
ADDRESS:	(IF APPLICABLE)	ADDRESS:					
BANK:	, ,	BANK:					
ABA:	ACH NUMBERS	ABA:					
ACCT:	(IF APPLICABLE)	ACCT:					
OTHER DETAILS:	1	OTHER DETAILS:					

REDACTED

Base Contract for Sale and Purchase of Natural Gas

(Continued)

This Base Contract incorporates by reference for all purposes the General Terms and Conditions for Sale and Purchase of Natural Gas published by the North American Energy Standards Board. The parties hereby agree to the following provisions offered in said General Terms and Conditions. In the event the parties fail to check a box, the specified default provision shall apply. Select the appropriate box(es) from each section:

Section 1.2	
Section 2.7	
Confirm Deadline OR	
☐ Business Days after receipt ☐ Transactional Cross Default Specified Transactions:	
Section 2.8	
Section 3.2	
Performance OR Obligation ☐ Spot Price Standard	
Damages ☐ Early Termination Damages Do Not Apply	
Note: The following Spot Price Publication applies to both of the immediately preceding. Section 10.3.2 Other Agreement Setoffs Apply (default)	
Section 2.31 Gas Daily Midpoint (default) Spot Price OR Publication Gas Daily Midpoint (default) Gas Daily Midpoint (default) Setoffs Gas Daily Midpoint (default)	
— □ Other Agreement Setoffs Do Not Apply	
Section 6	
Section 7.2	
Payment Date (default) Choice Of Law	
☐ Day of Month following Month of delivery	
Section 7.2	
Section 7.7	
Special Provisions Number of sheets attached:()_ Addendum(s):	

IN WITNESS WHEREOF, the parties hereto have executed this Base Contract in duplicate.

		•
	PARTY NAME	
Ву:	SIGNATURE	Ву:
Name:	PRINTED NAME	Name:
Its:	TITLE	Title:

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 39 of 153

General Terms and Conditions Base Contract for Sale and Purchase of Natural Gas

SECTION 1. PURPOSE AND PROCEDURES

1.1. These General Terms and Conditions are intended to facilitate purchase and sale transactions of Gas on a Firm or Interruptible basis. "Buyer" refers to the party receiving Gas and "Seller" refers to the party delivering Gas. The entire agreement between the parties shall be the Contract as defined in Section 2.9.

The parties have selected either the "Oral Transaction Procedure" or the "Written Transaction Procedure" as indicated on the Base Contract.

Oral Transaction Procedure:

The parties will use the following Transaction Confirmation procedure. Any Gas purchase and sale transaction may be effectuated in an EDI transmission or telephone conversation with the offer and acceptance constituting the agreement of the parties. The parties shall be legally bound from the time they so agree to transaction terms and may each rely thereon. Any such transaction shall be considered a "writing" and to have been "signed". Notwithstanding the foregoing sentence, the parties agree that Confirming Party shall, and the other party may, confirm a telephonic transaction by sending the other party a Transaction Confirmation by facsimile, EDI or mutually agreeable electronic means within three Business Days of a transaction covered by this Section 1.2 (Oral Transaction Procedure) provided that the failure to send a Transaction Confirmation shall not invalidate the oral agreement of the parties. Confirming Party adopts its confirming letterhead, or the like, as its signature on any Transaction Confirmation as the identification and authentication of Confirming Party. If the Transaction Confirmation contains any provisions other than those relating to the commercial terms of the transaction (i.e., price, quantity, performance obligation, delivery point, period of delivery and/or transportation conditions), which modify or supplement the Base Contract or General Terms and Conditions of this Contract (e.g., arbitration or additional representations and warranties), such provisions shall not be deemed to be accepted pursuant to Section 1.3 but must be expressly agreed to by both parties; provided that the foregoing shall not invalidate any transaction agreed to by the parties.

Written Transaction Procedure:

- 1.2. The parties will use the following Transaction Confirmation procedure. Should the parties come to an agreement regarding a Gas purchase and sale transaction for a particular Delivery Period, the Confirming Party shall, and the other party may, record that agreement on a Transaction Confirmation and communicate such Transaction Confirmation by facsimile, EDI or mutually agreeable electronic means, to the other party by the close of the Business Day following the date of agreement. The parties acknowledge that their agreement will not be binding until the exchange of nonconflicting Transaction Confirmations or the passage of the Confirm Deadline without objection from the receiving party, as provided in Section 1.3.
- 1.3. If a sending party's Transaction Confirmation is materially different from the receiving party's understanding of the agreement referred to in Section 1.2, such receiving party shall notify the sending party via facsimile, EDI or mutually agreeable electronic means by the Confirm Deadline, unless such receiving party has previously sent a Transaction Confirmation to the sending party. The failure of the receiving party to so notify the sending party in writing by the Confirm Deadline constitutes the receiving party's agreement to the terms of the transaction described in the sending party's Transaction Confirmation. If there are any material differences between timely sent Transaction Confirmations governing the same transaction, then neither Transaction Confirmation shall be binding until or unless such differences are resolved including the use of any evidence that clearly resolves the differences in the Transaction Confirmations. In the event of a conflict among the terms of (i) a binding Transaction Confirmation pursuant to Section 1.2, (ii) the oral agreement of the parties which may be evidenced by a recorded conversation, where the parties have selected the Oral Transaction Procedure of the Base Contract, (iii) the Base Contract, and (iv) these General Terms and Conditions, the terms of the documents shall govern in the priority listed in this sentence.
- 1.4. The parties agree that each party may electronically record all telephone conversations with respect to this Contract between their respective employees, without any special or further notice to the other party. Each party shall obtain any necessary consent of its agents and employees to such recording. Where the parties have selected the Oral Transaction Procedure in Section 1.2 of the Base Contract, the parties agree not to contest the validity or enforceability of telephonic recordings entered into in accordance with the requirements of this Base Contract.

SECTION 2. DEFINITIONS

2.1. The terms set forth below shall have the meaning ascribed to them below. Other terms are also defined elsewhere in the Contract and shall have the meanings ascribed to them herein.

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- 2.2. "Additional Event of Default" shall mean Transactional Cross Default or Indebtedness Cross Default, each as and if selected by the parties pursuant to the Base Contract.
- 2.3. "Affiliate" shall mean, in relation to any person, any entity controlled, directly or indirectly, by the person, any entity that controls, directly or indirectly, the person or any entity directly or indirectly under common control with the person. For this purpose, "control" of any entity or person means ownership of at least 50 percent of the voting power of the entity or person.
- 2.4. "Alternative Damages" shall mean such damages, expressed in dollars or dollars per MMBtu, as the parties shall agree upon in the Transaction Confirmation, in the event either Seller or Buyer fails to perform a Firm obligation to deliver Gas in the case of Seller or to receive Gas in the case of Buyer.
- 2.5. "Base Contract" shall mean a contract executed by the parties that incorporates these General Terms and Conditions by reference; that specifies the agreed selections of provisions contained herein; and that sets forth other information required herein and any Special Provisions and addendum(s) as identified on page one.
- 2.6. "British thermal unit" or "Btu" shall mean the International BTU, which is also called the Btu (IT).
- 2.7. "Business Day(s)" shall mean Monday through Friday, excluding Federal Banking Holidays for transactions in the U.S.
- 2.8. "Confirm Deadline" shall mean 5:00 p.m. in the receiving party's time zone on the second Business Day following the Day a Transaction Confirmation is received or, if applicable, on the Business Day agreed to by the parties in the Base Contract; provided, if the Transaction Confirmation is time stamped after 5:00 p.m. in the receiving party's time zone, it shall be deemed received at the opening of the next Business Day.
- 2.9. "Confirming Party" shall mean the party designated in the Base Contract to prepare and forward Transaction Confirmations to the other party.
- 2.10. "Contract" shall mean the legally-binding relationship established by (i) the Base Contract, (ii) any and all binding Transaction Confirmations and (iii) where the parties have selected the Oral Transaction Procedure in Section 1.2 of the Base Contract, any and all transactions that the parties have entered into through an EDI transmission or by telephone, but that have not been confirmed in a binding Transaction Confirmation, all of which shall form a single integrated agreement between the parties.
- 2.11. "Contract Price" shall mean the amount expressed in U.S. Dollars per MMBtu to be paid by Buyer to Seller for the purchase of Gas as agreed to by the parties in a transaction.
- 2.12. "Contract Quantity" shall mean the quantity of Gas to be delivered and taken as agreed to by the parties in a transaction.
- 2.13. "Cover Standard", as referred to in Section 3.2, shall mean that if there is an unexcused failure to take or deliver any quantity of Gas pursuant to this Contract, then the performing party shall use commercially reasonable efforts to (i) if Buyer is the performing party, obtain Gas, (or an alternate fuel if elected by Buyer and replacement Gas is not available), or (ii) if Seller is the performing party, sell Gas, in either case, at a price reasonable for the delivery or production area, as applicable, consistent with: the amount of notice provided by the nonperforming party; the immediacy of the Buyer's Gas consumption needs or Seller's Gas sales requirements, as applicable; the quantities involved; and the anticipated length of failure by the nonperforming party.
- 2.14. "Credit Support Obligation(s)" shall mean any obligation(s) to provide or establish credit support for, or on behalf of, a party to this Contract such as cash, an irrevocable standby letter of credit, a margin agreement, a prepayment, a security interest in an asset, guaranty, or other good and sufficient security of a continuing nature.
- 2.15. "Day" shall mean a period of 24 consecutive hours, coextensive with a "day" as defined by the Receiving Transporter in a particular transaction.
- 2.16. "Delivery Period" shall be the period during which deliveries are to be made as agreed to by the parties in a transaction.
- 2.17. "Delivery Point(s)" shall mean such point(s) as are agreed to by the parties in a transaction.
- 2.18. "EDI" shall mean an electronic data interchange pursuant to an agreement entered into by the parties, specifically relating to the communication of Transaction Confirmations under this Contract.
- 2.19. "EFP" shall mean the purchase, sale or exchange of natural Gas as the "physical" side of an exchange for physical transaction involving gas futures contracts. EFP shall incorporate the meaning and remedies of "Firm", provided that a party's excuse for nonperformance of its obligations to deliver or receive Gas will be governed by the rules of the relevant futures exchange regulated under the Commodity Exchange Act.
- 2.20. "Firm" shall mean that either party may interrupt its performance without liability only to the extent that such performance is prevented for reasons of Force Majeure; provided, however, that during Force Majeure interruptions, the party invoking Force Majeure may be responsible for any Imbalance Charges as set forth in Section

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- 4.3 related to its interruption after the nomination is made to the Transporter and until the change in deliveries and/or receipts is confirmed by the Transporter.
- 2.21. "Gas" shall mean any mixture of hydrocarbons and noncombustible gases in a gaseous state consisting primarily of methane.
- 2.22. "Guarantor" shall mean any entity that has provided a guaranty of the obligations of a party hereunder.
- 2.23. "Imbalance Charges" shall mean any fees, penalties, costs or charges (in cash or in kind) assessed by a Transporter for failure to satisfy the Transporter's balance and/or nomination requirements.
- 2.24. "Indebtedness Cross Default" shall mean if selected on the Base Contract by the parties with respect to a party, that it or its Guarantor, if any, experiences a default, or similar condition or event however therein defined, under one or more agreements or instruments, individually or collectively, relating to indebtedness (such indebtedness to include any obligation whether present or future, contingent or otherwise, as principal or surety or otherwise) for the payment or repayment of borrowed money in an aggregate amount greater than the threshold specified in the Base Contract with respect to such party or its Guarantor, if any, which results in such indebtedness becoming immediately due and payable.
- 2.25. "Interruptible" shall mean that either party may interrupt its performance at any time for any reason, whether or not caused by an event of Force Majeure, with no liability, except such interrupting party may be responsible for any Imbalance Charges as set forth in Section 4.3 related to its interruption after the nomination is made to the Transporter and until the change in deliveries and/or receipts is confirmed by Transporter.
- 2.26. "MMBtu" shall mean one million British thermal units, which is equivalent to one dekatherm.
- 2.27. "Month" shall mean the period beginning on the first Day of the calendar month and ending immediately prior to the commencement of the first Day of the next calendar month.
- 2.28. "Payment Date" shall mean a date, as indicated on the Base Contract, on or before which payment is due Seller for Gas received by Buyer in the previous Month.
- 2.29. "Receiving Transporter" shall mean the Transporter receiving Gas at a Delivery Point, or absent such receiving Transporter, the Transporter delivering Gas at a Delivery Point.
- 2.30. "Scheduled Gas" shall mean the quantity of Gas confirmed by Transporter(s) for movement, transportation or management.
- 2.31. "Specified Transaction(s)" shall mean any other transaction or agreement between the parties for the purchase, sale or exchange of physical Gas, and any other transaction or agreement identified as a Specified Transaction under the Base Contract.
- 2.32. "Spot Price " as referred to in Section 3.2 shall mean the price listed in the publication indicated on the Base Contract, under the listing applicable to the geographic location closest in proximity to the Delivery Point(s) for the relevant Day; provided, if there is no single price published for such location for such Day, but there is published a range of prices, then the Spot Price shall be the average of such high and low prices. If no price or range of prices is published for such Day, then the Spot Price shall be the average of the following: (i) the price (determined as stated above) for the first Day for which a price or range of prices is published that next precedes the relevant Day; and (ii) the price (determined as stated above) for the first Day for which a price or range of prices is published that next follows the relevant Day.
- 2.33. "Transaction Confirmation" shall mean a document, similar to the form of Exhibit A, setting forth the terms of a transaction formed pursuant to Section 1 for a particular Delivery Period.
- 2.34. "Transactional Cross Default" shall mean if selected on the Base Contract by the parties with respect to a party, that it shall be in default, however therein defined, under any Specified Transaction.
- 2.35. "Termination Option" shall mean the option of either party to terminate a transaction in the event that the other party fails to perform a Firm obligation to deliver Gas in the case of Seller or to receive Gas in the case of Buyer for a designated number of days during a period as specified on the applicable Transaction Confirmation.
- 2.36. "Transporter(s)" shall mean all Gas gathering or pipeline companies, or local distribution companies, acting in the capacity of a transporter, transporting Gas for Seller or Buyer upstream or downstream, respectively, of the Delivery Point pursuant to a particular transaction.

SECTION 3. PERFORMANCE OBLIGATION

3.1. Seller agrees to sell and deliver, and Buyer agrees to receive and purchase, the Contract Quantity for a particular transaction in accordance with the terms of the Contract. Sales and purchases will be on a Firm or Interruptible basis, as agreed to by the parties in a transaction.

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Contract.

Cover Standard:

3.2. The sole and exclusive remedy of the parties in the event of a breach of a Firm obligation to deliver or receive Gas shall be recovery of the following: (i) in the event of a breach by Seller on any Day(s), payment by Seller to Buyer in an amount equal to the positive difference, if any, between the purchase price paid by Buyer utilizing the Cover Standard and the Contract Price, adjusted for commercially reasonable differences in transportation costs to or from the Delivery Point(s), multiplied by the difference between the Contract Quantity and the quantity actually delivered by Seller for such Day(s) excluding any quantity for which no replacement is available; or (ii) in the event of a breach by Buyer on any Day(s), payment by Buyer to Seller in the amount equal to the positive difference, if any, between the Contract Price and the price received by Seller utilizing the Cover Standard for the resale of such Gas, adjusted for commercially reasonable differences in transportation costs to or from the Delivery Point(s), multiplied by the difference between the Contract Quantity and the quantity actually taken by Buyer for such Day(s) excluding any quantity for which no sale is available; and (iii) in the event that Buyer has used commercially reasonable efforts to replace the Gas or Seller has used commercially reasonable efforts to sell the Gas to a third party, and no such replacement or sale is available for all or any portion of the Contract Quantity of Gas, then in addition to (i) or (ii) above, as applicable, the sole and exclusive remedy of the performing party with respect to the Gas not replaced or sold shall be an amount equal to any unfavorable difference between the Contract Price and the Spot Price, adjusted for such transportation to the applicable Delivery Point, multiplied by the quantity of such Gas not replaced or sold. Imbalance Charges shall not be recovered under this Section 3.2, but Seller and/or Buyer shall be responsible for Imbalance Charges, if any, as provided in Section 4.3. The amount of such unfavorable difference shall be payable five Business Days after presentation of the performing party's invoice, which shall set forth the basis upon which such amount was calculated.

Spot Price Standard:

- 3.2. The sole and exclusive remedy of the parties in the event of a breach of a Firm obligation to deliver or receive Gas shall be recovery of the following: (i) in the event of a breach by Seller on any Day(s), payment by Seller to Buyer in an amount equal to the difference between the Contract Quantity and the actual quantity delivered by Seller and received by Buyer for such Day(s), multiplied by the positive difference, if any, obtained by subtracting the Contract Price from the Spot Price; or (ii) in the event of a breach by Buyer on any Day(s), payment by Buyer to Seller in an amount equal to the difference between the Contract Quantity and the actual quantity delivered by Seller and received by Buyer for such Day(s), multiplied by the positive difference, if any, obtained by subtracting the applicable Spot Price from the Contract Price. Imbalance Charges shall not be recovered under this Section 3.2, but Seller and/or Buyer shall be responsible for Imbalance Charges, if any, as provided in Section 4.3. The amount of such unfavorable difference shall be payable five Business Days after presentation of the performing party's invoice, which shall set forth the basis upon which such amount was calculated.
- 3.3. Notwithstanding Section 3.2, the parties may agree to Alternative Damages in a Transaction Confirmation executed in writing by both parties.
- 3.4. In addition to Sections 3.2 and 3.3, the parties may provide for a Termination Option in a Transaction Confirmation executed in writing by both parties. The Transaction Confirmation containing the Termination Option will designate the length of nonperformance triggering the Termination Option and the procedures for exercise thereof, how damages for nonperformance will be compensated, and how liquidation costs will be calculated.

SECTION 4. TRANSPORTATION, NOMINATIONS, AND IMBALANCES

- 4.1. Seller shall have the sole responsibility for transporting the Gas to the Delivery Point(s). Buyer shall have the sole responsibility for transporting the Gas from the Delivery Point(s).
- 4.2. The parties shall coordinate their nomination activities, giving sufficient time to meet the deadlines of the affected Transporter(s). Each party shall give the other party timely prior Notice, sufficient to meet the requirements of all Transporter(s) involved in the transaction, of the quantities of Gas to be delivered and purchased each Day. Should either party become aware that actual deliveries at the Delivery Point(s) are greater or lesser than the Scheduled Gas, such party shall promptly notify the other party.
- 4.3. The parties shall use commercially reasonable efforts to avoid imposition of any Imbalance Charges. If Buyer or Seller receives an invoice from a Transporter that includes Imbalance Charges, the parties shall determine the validity as well as the cause of such Imbalance Charges. If the Imbalance Charges were incurred as a result of Buyer's receipt of quantities of Gas greater than or less than the Scheduled Gas, then Buyer shall pay for such Imbalance Charges or reimburse Seller for such Imbalance Charges paid by Seller. If the Imbalance Charges were incurred as a result of Seller's delivery of quantities of Gas greater than or less than the Scheduled Gas, then Seller shall pay for such Imbalance Charges or reimburse Buyer for such Imbalance Charges paid by Buyer.

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SECTION 5. QUALITY AND MEASUREMENT

All Gas delivered by Seller shall meet the pressure, quality and heat content requirements of the Receiving Transporter. The unit of quantity measurement for purposes of this Contract shall be one MMBtu dry. Measurement of Gas quantities hereunder shall be in accordance with the established procedures of the Receiving Transporter.

SECTION 6. TAXES

The parties have selected either "Buyer Pays At and After Delivery Point" or "Seller Pays Before and At Delivery Point" as indicated on the Base Contract.

Buyer Pays At and After Delivery Point:

Seller shall pay or cause to be paid all taxes, fees, levies, penalties, licenses or charges imposed by any government authority ("Taxes") on or with respect to the Gas prior to the Delivery Point(s). Buyer shall pay or cause to be paid all Taxes on or with respect to the Gas at the Delivery Point(s) and all Taxes after the Delivery Point(s). If a party is required to remit or pay Taxes that are the other party's responsibility hereunder, the party responsible for such Taxes shall promptly reimburse the other party for such Taxes. Any party entitled to an exemption from any such Taxes or charges shall furnish the other party any necessary documentation thereof.

Seller Pays Before and At Delivery Point:

Seller shall pay or cause to be paid all taxes, fees, levies, penalties, licenses or charges imposed by any government authority ("Taxes") on or with respect to the Gas prior to the Delivery Point(s) and all Taxes at the Delivery Point(s). Buyer shall pay or cause to be paid all Taxes on or with respect to the Gas after the Delivery Point(s). If a party is required to remit or pay Taxes that are the other party's responsibility hereunder, the party responsible for such Taxes shall promptly reimburse the other party for such Taxes. Any party entitled to an exemption from any such Taxes or charges shall furnish the other party any necessary documentation thereof.

SECTION 7. BILLING, PAYMENT, AND AUDIT

- 7.1. Seller shall invoice Buyer for Gas delivered and received in the preceding Month and for any other applicable charges, providing supporting documentation acceptable in industry practice to support the amount charged. If the actual quantity delivered is not known by the billing date, billing will be prepared based on the quantity of Scheduled Gas. The invoiced quantity will then be adjusted to the actual quantity on the following Month's billing or as soon thereafter as actual delivery information is available.
- 7.2. Buyer shall remit the amount due under Section 7.1 in the manner specified in the Base Contract, in immediately available funds, on or before the later of the Payment Date or 10 Days after receipt of the invoice by Buyer; provided that if the Payment Date is not a Business Day, payment is due on the next Business Day following that date. In the event any payments are due Buyer hereunder, payment to Buyer shall be made in accordance with this Section 7.2.
- 7.3. In the event payments become due pursuant to Sections 3.2 or 3.3, the performing party may submit an invoice to the nonperforming party for an accelerated payment setting forth the basis upon which the invoiced amount was calculated. Payment from the nonperforming party will be due five Business Days after receipt of invoice.
- 7.4. If the invoiced party, in good faith, disputes the amount of any such invoice or any part thereof, such invoiced party will pay such amount as it concedes to be correct; provided, however, if the invoiced party disputes the amount due, it must provide supporting documentation acceptable in industry practice to support the amount paid or disputed without undue delay. In the event the parties are unable to resolve such dispute, either party may pursue any remedy available at law or in equity to enforce its rights pursuant to this Section.
- 7.5. If the invoiced party fails to remit the full amount payable when due, interest on the unpaid portion shall accrue from the date due until the date of payment at a rate equal to the lower of (i) the then-effective prime rate of interest published under "Money Rates" by The Wall Street Journal, plus two percent per annum; or (ii) the maximum applicable lawful interest rate.
- 7.6. A party shall have the right, at its own expense, upon reasonable Notice and at reasonable times, to examine and audit and to obtain copies of the relevant portion of the books, records, and telephone recordings of the other party only to the extent reasonably necessary to verify the accuracy of any statement, charge, payment, or computation made under the Contract. This right to examine, audit, and to obtain copies shall not be available with respect to proprietary information not directly relevant to transactions under this Contract. All invoices and billings shall be conclusively presumed final and accurate and all associated claims for under- or overpayments shall be deemed waived unless such invoices or billings are objected to in writing, with adequate explanation and/or documentation, within two years after the Month of Gas delivery. All retroactive adjustments under Section 7 shall be paid in full by the party owing payment within 30 Days of Notice and substantiation of such inaccuracy.
- 7.7. Unless the parties have elected on the Base Contract not to make this Section 7.7 applicable to this Contract, the parties shall net all undisputed amounts due and owing, and/or past due, arising under the Contract such that the party owing the greater amount shall make a single payment of the net amount to the other party in accordance with

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Section 7; provided that no payment required to be made pursuant to the terms of any Credit Support Obligation or pursuant to Section 7.3 shall be subject to netting under this Section. If the parties have executed a separate netting agreement, the terms and conditions therein shall prevail to the extent inconsistent herewith.

SECTION 8. TITLE, WARRANTY, AND INDEMNITY

- 8.1. Unless otherwise specifically agreed, title to the Gas shall pass from Seller to Buyer at the Delivery Point(s). Seller shall have responsibility for and assume any liability with respect to the Gas prior to its delivery to Buyer at the specified Delivery Point(s). Buyer shall have responsibility for and assume any liability with respect to said Gas after its delivery to Buyer at the Delivery Point(s).
- 8.2. Seller warrants that it will have the right to convey and will transfer good and merchantable title to all Gas sold hereunder and delivered by it to Buyer, free and clear of all liens, encumbrances, and claims. EXCEPT AS PROVIDED IN THIS SECTION 8.2 AND IN SECTION 15.8, ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR ANY PARTICULAR PURPOSE, ARE DISCLAIMED.
- 8.3. Seller agrees to indemnify Buyer and save it harmless from all losses, liabilities or claims including reasonable attorneys' fees and costs of court ("Claims"), from any and all persons, arising from or out of claims of title, personal injury (including death) or property damage from said Gas or other charges thereon which attach before title passes to Buyer. Buyer agrees to indemnify Seller and save it harmless from all Claims, from any and all persons, arising from or out of claims regarding payment, personal injury (including death) or property damage from said Gas or other charges thereon which attach after title passes to Buyer.
- 8.4. The parties agree that the delivery of and the transfer of title to all Gas under this Contract shall take place within the Customs Territory of the United States (as defined in general note 2 of the Harmonized Tariff Schedule of the United States 19 U.S.C. §1202, General Notes, page 3); provided, however, that in the event Seller took title to the Gas outside the Customs Territory of the United States, Seller represents and warrants that it is the importer of record for all Gas entered and delivered into the United States, and shall be responsible for entry and entry summary filings as well as the payment of duties, taxes and fees, if any, and all applicable record keeping requirements.
- 8.5. Notwithstanding the other provisions of this Section 8, as between Seller and Buyer, Seller will be liable for all Claims to the extent that such arise from the failure of Gas delivered by Seller to meet the quality requirements of Section 5.

SECTION 9. NOTICES

- 9.1. All Transaction Confirmations, invoices, payment instructions, and other communications made pursuant to the Base Contract ("Notices") shall be made to the addresses specified in writing by the respective parties from time to time.
- 9.2. All Notices required hereunder shall be in writing and may be sent by facsimile or mutually acceptable electronic means, a nationally recognized overnight courier service, first class mail or hand delivered.
- 9.3. Notice shall be given when received on a Business Day by the addressee. In the absence of proof of the actual receipt date, the following presumptions will apply. Notices sent by facsimile shall be deemed to have been received upon the sending party's receipt of its facsimile machine's confirmation of successful transmission. If the day on which such facsimile is received is not a Business Day or is after five p.m. on a Business Day, then such facsimile shall be deemed to have been received on the next following Business Day. Notice by overnight mail or courier shall be deemed to have been received on the next Business Day after it was sent or such earlier time as is confirmed by the receiving party. Notice via first class mail shall be considered delivered five Business Days after mailing.
- 9.4. The party receiving a commercially acceptable Notice of change in payment instructions or other payment information shall not be obligated to implement such change until ten Business Days after receipt of such Notice.

SECTION 10. FINANCIAL RESPONSIBILITY

10.1. If either party ("X") has reasonable grounds for insecurity regarding the performance of any obligation under this Contract (whether or not then due) by the other party ("Y") (including, without limitation, the occurrence of a material change in the creditworthiness of Y or its Guarantor, if applicable), X may demand Adequate Assurance of Performance. "Adequate Assurance of Performance" shall mean sufficient security in the form, amount, for a term, and from an issuer, all as reasonably acceptable to X, including, but not limited to cash, a standby irrevocable letter of credit, a prepayment, a security interest in an asset or guaranty. Y hereby grants to X a continuing first priority security interest in, lien on, and right of setoff against all Adequate Assurance of Performance in the form of cash transferred by Y to X pursuant to this Section 10.1. Upon the return by X to Y of such Adequate Assurance of Performance, the security interest and lien granted hereunder on that Adequate Assurance of Performance shall be released automatically and, to the extent possible, without any further action by either party.

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- 10.2. In the event (each an "Event of Default") either party (the "Defaulting Party") or its Guarantor shall: (i) make an assignment or any general arrangement for the benefit of creditors; (ii) file a petition or otherwise commence, authorize, or acquiesce in the commencement of a proceeding or case under any bankruptcy or similar law for the protection of creditors or have such petition filed or proceeding commenced against it; (iii) otherwise become bankrupt or insolvent (however evidenced); (iv) be unable to pay its debts as they fall due; (v) have a receiver, provisional liquidator, conservator, custodian, trustee or other similar official appointed with respect to it or substantially all of its assets; (vi) fail to perform any obligation to the other party with respect to any Credit Support Obligations relating to the Contract; (vii) fail to give Adequate Assurance of Performance under Section 10.1 within 48 hours but at least one Business Day of a written request by the other party; (viii) not have paid any amount due the other party hereunder on or before the second Business Day following written Notice that such payment is due; or ix) be the affected party with respect to any Additional Event of Default; then the other party (the "Non-Defaulting Party") shall have the right, at its sole election, to immediately withhold and/or suspend deliveries or payments upon Notice and/or to terminate and liquidate the transactions under the Contract, in the manner provided in Section 10.3, in addition to any and all other remedies available hereunder.
- 10.3. If an Event of Default has occurred and is continuing, the Non-Defaulting Party shall have the right, by Notice to the Defaulting Party, to designate a Day, no earlier than the Day such Notice is given and no later than 20 Days after such Notice is given, as an early termination date (the "Early Termination Date") for the liquidation and termination pursuant to Section 10.3.1 of all transactions under the Contract, each a "Terminated Transaction". On the Early Termination Date, all transactions will terminate, other than those transactions, if any, that may not be liquidated and terminated under applicable law ("Excluded Transactions"), which Excluded Transactions must be liquidated and terminated as soon thereafter as is legally permissible, and upon termination shall be a Terminated Transaction and be valued consistent with Section 10.3.1 below. With respect to each Excluded Transaction, its actual termination date shall be the Early Termination Date for purposes of Section 10.3.1.

The parties have selected either "Early Termination Damages Apply" or "Early Termination Damages Do Not Apply" as indicated on the Base Contract.

Early Termination Damages Apply:

10.3.1. As of the Early Termination Date, the Non-Defaulting Party shall determine, in good faith and in a commercially reasonable manner, (i) the amount owed (whether or not then due) by each party with respect to all Gas delivered and received between the parties under Terminated Transactions and Excluded Transactions on and before the Early Termination Date and all other applicable charges relating to such deliveries and receipts (including without limitation any amounts owed under Section 3.2), for which payment has not yet been made by the party that owes such payment under this Contract and (ii) the Market Value, as defined below, of each Terminated Transaction. The Non-Defaulting Party shall (x) liquidate and accelerate each Terminated Transaction at its Market Value, so that each amount equal to the difference between such Market Value and the Contract Value, as defined below, of such Terminated Transaction(s) shall be due to the Buyer under the Terminated Transaction(s) if such Market Value exceeds the Contract Value and to the Seller if the opposite is the case; and (y) where appropriate, discount each amount then due under clause (x) above to present value in a commercially reasonable manner as of the Early Termination Date (to take account of the period between the date of liquidation and the date on which such amount would have otherwise been due pursuant to the relevant Terminated Transactions).

For purposes of this Section 10.3.1, "Contract Value" means the amount of Gas remaining to be delivered or purchased under a transaction multiplied by the Contract Price, and "Market Value" means the amount of Gas remaining to be delivered or purchased under a transaction multiplied by the market price for a similar transaction at the Delivery Point determined by the Non-Defaulting Party in a commercially reasonable manner. To ascertain the Market Value, the Non-Defaulting Party may consider, among other valuations, any or all of the settlement prices of NYMEX Gas futures contracts, quotations from leading dealers in energy swap contracts or physical gas trading markets, similar sales or purchases and any other bona fide third-party offers, all adjusted for the length of the term and differences in transportation costs. A party shall not be required to enter into a replacement transaction(s) in order to determine the Market Value. Any extension(s) of the term of a transaction to which parties are not bound as of the Early Termination Date (including but not limited to "evergreen provisions") shall not be considered in determining Contract Values and Market Values. For the avoidance of doubt, any option pursuant to which one party has the right to extend the term of a transaction shall be considered in determining Contract Values and Market Values. The rate of interest used in calculating net present value shall be determined by the Non-Defaulting Party in a commercially reasonable manner.

Early Termination Damages Do Not Apply:

10.3.1. As of the Early Termination Date, the Non-Defaulting Party shall determine, in good faith and in a commercially reasonable manner, the amount owed (whether or not then due) by each party with respect to all Gas delivered and received between the parties under Terminated Transactions and Excluded Transactions on and before the Early Termination Date and all other applicable charges relating to such deliveries and receipts (including without limitation any amounts owed under Section 3.2), for which payment has not yet been made by the party that owes

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such payment under this Contract.

The parties have selected either "Other Agreement Setoffs Apply" or "Other Agreement Setoffs Do Not Apply" as indicated on the Base Contract.

Other Agreement Setoffs Apply:

Bilateral Setoff Option:

10.3.2. The Non-Defaulting Party shall net or aggregate, as appropriate, any and all amounts owing between the parties under Section 10.3.1, so that all such amounts are netted or aggregated to a single liquidated amount payable by one party to the other (the "Net Settlement Amount"). At its sole option and without prior Notice to the Defaulting Party, the Non-Defaulting Party is hereby authorized to setoff any Net Settlement Amount against (i) any margin or other collateral held by a party in connection with any Credit Support Obligation relating to the Contract; and (ii) any amount(s) (including any excess cash margin or excess cash collateral) owed or held by the party that is entitled to the Net Settlement Amount under any other agreement or arrangement between the parties.

Triangular Setoff Option:

10.3.2. The Non-Defaulting Party shall net or aggregate, as appropriate, any and all amounts owing between the parties under Section 10.3.1, so that all such amounts are netted or aggregated to a single liquidated amount payable by one party to the other (the "Net Settlement Amount"). At its sole option, and without prior Notice to the Defaulting Party, the Non-Defaulting Party is hereby authorized to setoff (i) any Net Settlement Amount against any margin or other collateral held by a party in connection with any Credit Support Obligation relating to the Contract; (ii) any Net Settlement Amount against any amount(s) (including any excess cash margin or excess cash collateral) owed by or to a party under any other agreement or arrangement between the parties; (iii) any Net Settlement Amount owed to the Non-Defaulting Party against any amount(s) (including any excess cash margin or excess cash collateral) owed by the Non-Defaulting Party or its Affiliates to the Defaulting Party against any amount(s) (including any excess cash margin or excess cash collateral) owed by the Defaulting Party to the Non-Defaulting Party or its Affiliates under any other agreement or arrangement; and/or (v) any Net Settlement Amount owed to the Defaulting Party against any amount(s) (including any excess cash margin or excess cash collateral) owed by the Defaulting Party or its Affiliates to the Non-Defaulting Party under any other agreement or arrangement.

Other Agreement Setoffs Do Not Apply:

- 10.3.2. The Non-Defaulting Party shall net or aggregate, as appropriate, any and all amounts owing between the parties under Section 10.3.1, so that all such amounts are netted or aggregated to a single liquidated amount payable by one party to the other (the "Net Settlement Amount"). At its sole option and without prior Notice to the Defaulting Party, the Non-Defaulting Party may setoff any Net Settlement Amount against any margin or other collateral held by a party in connection with any Credit Support Obligation relating to the Contract.
- 10.3.3. If any obligation that is to be included in any netting, aggregation or setoff pursuant to Section 10.3.2 is unascertained, the Non-Defaulting Party may in good faith estimate that obligation and net, aggregate or setoff, as applicable, in respect of the estimate, subject to the Non-Defaulting Party accounting to the Defaulting Party when the obligation is ascertained. Any amount not then due which is included in any netting, aggregation or setoff pursuant to Section 10.3.2 shall be discounted to net present value in a commercially reasonable manner determined by the Non-Defaulting Party.
- 10.4. As soon as practicable after a liquidation, Notice shall be given by the Non-Defaulting Party to the Defaulting Party of the Net Settlement Amount, and whether the Net Settlement Amount is due to or due from the Non-Defaulting Party. The Notice shall include a written statement explaining in reasonable detail the calculation of the Net Settlement Amount, provided that failure to give such Notice shall not affect the validity or enforceability of the liquidation or give rise to any claim by the Defaulting Party against the Non-Defaulting Party. The Net Settlement Amount as well as any setoffs applied against such amount pursuant to Section 10.3.2, shall be paid by the close of business on the second Business Day following such Notice, which date shall not be earlier than the Early Termination Date. Interest on any unpaid portion of the Net Settlement Amount as adjusted by setoffs, shall accrue from the date due until the date of payment at a rate equal to the lower of (i) the then-effective prime rate of interest published under "Money Rates" by The Wall Street Journal, plus two percent per annum; or (ii) the maximum applicable lawful interest rate.
- 10.5. The parties agree that the transactions hereunder constitute a "forward contract" within the meaning of the United States Bankruptcy Code and that Buyer and Seller are each "forward contract merchants" within the meaning of the United States Bankruptcy Code.
- 10.6. The Non-Defaulting Party's remedies under this Section 10 are the sole and exclusive remedies of the Non-Defaulting Party with respect to the occurrence of any Early Termination Date. Each party reserves to itself all other rights, setoffs, counterclaims and other defenses that it is or may be entitled to arising from the Contract.

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10.7. With respect to this Section 10, if the parties have executed a separate netting agreement with close-out netting provisions, the terms and conditions therein shall prevail to the extent inconsistent herewith.

SECTION 11. FORCE MAJEURE

- 11.1. Except with regard to a party's obligation to make payment(s) due under Section 7, Section 10.4, and Imbalance Charges under Section 4, neither party shall be liable to the other for failure to perform a Firm obligation, to the extent such failure was caused by Force Majeure. The term "Force Majeure" as employed herein means any cause not reasonably within the control of the party claiming suspension, as further defined in Section 11.2.
- 11.2. Force Majeure shall include, but not be limited to, the following: (i) physical events such as acts of God, landslides, lightning, earthquakes, fires, storms or storm warnings, such as hurricanes, which result in evacuation of the affected area, floods, washouts, explosions, breakage or accident or necessity of repairs to machinery or equipment or lines of pipe; (ii) weather related events affecting an entire geographic region, such as low temperatures which cause freezing or failure of wells or lines of pipe; (iii) interruption and/or curtailment of Firm transportation and/or storage by Transporters; (iv) acts of others such as strikes, lockouts or other industrial disturbances, riots, sabotage, insurrections or wars, or acts of terror; and (v) governmental actions such as necessity for compliance with any court order, law, statute, ordinance, regulation, or policy having the effect of law promulgated by a governmental authority having jurisdiction. Seller and Buyer shall make reasonable efforts to avoid the adverse impacts of a Force Majeure and to resolve the event or occurrence once it has occurred in order to resume performance.
- 11.3. Neither party shall be entitled to the benefit of the provisions of Force Majeure to the extent performance is affected by any or all of the following circumstances: (i) the curtailment of interruptible or secondary Firm transportation unless primary, in-path, Firm transportation is also curtailed; (ii) the party claiming excuse failed to remedy the condition and to resume the performance of such covenants or obligations with reasonable dispatch; or (iii) economic hardship, to include, without limitation, Seller's ability to sell Gas at a higher or more advantageous price than the Contract Price, Buyer's ability to purchase Gas at a lower or more advantageous price than the Contract Price, or a regulatory agency disallowing, in whole or in part, the pass through of costs resulting from this Contract; (iv) the loss of Buyer's market(s) or Buyer's inability to use or resell Gas purchased hereunder, except, in either case, as provided in Section 11.2; or (v) the loss or failure of Seller's gas supply or depletion of reserves, except, in either case, as provided in Section 11.2. The party claiming Force Majeure shall not be excused from its responsibility for Imbalance Charges.
- 11.4. Notwithstanding anything to the contrary herein, the parties agree that the settlement of strikes, lockouts or other industrial disturbances shall be within the sole discretion of the party experiencing such disturbance.
- 11.5. The party whose performance is prevented by Force Majeure must provide Notice to the other party. Initial Notice may be given orally; however, written Notice with reasonably full particulars of the event or occurrence is required as soon as reasonably possible. Upon providing written Notice of Force Majeure to the other party, the affected party will be relieved of its obligation, from the onset of the Force Majeure event, to make or accept delivery of Gas, as applicable, to the extent and for the duration of Force Majeure, and neither party shall be deemed to have failed in such obligations to the other during such occurrence or event.
- 11.6. Notwithstanding Sections 11.2 and 11.3, the parties may agree to alternative Force Majeure provisions in a Transaction Confirmation executed in writing by both parties.

SECTION 12. TERM

This Contract may be terminated on 30 Day's written Notice, but shall remain in effect until the expiration of the latest Delivery Period of any transaction(s). The rights of either party pursuant to Section 7.6, Section 10, Section 13, the obligations to make payment hereunder, and the obligation of either party to indemnify the other, pursuant hereto shall survive the termination of the Base Contract or any transaction.

SECTION 13. LIMITATIONS

FOR BREACH OF ANY PROVISION FOR WHICH AN EXPRESS REMEDY OR MEASURE OF DAMAGES IS PROVIDED, SUCH EXPRESS REMEDY OR MEASURE OF DAMAGES SHALL BE THE SOLE AND EXCLUSIVE REMEDY. A PARTY'S LIABILITY HEREUNDER SHALL BE LIMITED AS SET FORTH IN SUCH PROVISION, AND ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY ARE WAIVED. IF NO REMEDY OR MEASURE OF DAMAGES IS EXPRESSLY PROVIDED HEREIN OR IN A TRANSACTION, A PARTY'S LIABILITY SHALL BE LIMITED TO DIRECT ACTUAL DAMAGES ONLY. SUCH DIRECT ACTUAL DAMAGES SHALL BE THE SOLE AND EXCLUSIVE REMEDY, AND ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY ARE WAIVED. UNLESS EXPRESSLY HEREIN PROVIDED, NEITHER PARTY SHALL BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, PUNITIVE, EXEMPLARY OR INDIRECT DAMAGES, LOST PROFITS OR OTHER BUSINESS INTERRUPTION DAMAGES, BY STATUTE, IN TORT OR CONTRACT, UNDER ANY INDEMNITY PROVISION OR OTHERWISE. IT IS THE INTENT OF THE PARTIES THAT THE LIMITATIONS HEREIN IMPOSED ON REMEDIES AND THE MEASURE OF DAMAGES BE WITHOUT REGARD TO THE CAUSE OR CAUSES RELATED THERETO, INCLUDING THE NEGLIGENCE OF ANY PARTY, WHETHER SUCH

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NEGLIGENCE BE SOLE, JOINT OR CONCURRENT, OR ACTIVE OR PASSIVE. TO THE EXTENT ANY DAMAGES REQUIRED TO BE PAID HEREUNDER ARE LIQUIDATED, THE PARTIES ACKNOWLEDGE THAT THE DAMAGES ARE DIFFICULT OR IMPOSSIBLE TO DETERMINE, OR OTHERWISE OBTAINING AN ADEQUATE REMEDY IS INCONVENIENT AND THE DAMAGES CALCULATED HEREUNDER CONSTITUTE A REASONABLE APPROXIMATION OF THE HARM OR LOSS.

SECTION 14. MARKET DISRUPTION

If a Market Disruption Event has occurred then the parties shall negotiate in good faith to agree on a replacement price for the Floating Price (or on a method for determining a replacement price for the Floating Price) for the affected Day, and if the parties have not so agreed on or before the second Business Day following the affected Day then the replacement price for the Floating Price shall be determined within the next two following Business Days with each party obtaining, in good faith and from non-affiliated market participants in the relevant market, two quotes for prices of Gas for the affected Day of a similar quality and quantity in the geographical location closest in proximity to the Delivery Point and averaging the four quotes. If either party fails to provide two quotes then the average of the other party's two quotes shall determine the replacement price for the Floating Price. "Floating Price" means the price or a factor of the price agreed to in the transaction as being based upon a specified index. "Market Disruption Event" means, with respect to an index specified for a transaction, any of the following events: (a) the failure of the index to announce or publish information necessary for determining the Floating Price; (b) the failure of trading to commence or the permanent discontinuation or material suspension of trading on the exchange or market acting as the index; (c) the temporary or permanent discontinuance or unavailability of the index; (d) the temporary or permanent closing of any exchange acting as the index; or (e) both parties agree that a material change in the formula for or the method of determining the Floating Price has occurred. For the purposes of the calculation of a replacement price for the Floating Price, all numbers shall be rounded to three decimal places. If the fourth decimal number is five or greater, then the third decimal number shall be increased by one and if the fourth decimal number is less than five, then the third decimal number shall remain unchanged.

SECTION 15. MISCELLANEOUS

- 15.1. This Contract shall be binding upon and inure to the benefit of the successors, assigns, personal representatives, and heirs of the respective parties hereto, and the covenants, conditions, rights and obligations of this Contract shall run for the full term of this Contract. No assignment of this Contract, in whole or in part, will be made without the prior written consent of the non-assigning party (and shall not relieve the assigning party from liability hereunder), which consent will not be unreasonably withheld or delayed; provided, either party may (i) transfer, sell, pledge, encumber, or assign this Contract or the accounts, revenues, or proceeds hereof in connection with any financing or other financial arrangements, or (ii) transfer its interest to any parent or Affiliate by assignment, merger or otherwise without the prior approval of the other party. Upon any such assignment, transfer and assumption, the transferor shall remain principally liable for and shall not be relieved of or discharged from any obligations hereunder.
- 15.2. If any provision in this Contract is determined to be invalid, void or unenforceable by any court having jurisdiction, such determination shall not invalidate, void, or make unenforceable any other provision, agreement or covenant of this Contract.
- 15.3. No waiver of any breach of this Contract shall be held to be a waiver of any other or subsequent breach.
- 15.4. This Contract sets forth all understandings between the parties respecting each transaction subject hereto, and any prior contracts, understandings and representations, whether oral or written, relating to such transactions are merged into and superseded by this Contract and any effective transaction(s). This Contract may be amended only by a writing executed by both parties.
- 15.5. The interpretation and performance of this Contract shall be governed by the laws of the jurisdiction as indicated on the Base Contract, excluding, however, any conflict of laws rule which would apply the law of another jurisdiction.
- 15.6. This Contract and all provisions herein will be subject to all applicable and valid statutes, rules, orders and regulations of any governmental authority having jurisdiction over the parties, their facilities, or Gas supply, this Contract or transaction or any provisions thereof.
- 15.7. There is no third party beneficiary to this Contract.
- 15.8. Each party to this Contract represents and warrants that it has full and complete authority to enter into and perform this Contract. Each person who executes this Contract on behalf of either party represents and warrants that it has full and complete authority to do so and that such party will be bound thereby.
- 15.9. The headings and subheadings contained in this Contract are used solely for convenience and do not constitute a part of this Contract between the parties and shall not be used to construe or interpret the provisions of this Contract.
- 15.10. Unless the parties have elected on the Base Contract not to make this Section 15.10 applicable to this Contract, neither party shall disclose directly or indirectly without the prior written consent of the other party the terms of any

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transaction to a third party (other than the employees, lenders, royalty owners, counsel, accountants and other agents of the party, or prospective purchasers of all or substantially all of a party's assets or of any rights under this Contract, provided such persons shall have agreed to keep such terms confidential) except (i) in order to comply with any applicable law, order, regulation, or exchange rule, (ii) to the extent necessary for the enforcement of this Contract, (iii) to the extent necessary to implement any transaction, (iv) to the extent necessary to comply with a regulatory agency's reporting requirements including but not limited to gas cost recovery proceedings; or (v) to the extent such information is delivered to such third party for the sole purpose of calculating a published index. Each party shall notify the other party of any proceeding of which it is aware which may result in disclosure of the terms of any transaction (other than as permitted hereunder) and use reasonable efforts to prevent or limit the disclosure. The existence of this Contract is not subject to this confidentiality obligation. Subject to Section 13, the parties shall be entitled to all remedies available at law or in equity to enforce, or seek relief in connection with this confidentiality obligation. The terms of any transaction hereunder shall be kept confidential by the parties hereto for one year from the expiration of the transaction.

In the event that disclosure is required by a governmental body or applicable law, the party subject to such requirement may disclose the material terms of this Contract to the extent so required, but shall promptly notify the other party, prior to disclosure, and shall cooperate (consistent with the disclosing party's legal obligations) with the other party's efforts to obtain protective orders or similar restraints with respect to such disclosure at the expense of the other party.

- 15.11. The parties may agree to dispute resolution procedures in Special Provisions attached to the Base Contract or in a Transaction Confirmation executed in writing by both parties
- 15.12. Any original executed Base Contract, Transaction Confirmation or other related document may be digitally copied, photocopied, or stored on computer tapes and disks (the "Imaged Agreement"). The Imaged Agreement, if introduced as evidence—on paper, the Transaction Confirmation, if introduced as evidence in automated facsimile form, the recording, if introduced as evidence in its original form, and all computer records of the foregoing, if introduced as evidence in printed format, in any judicial, arbitration, mediation or administrative proceedings will be admissible as between the parties to the same extent and under the same conditions as other business records originated and maintained in documentary form. Neither Party shall object to the admissibility of the recording, the Transaction Confirmation, or the Imaged Agreement on the basis that such were not originated or maintained in documentary form. However, nothing herein shall be construed as a waiver of any other objection to the admissibility of such evidence.

DISCLAIMER: The purposes of this Contract are to facilitate trade, avoid misunderstandings and make more definite the terms of contracts of purchase and sale of natural gas. Further, NAESB does not mandate the use of this Contract by any party. NAESB DISCLAIMS AND EXCLUDES, AND ANY USER OF THIS CONTRACT ACKNOWLEDGES AND AGREES TO NAESB'S DISCLAIMER OF, ANY AND ALL WARRANTIES, CONDITIONS OR REPRESENTATIONS, EXPRESS OR IMPLIED, ORAL OR WRITTEN, WITH RESPECT TO THIS CONTRACT OR ANY PART THEREOF, INCLUDING ANY AND ALL IMPLIED WARRANTIES OR CONDITIONS OF TITLE, NON-INFRINGEMENT, MERCHANTABILITY, OR FITNESS OR SUITABILITY FOR ANY PARTICULAR PURPOSE (WHETHER OR NOT NAESB KNOWS, HAS REASON TO KNOW, HAS BEEN ADVISED, OR IS OTHERWISE IN FACT AWARE OF ANY SUCH PURPOSE), WHETHER ALLEGED TO ARISE BY LAW, BY REASON OF CUSTOM OR USAGE IN THE TRADE, OR BY COURSE OF DEALING. EACH USER OF THIS CONTRACT ALSO AGREES THAT UNDER NO CIRCUMSTANCES WILL NAESB BE LIABLE FOR ANY DIRECT, SPECIAL, INCIDENTAL, EXEMPLARY, PUNITIVE OR CONSEQUENTIAL DAMAGES ARISING OUT OF ANY USE OF THIS CONTRACT.

REDACTED

TRANSACTION CONFIRMATION FOR IMMEDIATE DELIVERY

EXHIBIT A

	7		
Letterhead/Logo	Date:,, Transaction Confirmation #:		
This Transaction Confirmation is subject to the Base Contract between Seller and Buyer dated The terms of this Transaction Confirmation are binding unless disputed in writing within 2 Business Days of receipt unless otherwise specified in the Base Contract.			
SELLER:	BUYER:		
Attn: Phone: Fax: Base Contract No. Transporter: Transporter Contract Number:	Transporter:		
Contract Price: \$/MMBtu or			
Delivery Period: Begin:	End:		
Performance Obligation and Contract Quantity: (Select One)			
Performance Obligation and Contract Quantity:	(Select One)		
Firm (Fixed Quantity): MMBtus/dayEFP	(Select One) Firm (Variable Quantity): Interruptible: MMBtus/day Minimum Up to MMBtus/day MMBtus/day Maximum subject to Section 4.2. at election of Buyer or Seller		
Firm (Fixed Quantity): MMBtus/dayEFP	Firm (Variable Quantity): MMBtus/day Minimum MMBtus/day Maximum subject to Section 4.2. at election of Buyer or Seller		
Firm (Fixed Quantity): MMBtus/day EFP Primary Delivery Point(s): Special Conditions:	Firm (Variable Quantity): MMBtus/day Minimum MMBtus/day Maximum subject to Section 4.2. at election of Buyer or Seller		
Firm (Fixed Quantity): MMBtus/day EFP Primary Delivery Point(s): Special Conditions:	Firm (Variable Quantity): MMBtus/day Minimum MMBtus/day Maximum subject to Section 4.2. at election of Buyer or Seller acts with primary firm capacity to the Primary Delivery Point.		
Firm (Fixed Quantity): MMBtus/day EFP Primary Delivery Point(s): Special Conditions: 1.)Seller must utilize pipeline control	Firm (Variable Quantity): Interruptible: MMBtus/day Minimum		
Firm (Fixed Quantity): MMBtus/day EFP Primary Delivery Point(s): Special Conditions: 1.)Seller must utilize pipeline control Seller:	Firm (Variable Quantity): MMBtus/day Minimum MMBtus/day Maximum subject to Section 4.2. at election of Buyer or Seller acts with primary firm capacity to the Primary Delivery Point. Buyer: Buyer: By:		
Firm (Fixed Quantity): MMBtus/day EFP Primary Delivery Point(s): Special Conditions: 1.)Seller must utilize pipeline control Seller: By:	Firm (Variable Quantity): MMBtus/day Minimum MMBtus/day Maximum subject to Section 4.2. at election of Buyer or Seller acts with primary firm capacity to the Primary Delivery Point. Buyer: By:		

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Special Provisions to Base Contract

and	, hereby	agree.	effective	as of
("Effective Date"), to the following special provisions ("Special P				
amend the North American Energy Standards Board, Inc. ("No	AESB") Ba	se Cont	ract for S	ale and
Purchase of Natural Gas, with the Effective Date("	Base Conf	tract").	Unless spe	ecifically
agreed to otherwise in a Transaction Confirmation by the parties, th	e Base Co	ntract, as	modified b	by these
Special Provisions, shall apply to all transactions for the purchase	and sale of	of Gas be	etween the	parties.
All capitalized terms used herein and not otherwise defined shall h	ave the me	eaning se	et forth in tl	he Base
Contract.				

1) Section 3.4 is amended by adding the following:

A performing party shall have the option to terminate an Affected Transaction by providing written notice to the non-performing party designating an Early Termination Date on which the Affected Transaction shall terminate. An "Affected Transaction" means a Firm Transaction with a Delivery Period of at least 30 Days in respect of which there has occurred either three consecutive Failure Days or five total Failure Days during the Term of such Firm Transaction. A "Failure Day" means a Day on which the non-performing party has failed to purchase and receive, or sell and deliver, as applicable, an amount equal to or greater than 96% of the Contract Quantity to be purchased and received or sold and delivered on such Day, which failure is not excused because of the non-performance of the performing party or by Force Majeure.

2) Section 5 shall be deleted in its entirety and replaced with following:

All Gas delivered by Seller shall meet the pressure, quality, heat content and interchangeability standards provided in the effective tariff at the time of delivery of the respective Receiving Transporter. The unit of quantity measurement for purposes of this Contract shall be one MMBtu dry. Measurement of Gas quantities hereunder shall be in accordance with the established procedures provided in the effective tariff at the time of delivery of the Receiving Transporter.

3) This section shall be added as new 11.7.

Notwithstanding anything to the contrary in Section 11, Force Majeure shall not include any act, event or circumstances occurring in a country in which LNG is produced or procured or any event that affects an LNG vessel prior to such vessel's departure from the LNG Loading Facilities (including but not limited to Gas liquefaction trains and associated liquefaction facilities, LNG storage and loading facilities, berth and marine facilities and other facilities, at which LNG is loaded onto LNG vessels) or during its voyage to the regasification or storage terminal for eventual delivery to selected delivery points.

REDACTED

Jessica Buno

From: Prag, Janet A. (Marketing)

Sent: Tuesday, October 27, 2015 4:11 PM

Cc: Allocca, John E. (Marketing); Brennan, Timothy J.; Jaffe, Samara A. (Marketing)

Subject: Requests for Proposals - Rhode Island & Massachusetts Electric Customers

Categories: Purple Category

To Providers of Gas Infrastructure in New England:

Please refer to the attached letter regarding the subject Requests for Proposals.

Thank you.

John E. Allocca Director, Gas Contracting & Compliance nationalgrid 100 East Old Country Road Hicksville, NY 11801 tel # 516-545-3108 cell # 917-750-6580



Janet A. Prag Senior Contract Specialist nationalgrid 100 E. Old Country Road

Hicksville, NY 11801 T: (516) 545-5463 F: (516) 806-4449

janet.prag@nationalgrid.com

REDACTED



October 27, 2015

To Gas Infrastructure Providers:

You recently received two RFPs pertaining to gas infrastructure expansion, one from National Grid on behalf of Rhode Island electric customers and one from National Grid and Eversource on behalf of Massachusetts electric customers.

Please be advised that National Grid EDCs are suspending verbal communications with all recipients of these recently issued RFPs until the bids of each RFP have been received. In the meantime, National Grid intends to respond to any questions or clarifications relating to the RFPs pursuant to Section C: Procedures and Bidder Certification.

Sincerely,

John Vaughn Vice President, Energy Procurement National Grid

REDACTED

Jessica Buno

From: Allocca, John E. (Marketing) Thursday, April 14, 2016 8:42 AM Sent: To: Prag, Janet A. (Marketing)

Subject: FW: EDC Pipeline Capacity/Supply Procurement

From: Scott, Emilee Mooney [mailto:EScott@rc.com]

Sent: Friday, October 30, 2015 2:10 PM To: eric.soderman@eversource.com

Cc: edna.karanian@eversource.com; Miranda, Joey Lee; Allocca, John E. (Marketing); Jaffe, Samara A. (Marketing);

Brennan, Timothy J.

Subject: RE: EDC Pipeline Capacity/Supply Procurement

Thank you, we appreciate the clarification.

Emilee

From: eric.soderman@eversource.com [mailto:eric.soderman@eversource.com]

Sent: Friday, October 30, 2015 2:08 PM

To: Scott, Emilee Mooney

Cc: edna.karanian@eversource.com; Miranda, Joey Lee; John.Allocca@nationalgrid.com; Samara.Jaffe@nationalgrid.com;

TIMOTHY.J.BRENNAN@nationalgrid.com

Subject: Re: EDC Pipeline Capacity/Supply Procurement

Hi Emilee,

The EDCs will endeavor to publish via the web all written responses to questions in a timely manner, but will not post any responses that in our sole discretion could jeopardize the competitive nature of any particular bid.

Questions are due by 5pm EST October 30th 2015.

Thank you

Eric

Eric Soderman **Eversource Energy** Gas Supply Phone

Email: eric.soderman@eversource.com

"Scott, Emilee Mooney" < EScott@rc.com> From:

To:

To: Edna M. Karanian/NUS@NU, Eric Soderman/NUS@NU, "John.Allocca@nationalgrid.com" <John.Allocca@nationalgrid.com",
"TIMOTHY.J.BRENNAN@nationalgrid.com" <Samara.Jaffe@nationalgrid.com" <Samara.Jaffe@nationalgrid.com" <Samara.Jaffe@nationalgrid.com",
"Miranda, Joey Lee" <imiranda@RC.com>

10/29/2015 02:52 PM Date:

EDC Pipeline Capacity/Supply Procurement Subject:

REDACTED

All,

We have two questions, the answers to which may shape further questions to be submitted tomorrow. As such, we would appreciate a promot reply if possible

•

Than Emilee

Emilee Mooney Scott

Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103 Direct 860.275.8362 | Fax 860.275.8299 escott@rc.com | www.rc.com Bio | Contact Card

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REDACTED

Jessica Buno

From: Allocca, John E. (Marketing)
Sent: Thursday, April 14, 2016 8:42 AM

To: Prag, Janet A. (Marketing)

Subject: FW: EDC Pipeline Capacity/Supply Procurement

From: Scott, Emilee Mooney [mailto:EScott@rc.com]

Sent: Friday, October 30, 2015 1:42 PM **To:** eric.soderman@eversource.com

Cc: edna.karanian@eversource.com; Miranda, Joey Lee; Allocca, John E. (Marketing); Jaffe, Samara A. (Marketing);

Brennan, Timothy J.

Subject: RE: EDC Pipeline Capacity/Supply Procurement

Eric

We are representing Algonquin Gas Transmission, LLC. Please let us know if we might expect an answer on our confidentiality question (*i.e.*, whether all questions and responses be made available to all potential bidders) before the question period ends later today. Thank you. Emilee

From: eric.soderman@eversource.com [mailto:eric.soderman@eversource.com]

Sent: Friday, October 30, 2015 12:31 PM

To: Scott, Emilee Mooney

Cc: edna.karanian@eversource.com; Miranda, Joey Lee; John.Allocca@nationalgrid.com; Samara.Jaffe@nationalgrid.com;

TIMOTHY.J.BRENNAN@nationalgrid.com

Subject: RE: EDC Pipeline Capacity/Supply Procurement

Hi Emilee.

As you aware of our identity, we would appreciate understanding who we are communicating with through your firm.

Thanks

Eric

Eric Soderman Eversource Energy

Gas Supply Phone:

Email: eric.soderman@eversource.com

From: "Scott, Emilee Mooney" < EScott@rc.com>

To: Eric Soderman/NUS@NU,

Cc: Edna M. Karanian/NUS@NU, "Miranda, Joey Lee" <imiranda@RC.com>, "John.Allocca@nationalgrid.com" <John.Allocca@nationalgrid.com", "Samara.Jaffe@nationalgrid.com" <Samara.Jaffe@nationalgrid.com" <Samara.Jaffe@nationalgrid.com <Samara.Jaff

Date: 10/30/2015 10:34 AM

Subject: RE: EDC Pipeline Capacity/Supply Procurement

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 57 of 153

We are not at liberty to reveal our client's identity at this time, but we confirm that it is a very interested bidder. **Emilee**

From: eric.soderman@eversource.com [mailto:eric.soderman@eversource.com]

Sent: Friday, October 30, 2015 9:51 AM

To: Scott, Emilee Mooney

Cc: edna.karanian@eversource.com; Miranda, Joey Lee; John.Allocca@nationalgrid.com; Samara.Jaffe@nationalgrid.com;

TIMOTHY.J.BRENNAN@nationalgrid.com

Subject: Re: EDC Pipeline Capacity/Supply Procurement

Hi Emilee.

Could you please indicate which client you are representing as part of the is RFP process?

Thanks

Eric

Eric Soderman **Eversource Energy** Gas Supply

Phone:

Email: eric.soderman@eversource.com

From: "Scott, Emilee Mooney" < EScott@rc.com>

To: Edna M. Karanian/NUS@NU, Eric Soderman/NUS@NU, "John.Allocca@nationalgrid.com" <John.Allocca@nationalgrid.com>,
"TIMOTHY.J.BRENNAN@nationalgrid.com" <TIMOTHY.J.BRENNAN@nationalgrid.com" <Samara.Jaffe@nationalgrid.com>,

"Miranda, Joey Lee" < imiranda@RC.com>

10/29/2015 02:52 PM Date:

EDC Pipeline Capacity/Supply Procurement Subject:

We have two questions, the answers to which may shape further questions to be submitted tomorrow. As such, we would appreciate a prompt reply if possible

Thank you.

Emilee

Emilee Mooney Scott

Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103 Direct 860.275.8362 | Fax 860.275.8299 escott@rc.com | www.rc.com Bio | Contact Card

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Jessica Buno

From: Allocca, John E. (Marketing)
Sent: Thursday, April 14, 2016 8:42 AM
To: Prag, Janet A. (Marketing)

Subject: FW: EXTRNL SENDR || EDC Pipeline Capacity/Supply Procurement

From: Denis Larivée

Sent: Wednesday, November 11, 2015 7:11 PM

To: Allocca, John E. (Marketing)

Subject: EXTRNL SENDR || EDC Pipeline Capacity/Supply Procurement

Good evening,

According to the RFP in subject.

At which address the written document should be send, and to who's attention.

Thank you!

Best regards,

Denis Larivée, Directeur adjoint au développement des affaires, Assistant director of business development 550, rue Sherbrooke Ouest, bureau 510, Tour Est, Montréal (QC) H3A 1B9

T:

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Jessica Buno

From: Denis Larivée

Sent: Thursday, November 12, 2015 10:39 AM

To: Prag, Janet A. (Marketing)

Cc: Allocca, John E. (Marketing); Jaffe, Samara A. (Marketing);

edna.karanian@eversource.com; eric.soderman@eversource.com

Subject: EXTRNL SENDR | RE: Requests for Proposals ("RFP") - EDC Pipeline Capacity/Supply

Procurement - Massachusetts & Rhode Island

Than you!

Best regards,

Denis Larivée, Directeur adjoint au développement des affaires, Assistant director of business development 550, rue Sherbrooke Ouest, bureau 510, Tour Est, Montréal (QC) H3A 1B9

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This e-mail may contain confidential or privileged information. If you are not the intended recipient, please notify us immediately. Thank you.

From: Prag, Janet A. (Marketing) [mailto

Sent: 12 novembre 2015 10:38

To: Denis Larivée

Cc: Allocca, John E. (Marketing) < John. Allocca@nationalgrid.com>; Jaffe, Samara A. (Marketing) < Samara. Jaffe@nationalgrid.com>; edna.karanian@eversource.com; eric.soderman@eversource.com

Subject: Requests for Proposals ("RFP") - EDC Pipeline Capacity/Supply Procurement - Massachusetts & Rhode Island

Hi Denis,

I'm responding to your inquiry to John Allocca regarding the address for paper copies of the proposals with respect to the subject RFPs.

For the Massachusetts RFP, the paper copy should be addressed to the following:

Edna Karanian 107 Selden Street Berlin CT 06037

and

John Allocca 100 East Old Country Road Hicksville NY 11801

For the Rhode Island RFP, the paper copy should be addressed to the following:

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 61 of 153

John Allocca 100 East Old Country Road Hicksville NY 11801

Please let me know if you require additional information.

Thank you, Janet

Janet A. Prag Senior Contract Specialist nationalgrid 100 E. Old Country Road Hicksville, NY 11801 T:

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Jessica Buno

From: Allocca, John E. (Marketing)
Sent: Thursday, April 14, 2016 8:42 AM

To: Prag, Janet A. (Marketing)

Subject: FW: EXTRNL SENDR || Confirmation of PNGTS Bid Delivery

From: Cynthia Armstrong [mailto:cynthia_armstrong@transcanada.com]

Sent: Thursday, November 12, 2015 10:30 PM

To: Allocca, John E. (Marketing); Brennan, Timothy J.; Jaffe, Samara A. (Marketing)

Cc: Don Bell; Margaret Foulds; Richard Bralow

Subject: EXTRNL SENDR || Confirmation of PNGTS Bid Delivery

Hi John, Tim an Samara,

I just wanted to make sure that you received PNGTS's bid response to National Grid's and Narragansett's RFPs I sent Narragansett's twice because the first email didn't have any intro on it. The emails that I sent were fairly large (13MB each) and I wanted to make sure that they didn't get bounced by your email system due to size.

Please confirm your receipt of our bid package, so we can break up and re-send if necessary.

Thanks, Cynthia

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Jessica Buno

From: Allocca, John E. (Marketing)
Sent: Thursday, April 14, 2016 8:42 AM

To: Prag, Janet A. (Marketing)

Subject: FW: EXTRNL SENDR || EDC Pipeline Capacity/Supply Procurement

From: Denis Larivée

Sent: Thursday, November 12, 2015 10:21 AM

To: Allocca, John E. (Marketing)

Cc: Josee Béliveau

Subject: RE: EXTRNL SENDR | EDC Pipeline Capacity/Supply Procurement

Perfect,

Well received, has mentioned, Josée need the delivery address for our written package.

Two separate package will be send with the same offer:

- Massachusset
- Rhode Island

Best regards,

Denis Larivée, Directeur adjoint au développement des affaires, Assistant director of business development 550, rue Sherbrooke Ouest, bureau 510, Tour Est, Montréal (QC) H3A 1B9

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From: Allocca, John E. (Marketing) [mailto:John.Allocca@nationalgrid.com]

Sent: 12 novembre 2015 10:15

To: Denis Larivée

Subject: RE: EXTRNL SENDR | | EDC Pipeline Capacity/Supply Procurement

I received your email and will respond very soon.

From: Denis Larivée

Sent: Wednesday, November 11, 2015 7:11 PM

To: Allocca, John E. (Marketing)

Subject: EXTRNL SENDR || EDC Pipeline Capacity/Supply Procurement

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 64 of 153

(-'004	evening,
aoou	evenine.

According to the RFP in subject.

At which address the written document should be send, and to who's attention.

Thank you!

Best regards,

Denis Larivée, Directeur adjoint au développement des affaires, Assistant director of business development 550, rue Sherbrooke Ouest, bureau 510, Tour Est, Montréal (QC) H3A 1B9

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Jessica Buno

From: Denis Larivée

Sent: Thursday, November 12, 2015 1:53 PM

To: Prag, Janet A. (Marketing)

Cc: Allocca, John E. (Marketing); Jaffe, Samara A. (Marketing);

edna.karanian@eversource.com; eric.soderman@eversource.com

Subject: EXTRNL SENDR || RE: Requests for Proposals ("RFP") - EDC Pipeline Capacity/Supply

Procurement - Massachusetts & Rhode Island

Categories: Yellow Category

Good afternoon,

A few questions to answer please:

- How do you want to be identify both RFP Rhode Island and Massachusetts?
- Please provide us the name and address of the both buyers, for our term sheet proposal?

Best regards,

Denis Larivée, Directeur adjoint au développement des affaires, Assistant director of business development 550, rue Sherbrooke Ouest, bureau 510, Tour Est, Montréal (QC) H3A 1B9

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From: Prag, Janet A. (Marketing)

Sent: 12 novembre 2015 10:38

To: Denis Larivée

Cc: Allocca, John E. (Marketing) < John. Allocca@nationalgrid.com>; Jaffe, Samara A. (Marketing)

< Samara. Jaffe@nationalgrid.com >; edna.karanian@eversource.com; eric.soderman@eversource.com = (a.c., b.c., b.

Subject: Requests for Proposals ("RFP") - EDC Pipeline Capacity/Supply Procurement - Massachusetts & Rhode Island

Hi Denis,

I'm responding to your inquiry to John Allocca regarding the address for paper copies of the proposals with respect to the subject RFPs.

For the Massachusetts RFP, the paper copy should be addressed to the following:

Edna Karanian 107 Selden Street Berlin CT 06037

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 66 of 153

and

John Allocca 100 East Old Country Road Hicksville NY 11801

For the Rhode Island RFP, the paper copy should be addressed to the following:

John Allocca 100 East Old Country Road Hicksville NY 11801

Please let me know if you require additional information.

Thank you, Janet

Janet A. Prag
Senior Contract Specialist
nationalgrid
100 E. Old Country Road
Hicksville, NY 11801
T:
F:

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Jessica Buno

From: Allocca, John E. (Marketing)

Sent: Friday, April 15, 2016 1:32 PM

To: Prag, Janet A. (Marketing)

Subject: FW: EXTRNL SENDR || Extension

From: IAMPEN , KAREN [mailto

Sent: Friday, November 13, 2015 9:03 AM

To: Eric Soderman (sodere@nu.com); Allocca, John E. (Marketing); karanem@nu.com; Jaffe, Samara A. (Marketing)

Subject: EXTRNL SENDR || Extension

I know you guys can appreciate the amount of detail and effort that it takes to put together deals of this type. We of course are getting close to the finish line and are waiting on an opinion from our auditors that we might not get in time ... I have to ask if it is possible to get an extension – I am actually hoping others are out there asking for extra time as well and you are going to tell me you are just about to send out email extending it anyway....

Regards, Karen

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Jessica Buno

From:Allocca, John E. (Marketing)Sent:Friday, April 15, 2016 1:32 PMTo:Prag, Janet A. (Marketing)

Subject: FW: EXTRNL SENDR || RE: Extension

From: IAMPEN, KAREN [mailto:karen.iampen@repsol.com]

Sent: Friday, November 13, 2015 10:16 AM

To: Eric Soderman (sodere@nu.com); Allocca, John E. (Marketing); karanem@nu.com; Jaffe, Samara A. (Marketing)

Subject: EXTRNL SENDR || RE: Extension

Ok ... I apologize in advance, our auditing department actually just called and gave us the go ahead. We don't need an extension (not sure we would have gotten one) ... sorry for the unnecessary noise.

Karen

From: IAMPEN, KAREN

Sent: Friday, November 13, 2015 8:03 AM

To: Eric Soderman (sodere@nu.com); John Allocca (john.allocca@us.ngrid.com); 'karanem@nu.com';

Samara.Jaffe@nationalgrid.com

Subject: Extension

I know you guys can appreciate the amount of detail and effort that it takes to put together deals of this type. We of course are getting close to the finish line and are waiting on an opinion from our auditors that we might not get in time ... I have to ask if it is possible to get an extension – I am actually hoping others are out there asking for extra time as well and you are going to tell me you are just about to send out email extending it anyway....

Regards, Karen

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Jessica Buno

From: Allocca, John E. (Marketing)
Sent: Thursday, April 14, 2016 8:42 AM

To: Prag, Janet A. (Marketing)

Subject: FW: EXTRNL SENDR || Tennessee Gas Pipeline Company, L.L.C. Response to Notice of

Request for Proposals by National Grid (Confidential) - Attachments

From: Mody, Sital K [mailto:Sital_Mody@kindermorgan.com]

Sent: Friday, November 13, 2015 11:54 AM

To: Allocca, John E. (Marketing)

Subject: RE: EXTRNL SENDR | Tennessee Gas Pipeline Company, L.L.C. Response to Notice of Request for Proposals by

National Grid (Confidential) - Attachments

John can you please confirm receipt of proposals as well. Thank you.

From: Allocca, John E. (Marketing) [mailto:John.Allocca@nationalgrid.com]

Sent: Friday, November 13, 2015 10:52 AM

To: Mody, Sital K

Subject: RE: EXTRNL SENDR | Tennessee Gas Pipeline Company, L.L.C. Response to Notice of Request for Proposals by

National Grid (Confidential) - Attachments

Received. Thanks.

From: Mody, Sital K [mailto:Sital Mody@kindermorgan.com]

Sent: Friday, November 13, 2015 11:47 AM

To: Allocca, John E. (Marketing); Brennan, Timothy J.; Jaffe, Samara A. (Marketing)

Cc: Mody, Sital K; Piczak, Christopher T (Todd)

Subject: EXTRNL SENDR | Tennessee Gas Pipeline Company, L.L.C. Response to Notice of Request for Proposals by

National Grid (Confidential) - Attachments

Dear John, Timothy, and Samara:

Attached please find <u>12 attachments</u> to the response of Tennessee Gas Pipeline Company, L.L.C. (TGP) to the Notice of Request for Proposals issued by National Grid as stated in previous email.

Please reply to this email to confirm your receipt of attachments. Take care,

Sital

Sital Mody

Vice President of Marketing & Business Development Kinder Morgan - Tennessee Gas Pipeline, Southern Natural Gas Optimization 713.420.4336 (office)

sital mody@kindermorgan.com

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 70 of 153

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Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 71 of 153

REDACTED

Jessica Buno

From: Prag, Janet A. (Marketing)

Sent: Friday, November 20, 2015 6:05 PM

To:

Cc: Allocca, John E. (Marketing); Brennan, Timothy J.; Holodak Jr, James G.; Jaffe, Samara A.

(Marketing); Mc Cauley, Stephen A. (Marketing); Vaughn, John V.

Subject: Request for Proposals - MA & RI Gas Infrastructure Expansion

Categories: Purple Category

Keith,



Please respond in writing by Wednesday, November 25.

Thank you.

John E. Allocca
Director, Gas Contracting & Compliance
nationalgrid
100 East Old Country Road
Hicksville, NY 11801
tel
cell

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 72 of 153

Janet A. Prag
Senior Contract Specialist
nationalgrid
100 E. Old Country Road
Hicksville, NY 11801
T:
F:

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b)

Page 73 of 153

REDACTED

Jessica Buno

From: Prag, Janet A. (Marketing)

Sent: Monday, November 23, 2015 2:51 PM

Cc: Allocca, John E. (Marketing); Brennan, Timothy J.; Holodak Jr, James G.; Jaffe, Samara A.

(Marketing); edna.karanian@eversource.com; Mc Cauley, Stephen A. (Marketing);

eric.soderman@eversource.com; Vaughn, John V.

Subject: FW: Request for Proposals - MA & RI Gas Infrastructure Expansion

To All Bidders:

Further to our email below, we respectfully request that your respond to our request in writing by 5:00 PM on Wednesday, November 25, and that you submit your response to the following:

John Allocca at: <u>John.Allocca@nationalgrid.com</u>;

Timothy Brennan at: Timothy.J.Brennan@nationalgrid.com;

Samara Jaffe at: <u>Samara.Jaffe@nationalgrid.com</u>;

Edna Karanian at: Edna.Karanian@eversource.com; and

Eric Soderman at: Eric.Soderman@eversource.com.

Thank you.

John E. Allocca
Director, Gas Contracting & Compliance
national grid
100 East Old Country Road
Hicksville, NY 11801
tel #
cell

Janet A. Prag
Senior Contract Specialist
nationalgrid
100 E. Old Country Road
Hicksville, NY 11801
T:
F:

From: Prag, Janet A. (Marketing)

Sent: Friday, November 20, 2015 5:57 PM

Cc: Allocca, John E. (Marketing); Brennan, Timothy J.; Jaffe, Samara A. (Marketing); Mc Cauley, Stephen A. (Marketing);

Vaughn, John V. Holodak Jr, James G.

Subject: Request for Proposals - The Narragansett Electric Company d/b/a National Grid - New England Gas

Infrastructure

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b)

Page 74 of 153

REDACTED

To All Bidders:



Please respond in writing by Wednesday, November 25.

Thank you.

John E. Allocca
Director, Gas Contracting & Compliance
national grid
100 East Old Country Road
Hicksville, NY 11801
tel #
cell

To All Bidders:



Please respond by Wednesday, November 25.

Thank you.

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 75 of 153

Janet A. Prag
Senior Contract Specialist
nationalgrid
100 E. Old Country Road
Hicksville, NY 11801
T:

Page 76 of 153

REDACTED

Jessica Buno

From: Prag, Janet A. (Marketing)

Sent: Monday, November 23, 2015 2:27 PM

To:

Cc: Allocca, John E. (Marketing); Brennan, Timothy J.; Holodak Jr, James G.; Jaffe, Samara A.

(Marketing); Mc Cauley, Stephen A. (Marketing); Vaughn, John V. edna.karanian@eversource.com;

eric.soderman@eversource.com

Subject: RE: Request for Proposals - MA & RI Gas Infrastructure Expansion

Keith,

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- John Allocca at: John.Allocca@nationalgrid.com;
- Timothy Brennan at: <u>Timothy.J.Brennan@nationalgrid.com</u>;
- Samara Jaffe at: <u>Samara.Jaffe@nationalgrid.com</u>;
- Edna Karanian at: Edna.Karanian@eversource.com; and
- Eric Soderman at: Eric Soderman@eversource.com.

Thank you.

John E. Allocca
Director, Gas Contracting & Compliance
national grid
100 East Old Country Road
Hicksville, NY 11801
tel #
cell

Janet A. Prag
Senior Contract Specialist
nationalgrid
100 E. Old Country Road
Hicksville, NY 11801
T:
F:

From: Prag, Janet A. (Marketing)

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 77 of 153

Sent: Friday, November 20, 2015 6:05 PM

To: 'Keith.Crane@gdfsuezna.com'

Cc: Allocca, John E. (Marketing); Brennan, Timothy J.; Holodak Jr, James G.; Jaffe, Samara A. (Marketing); Mc Cauley,

Stephen A. (Marketing); Vaughn, John V.

Subject: Request for Proposals - MA & RI Gas Infrastructure Expansion

Keith,



Please respond in writing by Wednesday, November 25.

Thank you.

John E. Allocca
Director, Gas Contracting & Compliance
nationalgrid
100 East Old Country Road
Hicksville, NY 11801
tel #
cell

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 78 of 153

Senior Contract Specialist nationalgrid 100 E. Old Country Road Hicksville, NY 11801 T: F:

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 79 of 153

REDACTED

Jessica Buno

From: Miranda, Joey Lee <jmiranda@RC.com>
Sent: Monday, November 23, 2015 8:15 PM

To: Prag, Janet A. (Marketing)

Cc: Allocca, John E. (Marketing); Brennan, Timothy J.; Jaffe, Samara A. (Marketing);

edna.karanian@eversource.com; Eric.Soderman@eversource.com

Subject: EXT || FW: Request for Proposals - MA & RI Gas Infrastructure Expansion

Ms. Prag:

Emilee Scott of our office received the below e-mail. Emilee is now out of the office on maternity leave for the next several months. To ensure that we are receiving all future correspondence, can you please add me to the e-mail distribution list(s) related to the Massachusetts and Rhode Island Gas Infrastructure Expansion RFPs? In the meantime, please feel free to contact me if you have any questions or require additional information.

Thank you, Joey Lee

Joey Lee Miranda

Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103 Direct 860.275.8227 | Fax 860.275.8299 imiranda@rc.com | www.rc.com Bio | Contact Card

Robinson+Cole

Boston | Hartford | New York | Providence | Stamford Albany | Los Angeles | Miami | New London

Begin forwarded message:

From: "Prag, Janet A. (Marketing)"

Date: November 23, 2015 at 2:50:37 PM EST

Cc: "Allocca, John E. (Marketing)" < <u>John.Allocca@nationalgrid.com</u>>, "Brennan, Timothy J."

<TIMOTHY J BRENNAN@nationalgrid.com</p>
, "Holodak Jr, James G."

, "Jaffe, Samara A. (Marketing)"

<<u>Samara.Jaffe@nationalgrid.com</u>>, "edna.karanian@eversource.com"

<edna.karanian@eversource.com>, "Mc Cauley, Stephen A. (Marketing)"

>, "eric.soderman@eversource.com"

<eric.soderman@eversource.com>, "Vaughn, John V."

Subject: FW: Request for Proposals - MA & RI Gas Infrastructure Expansion

To All Bidders:

Further to our email below, we respectfully request that your respond to our request in writing by 5:00 PM on Wednesday, November 25, and that you submit your response to the following:

Page 80 of 153

REDACTED

- John Allocca at: <u>John.Allocca@nationalgrid.com</u>;
- Timothy Brennan at: <u>Timothy.J.Brennan@nationalgrid.com</u>;
- Samara Jaffe at: Samara.Jaffe@nationalgrid.com;
- Edna Karanian at: Edna.Karanian@eversource.com; and
- Eric Soderman at: Eric Soderman@eversource.com.

Thank you.

John E. Allocca
Director, Gas Contracting & Compliance
nationalgrid
100 East Old Country Road
Hicksville, NY 11801
tel #
cell

Janet A. Prag
Senior Contract Specialist
nationalgrid
100 E. Old Country Road
Hicksville, NY 11801
T:
F:

From: Prag, Janet A. (Marketing)

Sent: Friday, November 20, 2015 5:57 PM

Cc: Allocca, John E. (Marketing); Brennan, Timothy J.; Jaffe, Samara A. (Marketing); Mc Cauley, Stephen

A. (Marketing); Vaughn, John V. ; Holodak Jr, James G.

Subject: Request for Proposals - The Narragansett Electric Company d/b/a National Grid - New England

Gas Infrastructure

To All Bidders:



Please respond in writing by Wednesday, November 25.

Thank you.

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 81 of 153

REDACTED

John E. Allocca
Director, Gas Contracting & Compliance
nationalgrid
100 East Old Country Road
Hicksville, NY 11801
tel #
cell

To All Bidders:



Please respond by Wednesday, November 25.

Thank you.

Janet A. Prag Senior Contract Specialist nationalgrid 100 E. Old Country Road Hicksville, NY 11801

T: F·

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 82 of 153

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Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 83 of 153

REDACTED

Jessica Buno

From: Prag, Janet A. (Marketing)

Sent: Tuesday, November 24, 2015 10:20 AM

To: 'Miranda, Joey Lee'

Cc: Allocca, John E. (Marketing); Brennan, Timothy J.; Jaffe, Samara A. (Marketing);

edna.karanian@eversource.com; Eric.Soderman@eversource.com

Subject: RE: EXT || FW: Request for Proposals - MA & RI Gas Infrastructure Expansion

Hi Joey,

Consider it done!

Thank you and enjoy the Thanksgiving holiday!

Best regards, Janet

Janet A. Prag
Senior Contract Specialist
nationalgrid
100 E. Old Country Road
Hicksville, NY 11801
T:
F:

From: Miranda, Joey Lee [mailto:jmiranda@RC.com]

Sent: Monday, November 23, 2015 8:15 PM

To: Prag, Janet A. (Marketing)

Cc: Allocca, John E. (Marketing); Brennan, Timothy J.; Jaffe, Samara A. (Marketing); edna.karanian@eversource.com;

Eric.Soderman@eversource.com

Subject: EXT || FW: Request for Proposals - MA & RI Gas Infrastructure Expansion

Ms. Prag:

Emilee Scott of our office received the below e-mail. Emilee is now out of the office on maternity leave for the next several months. To ensure that we are receiving all future correspondence, can you please add me to the e-mail distribution list(s) related to the Massachusetts and Rhode Island Gas Infrastructure Expansion RFPs? In the meantime, please feel free to contact me if you have any questions or require additional information.

Thank you, Joey Lee

Joey Lee Miranda

Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103 Direct 860.275.8227 | Fax 860.275.8299 jmiranda@rc.com | www.rc.com Bio | Contact Card

Robinson+Cole

Boston | Hartford | New York | Providence | Stamford Albany | Los Angeles | Miami | New London

Begin forwarded message:

From: "Prag, Janet A. (Marketing)"

Date: November 23, 2015 at 2:50:37 PM EST

Cc: "Allocca, John E. (Marketing)" < John. Allocca@nationalgrid.com >, "Brennan, Timothy J."

<TIMOTHY.J.BRENNAN@nationalgrid.com>, "Holodak Jr, James G."

>, "Jaffe, Samara A. (Marketing)"

<<u>Samara.Jaffe@nationalgrid.com</u>>, "<u>edna.karanian@eversource.com</u>"

<edna.karanian@eversource.com>, "Mc Cauley, Stephen A. (Marketing)"

, "eric.soderman@eversource.com"

<eric.soderman@eversource.com>, "Vaughn, John V."

Subject: FW: Request for Proposals - MA & RI Gas Infrastructure Expansion

To All Bidders:

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- Timothy Brennan at: Timothy.J.Brennan@nationalgrid.com;
- Samara Jaffe at: Samara.Jaffe@nationalgrid.com;
- Edna Karanian at: Edna.Karanian@eversource.com; and
- Eric Soderman at: Eric.Soderman@eversource.com.

Thank you.

John E. Allocca
Director, Gas Contracting & Compliance
national grid
100 East Old Country Road
Hicksville, NY 11801
tel #
cell

Janet A. Prag
Senior Contract Specialist
nationalgrid
100 E. Old Country Road
Hicksville, NY 11801
T: (

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 85 of 153

From: Prag, Janet A. (Marketing)

Sent: Friday, November 20, 2015 5:57 PM

Cc: Allocca, John E. (Marketing); Brennan, Timothy J.; Jaffe, Samara A. (Marketing); Mc Cauley, Stephen

A. (Marketing); Vaughn, John V. (); Holodak Jr, James G.

Subject: Request for Proposals - The Narragansett Electric Company d/b/a National Grid - New England

Gas Infrastructure

To All Bidders:



Please respond in writing by Wednesday, November 25.

Thank you.

John E. Allocca
Director, Gas Contracting & Compliance
nationalgrid
100 East Old Country Road
Hicksville, NY 11801
tel #
cell

To All Bidders:



Please respond by Wednesday, November 25.

Thank you.

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 86 of 153

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Janet A. Prag
Senior Contract Specialist
nationalgrid
100 E. Old Country Road
Hicksville, NY 11801
T:
F:

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Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 87 of 153

immediately delete this message and all its attachments.

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 88 of 153

Jessica Buno

From: Crane, Keith

Sent: Wednesday, November 25, 2015 11:37 AM

To: Prag, Janet A. (Marketing)

Cc: Allocca, John E. (Marketing); Brennan, Timothy J.; Holodak Jr, James G.; Jaffe, Samara A.

(Marketing); Mc Cauley, Stephen A. (Marketing); Vaughn, John V.; edna.karanian@eversource.com; eric.soderman@eversource.com

Subject: EXT || RE: Request for Proposals - MA & RI Gas Infrastructure Expansion

Attachments: GSGNA Response to Questions from National Grid dated November 20 2015.pdf

Importance: High

Janet, please find attached GSGNA's response to your questions dated November 20, 2015. Thanks.

Keith Crane Commercial Development Director GDF SUEZ Gas NA, LLC 1990 Post Oak Blvd., Suite 1900 Houston, TX 77056

Office: Cell:

From: Prag, Janet A. (Marketing)

Sent: Monday, November 23, 2015 1:27 PM

To: Crane, Keith

Cc: Allocca, John E. (Marketing); Brennan, Timothy J.; Holodak Jr, James G.; Jaffe, Samara A. (Marketing); Mc Cauley,

Stephen A. (Marketing); Vaughn, John V.; edna.karanian@eversource.com; eric.soderman@eversource.com

Subject: RE: Request for Proposals - MA & RI Gas Infrastructure Expansion

Keith,

Further to our email below, we respectfully request that your respond to our request in writing by 5:00 PM on Wednesday, November 25, and that you submit your response to the following:

- John Allocca at: <u>John.Allocca@nationalgrid.com</u>;
- Timothy Brennan at: <u>Timothy.J.Brennan@nationalgrid.com</u>;
- Samara Jaffe at: Samara.Jaffe@nationalgrid.com;
- Edna Karanian at: Edna.Karanian@eversource.com; and
- Eric Soderman at: Eric.Soderman@eversource.com.

Thank you.

John E. Allocca
Director, Gas Contracting & Compliance
nationalgrid

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 89 of 153

REDACTED

100 East Old Country Road Hicksville, NY 11801 tel# cell

Janet A. Prag **Senior Contract Specialist** nationalgrid 100 E. Old Country Road Hicksville, NY 11801 T:

From: Prag, Janet A. (Marketing)

Sent: Friday, November 20, 2015 6:05 PM

Cc: Allocca, John E. (Marketing); Brennan, Timothy J.; Holodak Jr, James G.; Jaffe, Samara A. (Marketing); Mc Cauley,

Stephen A. (Marketing); Vaughn, John V.

Subject: Request for Proposals - MA & RI Gas Infrastructure Expansion

Keith,



Please respond in writing by Wednesday, November 25.

Thank you.

John E. Allocca **Director, Gas Contracting & Compliance** nationalgrid 100 East Old Country Road Hicksville, NY 11801

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 90 of 153

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Janet A. Prag
Senior Contract Specialist
nationalgrid
100 E. Old Country Road
Hicksville, NY 11801
T:
F:

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VIA EMAIL

November 25, 2015

To: Eversource:

Edna Karanian, edna.karanian@eversource.com Eric Soderman, eric.soderman@eversource.com

To: National Grid:

John Allocca, john.allocca@nationalgrid.com
Timothy Brennan, timothy.j.brennan@nationalgrid.com
Samara Jaffe, samara.jaffe@nationalgrid.com

Re: GDF SUEZ Gas NA LLC ("GSGNA") Response to Questions Dated November 20, 2015 Regarding the Eversource and National Grid Request for Proposals – MA & RI Gas Infrastructure Expansion (the "RFP")

Dear Eversource and National Grid:

We are in receipt of your email message dated November 20, 2015 in which you asked the following clarifying questions concerning GSGNA's response to the RFP:

Question 1



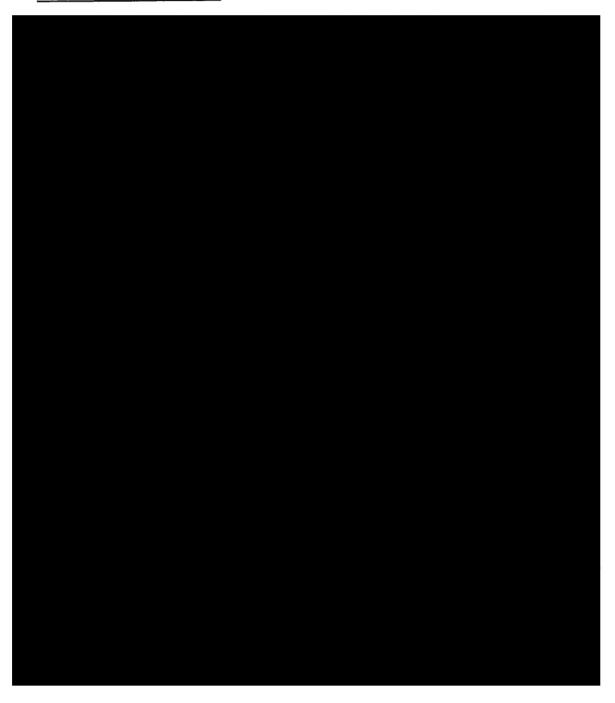
Question 2



GDF SUEZ Gas NA LLC 1990 Post Oak Blvd., Suite 1900 Houston, TX 77056

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 92 of 153

GSGNA Response to Question 1



Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 93 of 153

REDACTED



GSGNA Response to Question 2



Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 94 of 153



Thank you for your attention to this letter.

Sincerely,

Rudolph Adamiak

Senior Vice President - Commercial

as

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 95 of 153

REDACTED

Jessica Buno

From: Allocca, John E. (Marketing)

Sent: Friday, April 15, 2016 11:44 AM

To: Prag, Janet A. (Marketing)

Subject: FW: EXT || Request for Proposals - MA & RI Questions **Attachments:** Response to Questions dated November 25 2015.pdf

From: IAMPEN , KAREN

Sent: Wednesday, November 25, 2015 1:58 PM

To: Allocca, John E. (Marketing); Jaffe, Samara A. (Marketing); Brennan, Timothy J.; eric.soderman@eversource.com;

edna.karanian@eversource.com

Cc: KELLY, STEVE; MCCUNE, TERRI JEAN; RIBBECK, PHILLIP B Subject: EXT || Request for Proposals - MA & RI Questions

Attached please find response to questions received on November 20th. Please acknowledge receipt when you have a

moment and Happy Thanksgiving everyone!

Regards, Karen

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This information is private and confidential and intended for the recipient only. If you are not the intended recipient of this message you are hereby notified that any review, dissemination, distribution or copying of this message is strictly prohibited. This communication is for information purposes only and should not be regarded as an official statement from Repsol. Email transmission cannot be guaranteed to be secure or error-free. Therefore, we do not represent that this information is complete or accurate and it should not be relied upon as such. All information is subject to change without notice.

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Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 96 of 153



November 25, 2015

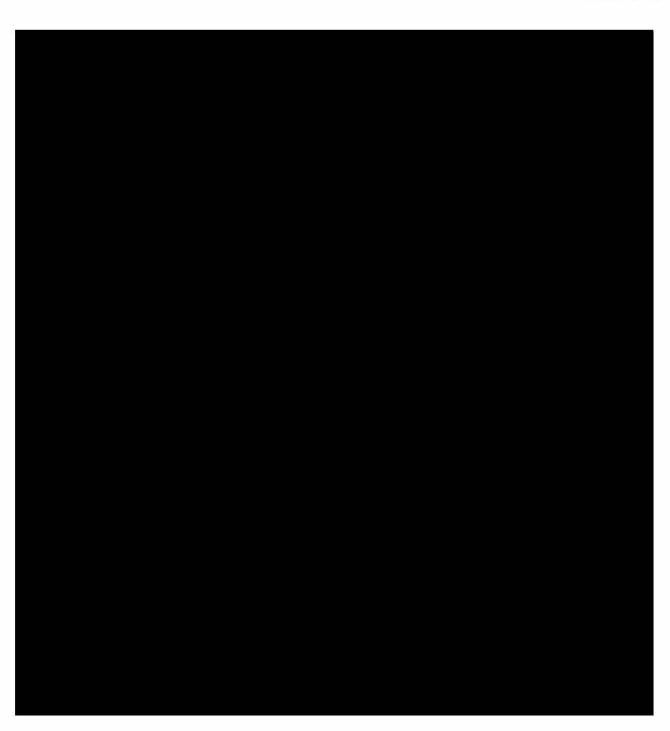
Response is to be given via email

Dear Mr. Allocca,



Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 97 of 153





Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 98 of 153





Regards.

Stephen A. Kelly

Vice President, Gas Trading

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 99 of 153

REDACTED

Jessica Buno

From: Allocca, John E. (Marketing)
Sent: Thursday, April 14, 2016 8:34 AM

To: Prag, Janet A. (Marketing)

Subject: FW: EXT || CONFIDENTIAL: TCPL Response to Follow Up Question re: National Grid's

RFP Dated October 22, 2015

Attachments: 2015Nov25 TCPL Letter to NatGrid.pdf

From: Tim Stringer [mailto:

Sent: Wednesday, November 25, 2015 12:07 PM

To: Allocca, John E. (Marketing); 'timothy, j.brennan@nationalgrid.com'; 'samara.jaffe@nationalgrid.com'

Cc: Don Bell; Cynthia Armstrong; Dave Schultz; Amelia Cheung; Tim Stringer; Richard Bralow; Helen Gallagher (Iroquois)

Robert Perless

Margaret Foulds

Subject: EXT || CONFIDENTIAL: TCPL Response to Follow Up Question re: National Grid's RFP Dated October 22, 2015

Please find attached TransCanada's response to the questions included in John Allocca's correspondence dated November 20, 2015, regarding National Grid's RFP dated October 22, 2015.

If you have any questions please do not hesitate to contact me via email or at the number below.

Regards,

Tim Stringer Manager, Commercial East TransCanada PipeLines Limited

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Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 100 of 153



November 25, 2015

200 Bay Street, 24th Floor, South Tower Toronto, Ontario, Canada M5J 2J1 tel. 416-869-2177 fax 416-869-2119 email tim_stringer@transcanada.com web www.transcanada.com

National Grid 100 East Old Country road Hicksville, NY 11801

Attention: Mr. John Allocca

Director, Gas Contracting and Compliance

Dear John,

Re: Response to Questions re: National Grid's RFP Dated October 22, 2015



Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 101 of 153



If you have further questions, please feel free to contact me at

Regards,

Tim Stringer

Manager, Commercial East Canadian Pipelines

Cc: Don Bell

Jessica Buno

From: Allocca, John E. (Marketing)

Sent: Monday, December 07, 2015 9:24 AM

To: Prag, Janet A. (Marketing)

Subject: FW: EXT || Privileged and Confidential: MA EDC 10.23.15 RFP - Information Request

11-30-2015

Attachments: 2015 12-01 EDC RFP TGP Alternate Path Request FINAL.xlsx

From: Sculley, Coralie [mailto:

Sent: Tuesday, December 01, 2015 4:11 PM

To: edna.karanian@eversource.com; Allocca, John E. (Marketing); Mc Cauley, Stephen A.

(Marketing); Jaffe, Samara A. (Market

Cc: eric.soderman@eversource.com; Mody, Sital K; Palmer Jr, Henry M (Milton); Piczak, Christopher T (Todd)

Subject: EXT || Privileged and Confidential: MA EDC 10.23.15 RFP - Information Request 11-30-2015

All,

Please see the attached spreadsheet for TGP's response to MA EDC RFP Information Request dated November 30, 2015 below. Please let me know if you have any questions. Thanks.

Coralie Carter Sculley Account Director

Tennessee Gas Pipe Line Company LLC

Caralie Cartes Levelley

a Kinder Morgan company 1001 Louisiana Street

Houston, Texas 77002



From: eric.soderman@eversource.com [mailto:eric.soderman@eversource.com]

Sent: Monday, November 30, 2015 11:51 AM

To: Sculley, Coralie; Mody, Sital K

; Samara.Jaffe@nationalgrid.com

Subject: MA EDC 10.23.15 RFP - Information Request

Coralie/Sital,

In order for the MA EDCs to accurately represent the analysis of alternatives on both price and non-prices factors, the MA EDCs request that Tennessee Gas Pipeline ("TGP") provide the following information



Please provide all requested information by 4PM EST on Tuesday, December 1, 2015.

Please include the following recipients on that response via email:

Edna Karanian - edna.karanian@eversource.com

Eric Soderman - eric.soderman@eversource.com

Lisa Cullen

John Allocca - John.Allocca@nationalgrid.com

Stephen Mc Cauley -

Samara Jaffe - Samara.Jaffe@nationalgrid.com

Thank you

Eric

Eric Soderman Eversource Energy Gas Supply

Phone:

Email: eric.soderman@eversource.com

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REDACTED



Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 105 of 153

REDACTED

Jessica Buno

From: Allocca, John E. (Marketing)

Sent: Monday, December 07, 2015 9:22 AM

To: Prag, Janet A. (Marketing)

Subject: FW: EXT || FW: AN volume scenarios (operational)

Attachments: ANE EDCs MA RFP Second Follow-up Supplemental Response.pdf

From: Miranda, Joey Lee [mailto:jmiranda@RC.com]

Sent: Tuesday, December 01, 2015 2:32 PM

To: Allocca, John E. (Marketing); Mc Cauley, Stephen A. (Marketing); Jaffe, Samara A. (Marketing)

Cc: eric.soderman@eversource.com; Crisp, Gregory; Currie, Caitlin L

Subject: EXT || FW: AN volume scenarios (operational)

On behalf of Algonquin Gas Transmission, LLC and the Access Northeast Project, I am forwarding the attached supplemental information at Eric Soderman's request. Please feel free to contact me if you have any questions or require further information. Thank you.

Joey Lee Miranda

Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103 Direct 860.275.8227 | Fax 860.275.8299 imiranda@rc.com | www.rc.com Bio | Contact Card

Robinson+Cole

Boston | Hartford | New York | Providence | Stamford Albany | Los Angeles | Miami | New London

From: eric.soderman@eversource.com [mailto:eric.soderman@eversource.com]

Sent: Tuesday, December 01, 2015 11:09 AM

To: Miranda, Joey Lee

Subject: RE: AN volume scenarios (operational)

Thanks Joey Lee,

Could you please also forward to these National Grid representatives as part of this RFP process:

John Allocca - John.Allocca@nationalgrid.com

Stephen Mc Cauley -

Samara Jaffe - Samara.Jaffe@nationalgrid.com

-Eric

Eric Soderman Eversource Energy Gas Supply

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 106 of 153

Phone

Email: eric.soderman@eversource.com

From: "Miranda, Joey Lee" < imiranda@RC.com>

To: Lisa M. Cullen/NUS@NU,
Cc: Edna M. Karanian/NUS@NU, Eric Soderman/NUS@NU, "Currie, Caitlin L

Crisp, Gregory"

Date: 12/01/2015 11:00 AM

Subject: RE: AN volume scenarios (operational)

On behalf of Algonquin Gas Transmission, LLC and the Access Northeast Project, attached is supplemental information in connection with the below request. Please feel free to contact me if you have any questions or require further information. Thank you.

Joey Lee Miranda

Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103 Direct 860.275.8227 | Fax 860.275.8299 imiranda@rc.com | www.rc.com Bio | Contact Card

Robinson+Cole

Boston | Hartford | New York | Providence | Stamford Albany | Los Angeles | Miami | New London

From: "Miranda, Joey Lee"

Sent: Sunday, November 29, 2015 11:03 PM

To Leading kers

Cc: edna.karanian@eversource.com; Currie, Caitlin L; Crisp, Gregory; MDC - Clean All

Metadata

Subject: RE: AN volume scenarios (operational)

On behalf of Algonquin Gas Transmission, LLC and the Access Northeast Project, attached is a response to the below request for additional information. Please feel free to contact me if you have any questions or require further information. Thank you.

Joey Lee Miranda

Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103 Direct 860.275.8227 | Fax 860.275.8299 imiranda@rc.com | www.rc.com Bio | Contact Card

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Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 107 of 153

From:

Sent: Wednesday, November 25, 2015 10:20 AM

To: Currie, Caitlin L

Cc: Crisp, Gregory; edna.karanian@eversource.com; eric.soderman@eversource.com

Subject: AN volume scenarios (operational)

Hi Caitlin



Thanks,

Lisa

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__[attachment "ANE EDCs MA RFP

Second Follow-up Supplemental Response.pdf" deleted by Eric Soderman/NUS]

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ALGONQUIN GAS TRANSMISSION, LLC 5400 Westheimer Court Houston, TX 77056-5310 713.627.5400 main Mailing Address: P.O. Box 1642 Houston, TX 77251-1642



Via Electronic Mail

December 1, 2015

Eric Soderman
Eversource Energy
107 Selden Street
Berlin, CT 06037
(Eric.Soderman@eversource.com)

Re: MA EDC 10.23.15 RFP - Information Request

Dear Mr. Soderman:



Page 109 of 153

REDACTED



We would be happy to answer any further questions you may have. Thank you.

Sincerely,

William Yardley

President, US Transmission

Algonquin Gas Transmission, LLC Spectra Energy Partners, LP

WY/jlm

Copy to: Edna Karanian (edna.karanian@eversource.com)

Lisa Cullen

John Allocca (John.Allocca@nationalgrid.com)

Stephen McCauley (

Samara Jaffe (Samara.Jaffe@nationalgrid.com)

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 110 of 153

Jessica Buno

From: Allocca, John E. (Marketing)

Sent: Monday, December 07, 2015 9:36 AM

To: Prag, Janet A. (Marketing)

Subject: FW: EXT || RE: MA EDC 10.23.15 RFP - Information Request

Attachments: 14341312.pdf

From: Miranda, Joey Lee [mailto:jmiranda@RC.com] Sent: Thursday, December 03, 2015 2:38 PM

To: eric.soderman@eversource.com

Cc: edna.karanian@eversource.com; Allocca, John E. (Marketing); lisa.cullen@eversource.com; Jaffe, Samara A.

(Marketing); Mc Cauley, Stephen A. (Marketing); Crisp, Gregory Subject: EXT || RE: MA EDC 10.23.15 RFP - Information Request

Eric:

Attached is a letter in response to yesterday's request. Please feel free to contact me if you have any questions or require further information.

Thank you, Joey Lee

Joey Lee Miranda

Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103 Direct 860.275.8227 | Fax 860.275.8299 imiranda@rc.com | www.rc.com Bio | Contact Card

Robinson+Cole

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From: eric.soderman@eversource.com [mailto:eric.soderman@eversource.com]

Sent: Wednesday, December 02, 2015 12:36 PM

To: Miranda, Joey Lee

Cc: edna.karanian@eversource.com; Crisp, Gregory; John.Allocca@nationalgrid.com; <u>lisa.cullen@eversource.com</u>;

Samara.Jaffe@nationalgrid.com;

Subject: RE: MA EDC 10.23.15 RFP - Information Request

Thanks Joey Lee,

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 111 of 153

REDACTED

Eric Soderman Eversource Energy Gas Supply

Phone:

Email: eric.soderman@eversource.com

From: "Miranda, Joey Lee" < imiranda@RC.com > To: Eric Soderman/NUS@NU,

nationalgrid.com" < John.Allocca@nationalgrid.com>,

"Samara.Jaffe@nationalgrid.com" < Samara.Jaffe@nationalgrid.com>, "Crisp,

Gregory"

Date: 12/01/2015 05:21 PM

Subject: RE: MA EDC 10.23.15 RFP - Information Request

Attached is a letter in response to the below request. Please feel free to contact me if you have any questions or require further information. Thank you.

Joey Lee Miranda

Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103 Direct 860.275.8227 | Fax 860.275.8299 imiranda@rc.com | www.rc.com Bio | Contact Card

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From: eric.soderman@eversource.com [mailto:eric.soderman@eversource.com]

Sent: Monday, November 30, 2015 12:48 PM

To: Miranda, Joey Lee; Crisp, Gregory

Cc: edna.karanian@eversource.com; lisa.cullen@eversource.com; John.Allocca@nationalgrid.com;

Stephen.McCauley@nationalgrid.com; Samara.Jaffe@nationalgrid.com

Subject: MA EDC 10.23.15 RFP - Information Request

Joey Lee Miranda,

Please provide all requested information by 4PM EST on Tuesday, December 1, 2015.

Please include the following recipients on that response via email:

Edna Karanian - edna.karanian@eversource.com

Eric Soderman - eric.soderman@eversource.com

Lisa Cullen
John Allocca - John.Allocca@nationalgrid.com

Stephen Mc Cauley
Samara Jaffe - Samara.Jaffe@nationalgrid.com

Thank you

Eric

Eric Soderman

Eversource Energy

Gas Supply

Phone

Email: eric.soderman@eversource.com

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_[attachment "14335982.pdf" deleted

by Eric Soderman/NUS]

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Via Electronic Mail

December 1, 2015

Lisa Cullen Eversource Energy 107 Selden Street Berlin, CT 06037

Re: Access Northeast's Proposal in Response to National Grid's & Eversource's Request for Proposal for Natural Gas Capacity, Liquefied Natural Gas, and Natural Gas Storage Procurement

Dear Ms. Cullen:

On behalf of Algonquin Gas Transmission, LLC ("Algonquin") and the Access Northeast Project¹ ("Access Northeast"), I am pleased to submit the attached supplemental information in response to your November 25, 2015 e-mail request for the following information in connection with Access Northeast's Proposal in Response to National Grid's & Eversource's Request for Proposal for Natural Gas Capacity, Liquefied Natural Gas, and Natural Gas Storage Procurement:



¹ The Access Northeast Project is being developed by Algonquin, whose members are Spectra Algonquin Holdings, LLC, Eversource Gas Transmission LLC and National Grid Algonquin LLC.

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 115 of 153

Lisa Cullen December 1, 2015 Page 2

We would be happy to answer any further questions you may have. Thank you.

Sincerely,

William Yardley

President, US Transmission

Algonquin Gas Transmission, LLC

Spectra Energy Partners, LP

WY/jlm

Attachment

Copy to: Edna Karanian (edna.karanian@eversource.com)

Eric Soderman (Eric.Soderman@eversource.com)

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Access Northeast: Operational Examples – Supplement

Confidential – For Illustrative Purposes Only

December 1, 2015

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Jessica Buno

From: Allocca, John E. (Marketing)

Sent: Monday, December 07, 2015 9:25 AM

To: Prag, Janet A. (Marketing)

Subject: FW: EXT || RE: MA EDC 10.23.15 RFP - Information Request

Attachments: 14335982.pdf

From: Miranda, Joey Lee [mailto:jmiranda@RC.com]

Sent: Tuesday, December 01, 2015 5:21 PM

To: eric.soderman@eversource.com

Cc: edna.karanian@eversource.com; lisa.cullen@eversource.com; Allocca, John E. (Marketing); Mc Cauley, Stephen A.

(Marketing); Jaffe, Samara A. (Marketing); Crisp, Gregory

Subject: EXT || RE: MA EDC 10.23.15 RFP - Information Request

Attached is a letter in response to the below request. Please feel free to contact me if you have any questions or require further information. Thank you.

Joey Lee Miranda

Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103 Direct 860.275.8227 | Fax 860.275.8299 imiranda@rc.com | www.rc.com Bio | Contact Card

Robinson+Cole

Boston | Hartford | New York | Providence | Stamford Albany | Los Angeles | Miami | New London

From: eric.soderman@eversource.com [mailto:eric.soderman@eversource.com]

Sent: Monday, November 30, 2015 12:48 PM

To: Miranda, Joey Lee; Crisp, Gregory_

Cc: edna.karanian@eversource.com; John.Allocca@nationalgrid.com;

Samara.Jaffe@nationalgrid.com

Subject: MA EDC 10.23.15 RFP - Information Request

Joey Lee Miranda,

Please provide all requested information by 4PM EST on Tuesday, December 1, 2015.

Please include the following recipients on that response via email:

Edna Karanian - edna.karanian@eversource.com

Eric Soderman - eric.soderman@eversource.com

Lisa Cullen - lisa.cullen@eversource.com

John Allocca - John.Allocca@nationalgrid.com

Stephen Mc Cauley - Stephen.McCauley@nationalgrid.com

Samara Jaffe - Samara.Jaffe@nationalgrid.com

Thank you

Eric

Eric Soderman Eversource Energy Gas Supply

Phone: 860-665-5171

Email: eric.soderman@eversource.com

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ALGONQUIN GAS TRANSMISSION, LLC 5400 Westheimer Court Houston, TX 77056-5310 713.627.5400 main Mailing Address: P.O. Box 1642 Houston, TX 77251-1642



Via Electronic Mail

December 3, 2015

Eric Soderman
Eversource Energy
107 Selden Street
Berlin, CT 06037
(Eric.Soderman@eversource.com)

Re: MA EDC 10.23.15 RFP - Information Request

Dear Mr. Soderman:



Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 121 of 153

Page 2 of 2

We would be happy to answer any further questions you may have. Thank you.

Sincerely,

William Yardley

President, US Transmission

Algonquin Gas Transmission, LLC

Spectra Energy Partners, LP

WY/jlm

Edna Karanian (edna.karanian@eversource.com) Copy to:

Lisa Cullen

John Allocca (John.Allocca@nationalgrid.com)

Stephen McCauley (

Samara Jaffe (Samara.Jaffe@nationalgrid.com)

Jessica Buno

From: Allocca, John E. (Marketing)

Sent: Monday, December 07, 2015 8:19 AM

To: Prag, Janet A. (Marketing)

Subject: FW: EXT || FW: Privileged and Confidential: RFP Responses

Attachments:

From: Sculley, Coralie [mailto:Coralie_Sculley@kindermorgan.com]

Sent: Monday, November 30, 2015 4:56 PM

To: Allocca, John E. (Marketing); Jaffe, Samara A. (Marketing); Mc Cauley, Stephen A. (Marketing)

Cc: Edna.Karanian@eversource.com; lisa.cullen@eversource.com; eric.soderman@eversource.com; Palmer Jr, Henry M

(Milton); Piczak, Christopher T (Todd); Mody, Sital K

Subject: EXT | FW: Privileged and Confidential: RFP Responses

All, As a courtesy, and in an effort to provide uniform communication, the email below and the attached spreadsheet were provided to Eversource last night in response to the ongoing evaluation of TGP's bid. If you have any questions, please do not hesitate to give me a call. Thanks.

Coralie Carter Sculley

Account Director

Tennessee Gas Pipe Line Company LLC

Caralie Carter Levelley

a Kinder Morgan company 1001 Louisiana Street

Houston, Texas 77002



From: Sculley, Coralie

Sent: Sunday, November 29, 2015 8:37 PM

To: <u>lisa</u>.

K; Moffatt, Curt; Piczak, Christopher T (Todd); Milton Palmer@kindermorgan.com

Subject: Privileged and Confidential: RFP Responses

Lisa,

As discussed, in advance of your meeting tomorrow morning, below is our response to your specific questions. Also attached is a spreadsheet providing several rate scenarios and additional service detail. I am happy to review this prior to your meeting if you would like; just let me know when. I would also like to arrange a time to conference or meet in person with our team members and yours at your earliest convenience to

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 123 of 153

REDACTED

further examine the service. We can provide maps and nomination/scheduling scenarios to assist Eversource in evaluating our proposal and answer any outstanding questions.



I look forward to hearing from you. Hope you had a great Thanksgiving holiday!

From:

Sent: Wednesday, November 25, 2015 10:09 AM

To: Sculley, Coralie

Cc: edna.karanian@eversource.com; eric.soderman@eversource.com

Subject: *Confidential: Re: Privileged and Confidential: RFP LNG Peaking Service

Hi Coralie

To remove all doubt, can you confirm the following:



Thanks,

Lisa

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 124 of 153

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Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 125 of 153

REDACTED

Jessica Buno

From: Prag, Janet A. (Marketing)

Sent: Tuesday, December 15, 2015 3:41 PM

Mody, Sital K (Sital_Mody@kindermorgan.com);

n, Timothy J.; Holodak Jr, James G.; Jaffe, Samara A.

(Marketing); Mc Cauley, Stephen A. (Marketing); Vaughn, John V. ; edna.karanian@eversource.com;

eric.soderman@eversource.com

Subject: RFPs - MA & RI Gas Infrastructure Expansion

Becky, Sital, Coralie,

Please refer to National Grid's follow up questions with regard to the subject RFPs:



Thank you.

John E. Allocca
Director, Gas Contracting & Compliance
national grid
100 East Old Country Road
Hicksville, NY 11801
tel #
cell

Janet A. Prag Senior Contract Specialist nationalgrid

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 126 of 153

100 E. Old Country Road Hicksville, NY 11801 T: F:

Jessica Buno

From: Prag, Janet A. (Marketing)

Sent: Wednesday, December 16, 2015 2:09 PM

To: 'Mack, Rebecca G (Becky)'

Subject: RE: EXT || RE: RFPs - MA & RI Gas Infrastructure Expansion

Hi Becky,

I just left you a voicemail. We would like to respond by this coming Friday if possible. Please let me know if you need additional time.

Thank you! Janet

Janet A. Prag
Senior Contract Specialist
nationalgrid
100 E. Old Country Road
Hic 01
T:
F:

From: Mack, Rebecca G (Becky)

Sent: Wednesday, December 16, 2015 12:21 PM

To: Prag, Janet A. (Marketing)

Subject: EXT || RE: RFPs - MA & RI Gas Infrastructure Expansion

Hi Janet,

Is there a deadline for responding to this request?

Thanks,

Becky Mack

Manager, Business Development

Office:



From: Prag, Janet A. (Marketing)

Sent: Tuesday, December 15, 2015 2:41 PM

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 128 of 153

To: Mack, Rebecca G (Becky); Mody, Sital K; Sculley, Coralie

Cc: Allocca, John E. (Marketing); Brennan, Timothy J.; Holodak Jr, James G.; Jaffe, Samara A. (Marketing); Mc Cauley, Stephen A. (Marketing); Vaughn, John V.; edna.karanian@eversource.com; eric.soderman@eversource.com

Subject: RFPs - MA & RI Gas Infrastructure Expansion

Becky, Sital, Coralie,

Please refer to National Grid's follow up questions with regard to the subject RFPs:



Thank you.

John E. Allocca
Director, Gas Contracting & Compliance
nationalgrid
100 East Old Country Road
Hicksville, NY 11801
tel #
cell

Janet A. Prag
Senior Contract Specialist
nationalgrid
100 E. Old Country Road
Hicksville, NY 11801
T:
F:

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Jessica Buno

From: Mack, Rebecca G (Becky)

Sent: Wednesday, December 16, 2015 12:21 PM

To: Prag, Janet A. (Marketing)

Subject: EXT || RE: RFPs - MA & RI Gas Infrastructure Expansion

Hi Janet,

Is there a deadline for responding to this request?

Thanks,

Becky Mack

Manager, Business Development

Office: Cell:



From: Prag, Janet A. (Marketing)

Sent: Tuesday, December 15, 2015 2:41 PM

To: Mack, Rebecca G (Becky); Mody, Sital K; Sculley, Coralie

Cc: Allocca, John E. (Marketing); Brennan, Timothy J.; Holodak Jr, James G.; Jaffe, Samara A. (Marketing); Mc Cauley,

Stephen A. (Marketing); Vaughn, John V.; edna.karanian@eversource.com; eric.soderman@eversource.com

Subject: RFPs - MA & RI Gas Infrastructure Expansion

Becky, Sital, Coralie,

Please refer to National Grid's follow up questions with regard to the subject RFPs:



Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 131 of 153

REDACTED

Thank you.

John E. Allocca
Director, Gas Contracting & Compliance
nationalgrid
100 East Old Country Road
Hicksville NY 11801
tel
cell

Janet A. Prag
Senior Contract Specialist
nationalgrid
100 E. Old Country Road
Hicksville, NY 11801
T:
F:

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Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 132 of 153

Jessica Buno

From: Allocca, John E. (Marketing)

Sent: Thursday, April 14, 2016 8:42 AM

To: Prag, Janet A. (Marketing)

Subject: FW: EXT || Stolt LNGaz

From: Denis Larivée

Sent: Thursday, December 17, 2015 1:44 PM

To: Allocca, John E. (Marketing) **Subject:** RE: EXT || Stolt LNGaz

Thank you John,

Has already mentioned, I would like present our group to your team beginning of 2016.

Best regards,

Denis Larivée, Directeur adjoint au développement des affaires, Assistant director of business development 550, rue Sherbrooke Ouest, bureau 510, Tour Est, Montréal (QC) H3A 1B9

ww

Stolt LNGaz Inc.

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From: Allocca, John E. (Marketing) [mailto:John.Allocca@nationalgrid.com]

Sent: 17 décembre 2015 13:37

To: Denis Larivée <

Subject: RE: EXT | | Stolt LNGaz

Denis:

We have not yet completed our economic analysis. We hope to make selections some time next week. Thank you for your patience.

John

From: Denis Larivée [

Sent: Thursday, December 17, 2015 1:32 PM

To: Allocca, John E. (Marketing)
Subject: EXT || Stolt LNGaz

Good morning M. Allocca,

Is it possible to know when your decisions are going to take place, according to the RFP for LNG supply.

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 133 of 153

Best regards,

Denis Larivée, Directeur adjoint au développement des affaires, Assistant director of business development 550, rue Sherbrooke Ouest, bureau 510, Tour Est, Montréal (QC) H3A 1B9

www.slngaz.com

Stolt LNGaz Inc.

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Jessica Buno

From: Mack, Rebecca G (Becky)

Friday, December 18, 2015 3:00 PM Sent:

To: Prag, Janet A. (Marketing); Allocca, John E. (Marketing)

Brennan, Timothy J.; Holodak Jr, James G.; Jaffe, Samara A. (Marketing); Mc Cauley, Cc:

Stephen A. (Marketing); Vaughn, John V.; edna.karanian@eversource.com;

eric.soderman@eversource.com; Piczak, Christopher T (Todd); Palmer Jr, Henry M

(Milton); Sculley, Coralie

Subject: EXT || RE: RFPs - MA & RI Gas Infrastructure Expansion **Attachments:** TGP Response to EDC Request dated December 15 Final.pdf

Importance: High

Janet and John,

Please find attached Tennessee's response to National Grid's questions sent on December 15th.

Thank you.

Becky Mack

Manager, Business Development

Office:

Cell:



From: Prag, Janet A. (Marketing)

Sent: Tuesday, December 15, 2015 2:41 PM

To: Mack, Rebecca G (Becky); Mody, Sital K; Sculley, Coralie

Cc: Allocca, John E. (Marketing); Brennan, Timothy J.; Holodak Jr, James G.; Jaffe, Samara A. (Marketing); Mc Cauley,

Stephen A. (Marketing); Vaughn, John V.; edna.karanian@eversource.com; eric.soderman@eversource.com

Subject: RFPs - MA & RI Gas Infrastructure Expansion

Becky, Sital, Coralie,

Please refer to National Grid's follow up questions with regard to the subject RFPs:

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 135 of 153

REDACTED



Thank you.

John E. Allocca
Director, Gas Contracting & Compliance
nationalgrid
100 East Old Country Road
Hicksville, NY 11801
tel #
cell

Janet A. Prag
Senior Contract Specialist
nationalgrid
100 E. Old Country Road
Hicksville, NY 11801
T:
F:

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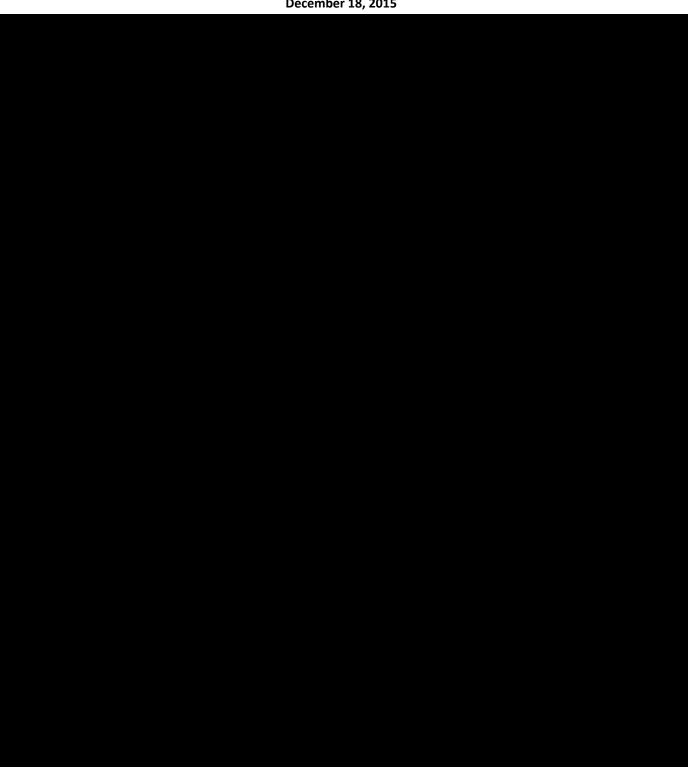
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Tennessee Gas Pipeline Company, L.L.C.
Response to EDC Data Request dated December 15, 2015
National Grid & Eversource MA RFP, National Grid RI RFP
December 18, 2015



Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 137 of 153



Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 138 of 153

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Jessica Buno

From: Allocca, John E. (Marketing)

Sent: Monday, December 21, 2015 2:54 PM

To:

Cc: Brennan, Timothy J.; Holodak Jr, James G.; Jaffe, Samara A. (Marketing); Mc Cauley,

Stephen A. (Marketing); Vaughn, John V.; Prag, Janet A. (Marketing)

Subject: RFPs - MA & RI Gas Infrastructure Expansion

Becky, Sital, Coralie,

Please refer to National Grid's follow up questions with regard to the subject RFPs:



We would greatly appreciate your response by close of business on Wednesday December 23.

Thank you.

John E. Allocca
Director, Gas Contracting & Compliance
nationalgrid
100 East Old Country Road
Hicksville, NY 11801
tel
cell

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 139 of 153

Jessica Buno

From: Mack, Rebecca G (Becky)

Sent: Wednesday, December 23, 2015 11:46 AM

To: Allocca, John E. (Marketing)

Cc: Brennan, Timothy J.; Holodak Jr, James G.; Jaffe, Samara A. (Marketing); Mc Cauley,

Stephen A. (Marketing); Vaughn, John V.; Prag, Janet A. (Marketing); Sculley, Coralie;

Mody, Sital K; Piczak, Christopher T (Todd)

Subject:EXT || RE: RFPs - MA & RI Gas Infrastructure ExpansionAttachments:TGP Response to EDC Request dated December 21 Final.pdf

John,

Please find attached Tennessee's response to National Grid's question regarding the Supply Path Project.

Thank you.

Becky Mack

Manager, Business Development

Office: Cell:

Tennessee Gas Pipeline Company, L.L.C.

From: Allocca, John E. (Marketing) [mailto:John.Allocca@nationalgrid.com]

Sent: Monday, December 21, 2015 1:54 PM

To: Mack, Rebecca G (Becky); Mack, Rebecca G (Becky); Sculley, Coralie

Cc: Brennan, Timothy J.; Holodak Jr, James G.; Jaffe, Samara A. (Marketing); Mc Cauley, Stephen A. (Marketing);

Vaughn, John V.; Prag, Janet A. (Marketing)

Subject: RFPs - MA & RI Gas Infrastructure Expansion

Becky, Sital, Coralie,

Please refer to National Grid's follow up questions with regard to the subject RFPs:

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 140 of 153

We would greatly appreciate your response by close of business on Wednesday December 23.

Thank you.

John E. Allocca
Director, Gas Contracting & Compliance
nationalgrid
100 East Old Country Road
Hicksville NY 11801
tel
cell

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Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 141 of 153

REDACTED

Tennessee Gas Pipeline Company, L.L.C. Response to EDC Data Request dated December 21, 2015 National Grid & Eversource MA RFP, National Grid RI RFP December 23, 2015



Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 142 of 153

REDACTED

Jessica Buno

From: Prag, Janet A. (Marketing)

Sent: Friday, January 15, 2016 5:02 PM

To: aboyd@acadiacenter.org

Cc: Allocca, John E. (Marketing)

Subject: National Grid - Request for Proposals for Massachusetts Gas Infrastructure Expansion

Hi Amy,

Please refer to the attached letter from John Allocca dated January 15, 2016.

Thank you, Janet



Janet A. Prag
Senior Contract Specialist
nationalgrid
100 E. Old Country Road
Hicksville, NY 11801
T:
F:

nationalgrid

January 15, 2016

VIA UPS

Amy Boyd Senior Attorney Acadia Center 31 Milk Street, Suite 501 Boston MA 02109-5128

Dear Amy:

Re: Request for Proposals for Massachusetts Gas Infrastructure Expansion

<u>Issued October 23, 2015</u>

Thank you for your Company's response to the subject RFP for interstate capacity/gas supplies to reduce the cost of electricity and increase the reliability of the New England electric system.

We appreciate the time and effort it took for you to respond to the RFP. While your proposal has not been selected for National Grid's Massachusetts Electric Distribution companies, we thank you again for your submission and look forward to future opportunities to work with you.

Sincerely,

John Allocca

Director of FERC Compliance & Contracting

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 144 of 153

REDACTED

Jessica Buno

From: Prag, Janet A. (Marketing)
Sent: Friday, January 15, 2016 5:01 PM
To:

Cc:

Subject: National Grid - Request for Proposals for Massachusetts Gas Infrastructure Expansion

Hi Keith,

Please refer to the attached letter from John Allocca dated January 15, 2016.

Thank you, Janet



Janet A. Prag Senior Contract Specialist nationalgrid 100 E. Old Country Road Hicksville, NY 11801

T:

nationalgrid

January 15, 2016

VIA UPS

Keith Crane Commercial Development Director GDF SUEZ Gas NA, LLC 1990 Post Oak Boulevard, Suite 1900 Houston, Texas 77056

Dear Keith:

Re: Request for Proposals for Massachusetts Gas Infrastructure Expansion Issued October 23, 2015

Thank you for your Company's response to the subject RFP for interstate capacity/gas supplies to reduce the cost of electricity and increase the reliability of the New England electric system.

We appreciate the time and effort it took for you to respond to the RFP. While your proposal has not been selected for National Grid's Massachusetts Electric Distribution companies, we thank you again for your submission and look forward to future opportunities to work with you.

Sincerely

John Allocca

Director of FERC Compliance & Contracting

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 146 of 153

REDACTED

Jessica Buno

From: Prag, Janet A. (Marketing)

Sent: Friday, January 15, 2016 4:58 PM

To: cynthia_armstrong@transcanada.com

Cc: Allocca, John E. (Marketing)

Subject: National Grid - Request for Proposals for Massachusetts Gas Infrastructure Expansion

Hi Cynthia,

Please refer to the attached letter from John Allocca dated January 15, 2016.

Thank you, Janet



Janet A. Prag
Senior Contract Specialist
nationalgrid
100 E. Old Country Road
Hicksville, NY 11801
T:
F:

nationalgrid

January 15, 2016

VIA UPS

Cynthia L. Armstrong
Director of Marketing and Business Development
Portland Natural Gas Transmission System
One Harbour Place, Suite 375
Portsmouth NH 03801

Dear Cynthia:

Re: Request for Proposals for Massachusetts Gas Infrastructure Expansion Issued October 23, 2015

Thank you for your Company's response to the subject RFP for interstate capacity/gas supplies to reduce the cost of electricity and increase the reliability of the New England electric system.

We appreciate the time and effort it took for you to respond to the RFP. While your proposal has not been selected for National Grid's Massachusetts Electric Distribution companies, we thank you again for your submission and look forward to future opportunities to work with you.

Sincerely,

John Allocca

Director of FERC Compliance & Contracting

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 148 of 153

REDACTED

Jessica Buno

 From:
 Prag, Janet A. (Marketing)

 Sent:
 Friday, January 15, 2016 4:57 PM

To:

Cc: Allocca, John E. (Marketing)

Subject: National Grid - Request for Proposals for Massachusetts Gas Infrastructure Expansion

Hi Josée,

Please refer to the letter attached from John Allocca dated January 15, 2016.

Thank you, Janet



Janet A. Prag Senior Contract Specialist nationalgrid 100 E. Old Country Road

Hicksville, NY 11801

T: F:

nationalgrid

January 15, 2016

VIA UPS

Josée Béliveau
Executive Assistant
Stolt LNGaz Inc.
550 Sherbrooke Quest
Bureau 510, Tour est
Montréal (Québec) Canada H3A 1B9

Dear Josée:

Re: Request for Proposals for Massachusetts Gas Infrastructure Expansion Issued October 23, 2015

Thank you for your Company's response to the subject RFP for interstate capacity/gas supplies to reduce the cost of electricity and increase the reliability of the New England electric system.

We appreciate the time and effort it took for you to respond to the RFP. While your proposal has not been selected for National Grid's Massachusetts Electric Distribution companies, we thank you again for your submission and look forward to future opportunities to work with you.

Sincerely,

John Allocca

Director of FERC Compliance & Contracting

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 150 of 153

REDACTED

Jessica Buno

From: Prag, Janet A. (Marketing)
Sent: Friday, January 15, 2016 4:59 PM
To:

Cc: Allocca, John E. (Marketing)

Subject: National Grid - Request for Proposals for Gas Infrastructure Expansion

Hi Don,

Please refer to the attached letter from John Allocca dated January 15, 2016.

Thank you, Janet



Janet A. Prag Senior Contract Specialist nationalgrid 100 E. Old Country Road Hicksville, NY 11801 T:

nationalgrid

January 15, 2016

VIA UPS

Don Bell
President
Portland Natural Gas Transmission System
One Harbour Place, Suite 375
Portsmouth NH 03801

Dear Don:

Re: Request for Proposals for Massachusetts Gas Infrastructure Expansion Issued October 23, 2015

Thank you for your Company's response to the subject RFP for interstate capacity/gas supplies to reduce the cost of electricity and increase the reliability of the New England electric system.

We appreciate the time and effort it took for you to respond to the RFP. While your proposal has not been selected for National Grid's Massachusetts Electric Distribution companies, we thank you again for your submission and look forward to future opportunities to work with you.

Sincerely,

John Allocca

Director of FERC Compliance & Contracting

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 152 of 153

Jessica Buno

From: Cynthia Armstrong <cynthia_armstrong@transcanada.com>

Sent: Monday, January 18, 2016 12:27 PM

To: Prag, Janet A. (Marketing)

Cc: Allocca, John E. (Marketing); Don Bell; Tim Stringer; Richard Bralow; Gallagher, Helen

(Helen_Gallagher@iroquois.com); Iroquois Gas Transmission System (Perless, Rob)

Subject: EXT | RE: National Grid - Request for Proposals for Massachusetts Gas Infrastructure

Expansion

Hi John,

While I'm sorry that our proposal was not chosen for National Grid's Massachusetts EDC Infrastructure Expansion, I very much appreciate the opportunity to participate in and bid on your business. PNGTS, TCPL and IGTS, as always, remain interested in future opportunities to serve National Grid, and I will stay in touch.

Thanks again, Cynthia

Cynthia L. Armstrong

Director of Marketing and Business Development

Portland Natural Gas Transmission System

One Harbour Place, Suite 375
Portsmouth, NH 03801
www.pngts.com

Office Fax

cynthia armstrong@transcanada.com

ynthiarmstrong

From: Prag, Janet A. (Marketing)

Sent: Friday, January 15, 2016 4:58 PM

To: Cynthia Armstrong

Cc: Allocca, John E. (Marketing)

Subject: National Grid - Request for Proposals for Massachusetts Gas Infrastructure Expansion

Hi Cynthia,

Please refer to the attached letter from John Allocca dated January 15, 2016.

Thank you,

Janet

REDACTED Nantucke each

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(b) Page 153 of 153

Senior Contract Specialist			
national grid			
100 E. Old Country Road			
Hicksville, NY 11801			
T:			
F:			

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Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(c) Page 1 of 14

Jessica Buno

From: Allocca, John E. (Marketing)

Sent: Monday, November 02, 2015 8:46 AM

To: Prag, Janet A. (Marketing)

Subject: FW: EDC Pipeline Capacity/Supply Procurement

Categories: Yellow Category

From: Scott, Emilee Mooney [mailto:EScott@rc.com]

Sent: Friday, October 30, 2015 4:32 PM

To: edna.karanian@eversource.com; eric.soderman@eversource.com; Allocca, John E. (Marketing); Brennan, Timothy J.;

Jaffe, Samara A. (Marketing)

Cc: Miranda, Joey Lee; Scott, Emilee Mooney

Subject: EDC Pipeline Capacity/Supply Procurement

All,

We submit the following additional questions:

Submittal Logistics:



Sec. B(3):



Sec. B(4):



Sec. B(6):

Page 2 of 14

Sec. B(7):



Thank you, Emilee

Emilee Mooney Scott

Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103
Direct 860.275.8362 | Fax 860.275.8299
escott@rc.com | www.rc.com
Bio | Contact Card

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Jessica Buno

From: Allocca, John E. (Marketing)

Sent: Thursday, October 29, 2015 3:16 PM

To: Prag, Janet A. (Marketing)

Subject: Fwd: EDC Pipeline Capacity/Supply Procurement

Categories: Yellow Category

Sent from my iPhone

Begin forwarded message:

From: "Scott, Emilee Mooney" < EScott@rc.com>
Date: October 29, 2015 at 2:52:01 PM EDT

To: "edna.karanian@eversource.com" <edna.karanian@eversource.com>,

 $"\underline{eric.soderman@eversource.com}" < \underline{eric.soderman@eversource.com} >,$

Cc: "Miranda, Joey Lee" < imiranda@RC.com>

Subject: EDC Pipeline Capacity/Supply Procurement

AII,

We have two questions, the answers to which may shape further questions to be submitted tomorrow. As such, we would appreciate a prompt reply if possible.

•

Thank you. Emilee

Emilee Mooney Scott

Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103
Direct 860.275.8362 | Fax 860.275.8299
escott@rc.com | www.rc.com
Bio | Contact Card

Robinson+Cole

Boston | Hartford | New York | Providence | Stamford Albany | Los Angeles | Miami | New London

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1

[&]quot;John.Allocca@nationalgrid.com" < John.Allocca@nationalgrid.com >,

[&]quot;TIMOTHY.J.BRENNAN@nationalgrid.com" < TIMOTHY.J.BRENNAN@nationalgrid.com >,

[&]quot;Samara.Jaffe@nationalgrid.com" <Samara.Jaffe@nationalgrid.com>

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(c) Page 4 of 14

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by telephone at 1-860-275-8200, or e-mail at <u>it-admin@rc.com</u>, and immediately delete this message and all its attachments.

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(c) Page 5 of 14

Jessica Buno

From: Allocca, John E. (Marketing)

Sent: Monday, November 02, 2015 8:28 AM

To: Prag, Janet A. (Marketing)

Subject: FW: Questions Regarding the Eversource/National Grid RFP -- Natural Gas Capacity,

LNG and Storage

Categories: Yellow Category

From: Crane, Keith [mailto Sent: Friday, October 30, 2

To: edna.karanian@eversource.com; eric.soderman@eversource.com; Allocca, John E. (Marketing); Brennan, Timothy J.;

Jaffe, Samara A. (Marketing)

Cc: Crane, Keith

Subject: Questions Regarding the Eversource/National Grid RFP -- Natural Gas Capacity, LNG and Storage

Dear Eversource and National Grid:

Associated with your RFP dated October 23, 2015, GDF SUEZ Gas NA LLC has the following questions:



Thanks.

Keith Crane Commercial Development Director GDF SUEZ Gas NA, LLC 1990 Post Oak Blvd., Suite 1900 Houston, TX 77056

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(c) Page 6 of 14

Office: Cell:

Page 7 of 14

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	•	_
J	essica	Buno

From: Allocca, John E. (Marketing)

Sent: Wednesday, October 28, 2015 7:42 AM

To: Prag, Janet A. (Marketing) **Subject:** FW: EDC RFP Questions

Categories: Yellow Category

Janet:

Could you please compile the questions that we receive in connection with the EDC RFP. Below is a question from IGTS.

Thanks,

John

From: Robert Perless [mailto

Sent: Tuesday, October 27, 2015 4:36 PM

To: Allocca, John E. (Marketing) **Subject:** RE: EDC RFP Questions

John,



Robert Perless, PE, PMP
Project Development Manager

Office FAX Cell

From: Allocca, John E. (Marketing) [mailto:John.Allocca@nationalgrid.com]

Sent: Tuesday, October 27, 2015 3:09 PM

To: Robert Perless

Subject: EDC RFP Questions

Rob:

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(c) Page 8 of 14

I got your voice-mail. We can only respond to questions that are submitted in writing (e-mail is fine). We will transmit our responses to all RFP recipients.

Thanks,

John

John E. Allocca
Director, Gas Contracting & Compliance
nationalgrid
100 East Old Country Road
Hicksville, NY 11801
tel #
cell

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For the registered information on the UK operating companies within the National Grid group please use the attached link: http://www.nationalgrid.com/corporate/legal/registeredoffices.htm

Page 9 of 14

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Jessica Buno

From: Allocca, John E. (Marketing)

Sent: Monday, November 02, 2015 8:45 AM

To: Prag, Janet A. (Marketing)

Subject: FW: *Confidential: Massachusetts Electric Distribution Companies Request for Proposal

- October 23, 2015 (INFORMATION)

Categories: Yellow Category

From: Cynthia Armstrong [mailto:cynthia_armstrong@transcanada.com]

Sent: Friday, October 30, 2015 4:10 PM

To: eric.soderman@eversource.com; edna.karanian@eversource.com; Allocca, John E. (Marketing); Brennan, Timothy J.;

Jaffe, Samara A. (Marketing)

Cc: Don Bell; Amelia Cheung; Tim Stringer; Richard Bralow; Rita Homan; Margaret Foulds

Subject: RE: *Confidential: Massachusetts Electric Distribution Companies Request for Proposal - October 23, 2015

(INFORMATION)

Hi All,

Portland Natural Gas Transmission System ("PNGTS") appreciates the opportunity to respond to Request for Proposal(s) ("RFP","RFPs") from Eversource, National Grid and Narragansett Electric (collectively the "Companies") for firm natural gas pipeline capacity to serve electric generation load in New England. PNGTS has several general and specific questions about the RFP and RFP process:

General Questions:



Specific Questions from Bid Documents:



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(c) Page 10 of 14

Thank you, Cynthia

Cynthia L. Armstrong

Director of Marketing and Business Development

Portland Natural Gas Transmission System

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(c)

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One Harbour Place, Suite 375 Portsmouth, NH 03801 www.pngts.com

Office Fax Cell

cynthia armstrong@transcanada.com

http://www.linkedin.com/in/cynthiarmstrong

From: eric.soderman@eversource.com [mailto:eric.soderman@eversource.com]

Sent: Friday, October 30, 2015 2:10 PM

Cc: edna.karanian@eversource.com; eric.soderman@eversource.com; John.Allocca@nationalgrid.com;

TIMOTHY.J.BRENNAN@nationalgrid.com; Samara.Jaffe@nationalgrid.com

Subject: *Confidential: Massachusetts Electric Distribution Companies Request for Proposal - October 23, 2015

(INFORMATION)

As a reminder, all questions are due by 5pm EST October 30th 2015.

The EDCs will endeavor to publish via the web all written responses to questions in a timely manner, but will not post any responses that in our sole discretion could jeopardize the competitive nature of any particular bid.

Thank you

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Jessica Buno

Cc:

From: Mack, Rebecca G (Becky)

Sent: Friday, October 30, 2015 4:22 PM

To: Allocca, John E. (Marketing); Brennan, Timothy J.; Jaffe, Samara A. (Marketing); Prag,

Janet A. (Marketing); edna.karanian@eversource.com; eric.soderman@eversource.com

Sculley, Coralie; Piczak, Christopher T (Todd); Mody, Sital K; Skipworth, Norman D

(Dodson); Mack, Rebecca G (Becky)

Subject:MA EDC Pipeline Capacity/Supply Procurement- QuestionsAttachments:EDC RFP (Massachusetts) - TGP Question Memo (10-30-15).pdf

Categories: Yellow Category

Please see the attached for Tennessee's questions regarding the Massachusetts EDC RFP.

Please confirm receipt of this document.

Thank you.

Becky Mack

Manager, Business Development

Office:



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(c) Page 13 of 14

MEMORANDUM

TO: Edna Karanian, Eversource

Eric Soderman, Eversource John Allocca, National Grid Timothy Brennan, National Grid Samara Jaffe, National Grid

FROM: Sital K. Mody, Vice President, Marketing & Business Development

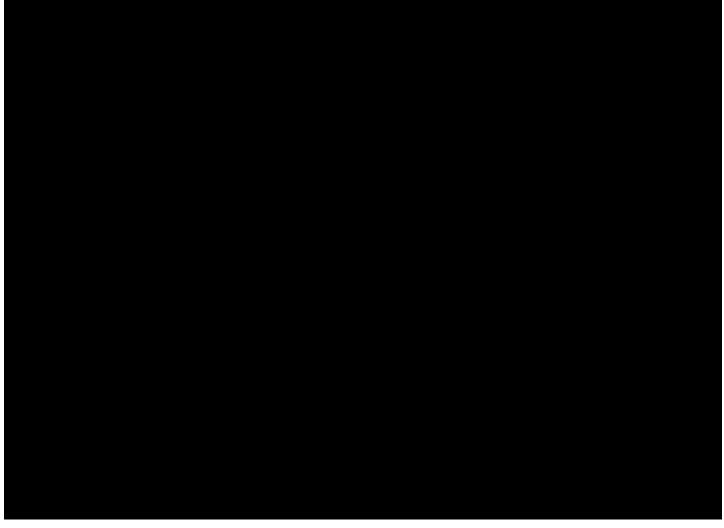
Tennessee Gas Pipeline Company

DATE: October 30, 2015

RE: EDC Pipeline Capacity/Supply Procurement

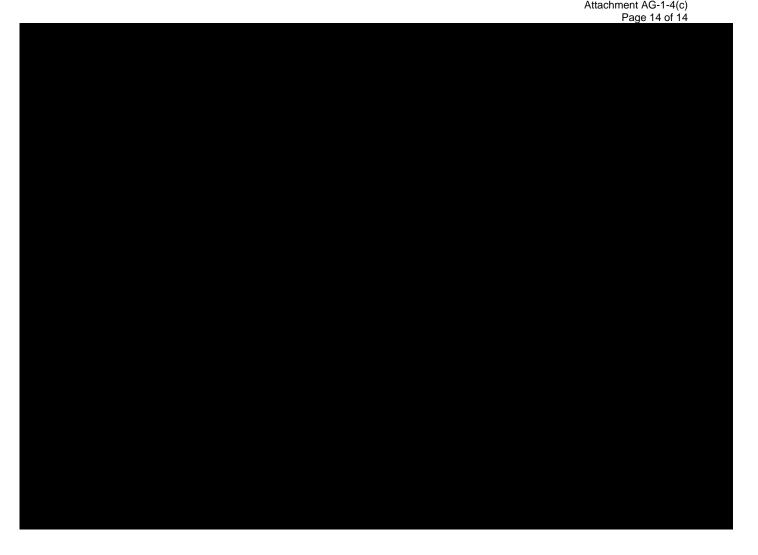
Bidder Questions

Tennessee Gas Pipeline Company, L.L.C. ("TGP") appreciates the opportunity to participate in the Notice of Request for Proposals ("RFP") issued by Eversource and National Grid on behalf of their Massachusetts electric distribution companies (the "EDCs"). In accordance with RFP, TGP submits the following questions. In order to have the benefit of your responses in preparing its proposals to the RFPs, TGP requests that Eversource and National Grid provide written responses by November 4, 2015.



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-4(c) Page 14 of 14

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Page 1 of 9

MA Gas Infrastructure Expansion – RFP Issued October 23, 2015 Response to RFP Questions from Bidders

November 5, 2015

Question 1.	
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Question 3.	
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Question 4.	
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Massachusetts Electric Company
Nantucket Electric Company
d/b/a National Grid
D.P.U. 16-05
Responses to the Attorney General's First Set of Information Requests
April 25, 2016
Exhibit AG-1-5
Page 1 of 1

Information Request AG-1-5

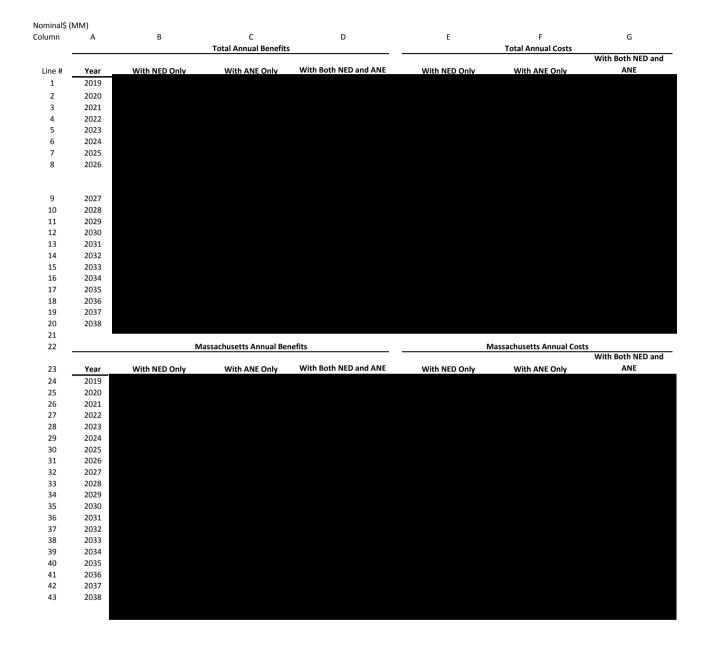
Request:

Refer to Exhibit NG-JNC-3, at pages 25-26. Please provide a copy of all supporting documentation, supporting analyses, calculations, and computer files utilized and/or prepared in conjunction with the preparation of Tables 3 and 4.

Response:

Please see Attachment AG-1-5(a) (HIGHLY SENSITIVE CONFIDENTIAL INFORMATION) for the supporting analysis and calculations for Tables 3 and 4.

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-5(a) Page 1 of 3



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-5(a) Page 2 of 3

С Column Α Total Annual Costs for Present Value Analysis
With Both NED and **Total Annual Benefits for Present Value Analysis** With NED Only With Both NED and ANE With NED Only ANE Line # Year With ANE Only With ANE Only

Nominal\$ (MM)

25		Massachusetts A	Annual Benefits for Pres	ent Value Analysis	Massachusetts	Annual Costs for Present	: Value Analysis
				_			With Both NED and
26	Year	With NED Only	With ANE Only	With Both NED and ANE	With NED Only	With ANE Only	ANE
27	2016						
28	2017						
29	2018						
30	2019						
31	2020						
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Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-5(a) Page 3 of 3

NG-JNC -3 Table 3 & Table 4

Nominal\$	(MM)									
Column		Α	В	С	D	E	F	G	Н	
		Total P	roject Cost-Bene	efits Summar	v 2019-2038 ((\$ Billions)				
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	Project		Benefits	Costs	Benefits	Benefits	Total Costs	Net Benefits	Cost Ratio	
1	With NED Only		_		\$1.4			\$12.1	4.7	•

	Project	Benefits	Costs	Benefits	Benefits	Total Costs	Net Benefits	Cost Ratio
1	With NED Only			\$1.4			\$12.1	4.7
2	With ANE Only			\$1.1			\$10.2	3.5
3	With Both NED and ANE			\$1.2			\$10.9	2.5
4								
5	Ma	ssachusetts Co	st-Benefits S	Summary 2019	-2038 (\$ Billi	ons)		_
6			Levelized			Present Valu	e	
		Annual	Annual	Annual Net	Total			Benefit to
7	Project	Benefits	Costs	Benefits	Benefits	Total Costs	Net Benefits	Cost Ratio
8	With NED Only			\$0.6			\$5.7	5.0
9	With ANE Only			\$0.5			\$4.8	3.8
10	With Both NED and ANE			\$0.6			\$5.2	2.7

Massachusetts Electric Company
Nantucket Electric Company
d/b/a National Grid
D.P.U. 16-05
Responses to the Attorney General's First Set of Information Requests
May 2, 2016
Exhibit AG-1-6
Page 1 of 1

<u>Information Request AG-1-6</u>

Request:

Please provide a copy of any presentations or business plans presented to National Grid's senior management or Board of Directors that address the Access Northeast Pipeline project or the NED projects.

Response:

Please see Attachment AG-1-6(a) (HIGHLY SENSITIVE CONFIDENTIAL INFORMATION) and Attachment AG-1-6(b) (HIGHLY SENSITIVE CONFIDENTIAL INFORMATION).

nationalgrid

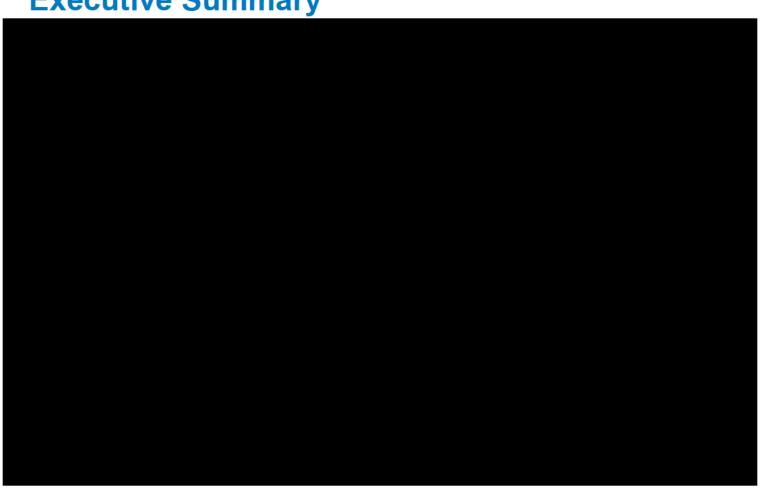
New England Natural Gas Infrastructure RFP

December 7, 2015

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-6(a) Page 2 of 9

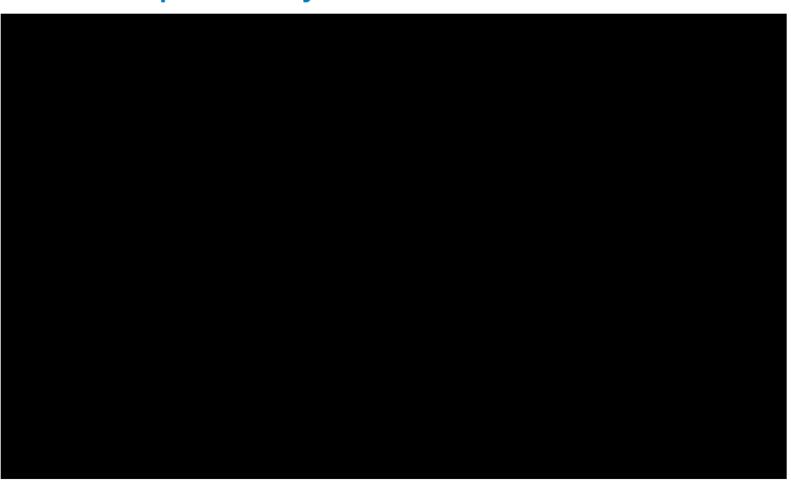
nationalgrid

Executive Summary



nationalgrid

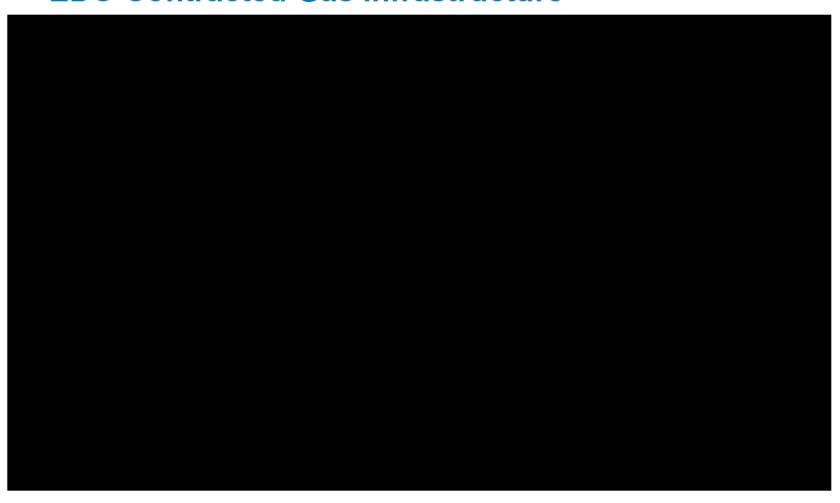
RFP Response Analysis: Status & Issues/Concerns



Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-6(a) Page 4 of 9

nationalgrid

EDC-Contracted Gas Infrastructure



Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-6(a) Page 5 of 9

nationalgrid

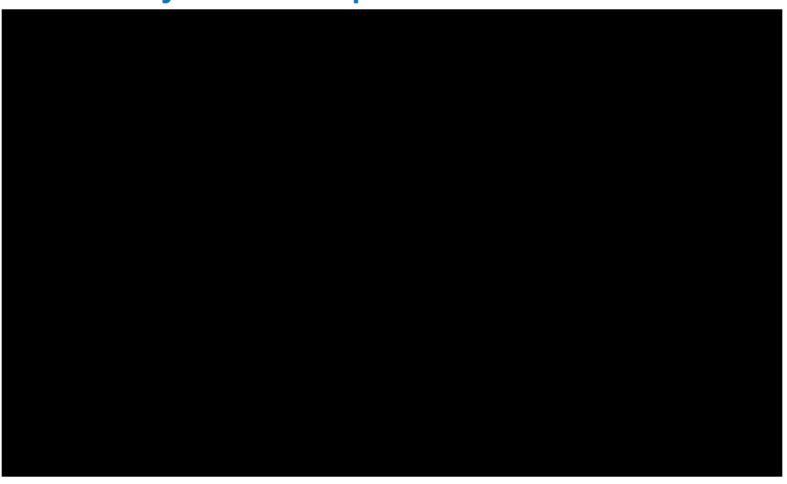
RFP Overview



Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-6(a) Page 6 of 9

nationalgrid

Summary of RFP Responses



Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-6(a) Page 7 of 9

nationalgrid

Timeline & Process to Filing in MA



Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-6(a) Page 8 of 9

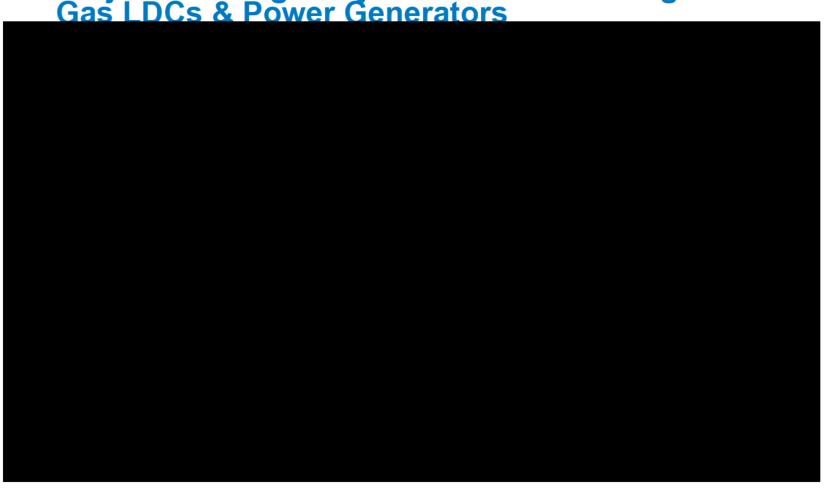
nationalgrid

APPENDIX

Massachusetts Electric Company Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05 Attachment AG-1-6(a) Page 9 of 9

nationalgrid

Projected Design Day Demand in New England: Gas LDCs & Power Generators



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-6(b) Page 1 of 12

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nationalgrid Financial Remuneration for New Natural Gas Infrastructure Long-Term Contracts

Privileged Work Product Prepared in Anticipation of Regulatory Proceeding

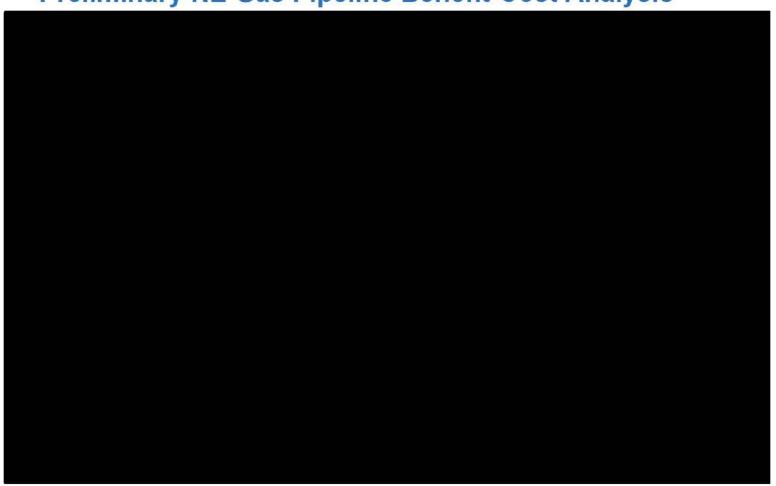
December 22, 2015

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-6(b) Page 2 of 12

Privileged Work Product Prepared in Anticipation of Regulatory Proceeding

nationalgrid

Preliminary NE Gas Pipeline Benefit-Cost Analysis

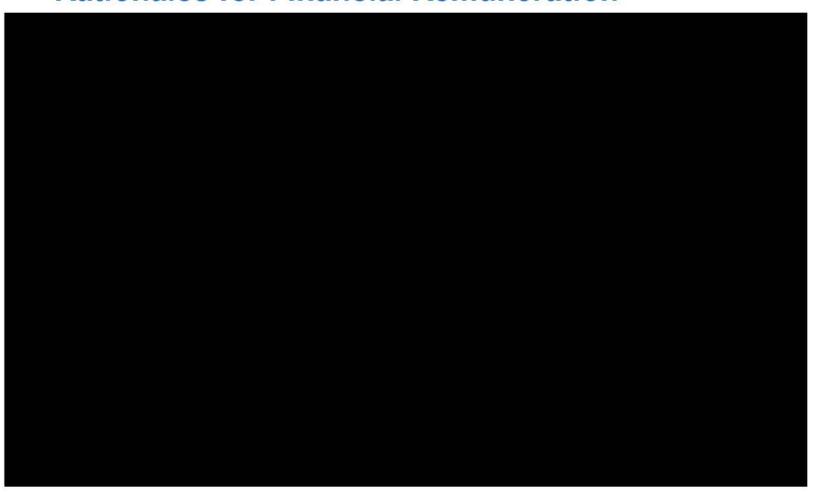


Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-6(b) Page 3 of 12

Privileged Work Product Prepared in Anticipation of Regulatory Proceeding



Rationales for Financial Remuneration

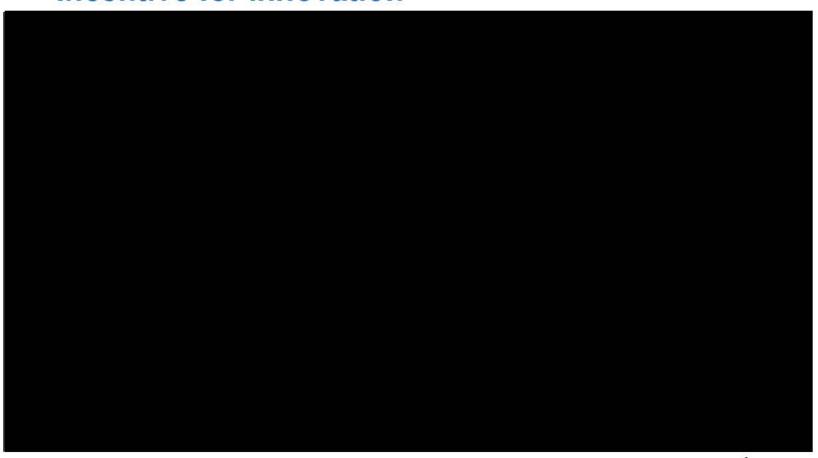


Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-6(b) Page 4 of 12

Privileged Work Product Prepared in Anticipation of Regulatory Proceeding

nationalgrid

Incentive for Innovation

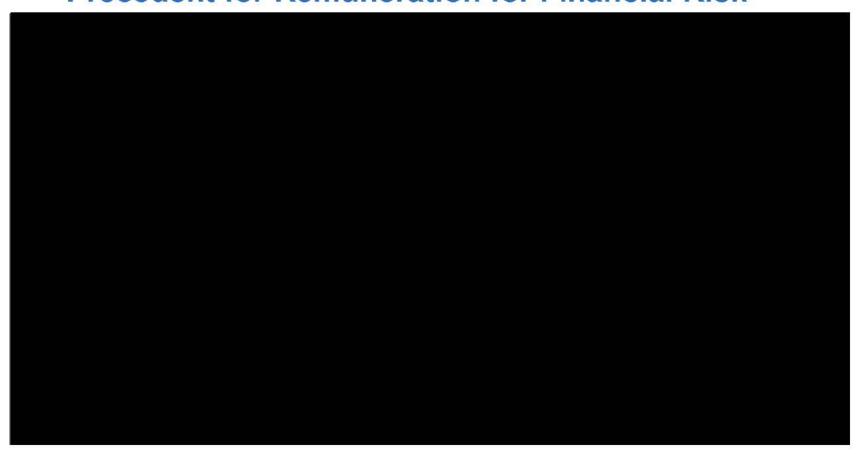


Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-6(b) Page 5 of 12

Privileged Work Product Prepared in Anticipation of Regulatory Proceeding

nationalgrid

Precedent for Remuneration for Financial Risk



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-6(b) Page 6 of 12

Privileged Work Product Prepared in Anticipation of Regulatory Proceeding

nationalgrid

Material Cost Recovery Risk

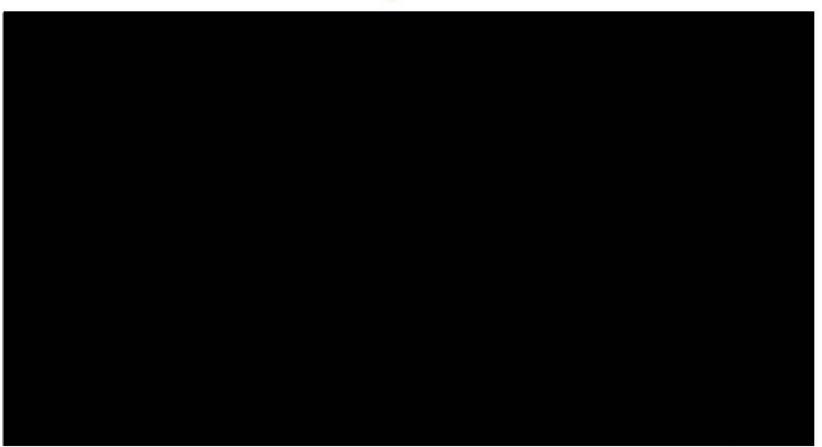


Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-6(b) Page 7 of 12

Privileged Work Product Prepared in Anticipation of Regulatory Proceeding

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Nature of Cost Recovery Risk



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-6(b) Page 8 of 12

Privileged Work Product Prepared in Anticipation of Regulatory Proceeding



Basis for Financial Remuneration



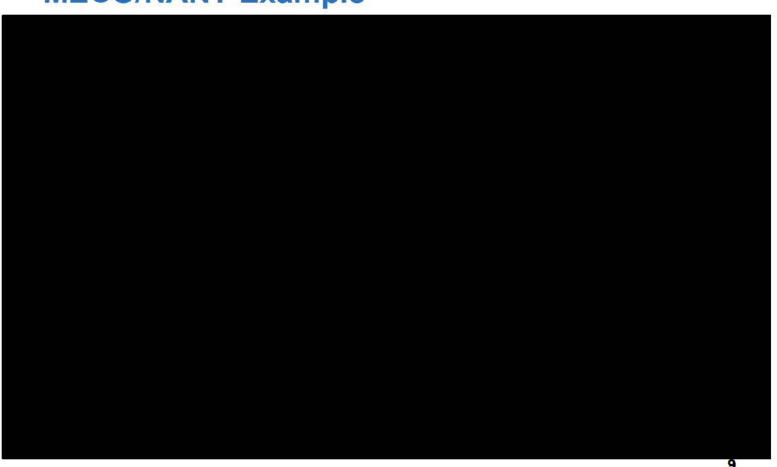
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-6(b)

Page 9 of 12

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Privileged Work Product Prepared in Anticipation of Regulatory Proceeding

nationalgrid Financial Remuneration Options -**MECO/NANT Example**

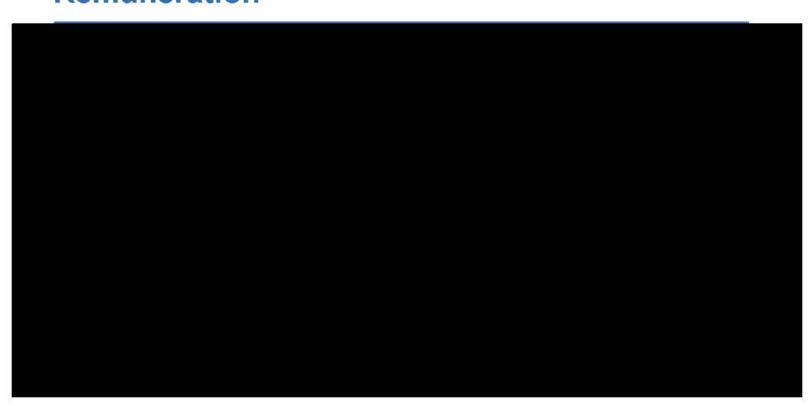


Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-6(b) Page 10 of 12

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Privileged Work Product Prepared in Anticipation of Regulatory Proceeding

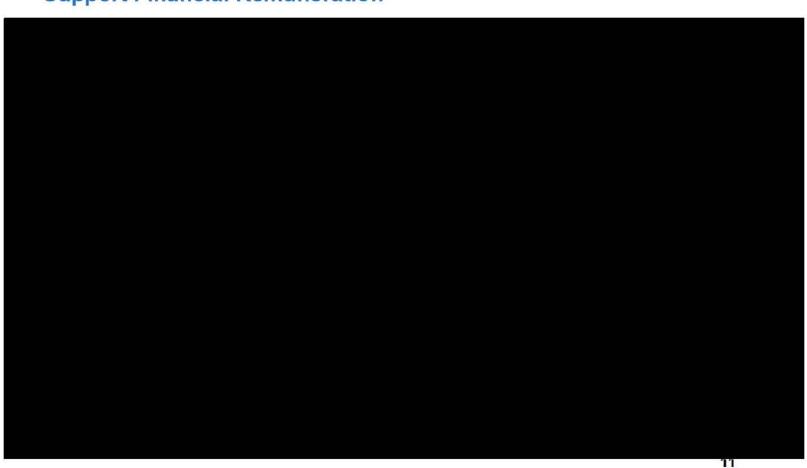
Equity Stakes in Pipelines Are Not nationalgrid Remuneration



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-6(b) Page 11 of 12

Privileged Work Product Prepared in Anticipation of Regulatory Proceeding

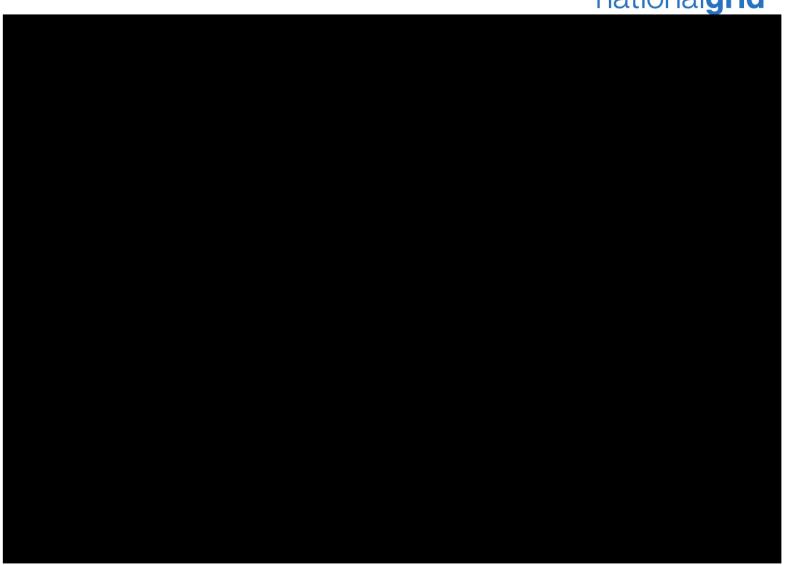
national **grid**Stand-Alone Regulation and Arm's Length Affiliate Transactions Support Financial Remuneration



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-6(b) Page 12 of 12

Privileged Work Product Prepared in Anticipation of Regulatory Proceeding





Massachusetts Electric Company
Nantucket Electric Company
d/b/a National Grid
D.P.U. 16-05
Responses to the Attorney General's First Set of Information Requests
April 25, 2016
Exhibit AG-1-7
Page 1 of 1

Information Request AG-1-7

Request:

Please provide a copy of any presentations or business plans presented to National Grid's senior management or Board of Directors that seek approval to enter into transportation and storage contracts with Algonquin and Tennessee.

Response:

Please see Attachment AG-1-7.

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-7 Page 1 of 4

national grid

EPRMC Approval Request:

Execution of Precedent Agreements for Incremental Energy Infrastructure in New England for Massachusetts Electric Distribution Companies

Executive owner: John Vaughn

Meeting date: January 8, 2016 | Agenda item: 1

Operating Co.: MECo & Nant | Reg. jurisdiction(s): US – Massachusetts | DOA: 4.C. Notional Amount:

Background

PURPOSE

The purpose of this document is to request that the EPRMC review and approve precedent agreements between the Massachusetts Electric Company, Nantucket Electric Company (collectively, referred to herein as "National Grid" or "EDCs") and each of Algonquin Gas Transmission ("AGT") and Tennessee Gas Pipeline Company, LLC ("TGP").

CONTEXT

Numerous published reports have concluded that there is insufficient natural gas infrastructure to support reliable and affordable electric power generation in New England. Over the next ten years, continued firm gas demand by Local Distribution Companies ("LDC") and power generation load growth will require energy infrastructure beyond current pipeline capacity commitments in the region. By 2030, firm LDC gas loads may require an additional 1 Bcf/d beyond the current incremental capacity planned in 2016. Winter peaking power generation demand may require an additional 1.2 Bcf/d of capacity.

Because most natural gas-fired power generation capacity in New England is not supported by firm transportation contracts on natural gas pipelines, the cost of gas-fired power generation is closely tied to wholesale natural gas prices. Therefore, New England's electricity prices across all ISO-NE zones correlate with regional wholesale natural gas prices. In order to provide relief from supply constraints and reduce daily price volatility, without reduced power sector demand, incremental gas infrastructure additions and increased gas supply are necessary.

REGULATORY MANDATE

On October 2, 2015, the Massachusetts Department of Public Utilities ("DPU") issued an order [DPU 15-37] allowing EDCs to contract for natural gas capacity to fuel power generation, and pass the cost on to consumers. Under the order, the DPU found that the contracts for pipeline capacity would be consistent with state law if the electric companies could show that entering into such a contract would result in cost savings for ratepayers. At this time, the Rhode Island Office of Energy Resources is seeking consulting services to advise on potential interstate natural gas capacity and infrastructure contracts which may be filed pursuant to Rhode Island General Laws §39-31, the Affordable Clean Energy Security Act and a solution for Narragansett Electric Company has not yet been selected.

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-7 Page 2 of 4

EPRMC APPROVAL REQUEST: PRECEDENT AGREEMENTS FOR INCREMEMNTAL ENERGY INFRASTURCTURE IN NEW ENGLAND FOR MASSACHUSETTS ELECTRIC DISTRIBUTION COMPANIES

National Grid RFP and Project Selection

NATIONAL GRID RFP

On October 23, 2015, National Grid issued a Notice of Request for Proposals for Natural Gas Capacity, Liquefied Natural Gas ("LNG"), and Natural Gas Storage ("National Grid RFP") for both Massachusetts and Rhode Island, with responses due by November 13, 2015. The National Grid RFP was developed and issued jointly with Eversource Energy and with the consultation of energy officials in the impacted state, and distributed to those market participants regarded in the industry as able to meet the requirements of power generation in New England. Responses to the National Grid RFP included four incremental pipeline solutions and four LNG solutions.

National Grid hired Black & Veatch to conduct a detailed benefit-cost analysis of responses received by National Grid in response to its RFP. Solutions identified by Black & Veatch included those responses able to provide reliable delivery of natural gas on a primary firm basis to multiple generating facilities on critical peak days across multiple load zones, with preference given to projects delivering incremental capacity to the region. Based on the findings of Black & Veatch, the optimal solution for new infrastructure includes a two-pipeline approach and will be achieved by contracting for capacity on both Spectra Energy Partners Access Northeast ("Access Northeast") and Kinder Morgan's Northeast Energy Direct Project ("NED").

PROPOSED PROJECTS

Access Northeast and NED will each have a significant impact on lowering regional peak winter natural gas and electric prices. The additional pipeline capacity will reduce regional constraints which will translate to a reduction in daily energy prices and volatility levels. Each project will be able to serve incremental firm load and power generation growth over the analysis period and both proposed pipeline projects are expected to provide significant long- term benefits to New England consumers.

NED

TGP, a subsidiary of Kinder Morgan, is developing NED by installing new and upgrading infrastructure in Pennsylvania, New York, Massachusetts, New Hampshire, Rhode Island and Connecticut to help meet increased demand for natural gas, reduce energy costs and create jobs. On November 20, 2015, TGP filed a certificate application with the Federal Energy Regulatory Commission for NED which includes both a supply path component with receipts back to the Marcellus shale basins in northern Pennsylvania for deliveries to Wright, New York, as well as a market path component having receipts from Wright, New York, for deliveries into New England. Last month, TGP announced a project called PowerServe, which would use NED assets to provide up to 750,000 dekatherms per day of capacity for eligible power plant operators, electrical distribution companies and natural gas marketers or aggregators.

Service on NED is expected to commence as early as November 1, 2018. TGP has offered the National Grid EDCs a primary term ending twenty years after the service commencement date and

Based upon the Black & Veatch analysis, the EDCs

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EPRMC APPROVAL REQUEST: PRECEDENT AGREEMENTS FOR INCREMEMNTAL ENERGY INFRASTURCTURE IN NEW ENGLAND FOR MASSACHUSETTS ELECTRIC DISTRIBUTION COMPANIES

will contract for approximately	60% of their mar	ket need on the	upstream	supply path.
	Maximum Daily	Maximum Daily	v	
EDC	Quantity (Dth) -	Quantity (Dth)	_ App	proximate
	Supply Path	Market Path	Anı	nual Cost
Massachusetts Electric	60,400	100,000		
Company	,	, ,		
Nantucket Electric Company	302	500		
Hamacket Electric company	302	300		

Access Northeast

Access Northeast was designed to maximize direct pipeline interconnects to up to 60% of ISO-NE's power plants as a customized solution to New England's energy challenge. Access Northeast will upgrade existing facilities on the existing AGT system and develop market area LNG storage assets in New England to deliver up to 0.9Bcf of natural gas. Access Northeast will primarily utilize existing pipeline and LDC corridors of natural gas infrastructure in New York, Connecticut, Rhode Island and Massachusetts.

Initial service on Access Northeast is expected to commence as early as November 1, 2018, for a portion of Access Northeast under a newly developed rate schedule to be filed as part of the pipeline's tariff with the Federal Energy Regulatory Commission. Capacity available to all EDCs that are customers of Access Northeast are expected to increase annually based on the customer's proportionate share of the project until total EDC capacity of 900,000 Dth/day is achieved, with

these entitlements will be supported by storage capacity of 6,400,000 Dth, vaporization entitlements of 400,000 Dth/d and liquefaction entitlements of 54,000 Dth/d of natural gas, in connection with Access Northeast. In addition to access to the storage receipt point at Acushnet during Phase 4, the EDCs will have access to receipt points along the existing AGT mainline for delivery into New England.

AGT has offered the National Grid EDCs precedent agreements having a primary term of twenty years

REDACTED

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-7 Page 4 of 4

EPRMC APPROVAL REQUEST: PRECEDENT AGREEMENTS FOR INCREMEMNTAL ENERGY INFRASTURCTURE IN NEW ENGLAND FOR MASSACHUSETTS ELECTRIC DISTRIBUTION COMPANIES

EDC	Maximum Daily Quantity (Dth) – Phase 4	Approximate Annual Cost
Massachusetts Electric Company	180,000	
Nantucket Electric Company	900	

REGULATORY APPROVALS REQUIRED

Massachusetts DPU Approval – In Massachusetts, there is a formal procedure for obtaining approval of supply agreements with a term greater than one year. Following approval by the EPRMC, the agreements would be filed with the Massachusetts DPU along with supporting testimony. We would be required to respond to data requests from the DPU and other interveners and would be subject to cross examination. Following the hearing, the Massachusetts DPU would issue an order.

Energy Procurement will collaborate with

Regulatory, Legal and the Massachusetts Jurisdiction in connection with the filing and approval process.

CONCLUSION & NEXT STEPS

We believe the precedent agreements are in the best interest of our EDC customers in Massachusetts and are consistent with the state's strategy to address New England's need for infrastructure in the region. Therefore, the EPRMC is requested to approve the precedent agreements described herein with the EDCs for service on both Access Northeast and NED and authorize the execution of the twenty-year service agreements contemplated therein.

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<u>Information Request AG-1-8</u>

Request:

Please provide a copy of any presentations or business plans presented to Massachusetts Electric Company's ("Massachusetts Electric") senior management or Board of Directors that address the Access Northeast Pipeline project or the NED projects.

Response:

See the Company's response to Information Request AG-1-6.

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<u>Information Request AG-1-9</u>

Request:

Please provide a copy of any presentations or business plans presented to Massachusetts Electric's senior management or Board of Directors that seek approval to enter into transportation and storage contracts with Algonquin and Tennessee.

Response:

Please see Attachment AG-1-7.

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<u>Information Request AG-1-10</u>

Request:

Please provide a copy of any presentations or business plans presented to Nantucket Electric Company's ("Nantucket Electric") senior management or Board of Directors that address the Access Northeast Pipeline project or the NED projects.

Response:

See the Company's Response to Information Request AG-1-6.

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Information Request AG-1-11

Request:

Please provide a copy of any presentations or business plans presented to Nantucket Electric's senior management or Board of Directors that seek approval to enter into transportation and storage contracts with Algonquin and Tennessee.

Response:

Please see Attachment AG-1-7.

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<u>Information Request AG-1-12</u>

Request:

Refer to the Petition at page 8, fn. 2. Who will be the National Grid witness testifying about "the rigorous process to ensure that, consistent with 220 C.M.R. § 12.00, contract negotiations were conducted on a transparent, arms-length basis" during the RFP process and subsequent contract negotiations?

Response:

Timothy J. Brennan will testify regarding this issue.

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<u>Information Request AG-1-13</u>

Request:

Please provide all documents that support National Grid's assertion at page 8, fn. 2 of the Petition.

Response:

Please see the following attached exhibits:

Exhibit AG-1-13(a): Standards of Conduct training

Exhibit AG-1-13(b): Standards of Conduct training certification (blank form)

Exhibit AG-1-13(c): List of Business Development (BD) team and Electric Distribution

Company (EDC) team members

In addition, please see the testimony contained in Exhibit NG-TJB/JEA-1, at 50-53, as part of the Company's initial filing in this proceeding.

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-13(a) Page 1 of 8

US Regulatory Compliance

Standards of Conduct

September 2015

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-13(a) Page 2 of 8

National Grid Business Development and Evaluation Teams

- For the purposes of various ongoing business development opportunities, National Grid has designated certain employees and outside contractors to reside within a specific team. Each of those teams is in effect a silo for the purposes of any communication with respect to non public information regarding any aspect of the project.
- Know what team you are on!
- If you have a question, ask.

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-13(a) Page 3 of 8

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Communications

 Communications may take many forms such as: Letters; E-mail; Telephone conversations; Instant Message; In person meetings; Video Conferences or Toxto

Texts.

Always think twice before you transmit any information regarding the project. You must ask yourself if there is any non public information contained in the communication and who will be receiving your communication!

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What the Lobbying Laws Covers-Generally

- "Lobbying" or "lobbying activities" means any activity intended to support, oppose, modify, delay, expedite or otherwise affect:
 - Passage or defeat of state or municipal legislation (incl., for state legislation only, its introduction or the Governor's approval or veto) or local ordinance or resolution;
 - Adoption, issuance, rescission, modification, or terms of an executive order;
 - Adoption or rejection of an agency rule or regulation;
 - Outcome of any rate making proceeding; or
 - Determinations relating to governmental procurements.

By the state or a "municipality," unless an exemption applies.



The laws covering lobbying in all states where we conduct business do vary. However, it is incumbent on everyone to recognize that certain activities related to government officials may rise to the level of reportable lobbying and it is your responsibility to ask questions if you are not sure if what you are doing is lobbying activity. Do not hesitate to reach out to the corporate affairs team and/or John Boyle for guidance.

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Exempt Activity – Not Reportable "Lobbying"

- Interactions (meetings, calls, emails, letters, etc.) that <u>do not</u> include an attempt to influence (e.g., filing reports or scheduling agency inspections)
- Participating as a witness, attorney, or other representative in public, on-the-record proceedings



- Applying for licenses, certificates, or permits authorized by law
- Certain government procurement-related communications (e.g., submitting bids, responding to RFPs, submitting written questions, post-award negotiations, or communications in the ordinary course of performing a contract)

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Case Study

- On March 25, 2015, the PSC adopted gas safety rules, in NYS PSC Case 14-G-0357, to mirror related federal regulations
 - These new PSC rules require new to-the-meter leak tests, repair crew drug tests, and gas odorization that could cost National Grid \$50,000,000 to implement over three years and \$14,000,000 per year after year three
 - Some interactions will be reportable "lobbying" but others will be exempt, for example:
 - Responding to a PSC request for comments, or analyzing a rule to advise executives on how it may impact the Company (but not identifying for a lobbyist the provisions the Company should try to change), <u>would not be</u> "lobbying"
 - But urging the Governor's Office to oppose the rule, asking an Assemblyman to introduce a bill that would pass its costs on to customers, convincing a Senator to vote for a utility-favorable bill, or negotiating with the PSC to delay a rule would be reportable lobbying

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-13(a) Page 7 of 8

United Message – Full Compliance

- Communicating contradictory messages or the perception that we are not complying fully with the lobbying rules can interfere with the Company's government relations efforts
 - Remember the "New York Times test"
 - Help is available to advocate the company's positions
- For legal guidance call John Boyle



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Questions

Contact for assistance:

John Boyle – Regulatory Compliance john.boyle@nationalgrid.com 516-545-3778

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CERTIFICATE

Reference is hereby made to the Standards of Conduct materials provided to me and
dated September 2015 (the "Standards"). I certify that the Standards have been communicated
to me and I commit to honoring the Standards. To the extent I have any questions regarding
compliance with these Standards I will consult with John P. Boyle, Sr. Counsel, National Grid.
Dated:
Signed:

Massachusetts Electric Company and Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-13(c) Page 1 of 1

Gas Capacity Contracts RFP: Business Development and Electric Distribution Company Team Members

Business Development Team

Kim Goslant Eyad Al-Sibai Larry Nelson Jackie Barry Jim Gould Celia O'Brien Steve Bern Prescott Hartshorne Nelson Perez Alexandra Blackmore Meabh Purcell William Hazelip Rhonda Blake Michael Hickey Josh Rogers Stan Blacewicz Nabil Hitti Karen Shih Raman Somayajulu Richard Burlingame Kevin Hyzak Gideon Katsh Nathaniel Standish Echo Cartwright Mary Coleman Ross Kennedy John Stavrakis Christopher Connolly Kevin Huyler Richard Stuebi Reshmi Das Dean Latulipe Patrick Tarmey Wendy Levine Cvnthia DeCambre Karl Thaesler Patty DiOrio Tim McAllister Grace Walsh **Emily Duncan** Brian McNeill Erin Whoriskey Robert Ermanski Mackay Miller Edward Young David Youngstrom Mark Ferri Brian Mulcahy

John J. Flynn Macdara Nash
Jill Gates Jake Navarro

Electric Distribution Company Team

Connie DiDomenico David Lodemore John Allocca Elizabeth Arangio Deborah Drew Tim Martin Mary-Leah Assad Tiffany Forsyth Scott McCabe David Graves Laura Bickel Steve McCauley Scott Bower John Habib Venkatesh Minisandram Tim Brennan Brian Havduk William Richer Jessica Buno Jennifer Hutchinson Michael Ryan Samara Jaffe **Brooke Skulley** Terry Burns Steve Caldwell Margaret Janzen Jessica Vongsa Carol White Mary Cammarata Ann Leary Cynthia Clark Melissa Liazos

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Information Request AG-1-14

Request:

Why was no testimony or supporting documentation on affiliate transaction issues contained in the Petition?

Response:

Testimony on affiliate transaction issues was contained in the Company's initial filing. <u>See</u> Exhibit NG-TJB/JEA-1, at 50-53.

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<u>Information Request AG-1-15</u>

Request:

Please identify the National Grid entity that owns an interest or potential interest Access Northeast Pipeline project?

Response:

National Grid Algonquin LLC, an indirect unregulated subsidiary of National Grid USA, holds a 20 percent Class B membership interest in Algonquin Gas Transmission LLC. Algonquin Gas Transmission LLC is responsible for the development of the ANE Project.

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<u>Information Request AG-1-16</u>

Request:

When was the National Grid entity identified in your response to AG 1-15 created and where was that entity incorporated or registered?

Response:

National Grid Algonquin LLC was formed as a Delaware limited liability company on September 1, 2015.

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<u>Information Request AG-1-17</u>

Request:

Who, if anyone, from the entity identified in your response to AG 1-15 was involved in negotiation of the ANE project and the NED precedent agreements? Provide that person(s)' title and the nature and extent of involvement.

Response:

Spectra personnel took the lead in the negotiations of the ANE precedent agreements on behalf of the ANE Project. National Grid Algonquin LLC was not directly involved in the negotiations of the ANE precedent agreements, and was not involved in the negotiation of the NED precedent agreements. For National Grid's participation in the negotiations of the ANE Precedent Agreement, please see response to AG 1-18.

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<u>Information Request AG-1-18</u>

Request:

Please identify all individuals employed by or on behalf of National Grid or one of its affiliated entities who negotiated the Access Northeast Pipeline project and the NED precedent agreements on behalf of National Grid. Provide titles and extent of involvement.

Response:

The following individuals were involved in the negotiation of the Access Northeast and NED precedent agreements on behalf of Massachusetts Electric and Nantucket Electric:

Name	Title	Extent of Involvement
John Allocca	Director of Gas Contracting &	Primary Negotiator
	Compliance	
Cynthia Clark	Assistant General Counsel	Legal Support
Timothy Brennan	Director, Regulatory Strategy and	Participated in Negotiations
	Integrated Analytics	
Samara Jaffe	Lead Program Manager, Energy	Participated in Negotiations
	Procurement	

Prescott Hartshorne, Director, US Business Development, had day-to-day responsibility for negotiating the ANE Project precedent agreements on behalf of National Grid Algonquin LLC, in association with Spectra and Eversource. Spectra personnel took the lead in the negotiations of the ANE precedent agreements on behalf of the ANE Project.

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Information Request AG-1-19

Request:

Please provide all documents relating to or describing the formation of the equity and/or other interests of National Grid, Spectra Energy Partners, LP, and National Grid USA, and their affiliates and subsidiaries, in the Access Northeast Pipeline project.

Response:

The followings documents are related to the formation of Class A and Class B equity interests in Algonquin Gas Transmission LLC and National Grid's equity participation in the ANE Project:

Attachment AG 1-19 (a): A copy of the AN Formation Agreement dated September 14, 2015, the agreement pursuant to which Spectra Algonquin Holdings, LLC, Eversource Gas Transmission LLC and National Grid Algonquin LLC purchased Class B membership interests in Algonquin Gas Transmission LLC.

Attachment AG 1-19(b): the First Amended and Restated Limited Liability Company Agreement dated September 14, 2015, the operating agreement of Algonquin Gas Transmission LLC.

Attachment AG 1-19 (a) and Attachment AG 1-19(b) contain highly sensitive and/or proprietary information (*e.g.*, information regarding business development opportunities, proprietary accounting methodologies, tax allocations, withdrawal & transfer rights, etc.) which, if disclosed, could subject the Class B members or their customers to competitive disadvantage or other business injury. As competitive solicitations in other New England states for natural gas infrastructure projects are either ongoing or imminent, if the project-specific information contained in Attachments AG 1-19 (a) and AG 1-19(b) is disclosed, the Class B members would be placed at a competitive disadvantage in those solicitation processes. Accordingly, for the reasons set forth in the Motion for Protective Treatment filed simultaneously herewith, Attachment AG 1-19 (a) and Attachment AG 1-19(b) consist entirely of Highly Sensitive Confidential Information and are omitted from the public record in their entirety.

Massachusetts Electric Company and Nantucket Electric Company each d/b/a National Grid D.P.U. 16-05

Attachments AG-1-19(a) and AG-1-19(b) constitute Highly Sensitive Confidential Information Protected from Public Disclosure

REDACTED

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<u>Information Request AG-1-20</u>

Request:

Please state what consideration was given by National Grid and/or the entity identified in your response to AG 1-15 in order to acquire its equity or other interest in the Access Northeast Pipeline project. Provide all supporting documentation.

Response:

National Grid Algonquin LLC provided in Pre-Formation Reimbursable Costs owed to other Class B Members in order to complete the purchase of its equity interest in the ANE Project. Please see the Formation Agreement provided in Attachment AG 1-19(a) which describes the Pre-Formation Reimbursable Costs.

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Information Request AG-1-21

Request:

Please confirm that the interest or potential interest owned or to be owned in Access Northeast Pipeline project by the entity identified in your response to AG-1-15 is 20 percent.

Response:

National Grid Algonquin LLC holds a 20 percent interest in the ANE Project through its ownership of 20 percent of the Class B membership interests in Algonquin Gas Transmission LLC.

REDACTED

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Information Request AG-1-22

Request:

What is the value of the ownership interest stated in your response to AG-1-21?

Response:

As of March 31, 2016, the value of National Grid Algonquin LLC's cumulative capital contributions to Algonquin Gas Transmission LLC was

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Information Request AG-1-23

Request:

Please provide current projections of the income National Grid will realize through its investment in ANE throughout the term of the agreement if the Department approves the proposed Precedent Agreement as written.

Response:

National Grid objects to the question on grounds that income projections by National Grid Algonquin LLC, an unregulated project developer, are not relevant to the Department's investigation in this proceeding. In <u>Massachusetts Electric Company and Nantucket Electric Company</u>, D.P.U. 10-54, Tr. 3 at 486-490 (2010), disclosure of income projections by non-regulated project developers was not required because such information was determined not to be relevant to the Department's investigation of whether proposed resource contracts should be approved in the public interest under applicable legal and regulatory standards.

Moreover, projections of the total costs and revenues for the ANE Project have not been finalized because the projections are dependent upon the final scope of the project, the commitments received from shippers who contract for service on the project and the rates that such shippers will agree to pay. Algonquin Gas Transmission LLC will submit detailed information on the costs and revenues for the project as part of its formal application to the Federal Energy Regulatory Commission ("FERC") for a certificate of public convenience and necessity for the project. The project is currently in the pre-filing stage before FERC in Docket No. PF16-1 and Algonquin anticipates filing its formal application with FERC in November 2016.

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Information Request AG-1-24

Request:

For each National Grid affiliate and subsidiary with an equity or contractual interest in Access Northeast Pipeline project, please provide all communications associated with its incorporation or registration, development, and expected operation.

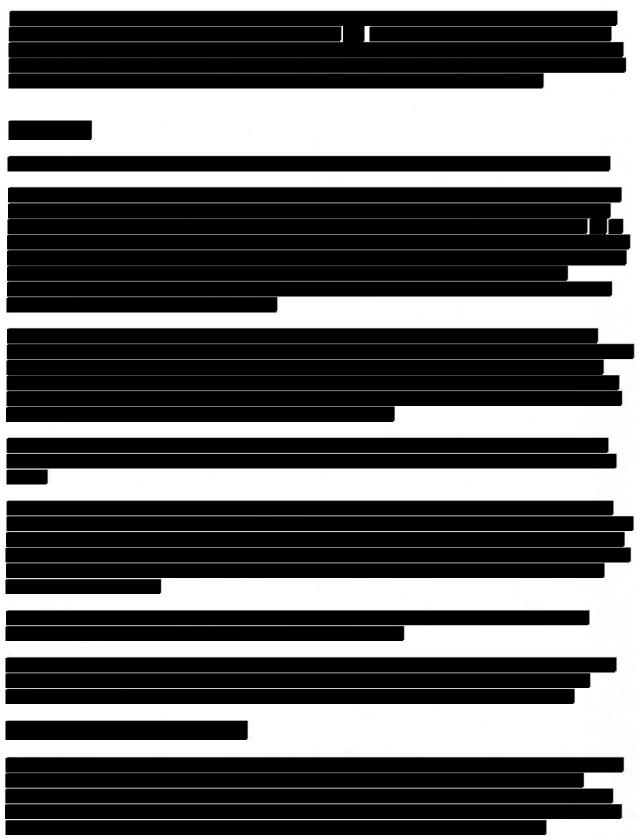
Response:

Provided as Attachment AG 1-24 are communications associated with the incorporation and/or registration of National Grid Algonquin, LLC. Attachment AG 1-24 has been redacted to remove information protected by attorney-client privilege. As National Grid Algonquin LLC is a holding company for National Grid's interest in the ANE Project, there are no communications associated with National Grid Algonquin LLC's development or expected operation.

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Schwartz, Robin		
From:	Das, Reshmi	
Sent:	Thursday, April 30, 2015 3:11 PM	
To:	Guerin, Michael	
Cc:	Burns, Patrick P.	
Subject:	FW:	
Attachments:		
Michael,		
iviicitaci,		
tan barreta diamen		
i am nappy to discuss one	te you have had a chance to review.	
Many thanks.		
Reshmi		

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ALSTON&BIRD ILP

TO:

Reshmi Das, National Grid USA

FROM:

BJ Shannon, Alston & Bird LLP

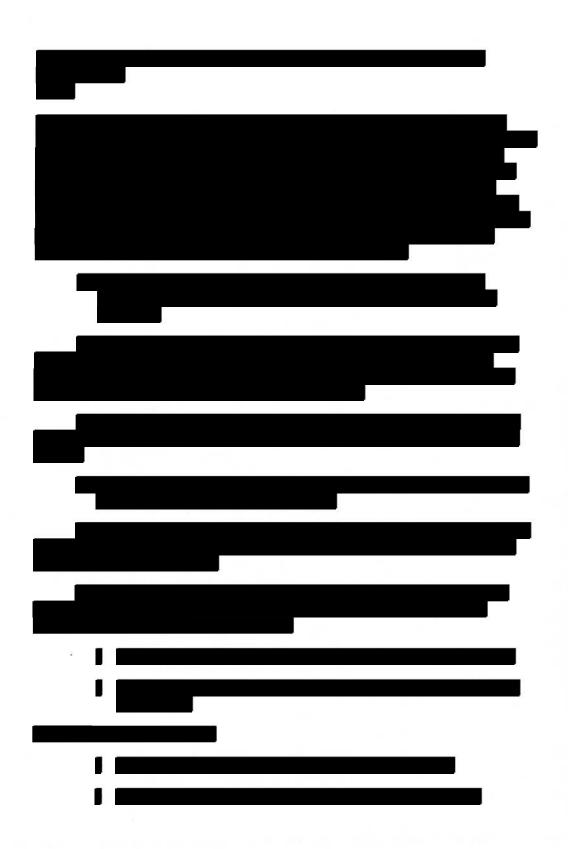
Jon Fee, Alston & Bird LLP



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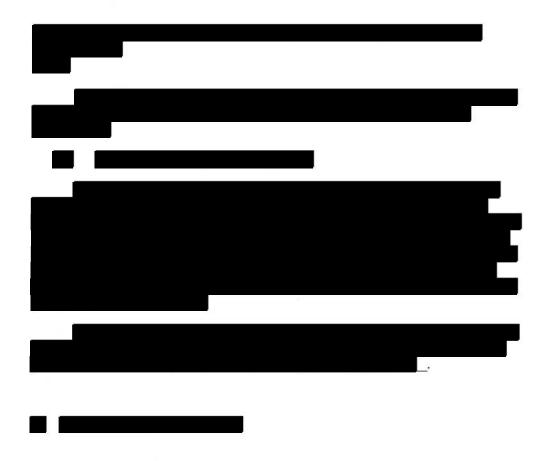
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Schwartz, Robin

From:

Das, Reshmi

Sent:

Wednesday, July 15, 2015 10:06 AM

To:

Hartshorne, Prescott

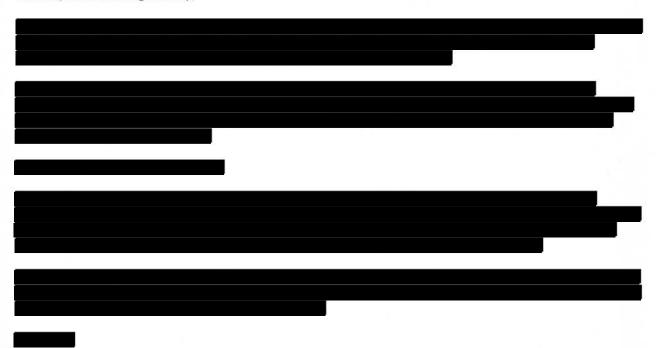
Cc:

Burlingame, Richard; Das, Reshmi

Subject:

RE: Entity. Access Northeast

Prescott/Richard Burlingame Esq.,



Hope this helps.

Reshmi

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 10 of 203



From: Hartshorne, Prescott

Sent: Wednesday, July 15, 2015 8:56 AM

To: Das, Reshmi
Cc: Burlingame, Richard
Subject: Fwd: Entity. Access Northeast

Hi Reshmi

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 11 of 203

Prescott

Sent from my iPhone

Begin forwarded message:

From: "Burlingame, Richard" < RICHARD.BURLINGAME@nationalgrid.com>

Date: July 15, 2015 at 8:49:44 AM EDT

To: "Hartshorne, Prescott" < Prescott.Hartshorne@nationalgrid.com

Subject: Entity. Access Northeast



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 12 of 203

Schwartz, Robin

From: Sent: Decicco, Philip A. (Legal) Friday, July 17, 2015 2:58 PM

To:

McAllister, Timothy E.

Subject:

RE: Access Northeast pipeline expansion project

Hi Tim,



Philip A. DeCicco
Assistant General Counsel
National Grid USA One MetroTech Center Brooklyn. NY 11201
Note New Phone Number: 929-324-4543
philip.decicco2@nationalgrid.com

From: McAllister, Timothy E. Sent: Friday, July 17, 2015 11:15 AM

To: Decicco, Philip A. (Legal)

Subject: Access Northeast pipeline expansion project

Phil,



Thanks,

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 13 of 203

Tim

Timothy E. McAllister

Assistant General Counsel and Director, US Corporate and M&A National Grid 40 Sylvan Road Waltham, MA 02451-1120 Tel: 781.907.1880

Fax: 781.296.8092 Cell: 617.877.3006

timothy.mcallister@nationalgrid.com

Please consider the environment before printing this email.

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 14 of 203

Schwartz, Robin

From:

Das, Reshmi

Friday, July 17, 2015 11:28 AM Sent:

To: McAllister, Timothy E. Subject: Re: Access Northeast

On Jul 17, 2015, at 11:06 AM, "McAllister, Timothy E." < Timothy.McAllister@nationalgrid.com > wrote:

Stan,



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 15 of 203

Timothy E. McAllister
Assistant General Counsel and Director, US Corporate and M&A National Grid 40 Sylvan Road Waltham, MA 02451-1120

Tel: 781.907.1880 Fax: 781.296.8092 Cell: 617.877.3006

timothy.mcallister@nationalgrid.com
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Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 16 of 203

Schwartz, Robin

From:

McAllister, Timothy E.

Sent:

Wednesday, July 22, 2015 1:29 PM

To:

Blazewicz, Stanley J.

Cc:

Das, Reshmi

Subject:

RE: Access Northeast

Stan,

Thanks,

Tim

Timothy E. McAllister

Assistant General Counsel and Director, US Corporate and M&A National Grid

National Grid 40 Sylvan Road

Waltham, MA 02451-1120

Tel: 781.907.1880 Fax: 781.296.8092 Cell: 617.877.3006

timothy.mcallister@nationalgrid.com

Please consider the environment before printing this email.

From: McAllister, Timothy E.

Sent: Friday, July 17, 2015 11:07 AM

To: Blazewicz, Stanley J. (Stanley.Blazewicz@nationalgrid.com)

Cc: Das, Reshmi

Subject: Access Northeast

Stan,



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 17 of 203



Thanks,

Tim

Timothy E. McAllister

Assistant General Counsel and Director, US Corporate and M&A National Grid 40 Sylvan Road Waltham, MA 02451-1120

Tel: 781.907.1880 Fax: 781.296.8092 Cell: 617.877.3006

timothy.mcallister@nationalgrid.com

Please consider the environment before printing this email.

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 18 of 203

Schwartz, Robin

From:

McAllister, Timothy E.

Sent:

Tuesday, July 28, 2015 12:21 PM

To:

Seavers, Dean

Subject:

RE:

Thanks, Dean!

Timothy E. McAllister

Assistant General Counsel and Director, US Corporate and M&A

National Grid 40 Sylvan Road Waltham MA 02

Waltham, MA 02451-1120

Tel: 781.907.1880 Fax: 781.296.8092 Cell: 617.877.3006

timothy.mcallister@nationalgrid.com

Please consider the environment before printing this email.

From: Seavers, Dean

Sent: Tuesday, July 28, 2015 6:18 AM

To: McAllister, Timothy E.

Subject: RE: Approval of managers of new subsidiary for Access Northeast project

dean

From: McAllister, Timothy E.

Sent: Monday, July 27, 2015 1:25 PM

To: Seavers, Dean

Cc: Tervo, Judith A.; Lombardo, Frank; Blazewicz, Stanley J.

Subject: Approval of managers of new subsidiary for Access Northeast project

Importance: High

Dean,



Thanks,

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 19 of 203

Tim

Timothy E. McAllister

Assistant General Counsel and Director, US Corporate and M&A National Grid 40 Sylvan Road Waltham, MA 02451-1120

Tel: 781.907.1880 Fax: 781.296.8092 Cell: 617.877.3006

timothy.mcallister@nationalgrid.com
Please consider the environment before printing this email.

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 20 of 203

Schwartz, Robin

From: Wynter Jr, Rudolph L.

Sent: Wednesday, July 22, 2015 4:30 PM

To: McAllister, Timothy E.

Cc: Flynn, John J.; Blazewicz, Stanley J.
Subject: Re: National Grid Algonquin LLC

Yes. I am good with the proposal

Sent from my iPhone

On Jul 22, 2015, at 3:26 PM, "McAllister, Timothy E." < Timothy.McAllister@nationalgrid.com > wrote:

Rudy & John,



Thanks,

Tim

Timothy E. McAllister

Assistant General Counsel and Director, US Corporate and M&A National Grid 40 Sylvan Road

40 Sylvan Road Waltham, MA 02451-1120

Tel: 781.907.1880 Fax: 781.296.8092 Cell: 617.877.3006

timothy.mcallister@nationalgrid.com

Please consider the environment before printing this email.

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 21 of 203

Schwartz, Robin

From:

McAllister, Timothy E.

Sent:

Monday, July 27, 2015 1:24 PM

To:

Flynn, John J. Blazewicz, Stanley J.

Cc: Subject:

RE: National Grid Algonquin LLC

Excellent.

Thanks, John.

Tim

Timothy E. McAllister

Assistant General Counsel and Director, US Corporate and M&A National Grid

40 Sylvan Road

Waltham, MA 02451-1120

Tel: 781.907.1880 Fax: 781.296.8092 Cell: 617.877.3006

timothy.mcallister@nationalgrid.com

Please consider the environment before printing this email.

From: Flynn, John J.

Sent: Monday, July 27, 2015 1:20 PM

To: McAllister, Timothy E. **Cc:** Blazewicz, Stanley J.

Subject: RE: National Grid Algonquin LLC

I am good!

John J. Flynn
Senior Vice President
US Business Development
National Grid
40 Sylvan Road, Waltham MA 02451
John.flynn2@nationalgrid.com
(781) 907-1661 Office
(781) 460-8110 Cell

From: McAllister, Timothy E.

Sent: Monday, July 27, 2015 1:20 PM

To: Flynn, John J. Cc: Blazewicz, Stanley J.

Subject: FW: National Grid Algonquin LLC

John,

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 22 of 203

Schwartz, Robin

To:

Gage, Frances

Subject:

New entity for Access Northeast

Frances,



Timothy E. McAllister

Assistant General Counsel and Director, US Corporate and M&A National Grid 40 Sylvan Road Waltham, MA 02451-1120

Tel: 781.907.1880 Fax: 781.296.8092 Cell: 617.877.3006

timothy.mcallister@nationalgrid.com
Please consider the environment before printing this email.

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 23 of 203

Schwartz, Robin

From:

McAllister, Timothy E.

Sent:

Wednesday, August 05, 2015 4:34 PM

To:

Gage, Frances

Subject:

RE: Formation of National Grid Algonquin LLC - ACTION REQUIRED

Frances,

Thanks for pulling all this together.



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 24 of 203

Thanks,

Tim

Timothy E. McAllister

Assistant General Counsel and Director, US Corporate and M&A National Grid 40 Sylvan Road Waltham, MA 02451-1120

Tel: 781.907.1880 Fax: 781.296.8092 Cell: 617.877.3006

timothy.mcallister@nationalgrid.com

Please consider the environment before printing this email.

From: Thomson, Frances

Sent: Thursday, July 30, 2015 10:40 AM

To: McAllister, Timothy E.

Subject: Formation of National Grid Algonquin LLC - ACTION REQUIRED

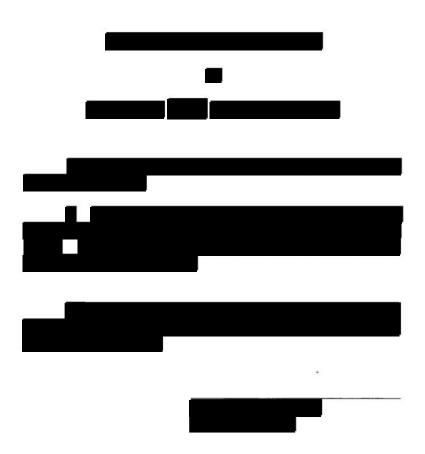
Tim,



Thank you, Frances

Frances Gage
Global Corporate, M&A and Corporate Secretariat
National Grid
40 Sylvan Road, W1.005
Waltham, MA 02451
(781) 907-1894 - Office
(781) 389-3874 - Cell
Frances.Gage@nationalgrid.com

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 25 of 203



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 26 of 203



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 27 of 203



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 28 of 203



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 29 of 203



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 30 of 203



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 31 of 203



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 32 of 203

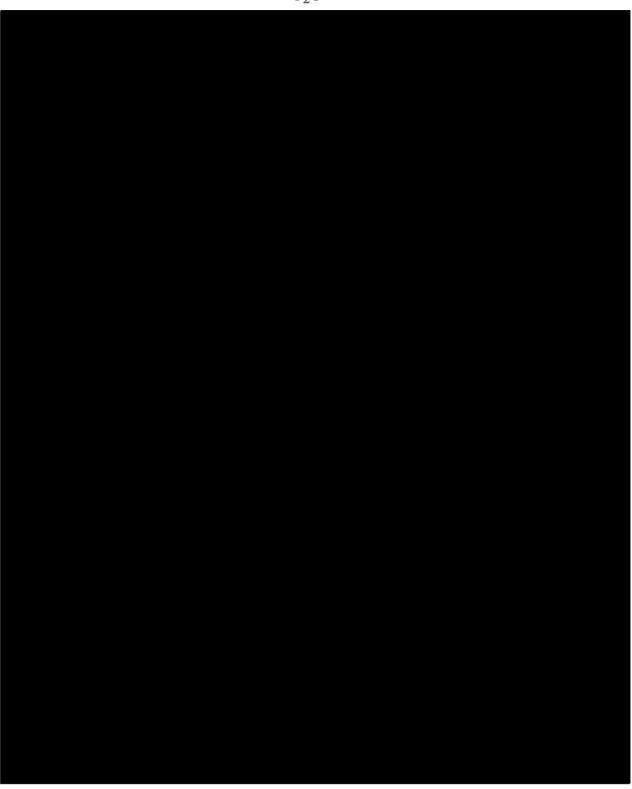


Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 33 of 203



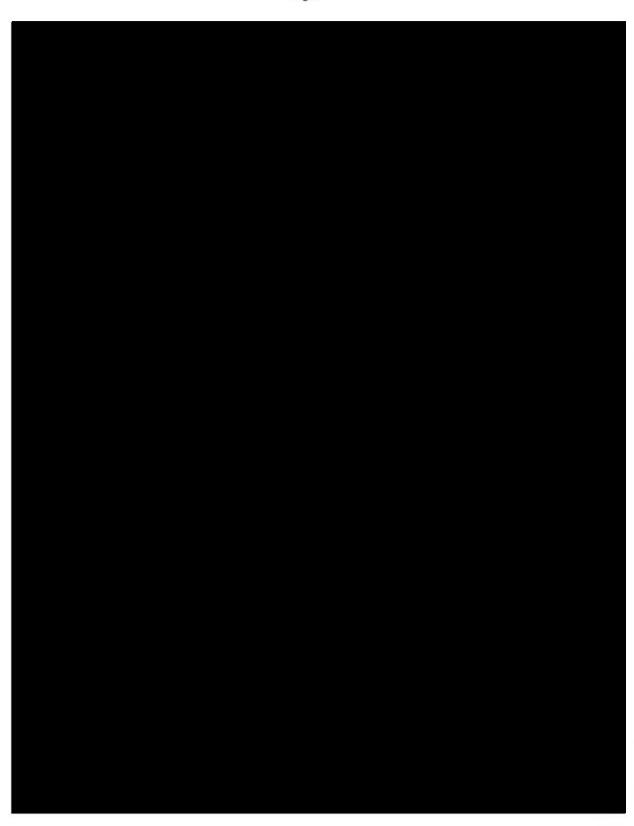
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 34 of 203





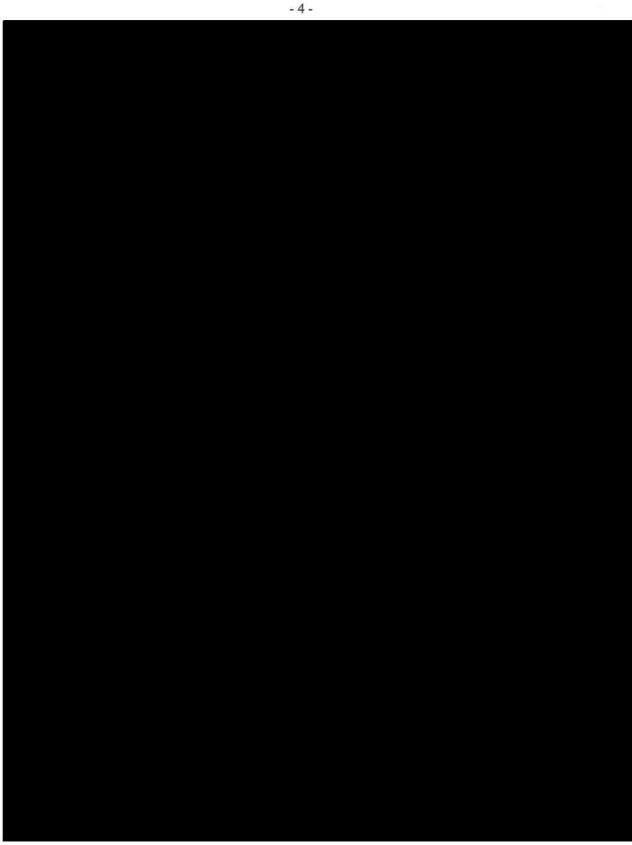
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 35 of 203





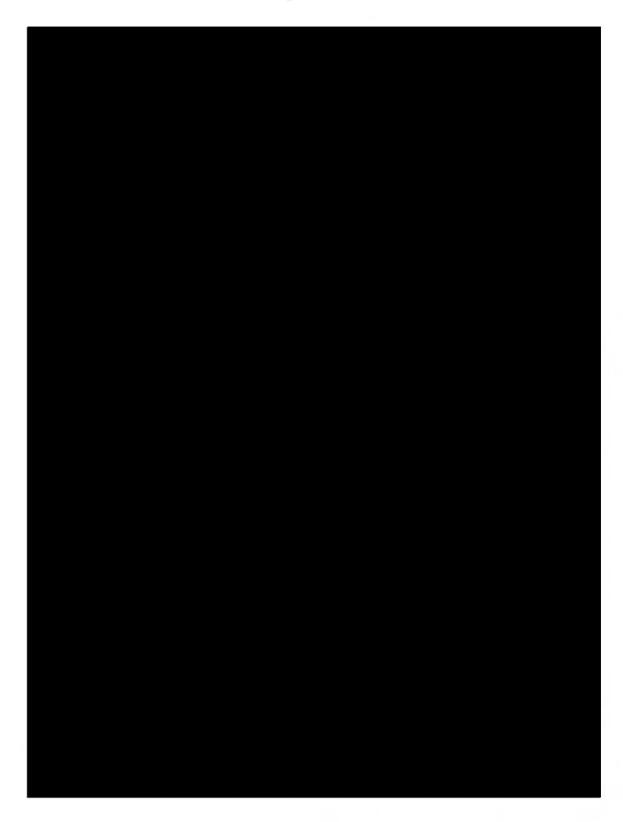
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 36 of 203





Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 37 of 203





Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 38 of 203



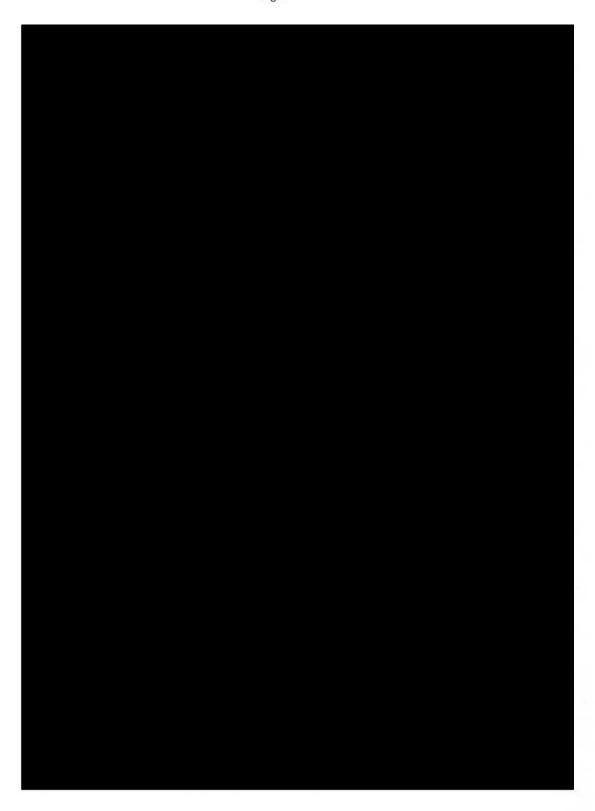


Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 39 of 203



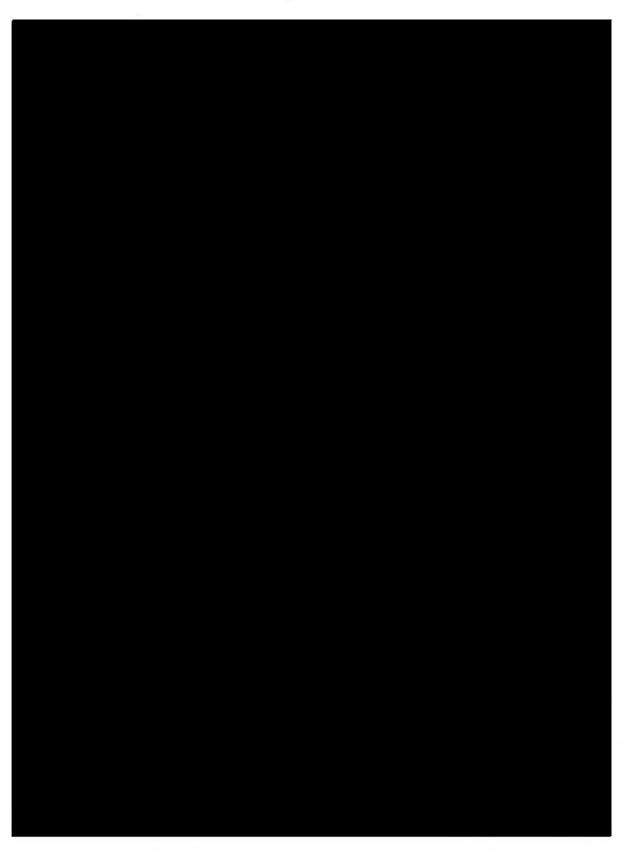
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 40 of 203





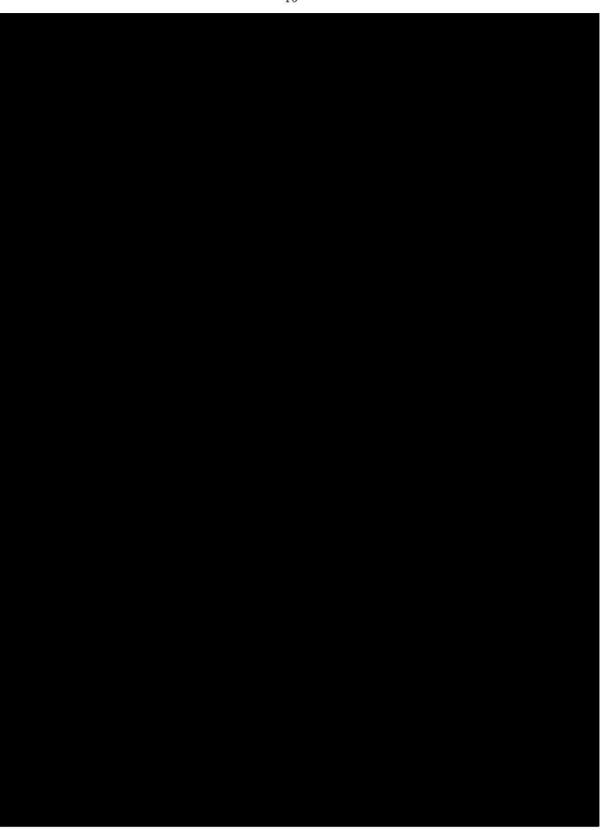
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 41 of 203





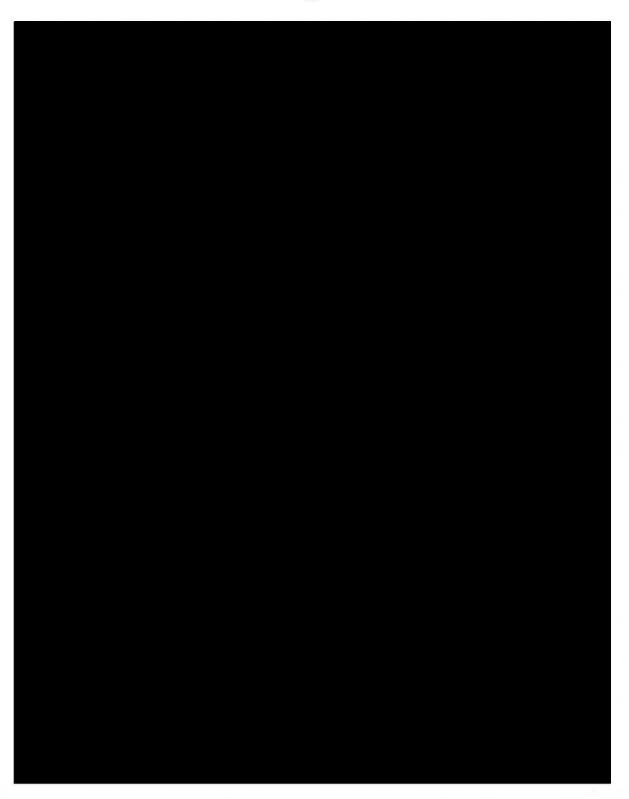
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 42 of 203





Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 43 of 203





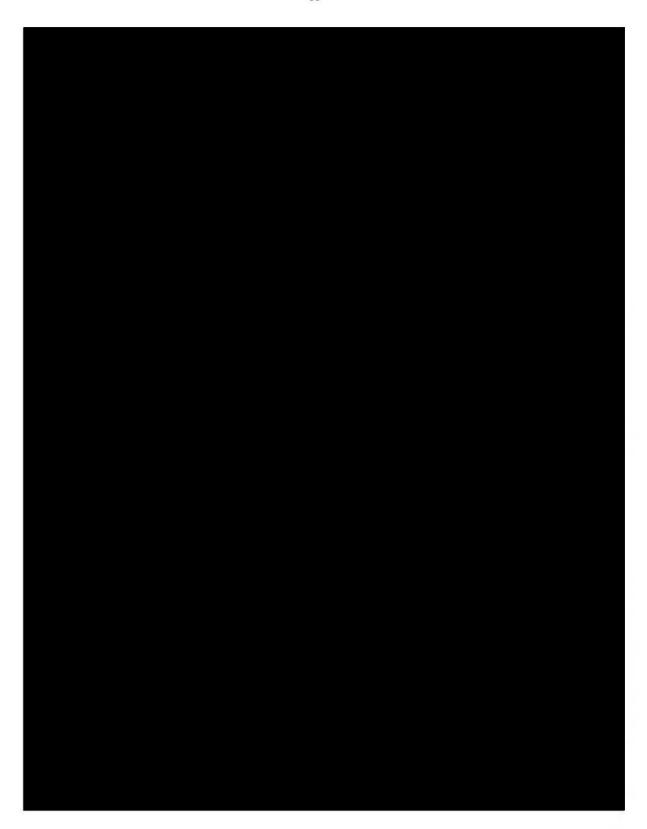
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 44 of 203





Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 45 of 203





Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 46 of 203





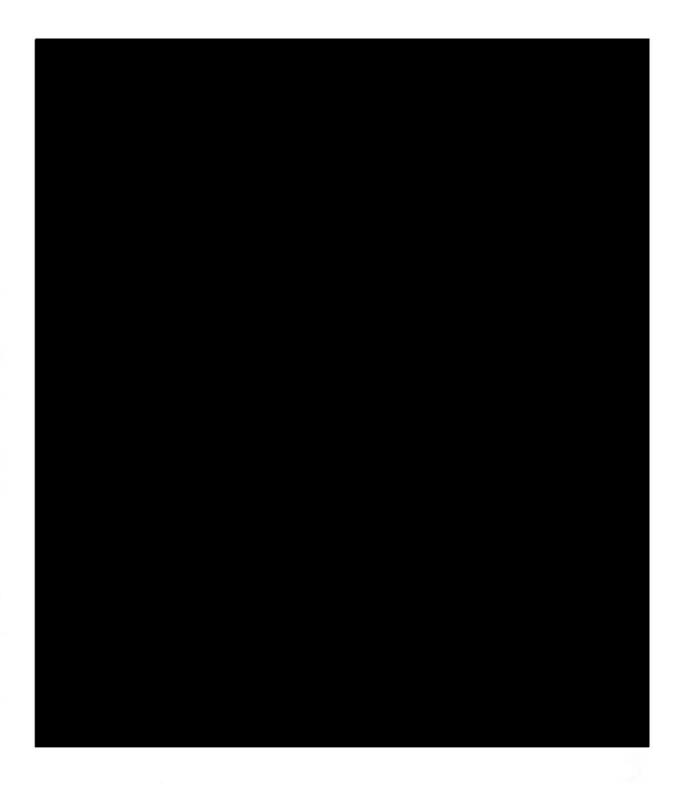
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 47 of 203



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 48 of 203



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 49 of 203



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 50 of 203

Schwartz, Robin

From:

McAllister, Timothy E.

Sent:

Wednesday, August 05, 2015 4:37 PM

To:

Gage, Frances

Subject:

FW: National Grid Algonquin LLC

Attachments:

DOCS-#380143-v1-National_Grid_Algonquin_Accession_Agreement_08_05_15.DOC

Frances,

Thanks,

Tim

Timothy E. McAllister

Assistant General Counsel and Director, US Corporate and M&A

National Grid 40 Sylvan Road

Waltham, MA 02451-1120

Tel: 781.907.1880 Fax: 781.296.8092 Cell: 617.877.3006

timothy.mcallister@nationalgrid.com

Please consider the environment before printing this email.

From: Meehan, James (LEGAL)

Sent: Wednesday, August 05, 2015 4:29 PM

To: McAllister, Timothy E.

Subject: RE: National Grid Algonquin LLC

Kind regards, Jim

James P. Meehan

Assistant General Counsel Legal Department National Grid 40 Sylvan Road Waltham, MA 02451 Tel: (781) 907-1884

james.meehan@nationalgrid.com

Please consider the environment before printing this e-mail.

From: Meehan, James (LEGAL)

Sent: Wednesday, August 05, 2015 4:19 PM

To: McAllister, Timothy E.

Subject: RE: National Grid Algonquin LLC

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 51 of 203

James P. Meehan Assistant General Counsel

Legal Department National Grid 40 Sylvan Road Waltham, MA 02451 Tel: (781) 907-1884

james.meehan@nationalgrid.com

Please consider the environment before printing this e-mail.

From: McAllister, Timothy E.

Sent: Wednesday, August 05, 2015 4:07 PM

To: Meehan, James (LEGAL)

Subject: National Grid Algonquin LLC

Jim,

Thanks,

Tim

Timothy E. McAllister

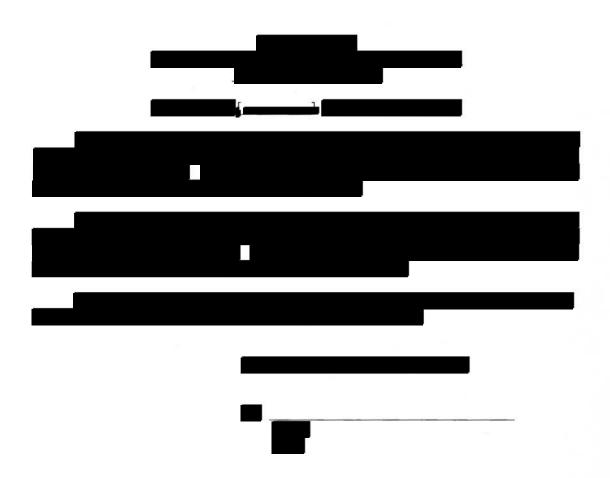
Assistant General Counsel and Director, US Corporate and M&A National Grid
40 Sylvan Road
Waltham, MA 02451-1120
Tel: 781.907.1880

Fax: 781.296.8092 Cell: 617.877.3006

timothy.mcallister@nationalgrid.com

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Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 52 of 203



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 53 of 203

Schwartz, Robin

From:

Gage, Frances

Sent:

Thursday, August 06, 2015 12:20 PM

To:

Meehan, James (LEGAL) McAllister, Timothy E.

Cc: Subject:

RE: Formation of National Grid Algonquin LLC - ACTION REQUIRED

Hi Jim,

I have the Accession, thanks. Just was asking was to protocol to follow, if any. Thanks for the response and will circulate to the Stan.

Thanks, Frances

From: Meehan, James (LEGAL)

Sent: Thursday, August 06, 2015 12:09 PM

To: Thomson, Frances Cc: McAllister, Timothy E.

Subject: Re: Formation of National Grid Algonquin LLC - ACTION REQUIRED

Hi Frances.

Kind regards

Jim

James P. Meehan **Assistant General Counsel** Legal Department National Grid 40 Sylvan Road Waltham, MA 02451

Tel: (781) 907-1884 Fax: (781) 907-5701

james.meehan@nationalgrid.com

On Aug 6, 2015, at 11:40 AM, "Thomson, Frances" < Frances. Gage @nationalgrid.com > wrote:

Hi Jim,

Thanks, Frances

From: Thomson, Frances Sent: Thursday, July 30, 2015 10:40 AM To: McAllister, Timothy E.

Subject: Formation of National Grid Algonquin LLC - ACTION REQUIRED

Tim,

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 54 of 203



Thank you, Frances

Frances Gage
Global Corporate, M&A and Corporate Secretariat
National Grid
40 Sylvan Road, W1.005
Waltham, MA 02451
(781) 907-1894 - Office
(781) 389-3874 - Cell
Frances.Gage@nationalgrid.com

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 55 of 203

Schwartz, Robin

From:

Gage, Frances

Sent:

Thursday, August 06, 2015 5:09 PM

To:

McAllister, Timothy E.

Subject:

Algonquin - Certificate of Formation

Attachments:

DOCS-#379768-v1-Formation_-_Algonquin.docx

Tim,

Attached is the Certificate of Formation. Did we get the okay to file? If so, I'll file tomorrow.

Thank you, Frances

Frances Gage Global Corporate, M&A and Corporate Secretariat National Grid 40 Sylvan Road, W1.005 Waltham, MA 02451 (781) 907-1894 - Office (781) 389-3874 - Cell

Frances.Gage@nationalgrid.com

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 56 of 203

CERTIFICATE OF FORMATION

OF

NATIONAL GRID ALGONQUIN LLC

- 1. The name of the limited liability company is National Grid Algonquin LLC.
- 2. The address of its registered office in the State of Delaware is 2711 Centerville Road, Suite 400, Wilmington, DE 19808. The name of its registered agent at such address is Corporation Service Company.

IN WITNESS WHEREOF, the undersigned has executed this Certificate of Formation of National Grid Algonquin LLC this 7th day of August, 2015.

Frances Gage, Authorized person

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 57 of 203

Schwartz, Robin

From:

Gage, Frances

Sent:

Friday, August 07, 2015 2:42 PM

To:

Das, Reshmi

Subject:

National Grid Algonquin LLC - Name Reservation

Attachments:

rsltrpt1438972431.pdf

Reshmi,

Attached is proof that the above-referenced company name has been reserved for 120 days. If, by chance, the company is not formed within 120 days, both CSC and I have it calendared for renewal.

Thank you, Frances

Frances Gage
Global Corporate, M&A and Corporate Secretariat
National Grid
40 Sylvan Road, W1.005
Waltham, MA 02451
(781) 907-1894 - Office
(781) 389-3874 - Cell
Frances.Gage@nationalgrid.com

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 58 of 203

CORPORATION SERVICE COMPANY

www.cscglobal.com

CSC- West Trenton P.O.Box 77132 830 Bear Tavern Road, Suite 305 West Trenton, NJ 08628-1020 800-631-2155 609-530-0877 (Fax)

Matter#

PO# 3200030488

Order Date

739500-5

Project Id:

Order#

08/07/2015

Entity Name:

NATIONAL GRID ALGONQUIN LLC

Jurisdiction:

DE-Secretary of State

Request for:

Name Reservation

Result:

Reserved

Reservation No.:

5799902 08/07/2015

Reservation Date: Reservation Length:

120 Days

Expiration Date for Name

Reservation:

12/05/2015

Ordered by FRANCES GAGE at NATIONAL GRID USA SERVICE COMPANY, INC.

Thank you for using CSC. For real-time 24 hour access to the status of any order placed with CSC, access our website at www.cscglobal.com.

If you have any questions concerning this order or CSCGlobal, please feel free to contact us.

Melissa Kostrzewski mkostrze@cscinfo.com

The responsibility for verification of the files and determination of the information therein lies with the filing officer, we accept no liability for errors or omissions.

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 59 of 203

Schwartz, Robin

From:

McAllister, Timothy E.

Sent:

Friday, August 07, 2015 5:27 PM

To:

Gage, Frances

Subject:

RE: Algonquin - Certificate of Formation

Frances,

Thanks,

Tim

Timothy E. McAllister

Assistant General Counsel and Director, US Corporate and M&A National Grid 40 Sylvan Road

Waltham, MA 02451-1120 Tel: 781.907.1880 Fax: 781.296.8092

Fax: 781.296.8092 Cell: 617.877.3006

timothy.mcallister@nationalgrid.com

Please consider the environment before printing this email.

From: Thomson, Frances

Sent: Thursday, August 06, 2015 5:09 PM

To: McAllister, Timothy E.

Subject: Algonquin - Certificate of Formation

Tim,

Attached is the Certificate of Formation. Did we get the okay to file? If so, I'll file tomorrow.

Thank you, Frances

Frances Gage
Global Corporate, M&A and Corporate Secretariat
National Grid
40 Sylvan Road, W1.005
Waltham, MA 02451
(781) 907-1894 - Office
(781) 389-3874 - Cell
Frances, Gage@nationalgrid.com

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 60 of 203

Schwartz, Robin

From:

Das, Reshmi

Sent:

Wednesday, August 19, 2015 4:22 PM

To:

Subject:

McAllister, Timothy E. FW: AN Final Board Paper

Attachments:

Access Northeast -

Reshmi Das

Senior Counsel

Global Corporate, Finance and M&A

National Grid

175 East Old Country Road

Hicksville, NY 11801 Tel: 516.545.3459

reshmi.das@nationalgrid.com

From: Hartshorne, Prescott

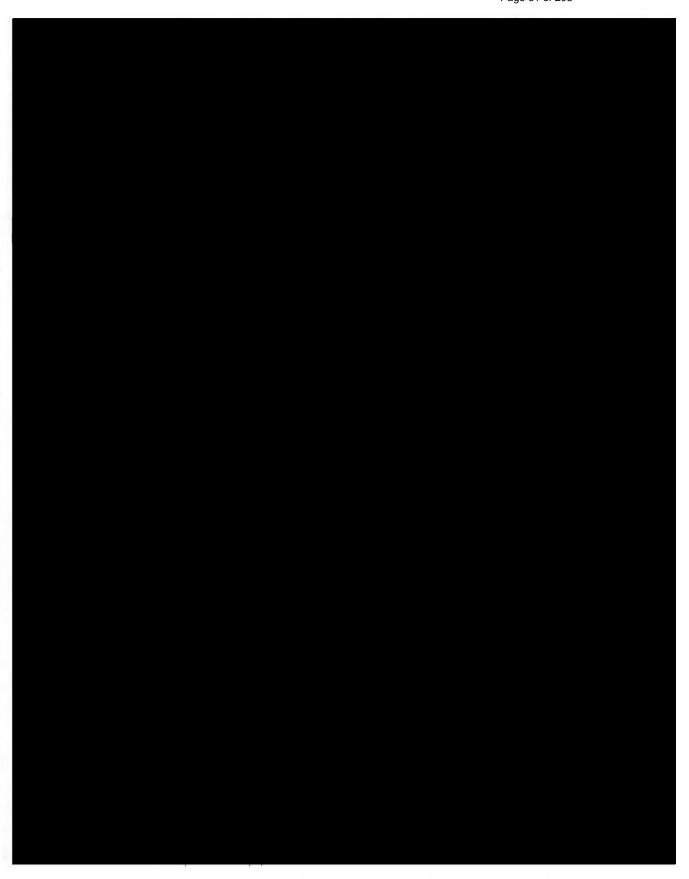
Sent: Wednesday, August 19, 2015 11:13 AM

To: Das, Reshmi

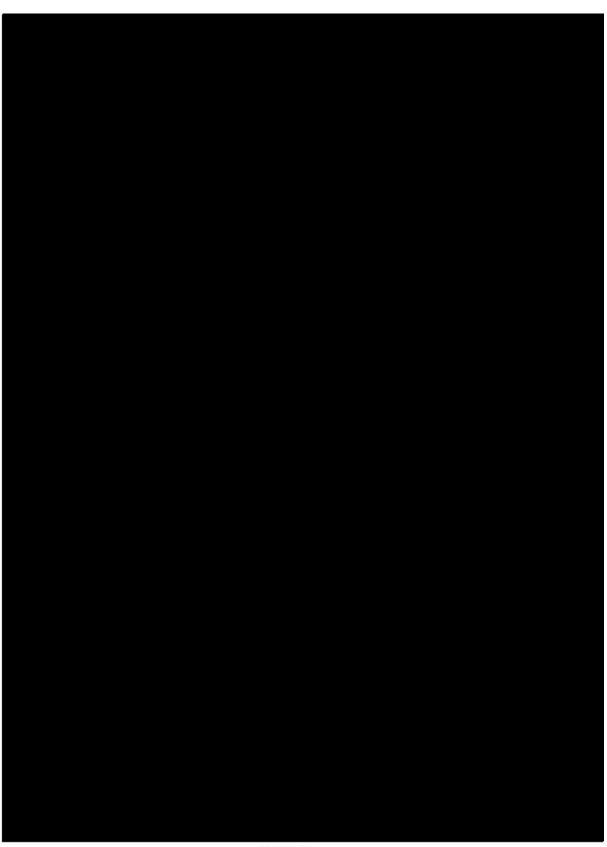
Subject: AN

Prescott Hartshorne Director, US Business Development National Grid 40 Sylvan Road Waltham, MA 02451 Direct: 781-907-5599

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 61 of 203

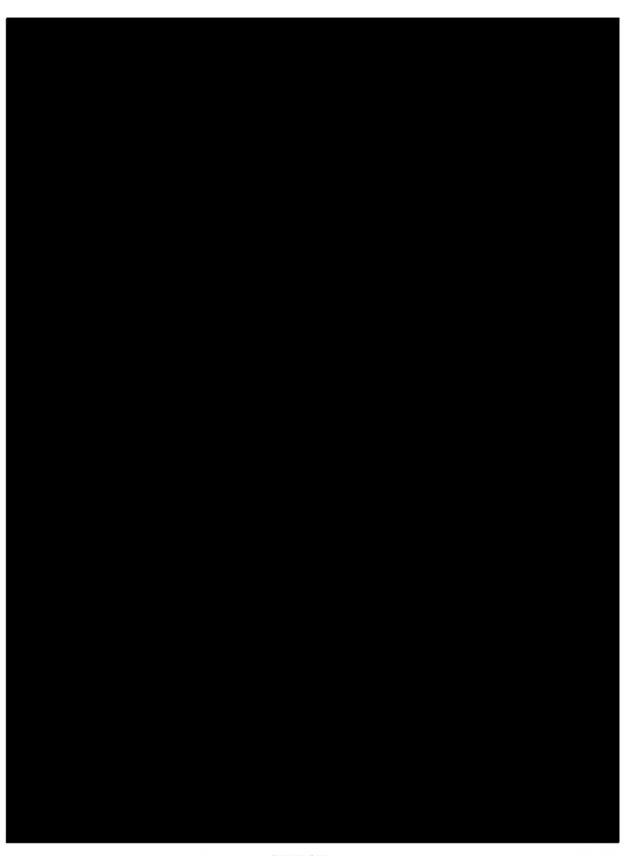


Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 62 of 203

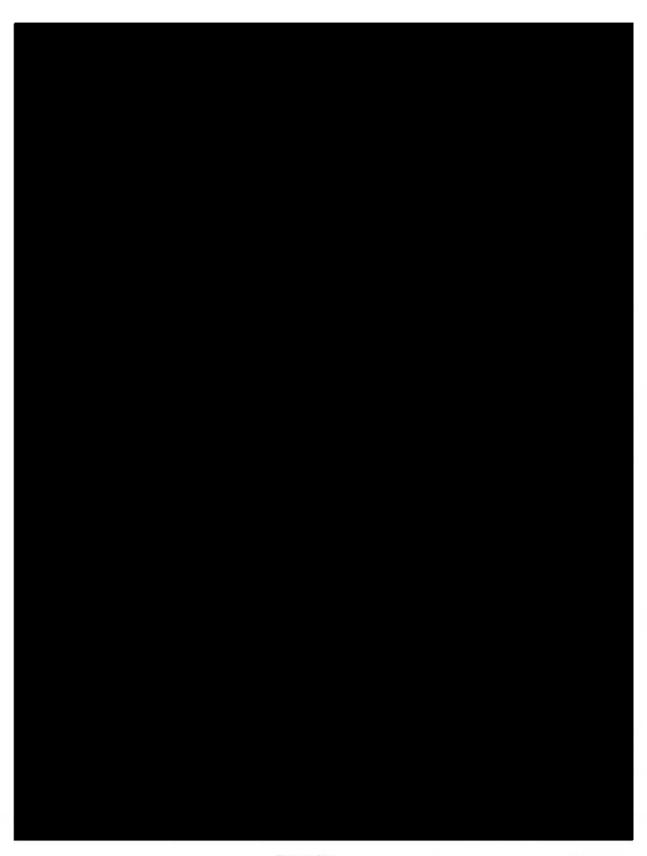


Page 2 of 11

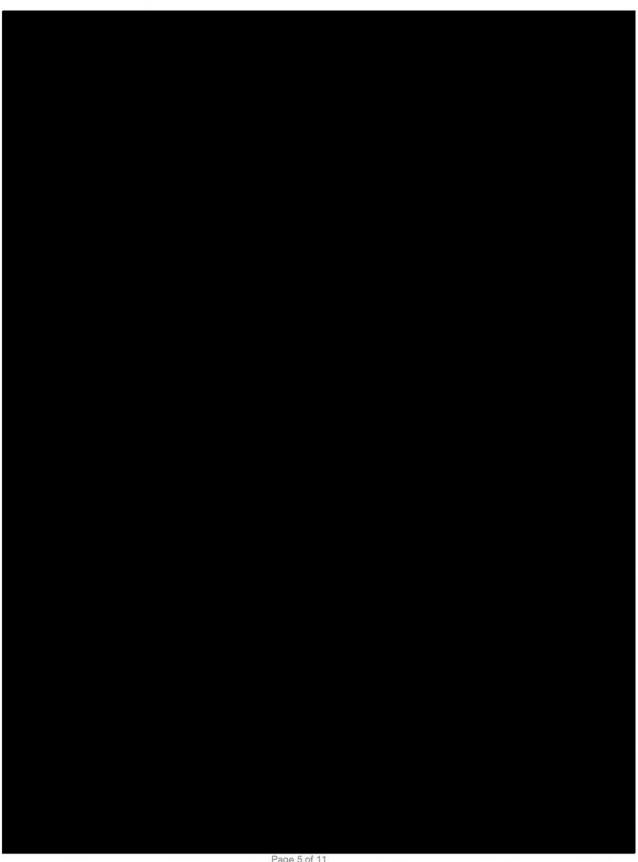
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 63 of 203



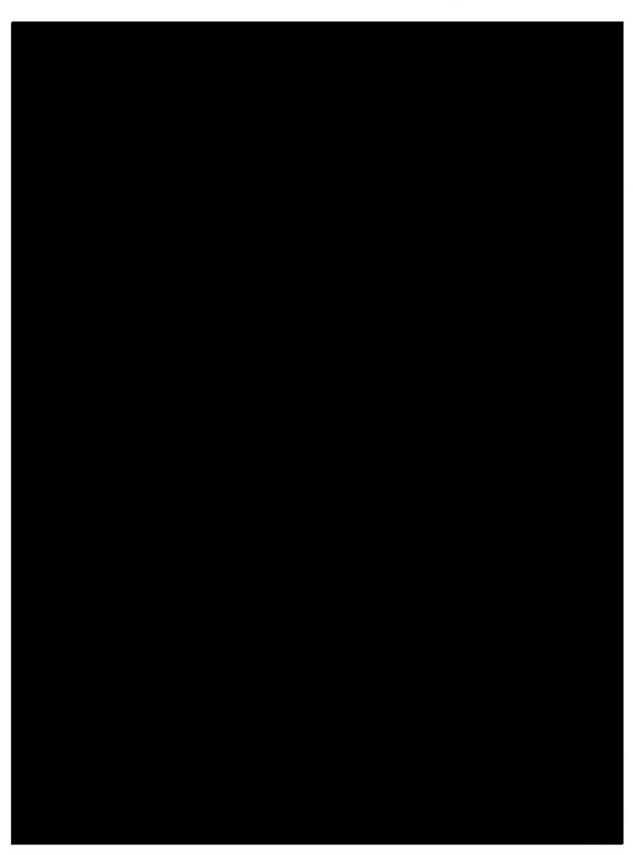
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 64 of 203



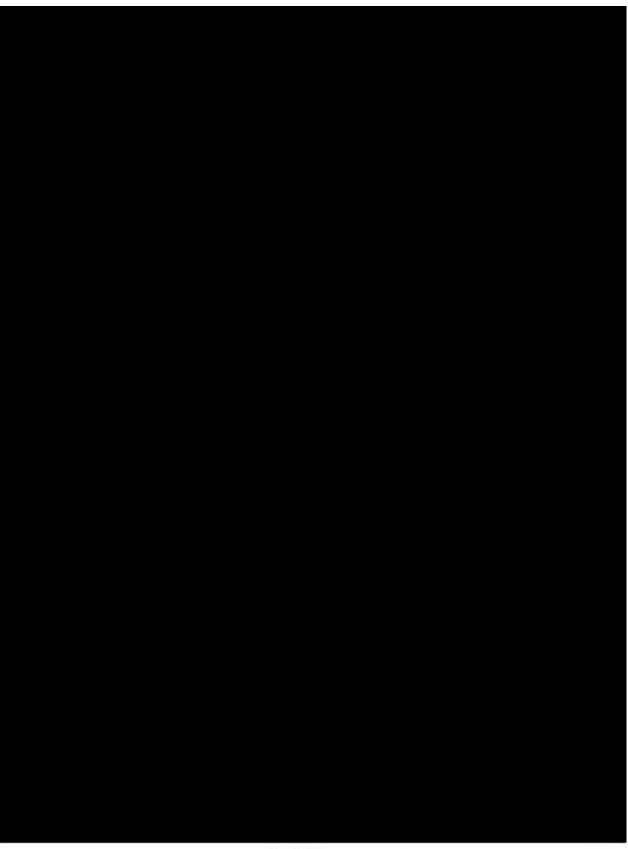
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 65 of 203



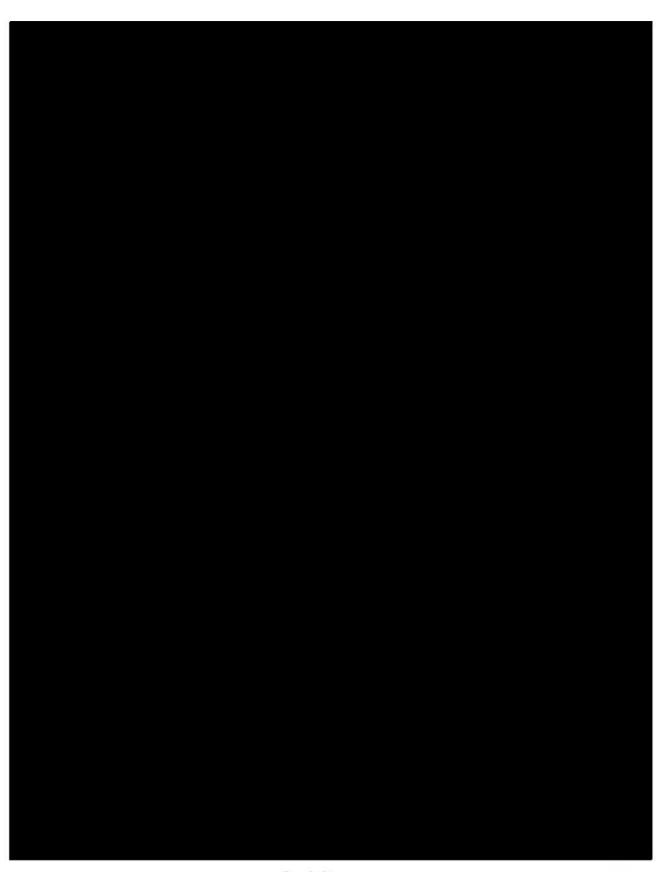
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 66 of 203



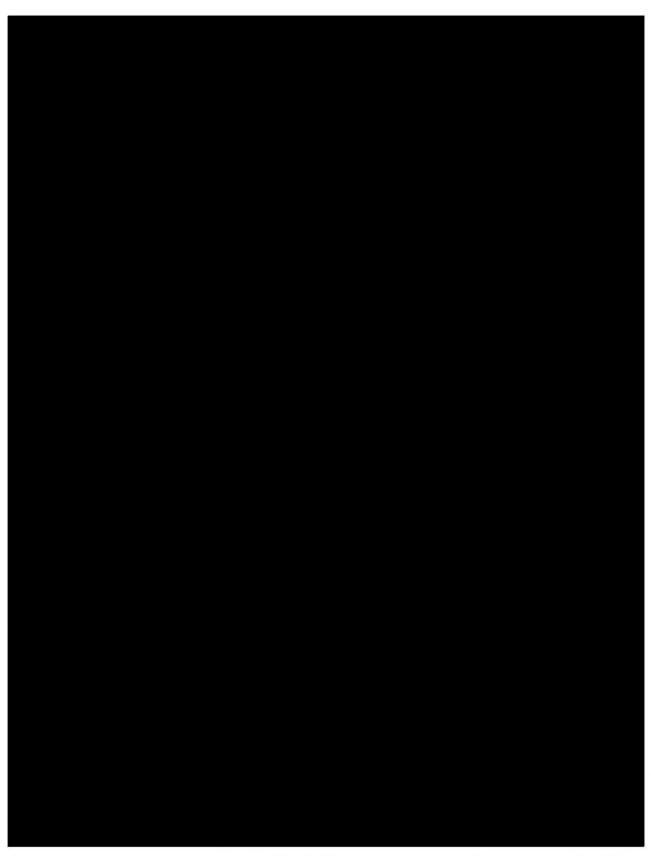
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 67 of 203



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 68 of 203

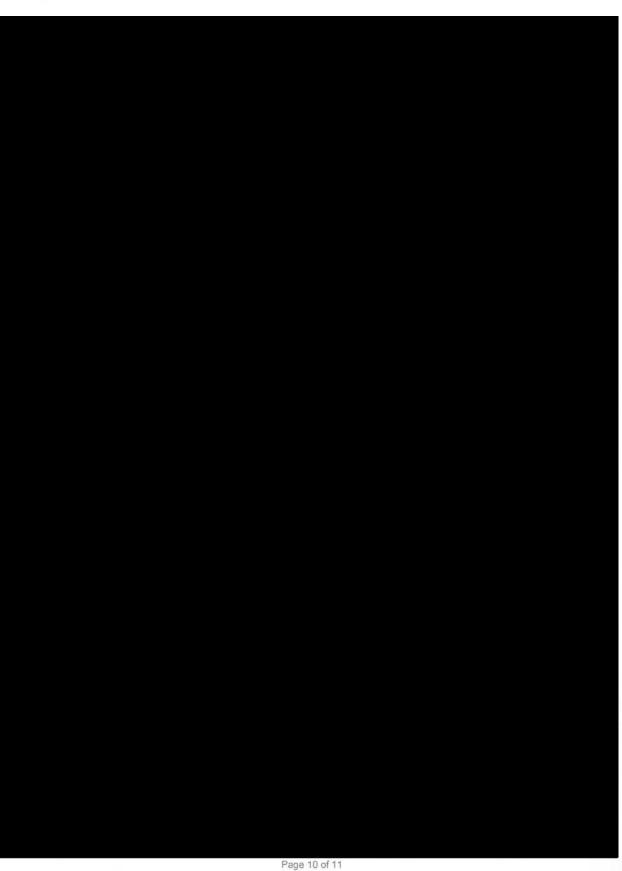


Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 69 of 203

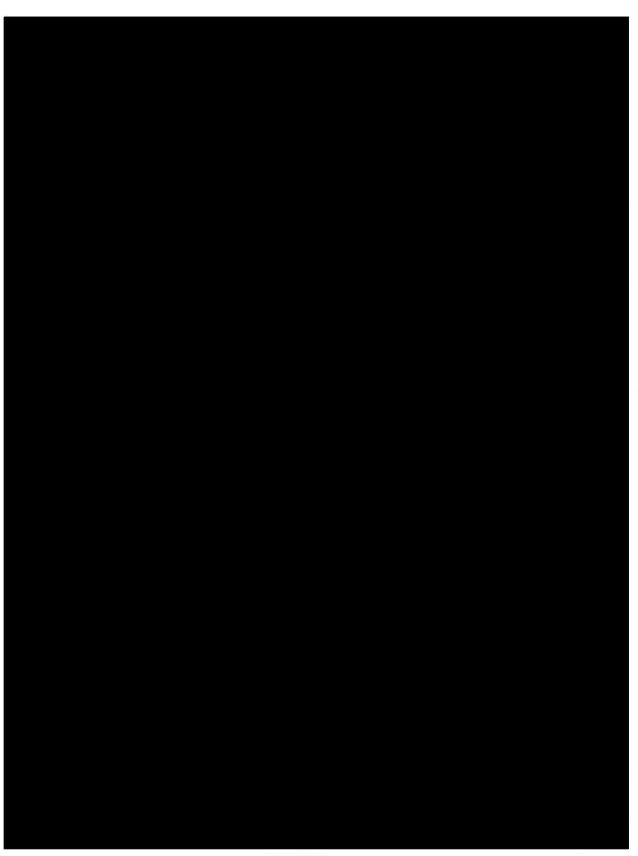


Page 9 of 11

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 70 of 203



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 71 of 203



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 72 of 203

Schwartz, Robin

From: Das, Reshmi

Sent: Sunday, August 30, 2015 12:55 PM
To: Gage, Frances; McAllister, Timothy E.

Cc: Hartshorne, Prescott

Subject: RE: Access Northeast-Formation of the investing entity

Attachments: DOCS-#380987-v1-Access_Northeast-Natioanal_Grid_Algonquin_LLC.DOC; DOCS-#

380992-v1-Access_Northeast__KeySpan_Corporation_UWC.DOC; DOCS-#380991-v1-

Access_Northeast-National_Grid_Development_Holdings_UWC.DOC

Tim/Frances,

4	

Thanks. Reshmi

From: Das, Reshmi

Sent: Thursday, August 27, 2015 2:35 PM

To: Thomson, Frances

Cc: McAllister, Timothy E.; Hartshorne, Prescott

Subject: Access Northeast-Formation of the investing entity

Frances,

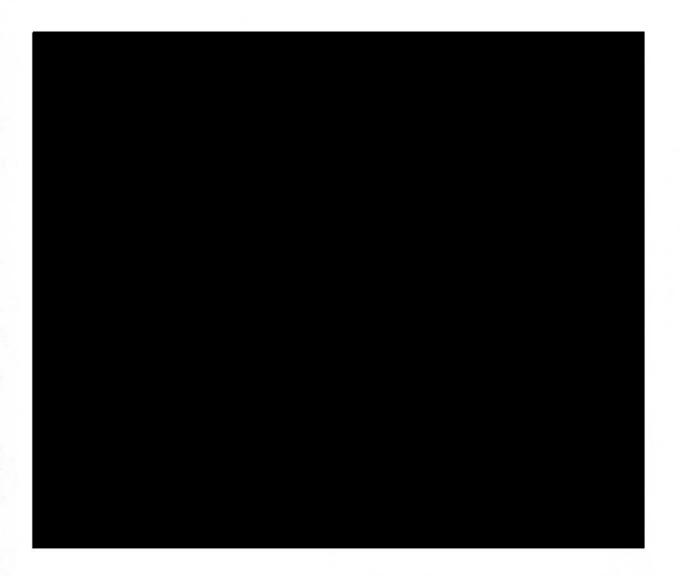
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 73 of 203

Thanks, Reshmi

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 74 of 203



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 75 of 203

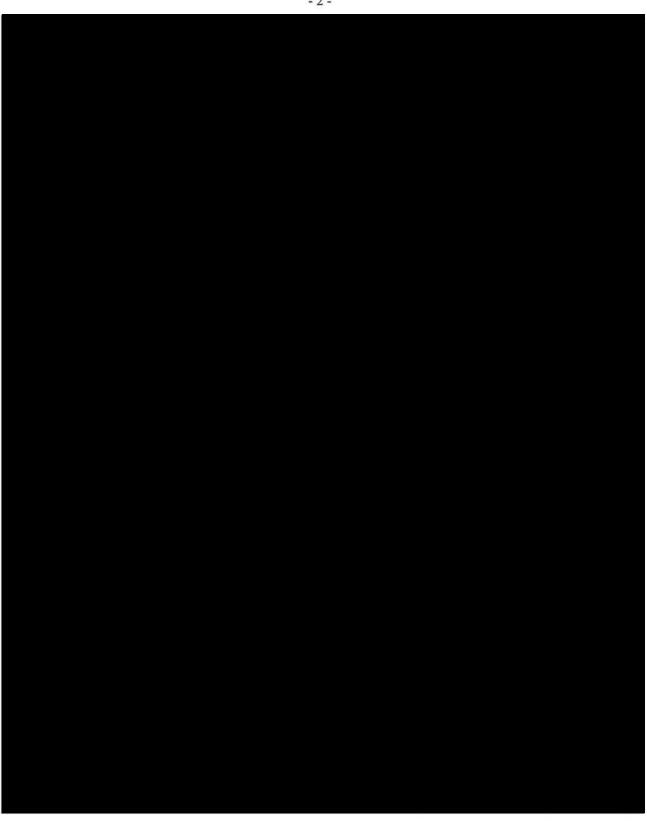


Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 76 of 203



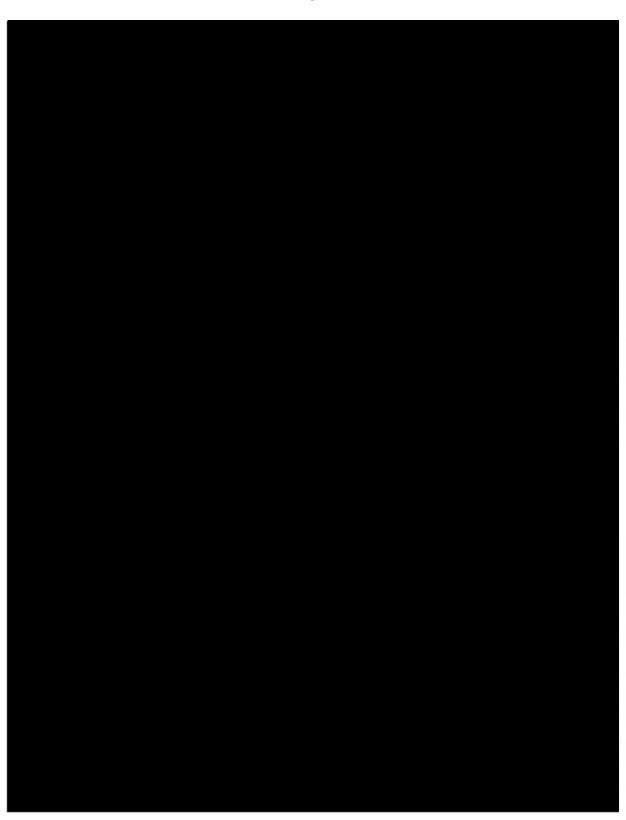
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 77 of 203





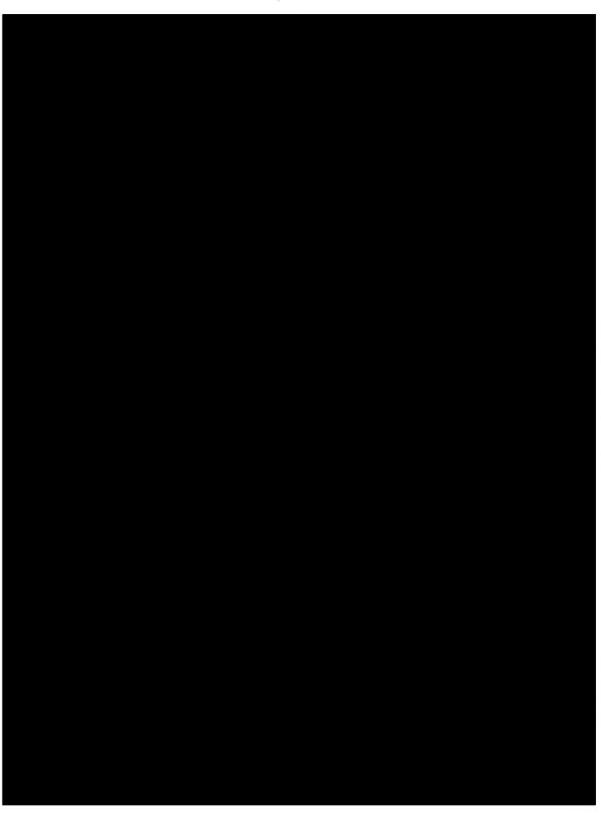
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 78 of 203





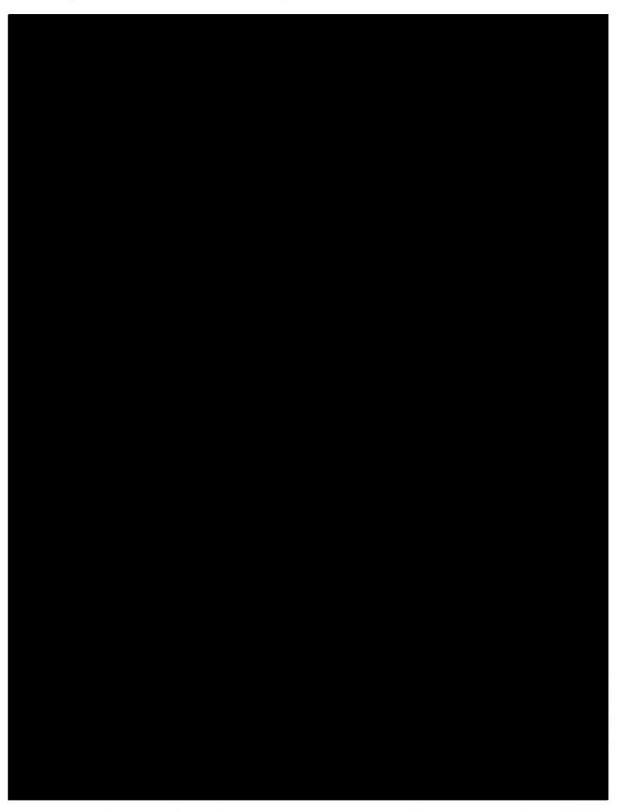
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 79 of 203





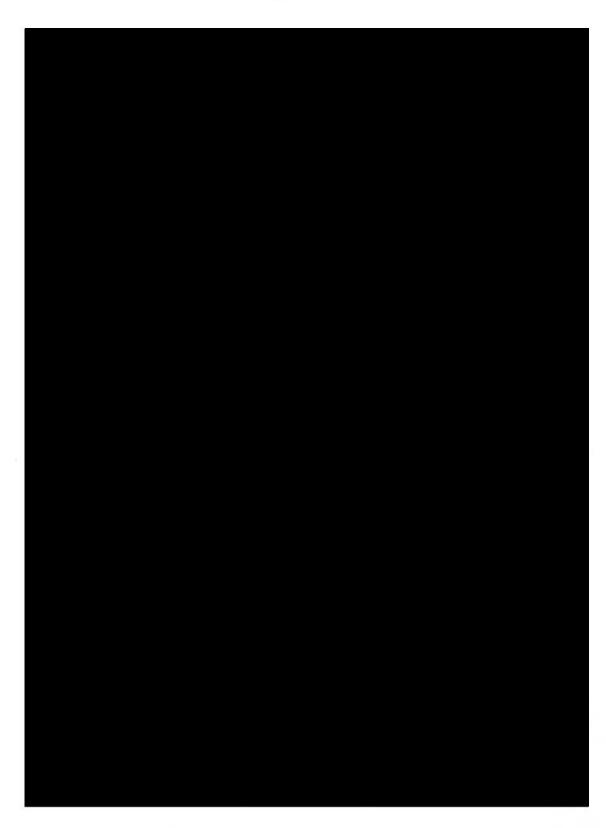
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 80 of 203





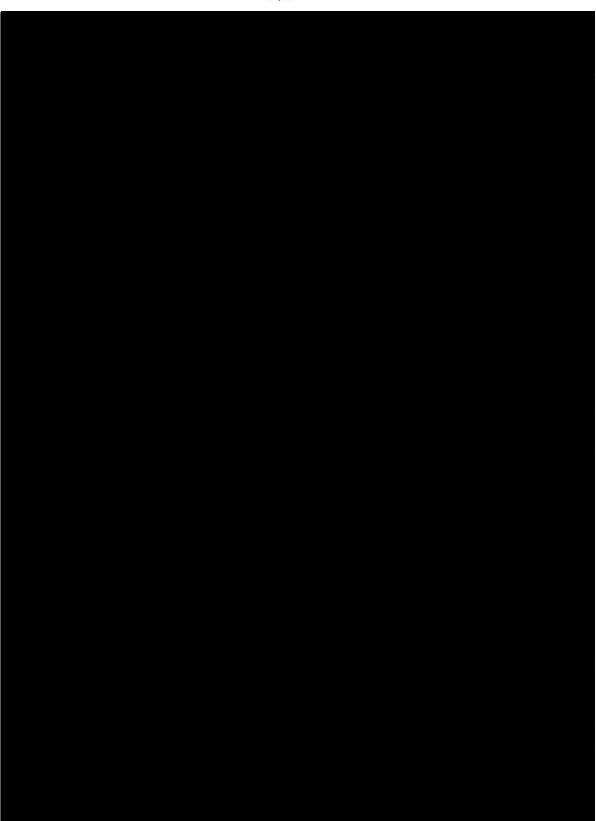
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 81 of 203





Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 82 of 203





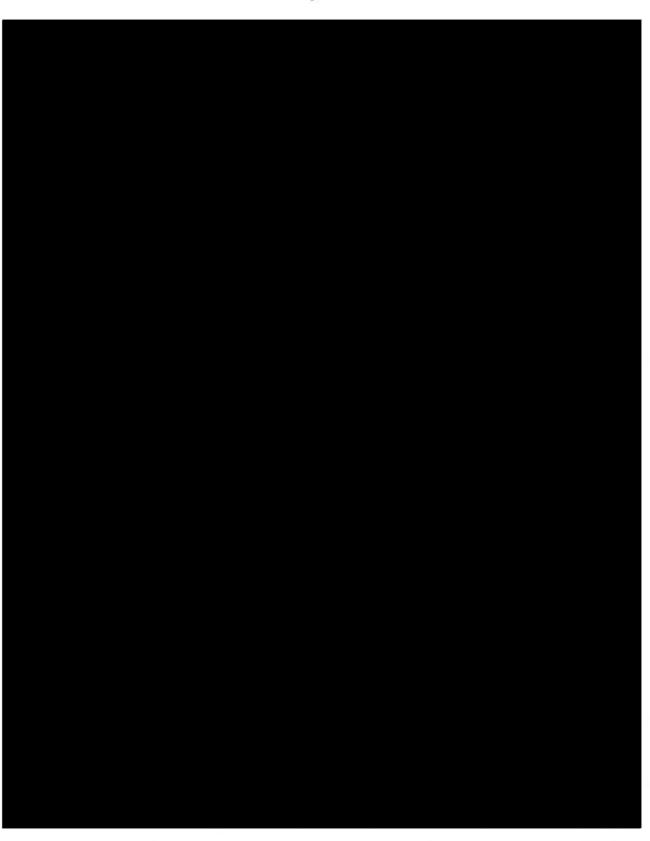
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 83 of 203





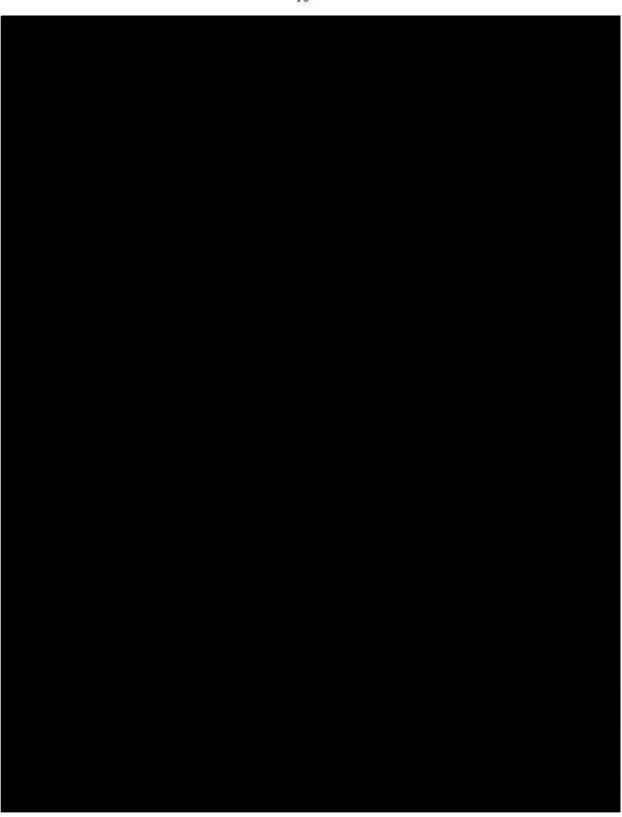
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 84 of 203





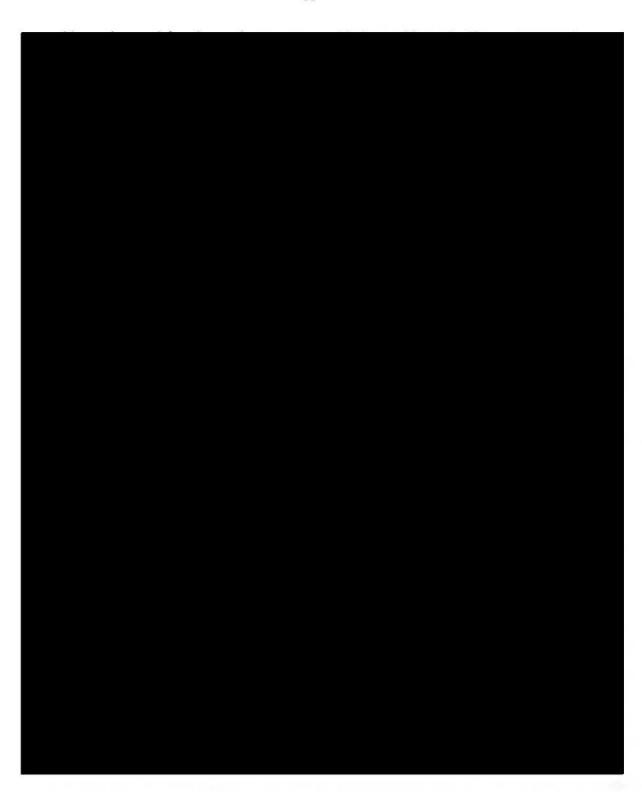
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 85 of 203





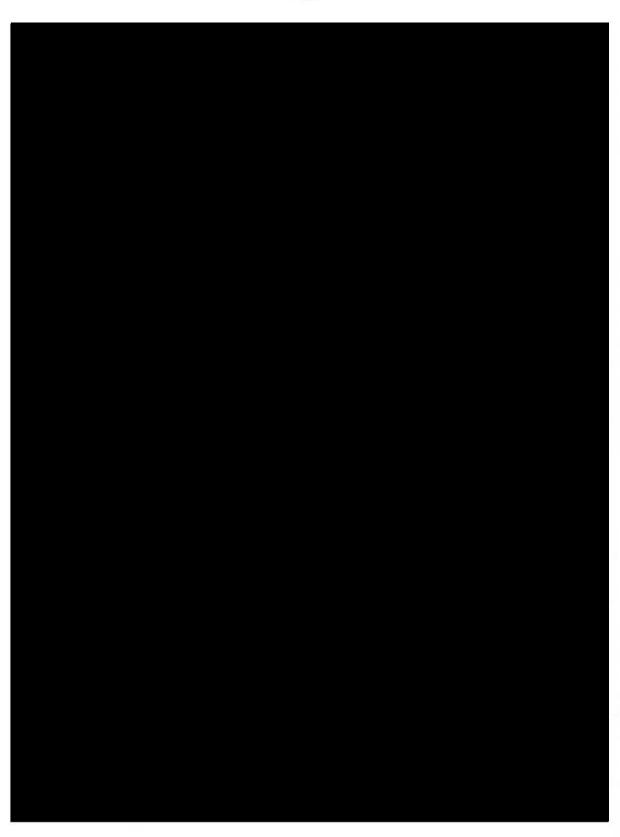
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 86 of 203





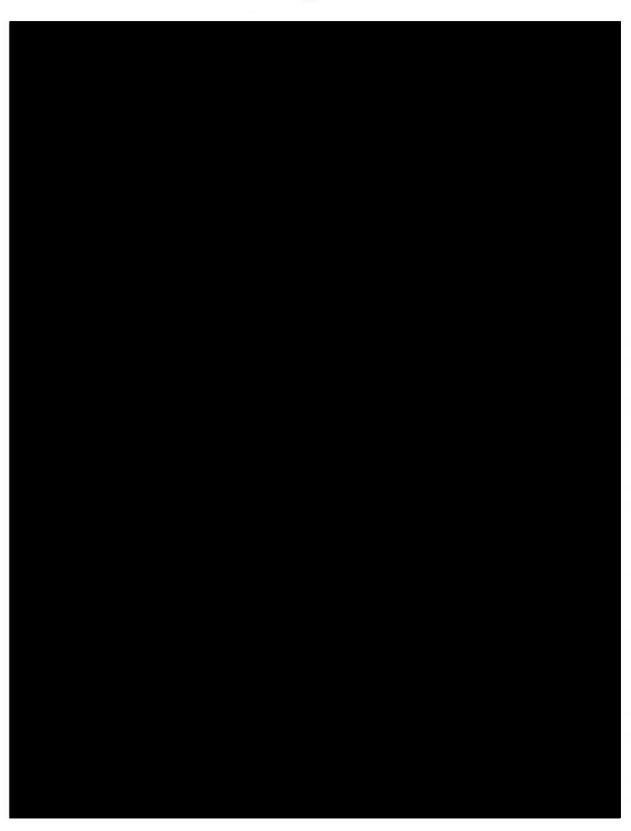
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 87 of 203





Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 88 of 203





Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 89 of 203





Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 90 of 203



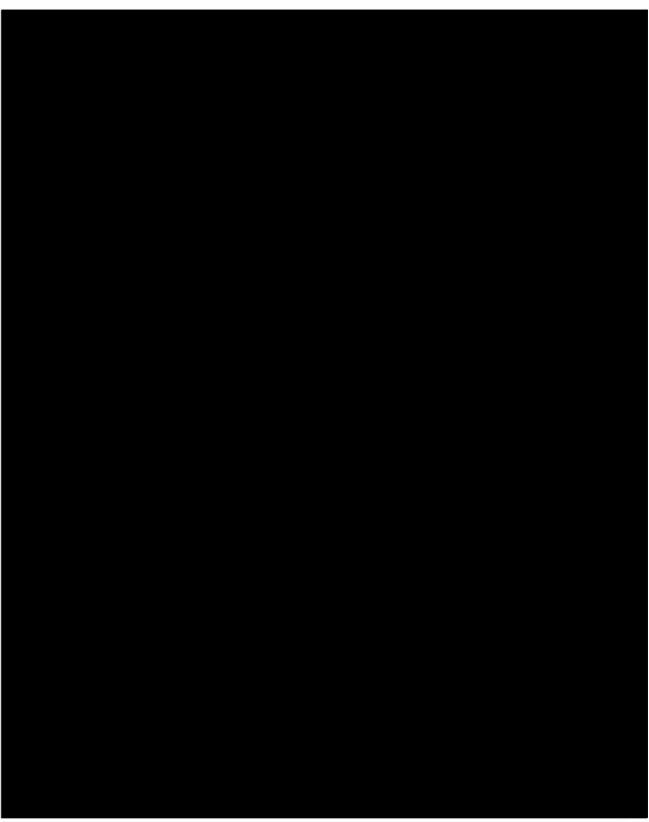
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 91 of 203



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 92 of 203



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 93 of 203



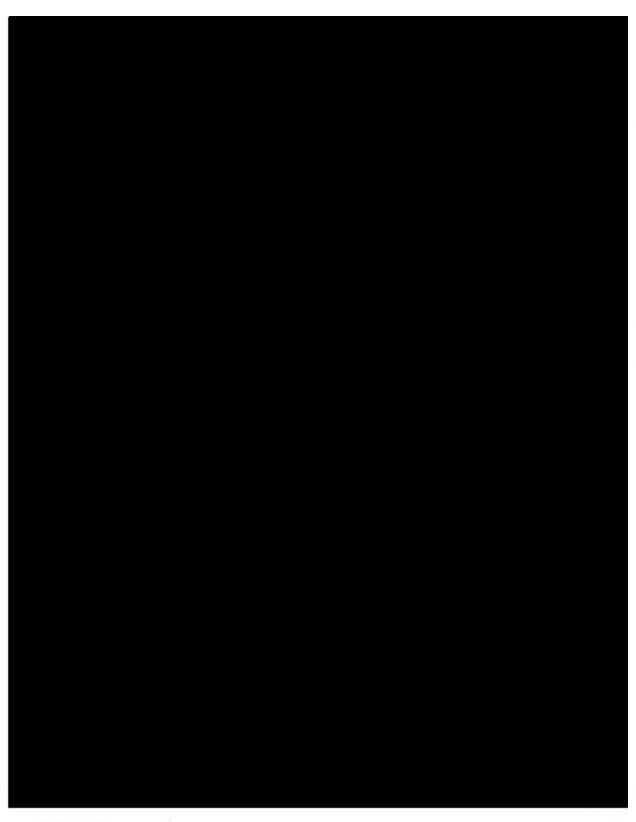
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 94 of 203



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 95 of 203



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 96 of 203



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 97 of 203



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 98 of 203



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 99 of 203

Schwartz, Robin

From:

McAllister, Timothy E.

Sent:

Monday, August 31, 2015 3:28 PM

To: Cc: Ermanski, Robert Greene, Susan

Subject:

RE: Access Northeast Holdings LLC

Rob,

Tim

Timothy E. McAllister

Assistant General Counsel and Director, US Corporate and M&A

National Grid 40 Sylvan Road

Waltham, MA 02451-1120

Tel: 781.907.1880 Fax: 781.296.8092 Cell: 617.877.3006

timothy.mcallister@nationalgrid.com

Please consider the environment before printing this email.

From: Ermanski, Robert

Sent: Monday, August 31, 2015 3:25 PM

To: McAllister, Timothy E. **Cc:** Greene, Susan

Subject: Access Northeast Holdings LLC

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 100 of 203

Schwartz, Robin

From:

Das, Reshmi

Sent:

Monday, August 31, 2015 3:51 PM

To: Cc: Gage, Frances McAllister, Timothy E.

Subject:

Re: Access Northeast-Formation

Frances/Tim, just heard that the DE Secretary of State office will be closed Thursday and Friday of this week. So if you could please form the entity by Wednesday that will be good. We are 98% there to deal negotiations.

Sent from my iPhone

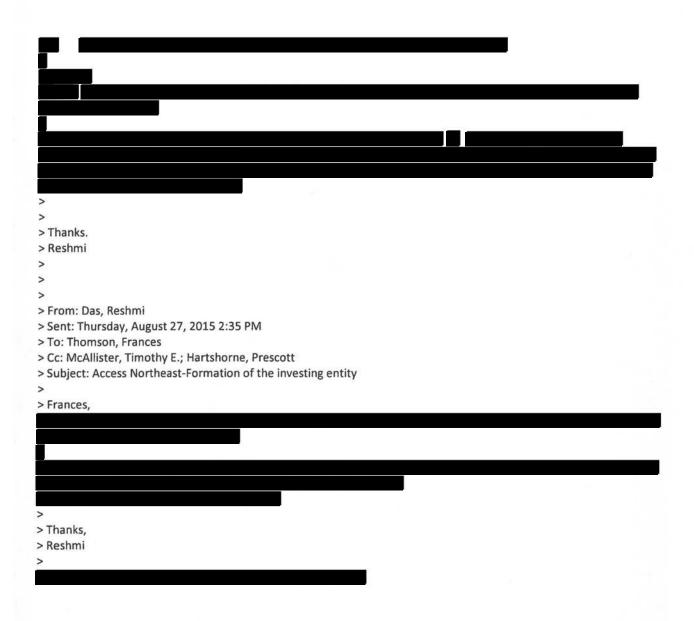
On Aug 31, 2015, at 9:48 AM, "Thomson, Frances" < Frances. Gage@nationalgrid.com > wrote:

- > Hi Reshmi,
- >
- > I believe I prepared all of the attached some time ago?
- >
- > Thank you,
- > Frances
- >
- > Frances Gage
- > Global Corporate, M&A and Corporate Secretariat
- > National Grid
- > 40 Sylvan Road, W1.005
- > Waltham, MA 02451
- > (781) 907-1894 Office
- > (781) 389-3874 Cell
- > Frances.Gage@nationalgrid.com<mailto:Frances.Gage@nationalgrid.com>
- >
- > From: Das, Reshmi
- > Sent: Sunday, August 30, 2015 12:55 PM
- > To: Thomson, Frances; McAllister, Timothy E.
- > Cc: Hartshorne, Prescott
- > Subject: RE: Access Northeast-Formation of the investing entity

>

> Tim/Frances,

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 101 of 203



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 102 of 203

Schwartz, Robin

From:

Das, Reshmi

Sent:

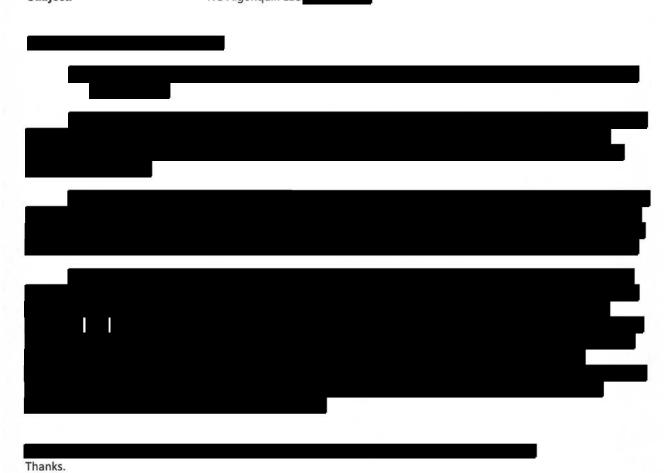
Tuesday, September 01, 2015 12:51 PM

To:

McAllister, Timothy E.

Subject:

NG Algonquin LLC



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 103 of 203

Schwartz, Robin

From: Burlingame, Richard

Sent:Tuesday, September 01, 2015 3:22 PMTo:Hartshorne, Prescott; Blazewicz, Stanley J.Cc:Nash, Macdara J. - US; Bern, StephenSubject:FW: National Grid Algonquin LLC

Attachments: NATIONAL GRID ALGONQUIN LLC DE - CERTIFICATE.pdf

Entity set up to hold Access Northeast Investment.

From: Thomson, Frances

Sent: Tuesday, September 01, 2015 3:07 PM

To: Thaesler, Karl; Di Gilio, Christopher T.; Chi, Wai Sang; Greene, Susan; Lundahl, Walter J.; Rayner, Heather; Das,

Reshmi; Mulcahy, Brian J.; McAllister, Timothy E.; Hunter, Carolyn; Burlingame, Richard

Subject: National Grid Algonquin LLC

All,

We formed a new limited liability company as of today, September 1, 2015. The name of the company is National Grid Algonquin LLC and 100% of its interest will be held by its parent, National Grid Development Holdings Corp. I've attached a copy of the Certificate of Formation for your records.

Please let me know if you have any questions and feel free to forward this email as you deem necessary.

Thank you, Frances

Frances Gage
Global Corporate, M&A and Corporate Secretariat
National Grid
40 Sylvan Road, W1.005
Waltham, MA 02451
(781) 907-1894 - Office
(781) 389-3874 - Cell
Frances.Gage@nationalgrid.com

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 104 of 203



PAGE

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF

DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT

COPY OF THE CERTIFICATE OF FORMATION OF "NATIONAL GRID ALGONQUIN

LLC", FILED IN THIS OFFICE ON THE FIRST DAY OF SEPTEMBER, A.D.

2015, AT 2:13 O'CLOCK P.M.

5799902 8100

151243053

AUTHENTICATION: 2693709 DATE: 09-01-15

Jeffrey W. Bullock, Secretary of State

You may verify this certificate online at corp.delaware.gov/authver.shtml

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 105 of 203

CERTIFICATE OF FORMATION

OF

NATIONAL GRID ALGONQUIN LLC

- 1. The name of the limited liability company is National Grid Algonquin LLC.
- The address of its registered office in the State of Delaware is 2711 Centerville Road, Suite 400, Wilmington, DE 19808. The name of its registered agent at such address is Corporation Service Company.

IN WITNESS WHEREOF, the undersigned has executed this Certificate of Formation of National Grid Algonquin LLC this 1st day of September, 2015.

Frances Gage,
Authorized person

State of Delaware Secretary of State Division of Corporations Delivered 02:18 PM 09/01/2015 FILED 02:13 PM 09/01/2015 SRV 151243053 - 5799902 FILE

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 106 of 203

Schwartz, Robin

From:

Gage, Frances

Sent:

Tuesday, September 01, 2015 2:32 PM

To:

Das, Reshmi

Subject:

NATIONAL GRID ALGONOUIN LLC

Attachments:

NATIONAL GRID ALGONQUIN LLC DE - CERTIFICATE.pdf

Importance:

High

Reshmi,

Attached is a copy of the Certificate of Formation. I'll send it along to the various departments.

Thank you, Frances

Frances Gage
Global Corporate, M&A and Corporate Secretariat
National Grid
40 Sylvan Road, W1.005
Waltham, MA 02451
(781) 907-1894 - Office
(781) 389-3874 - Cell
Frances.Gage@nationalgrid.com

----Original Message----

From: MDISBROW@cscinfo.com [mailto:MDISBROW@cscinfo.com]

Sent: Tuesday, September 01, 2015 2:27 PM

To: Thomson, Frances

Subject: Results for Entity Name: NATIONAL GRID ALGONQUIN LLC

Attached you will find results for the following:

Entity Name : NATIONAL GRID ALGONQUIN LLC Request For : Incorporation/Formation Filing

Jurisdiction: DE - Secretary of State

Order #: 771003 - 5 Order Date: 2015-09-01 Matter #: Not Provided

Thank you for using Corporation Service Company

If you have any questions concerning this order, please feel free to contact me.

Michelle Disbrow

MDISBROW@cscinfo.com

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 107 of 203

The responsibility for verification of the files and determination of the information therein lies with the filing officer; we accept no liability for errors or omissions.

Prepared by: DEXX

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 108 of 203

Delaware

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF FORMATION OF "NATIONAL GRID ALGONQUIN LLC", FILED IN THIS OFFICE ON THE FIRST DAY OF SEPTEMBER, A.D. 2015, AT 2:13 O'CLOCK P.M.

5799902 8100

DATE: 09-01-15 You may verify this certificate online at corp.delaware.gov/authver.shtml

AUTHENTICATION: 2693709

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 109 of 203

CERTIFICATE OF FORMATION

OF

NATIONAL GRID ALGONQUIN LLC

- The name of the limited liability company is National Grid Algonquin LLC.
- The address of its registered office in the State of Delaware is 2711 Centerville Road, Suite 400, Wilmington, DE 19808. The name of its registered agent at such address is Corporation Service Company.

IN WITNESS WHEREOF, the undersigned has executed this Certificate of Formation of National Grid Algonquin LLC this 1st day of September, 2015.

Frances Gage, Authorized person

adiorizoa poison

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 110 of 203

Schwartz, Robin

From: Gage, Frances

Sent: Tuesday, September 01, 2015 3:10 PM
To: Mulcahy, Brian J.; McAllister, Timothy E.

Cc: Soebke, Bernard M.

Subject: RE: National Grid Algonquin LLC

Yes.

Thank you, Frances

Frances Gage
Global Corporate, M&A and Corporate Secretariat
National Grid
40 Sylvan Road, W1.005
Waltham, MA 02451
(781) 907-1894 - Office
(781) 389-3874 - Cell
Frances.Gage@nationalgrid.com

From: Mulcahy, Brian J.

Sent: Tuesday, September 01, 2015 3:10 PM

To: McAllister, Timothy E.

Cc: Soebke, Bernard M.; Thomson, Frances Subject: Fwd: National Grid Algonquin LLC

Tim, is this a special purpose entity for Access Northeast?

Sent from my iPad

Begin forwarded message:

From: "Thomson, Frances" <Frances.Gage@nationalgrid.com>

Date: September 1, 2015 at 3:07:04 PM EDT

To: "Thaesler, Karl" < Karl. Thaesler@nationalgrid.com >, "Di Gilio, Christopher T."

<<u>Christopher.DiGilio@nationalgrid.com</u>>, "Chi, Wai Sang" <<u>WaiSang.Chi@nationalgrid.com</u>>, "Greene, Susan" <<u>Susan.Greene@nationalgrid.com</u>>, "Lundahl, Walter J." <<u>Walter.Lundahl@nationalgrid.com</u>>,

"Rayner, Heather" < Heather.Rayner@nationalgrid.com >, "Das, Reshmi"

<Reshmi.Das@nationalgrid.com>, "Mulcahy, Brian J." <Brian.Mulcahy@nationalgrid.com>, "McAllister,

Timothy E." <Timothy.McAllister@nationalgrid.com>, "Hunter, Carolyn"

<<u>Carolyn.Hunter@nationalgrid.com</u>>, "Burlingame, Richard"

< RICHARD.BURLINGAME@nationalgrid.com >

Subject: National Grid Algonquin LLC

All,

We formed a new limited liability company as of today, September 1, 2015. The name of the company is National Grid Algonquin LLC and 100% of its interest will be held by its parent, National Grid Development Holdings Corp. I've attached a copy of the Certificate of Formation for your records.

Please let me know if you have any questions and feel free to forward this email as you deem necessary.

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 111 of 203

Thank you, Frances

Frances Gage
Global Corporate, M&A and Corporate Secretariat
National Grid
40 Sylvan Road, W1.005
Waltham, MA 02451
(781) 907-1894 - Office
(781) 389-3874 - Cell
Frances.Gage@nationalgrid.com

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 112 of 203

Schwartz, Robin

From: Das, Reshmi

Sent: Tuesday, September 01, 2015 3:39 PM **To:** Hartshorne, Prescott; Blazewicz, Stanley J.

Subject: FW: National Grid Algonquin LLC

Attachments: NATIONAL GRID ALGONQUIN LLC DE - CERTIFICATE.pdf

Stan/Prescott,

The contemplated member of AGT for the ANE deal (National Grid Algonquin LLC) has been formed as a Delaware limited liability company. Please see attached the certificate of formation.

Please call me if you have any questions.

Thank you.

Reshmi

From: Thomson, Frances

Sent: Tuesday, September 01, 2015 3:07 PM

To: Thaesler, Karl; Di Gilio, Christopher T.; Chi, Wai Sang; Greene, Susan; Lundahl, Walter J.; Rayner, Heather; Das,

Reshmi; Mulcahy, Brian J.; McAllister, Timothy E.; Hunter, Carolyn; Burlingame, Richard

Subject: National Grid Algonquin LLC

All,

We formed a new limited liability company as of today, September 1, 2015. The name of the company is National Grid Algonquin LLC and 100% of its interest will be held by its parent, National Grid Development Holdings Corp. I've attached a copy of the Certificate of Formation for your records.

Please let me know if you have any questions and feel free to forward this email as you deem necessary.

Thank you, Frances

Frances Gage
Global Corporate, M&A and Corporate Secretariat
National Grid
40 Sylvan Road, W1.005
Waltham, MA 02451
(781) 907-1894 - Office
(781) 389-3874 - Cell
Frances.Gage@nationalgrid.com

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 113 of 203

Schwartz, Robin

From:

Decicco, Philip A. (Legal)

Sent:

Wednesday, September 02, 2015 9:56 AM

To:

Das, Reshmi

Cc:

McAllister, Timothy E.

Subject:

FW: Draft Memo - Acquisition and Transfer of Interests In Interstate Pipeline - Privileged

& Confidential - Attorney Work Product

Attachments:

082515_PDeCicco.docx

Importance:

High

Sensitivity:

Confidential

From: Maloney, Kenneth [KMaloney@CullenandDykman.com]

Sent: Tuesday, August 25, 2015 4:54 PM

To: Decicco, Philip A. (Legal) Cc: Maloney, Kenneth

Subject: Draft Memo - Acquisition and Transfer of Interests In Interstate Pipeline - Privileged & Confidential - Attorney

Work Product

Thanks,

Kenneth T. Maloney Partner Cullen and Dykman LLP 1101 Fourteenth Street, N.W. Washington, D.C. 20005 T: (202) 223-8890

F: (202) 457-1405

ATTORNEY-CLIENT PRIVILEGED COMMUNICATION - DO NOT FORWARD OR COPY - CONFIDENTIALITY NOTICE: The contents of this e-mail message and any attachments are intended solely for the personal and confidential use of the recipient(s) named above. This communication is intended to be and to remain confidential and may be subject to applicable attorney/client and/or work product privileges. If you are not the intended recipient of this message, or if this message has been addressed to you in error, please immediately alert the sender by reply e-mail and then delete this message and its attachments.

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 114 of 203

Sc	hwai	t7	Ro	hin
~	110001	Same 1		~

From:

Decicco, Philip A. (Legal)

Sent:

Wednesday, September 02, 2015 9:48 AM

To:

Das, Reshmi

Cc: Subject: McAllister, Timothy E.

RE: Access Northeast Query

From: Das, Reshmi

Sent: Wednesday, September 02, 2015 9:43 AM

To: Decicco, Philip A. (Legal) **Cc:** McAllister, Timothy E.

Subject: FW: Access Northeast Query

Hi Phil,

Thank you. Reshmi

From: Purcell, Meabh

Sent: Tuesday, September 01, 2015 5:50 PM

To: Das, Reshmi Cc: OBrien, Celia

Subject: RE: Access Northeast Query

Meabh

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 115 of 203

From: Das, Reshmi Sent: Thursday, August 27, 2015 10:32 AM To: Blackmore, Alexandra Cc: Purcell, Meabh Subject: FW: Access Northeast Query		
Alexandra,		
-		
		y.
Many thanks, Reshmi		
From: Das, Reshmi		
Sent: Monday, August 17, 2015 10:12 AM To: Decicco, Philip A. (Legal)		
Subject: Access Northeast Query		
		Ī

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 116 of 203

hanks. eshmi		
esnmi		

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 117 of 203

Privileged and Confidential – Attorney Work Product



NAME: KENNETH T. MALONEY Title: Partner kmaloney@cullenanddykman.com 1101 14th Street, N.W.
Suite 550
Washington, D.C. 20005-5600
Telephone: 202-223-8890 • Fax: 202-457-1405

August 25, 2015

To:

Phil Decicco

From:

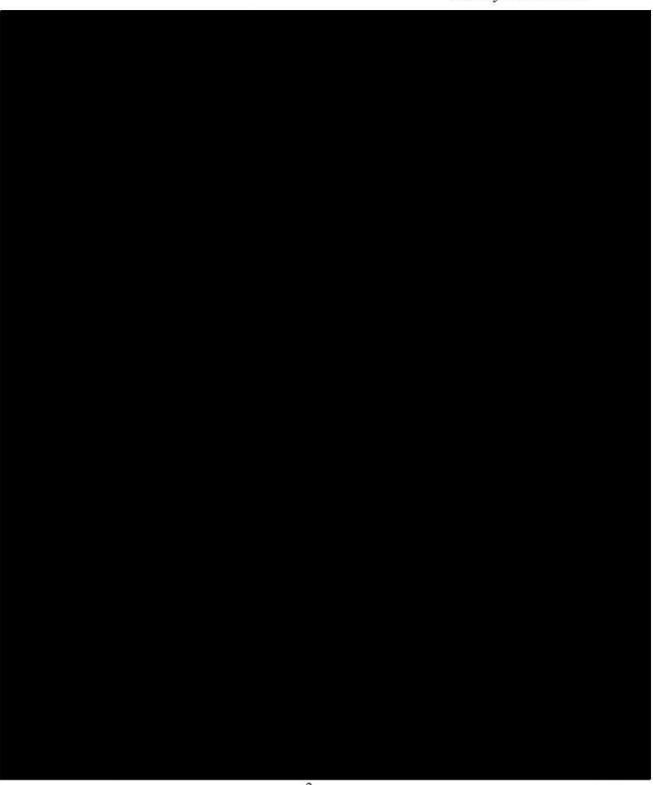
Ken Maloney

Re:

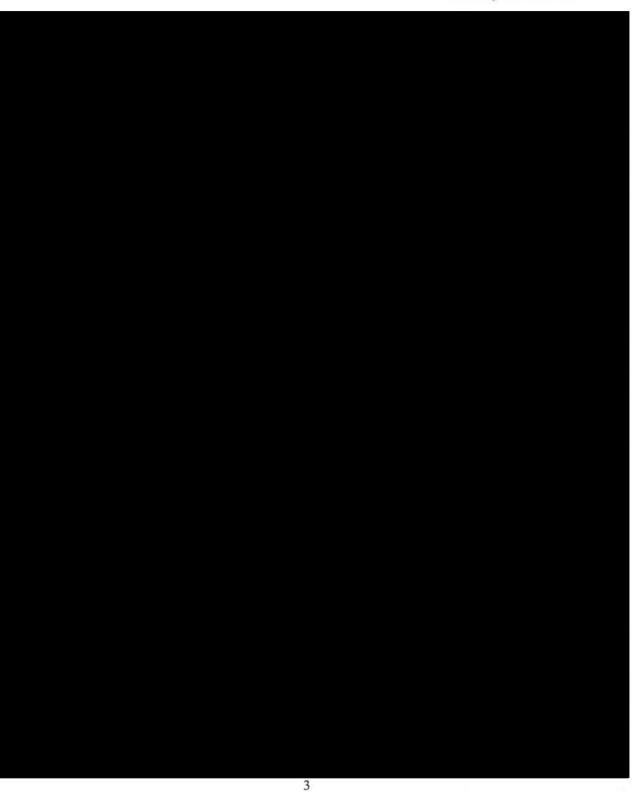
Acquisition and Transfer of Interests In Interstate Pipeline



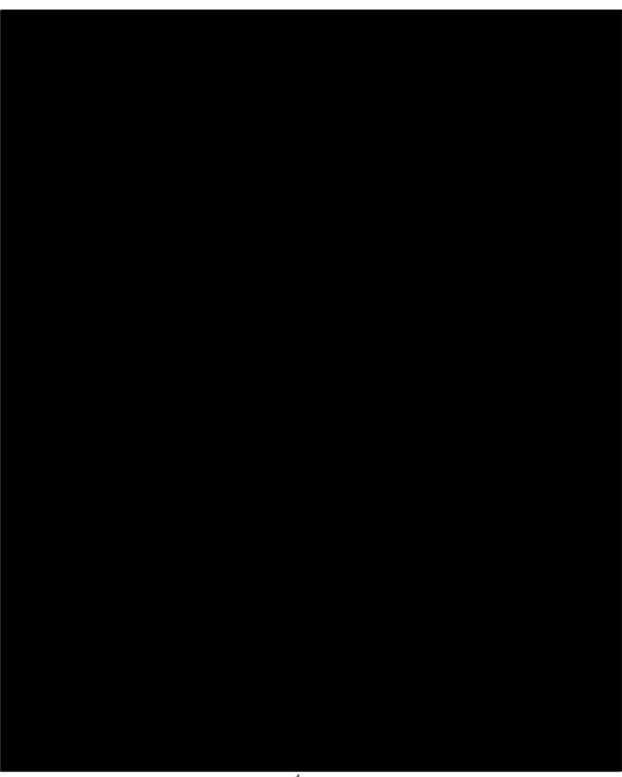
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 118 of 203



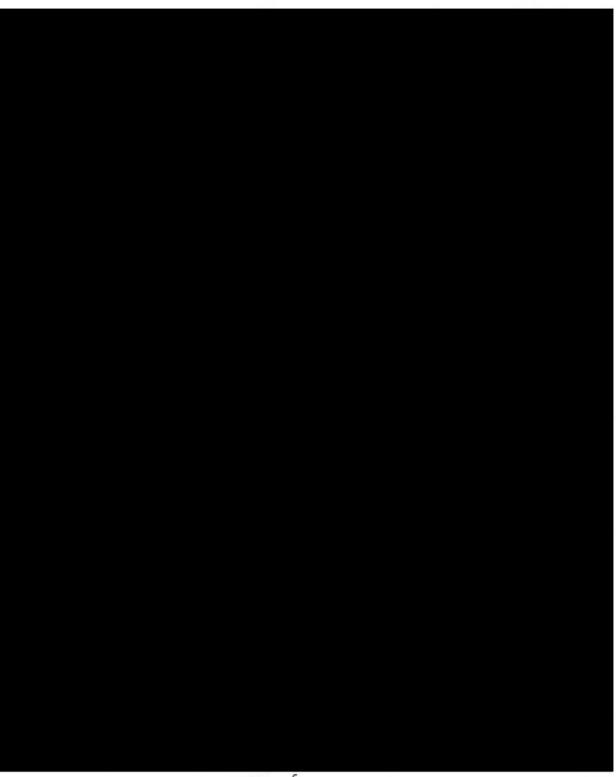
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 119 of 203



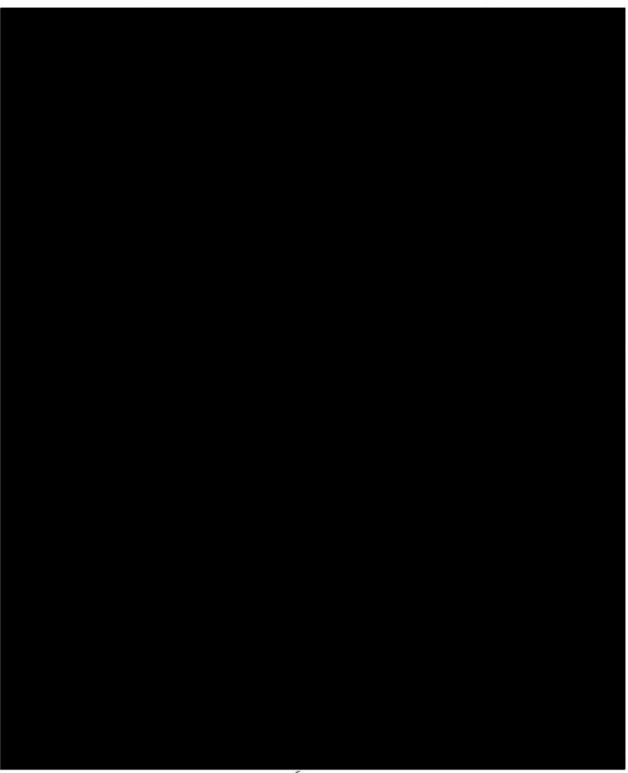
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 120 of 203



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 121 of 203



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 122 of 203



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 123 of 203

Schwartz, Robin

From:

Das, Reshmi

Sent:

Wednesday, September 02, 2015 11:12 AM

To: Subject: Decicco, Philip A. (Legal); McAllister, Timothy E.
RE: Draft Memo - Acquisition and Transfer of Interests In Interstate Pipeline - Privileged

& Confidential - Attorney Work Product

Sensitivity:

Confidential

----Original Message-----

From: Decicco, Philip A. (Legal)

Sent: Wednesday, September 02, 2015 11:09 AM

To: Das, Reshmi; McAllister, Timothy E.

Subject: RE: Draft Memo - Acquisition and Transfer of Interests In Interstate Pipeline - Privileged & Confidential -

Attorney Work Product Sensitivity: Confidential

From: Das, Reshmi

Sent: Wednesday, September 02, 2015 10:53 AM To: McAllister, Timothy E.; Decicco, Philip A. (Legal)

Subject: RE: Draft Memo - Acquisition and Transfer of Interests In Interstate Pipeline - Privileged & Confidential -

Attorney Work Product

somewhat emphasizing that N

-----Original Message-----From: McAllister, Timothy E.

Sent: Wednesday, September 02, 2015 10:45 AM

To: Decicco, Philip A. (Legal); Das, Reshmi

Subject: RE: Draft Memo - Acquisition and Transfer of Interests In Interstate Pipeline - Privileged & Confidential -

Attorney Work Product Sensitivity: Confidential

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 124 of 203

Timothy E. McAllister
Assistant General Counsel and Director, US Corporate and M&A
National Grid
40 Sylvan Road
Waltham, MA 02451-1120

Tel: 781.907.1880 Fax: 781.296.8092 Cell: 617.877.3006

timothy.mcallister@nationalgrid.com

Please consider the environment before printing this email.

From: McAllister, Timothy E.

Sent: Wednesday, September 02, 2015 10:43 AM To: Decicco, Philip A. (Legal); Das, Reshmi

Subject: RE: Draft Memo - Acquisition and Transfer of Interests In Interstate Pipeline - Privileged & Confidential -

Attorney Work Product

Phil,

Thanks,

Tim

Timothy E. McAllister
Assistant General Counsel and Director, US Corporate and M&A
National Grid
40 Sylvan Road
Waltham, MA 02451-1120
Tel: 781.907.1880

Fax: 781.296.8092 Cell: 617.877.3006

timothy.mcallister@nationalgrid.com

Please consider the environment before printing this email.

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 125 of 203

Schwartz, Robin

From:

Gage, Frances

Sent:

Thursday, September 03, 2015 10:32 AM

To:

Das, Reshmi

Cc: Subject: McAllister, Timothy E.

Attachments:

National Grid Algonquin LLC Good Standing NATIONAL GRID ALGONQUIN LLC - .pdf

Reshmi,

Here is the Good Standing Certificate.

Thank you, Frances

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 126 of 203

Delaware

PAGE 1

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF
DELAWARE, DO HEREBY CERTIFY "NATIONAL GRID ALGONQUIN LLC" IS
DULY FORMED UNDER THE LAWS OF THE STATE OF DELAWARE AND IS IN
GOOD STANDING AND HAS A LEGAL EXISTENCE SO FAR AS THE RECORDS OF
THIS OFFICE SHOW, AS OF THE THIRD DAY OF SEPTEMBER, A.D. 2015.

AND I DO HEREBY FURTHER CERTIFY THAT THE SAID "NATIONAL GRID ALGONQUIN LLC" WAS FORMED ON THE FIRST DAY OF SEPTEMBER, A.D. 2015.

AND I DO HEREBY FURTHER CERTIFY THAT THE ANNUAL TAXES HAVE NOT BEEN ASSESSED TO DATE.

5799902 8300

151253477

You may verify this certificate online at corp.delaware.gov/authver.shtml

AUTHENTICATION: 2701101

DATE: 09-03-15

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 127 of 203

From: Decicco, Philip A. (Legal)

Sent: Wednesday, September 02, 2015 9:55 AM

To: Das, Reshmi

Cc: McAllister, Timothy E.

Subject: FW: Draft Memo - Acquisition and Transfer of Interests In Interstate Pipeline - Privileged & Confidential -

Attorney Work Product

From: Maloney, Kenneth [KMaloney@CullenandDykman.com]

Sent: Tuesday, August 25, 2015 4:54 PM

To: Decicco, Philip A. (Legal) Cc: Maloney, Kenneth

Subject: Draft Memo - Acquisition and Transfer of Interests In Interstate Pipeline - Privileged & Confidential - Attorney

Work Product

Thanks,

Kenneth T. Maloney Partner Cullen and Dykman LLP 1101 Fourteenth Street, N.W. Washington, D.C. 20005 T: (202) 223-8890 F: (202) 457-1405

ATTORNEY-CLIENT PRIVILEGED COMMUNICATION - DO NOT FORWARD OR COPY - CONFIDENTIALITY NOTICE: The contents of this e-mail message and any attachments are intended solely for the personal and confidential use of the recipient(s) named above. This communication is intended to be and to remain confidential and may be subject to applicable attorney/client and/or work product privileges. If you are not the intended recipient of this message, or if this message has been addressed to you in error, please immediately alert the sender by reply e-mail and then delete this message and its attachments.

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 128 of 203

Schwartz, Robin

From:

McAllister, Timothy E.

Sent:

Thursday, September 03, 2015 10:59 AM

To:

Gage, Frances; Das, Reshmi

Subject:

RE: National Grid Algonquin LLC

Attachments:

DOCS-#379769-v1-Algonquin - Initial Mtg of BOM.docx; DOCS-#379770-v2-

Algonquin_-_Initial_Mtg__Member.docx; DOCS-#379771-v1-

Algonquin_-_LLC_Agreement.docx; DOCS-#380991-v2-Access_Northeast-

National_Grid_Development_Holdings_UWC.DOC

Timothy E. McAllister

Assistant General Counsel and Director, US Corporate and M&A National Grid 40 Sylvan Road Waltham, MA 02451-1120

Tel: 781.907.1880 Fax: 781.296.8092 Cell: 617.877.3006

timothy.mcallister@nationalgrid.com

Please consider the environment before printing this email.

From: Thomson, Frances

Sent: Thursday, September 03, 2015 9:45 AM To: McAllister, Timothy E.; Das, Reshmi Subject: RE: National Grid Algonquin LLC

Tim,

There were no attachments.

Thank you, Frances

Frances Gage
Global Corporate, M&A and Corporate Secretariat
National Grid
40 Sylvan Road, W1.005
Waltham, MA 02451
(781) 907-1894 - Office
(781) 389-3874 - Cell
Frances.Gage@nationalgrid.com

From: McAllister, Timothy E.

Sent: Wednesday, September 02, 2015 12:09 PM

To: Thomson, Frances; Das, Reshmi Subject: National Grid Algonquin LLC

Frances & Reshmi,

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 129 of 203



Thanks,

Tim

Timothy E. McAllister

Assistant General Counsel and Director, US Corporate and M&A National Grid
40 Sylvan Road
Waltham, MA 02451-1120

Tel: 781.907.1880 Fax: 781.296.8092 Cell: 617.877.3006

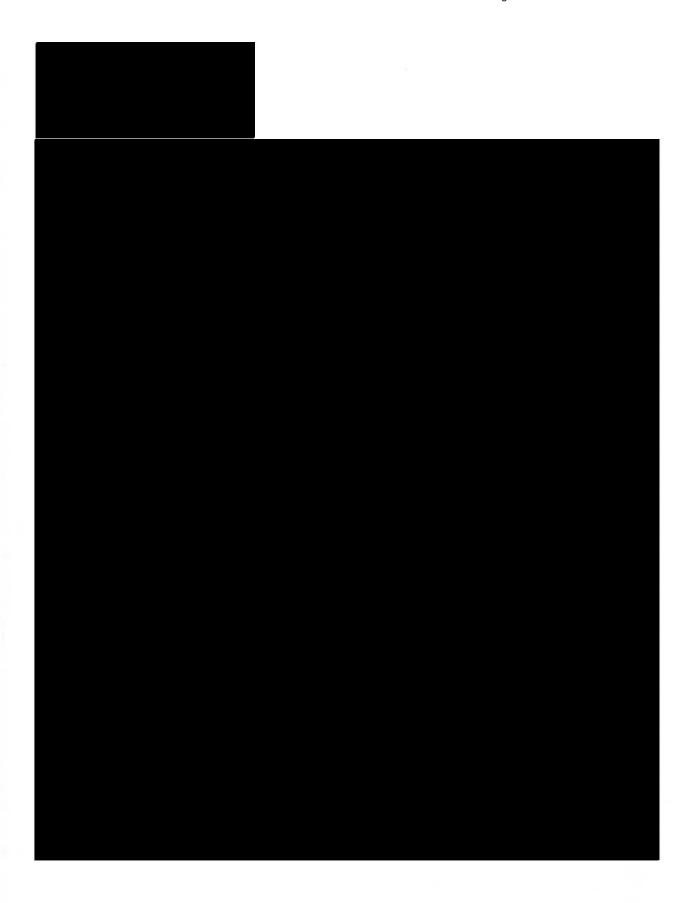
timothy.mcallister@nationalgrid.com

Please consider the environment before printing this email.

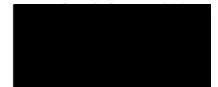
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 130 of 203

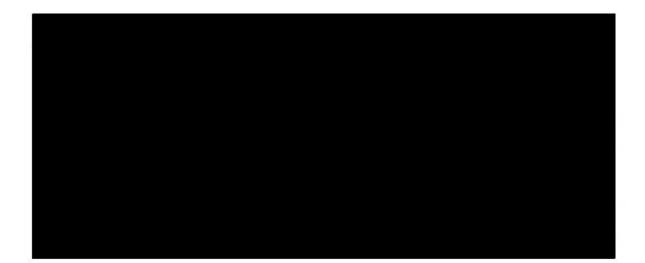


Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 131 of 203



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 132 of 203





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Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 134 of 203





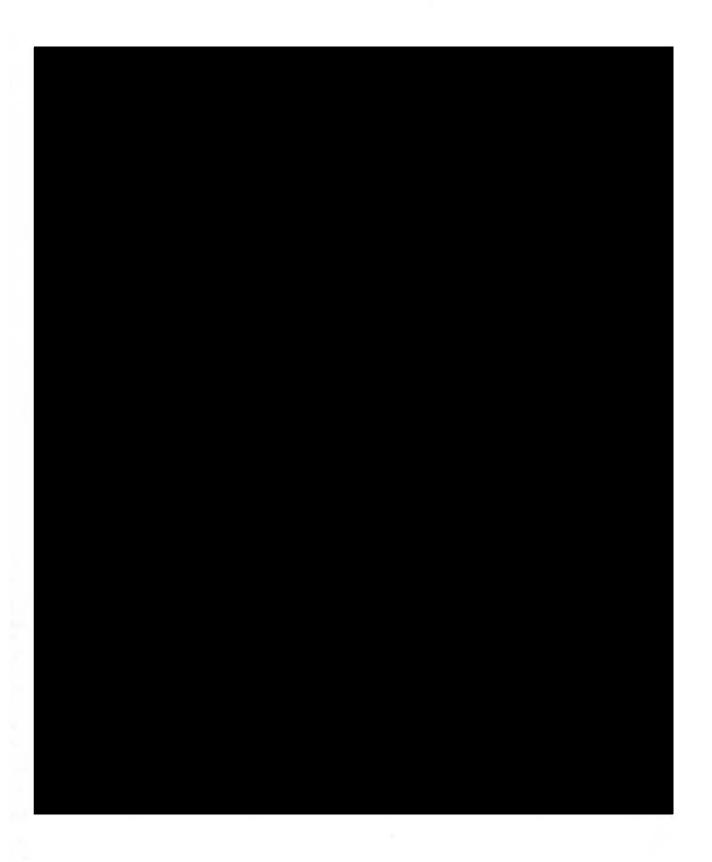
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 135 of 203



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 136 of 203

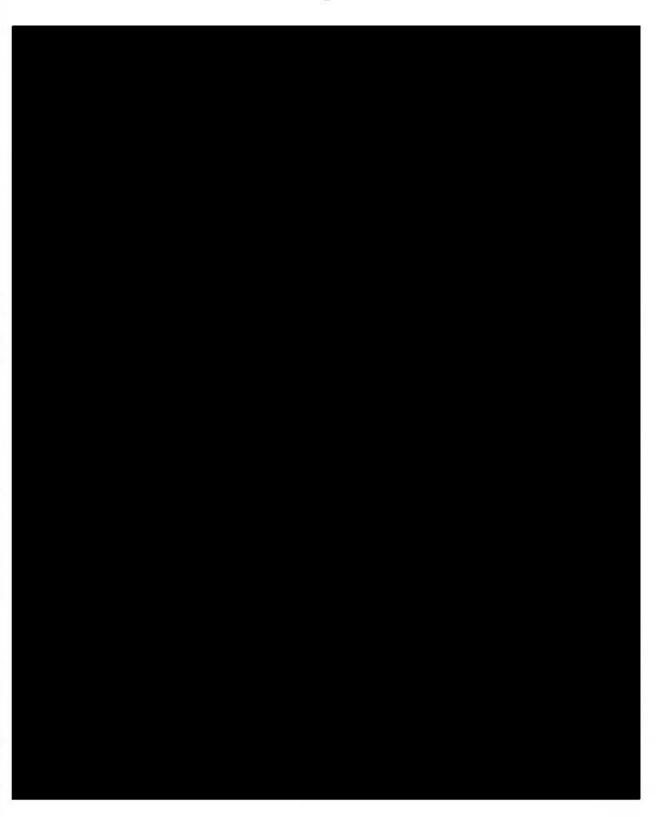


Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 137 of 203



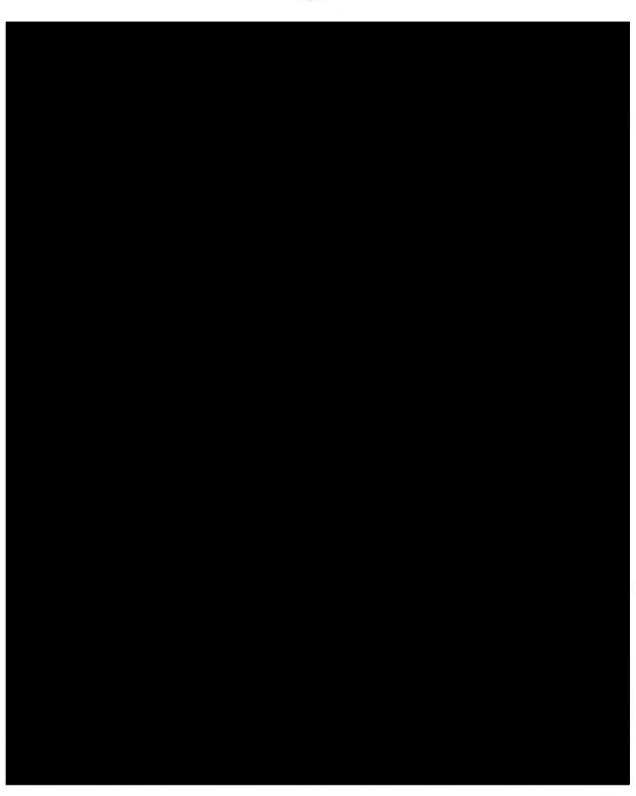
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 138 of 203





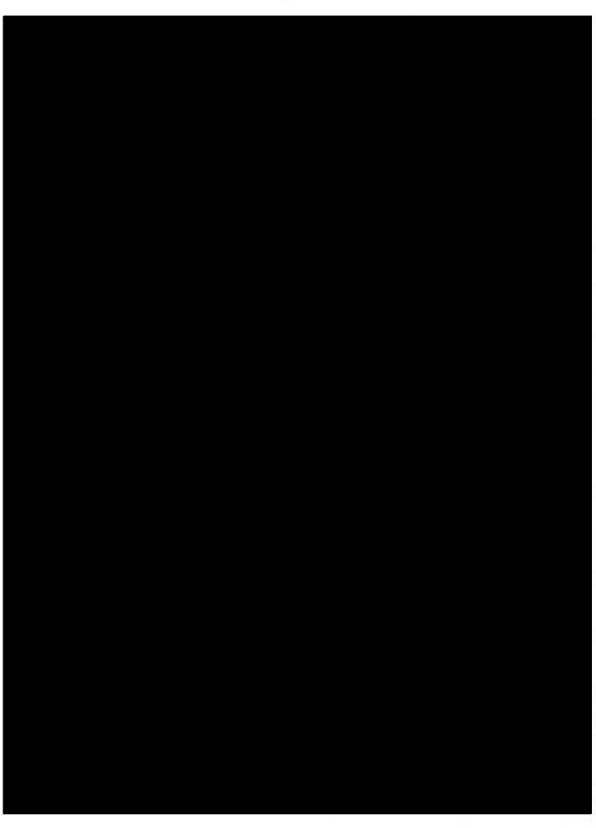
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 139 of 203





Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 140 of 203





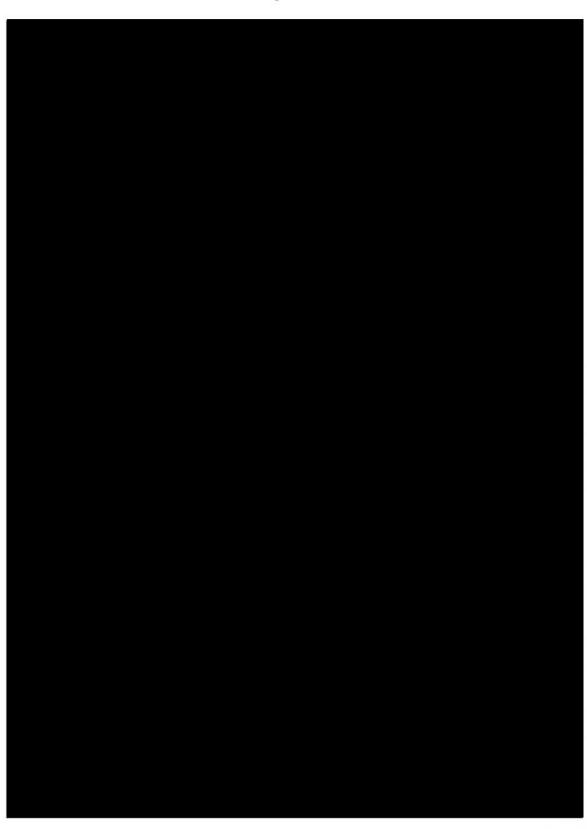
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 141 of 203





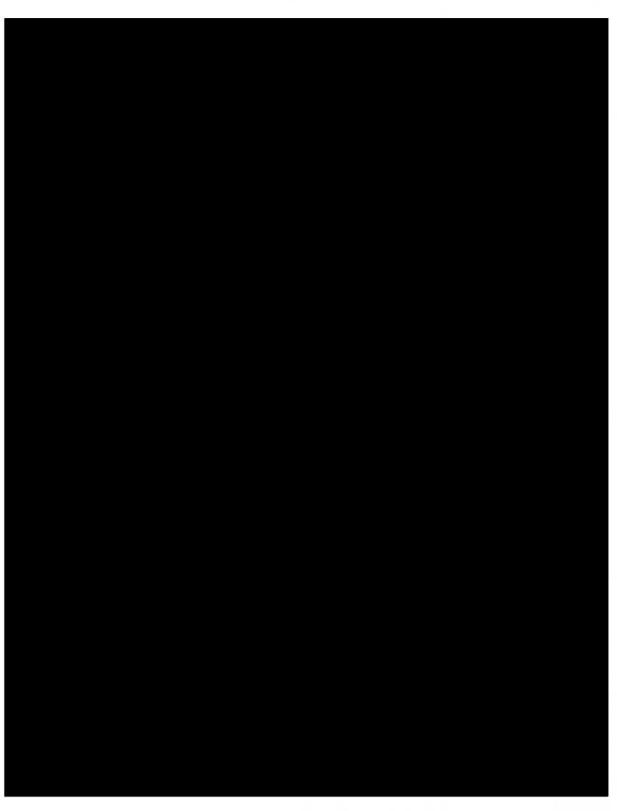
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 142 of 203





Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 143 of 203





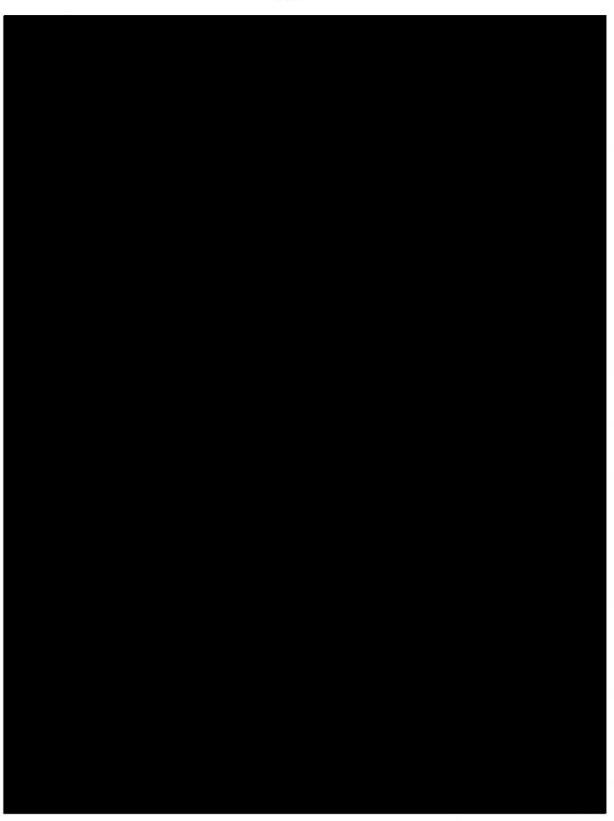
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 144 of 203





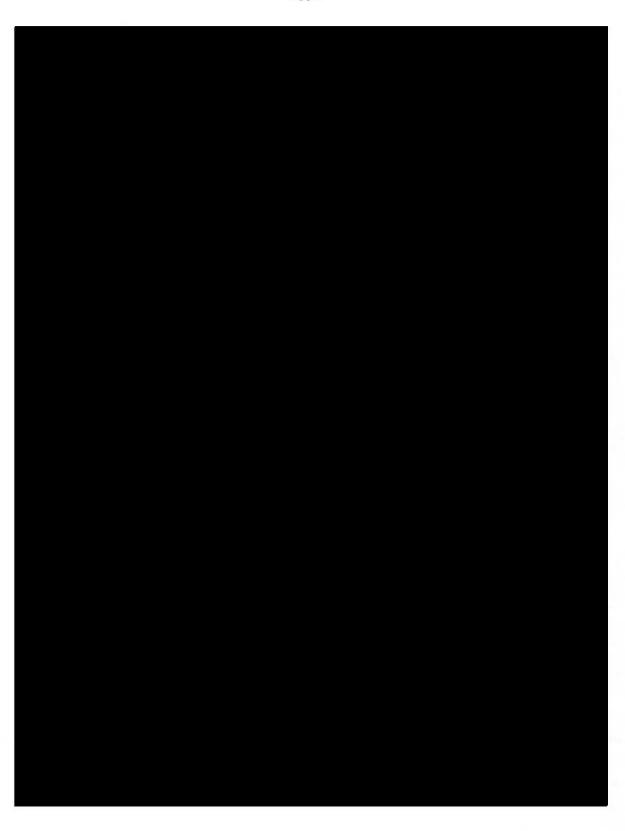
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 145 of 203





Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 146 of 203





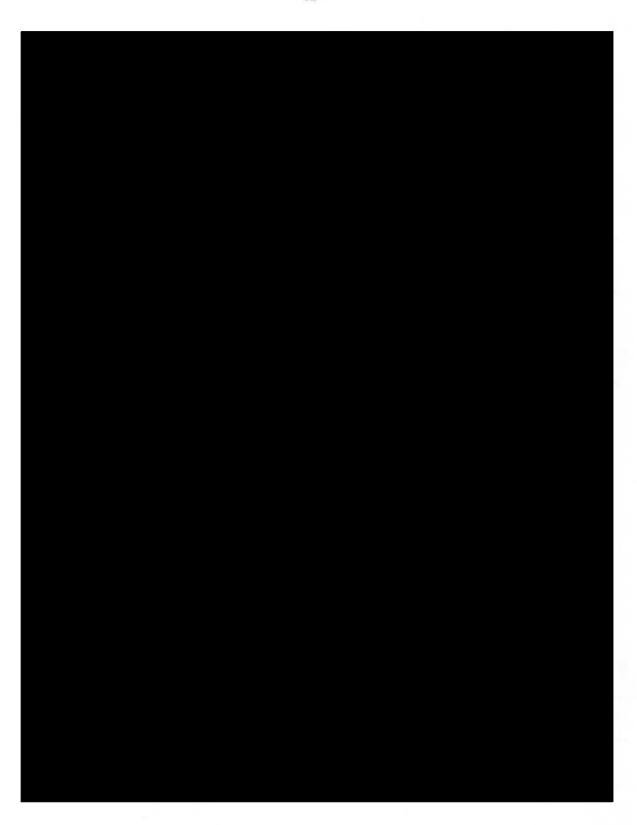
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 147 of 203

- 11 -



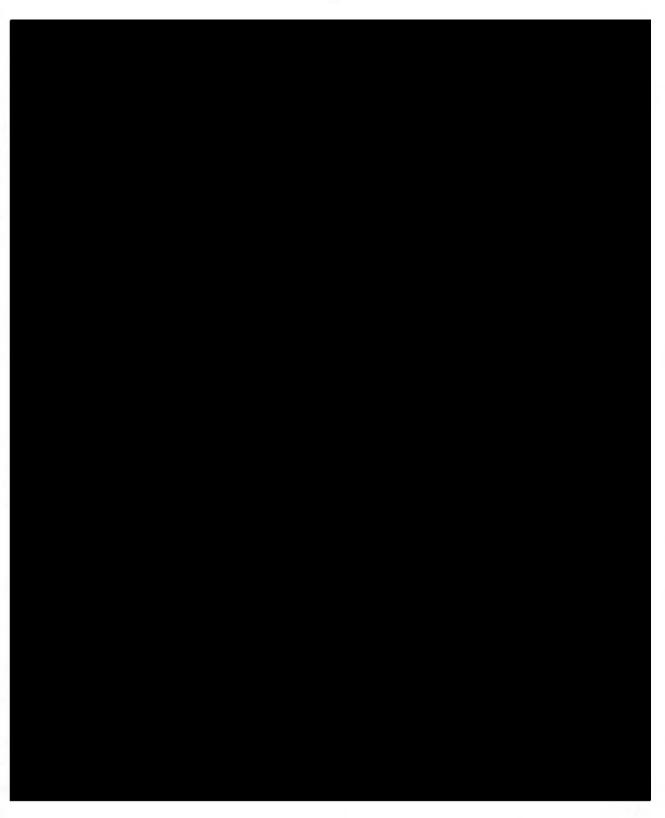
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 148 of 203





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Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 150 of 203

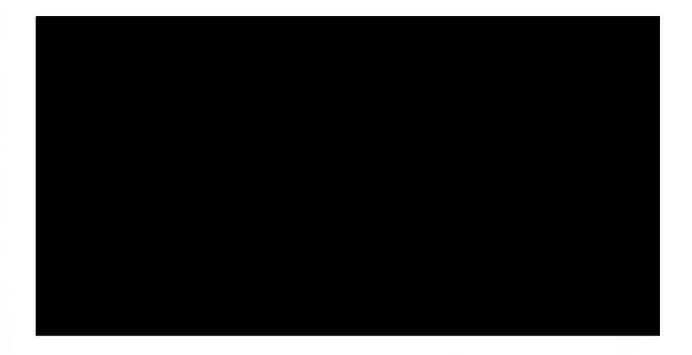




Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 151 of 203



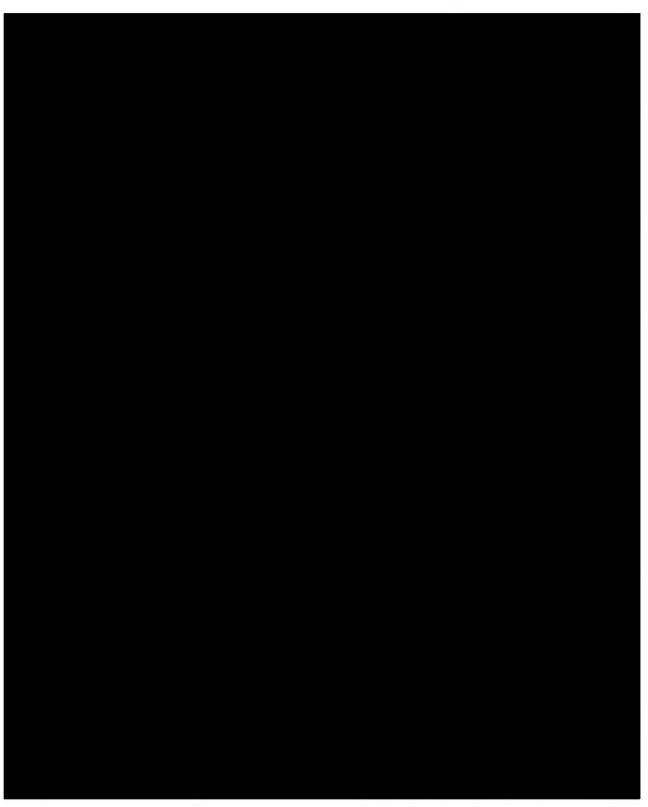
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 152 of 203



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 153 of 203



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Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 156 of 203



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 157 of 203

Schwartz, Robin

From:

Meehan, James (LEGAL)

Sent:

Thursday, September 10, 2015 8:54 AM

To:

Gage, Frances

Cc:

McAllister, Timothy E.

Subject:

RE: National Grid Algonquin LLC

Thanks Frances

James P. Meehan Assistant General Counsel Legal Department National Grid 40 Sylvan Road

Waltham, MA 02451 Tel: (781) 907-1884

james.meehan@nationalgrid.com

Please consider the environment before printing this e-mail.

From: Thomson, Frances

Sent: Thursday, September 10, 2015 8:07 AM

To: Meehan, James (LEGAL) Cc: McAllister, Timothy E.

Subject: National Grid Algonquin LLC

Hi Jim,

Stan has signed the attached Accession.

Thank you, Frances

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 158 of 203

ACCESSION TO NATIONAL GRID USA SERVICE COMPANY, INC. SERVICE AGREEMENT

Effective as of September 4, 2015 ("Accession Date")

Reference is made to that certain Service Agreement dated as of November 5, 2012 by and between National Grid USA Service Company, Inc. and the Client Companies party thereto (the "Service Agreement"). Any capitalized term used but not defined herein shall have the meaning specified for such term in the Service Agreement.

In accordance with Section 4.4 of the Service Agreement, the undersigned company (the "Additional Client Company") shall be deemed to be a Client Company under the Service Agreement as of the Accession Date. The Additional Client Company agrees to be bound by the terms of the Service Agreement from and after the Accession Date.

IN WITNESS WHEREOF, the undersigned has caused this instrument to be executed by its respective duly authorized representative as of the Accession Date.

NATIONAL GRID ALGONQUIN LLC

Name: Stanley Blazewicz

Title: Vice President

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 159 of 203

Schwartz, Robin

From:

Hartshorne, Prescott

Sent:

Subject:

Tuesday, September 15, 2015 11:03 AM

To:

Das, Reshmi; Gage, Frances RE: National Grid Algonquin LLC

Great - thank you Reshmi and Frances.

From: Das, Reshmi

Sent: Tuesday, September 15, 2015 11:02 AM

To: Thomson, Frances **Cc:** Hartshorne, Prescott

Subject: Re: National Grid Algonquin LLC

Thanks Frances. Based on Frances's confirmation, Peggy should be signing docs as Senior VP of National Grid Algonquin LLC. Thanks

Sent from my iPhone

On Sep 15, 2015, at 10:59 AM, "Thomson, Frances" < Frances. Gage@nationalgrid.com > wrote:

Reshmi,

Peggy is Senior Vice President of the company.

Thank you, Frances

Frances Gage
Global Corporate, M&A and Corporate Secretariat
National Grid
40 Sylvan Road, W1.005
Waltham, MA 02451
(781) 907-1894 - Office
(781) 389-3874 - Cell
Frances.Gage@nationalgrid.com

From: Das, Reshmi

Sent: Tuesday, September 15, 2015 10:33 AM **To:** Hartshorne, Prescott; Thomson, Frances

Cc: Thomson, Frances

Subject: Re: National Grid Algonquin LLC

Hi Frances, can you please confirm that Peggy has been elected as an officer of Natonal grid Algonquin LLC so she can sign access northeast docs? Thank you.

Sent from my iPhone

On Sep 15, 2015, at 9:32 AM, "Hartshorne, Prescott" < Prescott.Hartshorne@nationalgrid.com > wrote:

Hi Reshmi – Just confirming that Peggy Smyth is an officer of National Grid Algonquin (for purposes of sig authority)?

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 160 of 203

From: Das, Reshmi

Sent: Tuesday, September 01, 2015 3:39 PM **To:** Hartshorne, Prescott; Blazewicz, Stanley J. **Subject:** FW: National Grid Algonquin LLC

Stan/Prescott,

The contemplated member of AGT for the ANE deal (National Grid Algonquin LLC) has been formed as a Delaware limited liability company. Please see attached the certificate of formation.

Please call me if you have any questions. Thank you.

Reshmi

From: Thomson, Frances

Sent: Tuesday, September 01, 2015 3:07 PM

To: Thaesler, Karl; Di Gilio, Christopher T.; Chi, Wai Sang; Greene, Susan; Lundahl, Walter J.; Rayner, Heather; Das, Reshmi; Mulcahy, Brian J.; McAllister, Timothy E.;

Hunter, Carolyn; Burlingame, Richard Subject: National Grid Algonquin LLC

All,

We formed a new limited liability company as of today, September 1, 2015. The name of the company is National Grid Algonquin LLC and 100% of its interest will be held by its parent, National Grid Development Holdings Corp. I've attached a copy of the Certificate of Formation for your records.

Please let me know if you have any questions and feel free to forward this email as you deem necessary.

Thank you, Frances

Frances Gage
Global Corporate, M&A and Corporate Secretariat
National Grid
40 Sylvan Road, W1.005
Waltham, MA 02451
(781) 907-1894 - Office
(781) 389-3874 - Cell
Frances.Gage@nationalgrid.com

<NATIONAL GRID ALGONQUIN LLC DE - CERTIFICATE.pdf>
<DOCS-#379769-v1-Algonquin_-_Initial_Mtg__of_BOM.pdf>

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 161 of 203

NATIONAL GRID ALGONQUIN LLC

WRITTEN CONSENT IN LIEU OF THE INITIAL MEETING OF THE BOARD OF MANAGERS

As of September 4, 2015

The undersigned, being all of the members of the Board of Managers of National Grid Algonquin LLC, a Delaware limited liability company (the "Company"), hereby take, pursuant to Section 18-404(d) of the Limited Liability Company Act of the State of Delaware, the following actions by written consent in lieu of the organizational meeting of the Board of Managers:

Election of Officers

VOTED:

That the following persons be, and hereby are, elected to serve in the offices set forth opposite their respective names, each to hold office in accordance with the Company's Limited Liability Company Agreement and to serve until the first annual meeting of managers or consent in lieu thereof, and until such person's successor is elected or appointed and qualified, or until such person's earlier resignation, removal or disqualification:

Name	Office	
Rudolph L. Wynter, Jr.	President	
John Flynn	Senior Vice President	
Margaret M. Smyth	Senior Vice President	
Stanley J. Blazewicz	Vice President	
William Hazelip	Vice President	
Macdara Nash	Vice President	
Francine Kollydas	Treasurer	
Susan Greene	Assistant Treasurer	
Philip A. DeCicco	Secretary	
James J. Chicoski	Assistant Secretary	

Fiscal Year and Auditor

RESOLVED:

That the fiscal year of this Company shall be the twelve-month period ending on March 31 in each year.

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 162 of 203

National Grid Algonquin LLC Written Consent in Lieu of Initial Meeting of Board of Managers As of September 4, 2015 Page 2

RESOLVED: That the firm of PricewaterhouseCoopers is selected as auditor for the Company for the fiscal year ending March 31, 2016.

Banking Authority

RESOLVED: That the President, any Vice President, and the Treasurer of this Company be, and each acting alone hereby is, authorized:

- to designate such bank or banks as he may deem necessary or desirable as depositories (the "Depository" or "Depositories") for the funds of this Company;
- (b) to open, keep and close general and special bank accounts and safe deposit boxes with any Depository;
- to cause to be deposited in accounts with any Depository from time to time such funds of this Company as he may deem necessary or advisable;
- (d) to execute and deliver any Depository's customary forms of deposit account agreements, funds transfer agreements, foreign currency account agreements and such other similar agreements as such officer deems necessary or appropriate in connection with the establishment of banking accounts with any Depository;
- (e) to designate from time to time officers and agents of this Company who will be authorized by it to sign or countersign checks, drafts, or other orders for the payment of money issued in the name of this Company against any such account; and
- (f) to make such general and special rules and regulations with respect to such accounts (including without limitation authorization for use of facsimile signatures) as he or she may deem necessary or advisable.

RESOLVED: That if any Depository requires a prescribed form of preamble, preambles, resolution, or resolutions relating to such accounts or to any application, statement, instrument, or other documents connected therewith, each such preamble or resolution shall be deemed to be adopted by this Board of Managers, and any officer of this Company is authorized to certify the adoption of any such preamble or resolution as though it were presented to this Board of Managers at the time of adopting this Resolution and to insert all such preambles and resolutions in the record book of this Company immediately following this Resolution.

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 163 of 203

National Grid Algonquin LLC Written Consent in Lieu of Initial Meeting of Board of Managers As of September 4, 2015 Page 3

The undersigned further direct that this Consent shall take effect immediately as of the date first above written and shall be filed in the minute book of this Company with the minutes of the meetings of this Board of Managers.

Ludola Wyota	
Rudolph L. Wynter, Jr.	John Flynn
	Stanley J. Blazewicz

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 164 of 203

National Grid Algonquin LLC Written Consent in Lieu of Initial Meeting of Board of Managers As of September 4, 2015 Page 3

The undersigned further direct that this Consent shall take effect immediately as of the date first above written and shall be filed in the minute book of this Company with the minutes of the meetings of this Board of Managers.

Rudolph L. Wynter, Jr.

Stanley J. Blazewicz

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 165 of 203

Schwartz, Robin

From:

Gage, Frances

Sent:

Friday, September 18, 2015 9:17 AM

To:

Das, Reshmi

Subject:

FW: \$ estimate - Name Res. Good Standing Additional Fees

Name Reservation: \$55.50 + DE fees \$75.00 = \$130.50

Good standing: \$30.50 + DE fees \$80.00 = \$110.50

Thank you, Frances

Frances Gage Global Corporate, M&A and Corporate Secretariat National Grid 40 Sylvan Road, W1.005 Waltham, MA 02451 (781) 907-1894 - Office (781) 389-3874 - Cell Frances.Gage@nationalgrid.com

From: Thomson, Frances

Sent: Thursday, September 17, 2015 4:57 PM

To: Das, Reshmi

Subject: FW: \$ estimate

Reshmi,

Here are the fees for the formation from CSC - still waiting on the Name Reservation and Good Standing.

The formation fees totaled \$347.67:

State fee: \$209

CSC fee: \$104.50 for filing the formation; \$29.17 for the prorated registered agent service and \$5 to email back to you.

From: Thomson, Frances

Sent: Thursday, September 17, 2015 4:13 PM

To: Das, Reshmi Subject: RE: \$ estimate

Reshmi.

I don't usually see the bills, so I've asked CSC to provide me a quick accounting.

These are estimates of the Delaware fees:

Corporations - Domestic Incorporation *\$89.00 plus any expedited fees(?)

Good Standings a. Short: Domestic/Foreign \$90.00

Name Reservation \$75.00

Thank you, Frances

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 166 of 203

Frances Gage Global Corporate, M&A and Corporate Secretariat National Grid 40 Sylvan Road, W1.005 Waltham, MA 02451 (781) 907-1894 - Office (781) 389-3874 - Cell Frances.Gage@nationalgrid.com

From: Das, Reshmi

Sent: Thursday, September 17, 2015 3:39 PM To: Thomson, Frances

Subject: \$ estimate

Frances, can you please give me an estimate of the DE Secretary of State filing fees for the formation of the National Grid Algonquin LLC and the cost of CSC and any other expenses we may have incurred to set up this company?

Thanks. Reshmi

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 167 of 203

Schwartz, Robin	
From:	Das, Reshmi
Sent:	Friday, September 18, 2015 9:49 AM
To:	Burlingame, Richard; Hartshorne, Prescott

Burlingame, Richard; Hartshorne, Prescott

Subject: BEA 13B

Attachments:

Rick/Prescott,

Thanks.

Reshmi

-----Original Message-----

From: Reshmi.Das@nationalgrid.com [mailto:Reshmi.Das@nationalgrid.com]

Sent: Thursday, September 17, 2015 3:36 PM

To: Das, Reshmi

Subject: Scanned from a Xerox Multifunction Printer

Please open the attached document. It was scanned and sent to you using a Xerox Multifunction Printer.

Attachment File Type: pdf, Multi-Page

Multifunction Printer Location: HICKSVILLE - LEGAL - MAIN OFFICE - 2ND FLOOR

Device Name: XRXNGUS035MFD22

For more information on Xerox products and solutions, please visit http://www.xerox.com

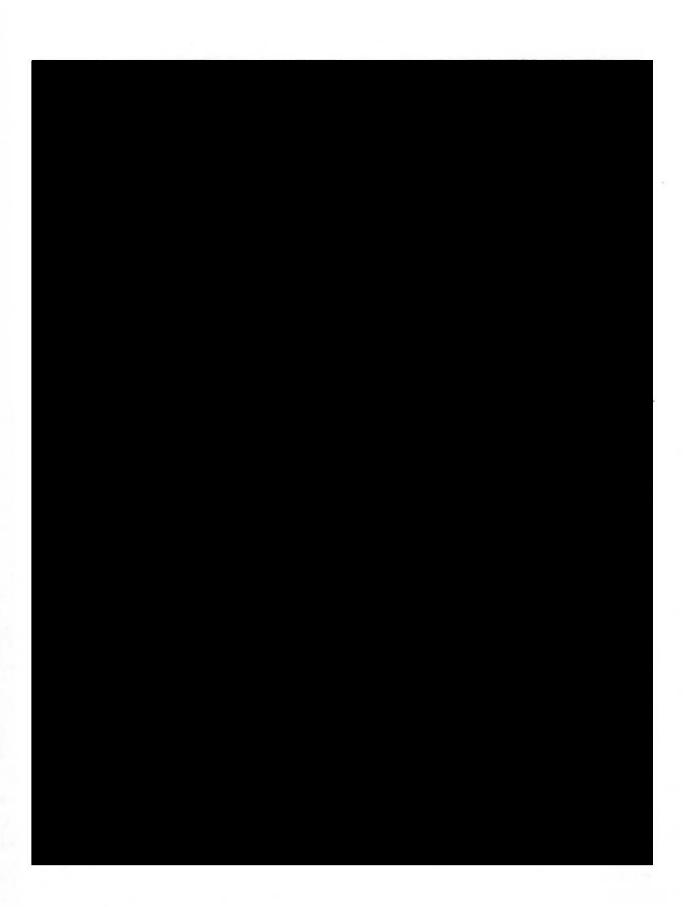
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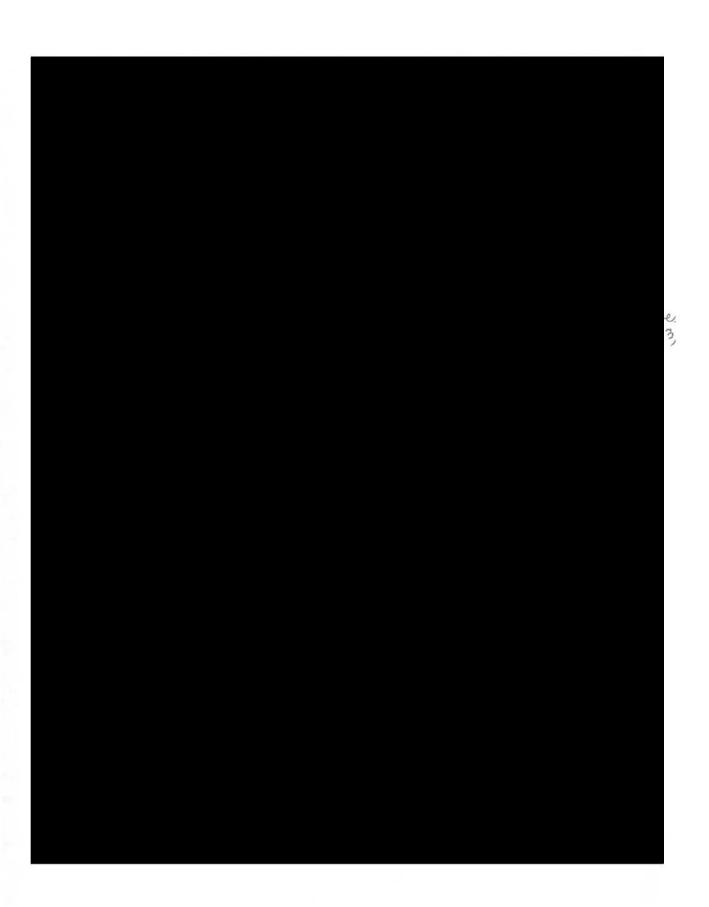
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 170 of 203



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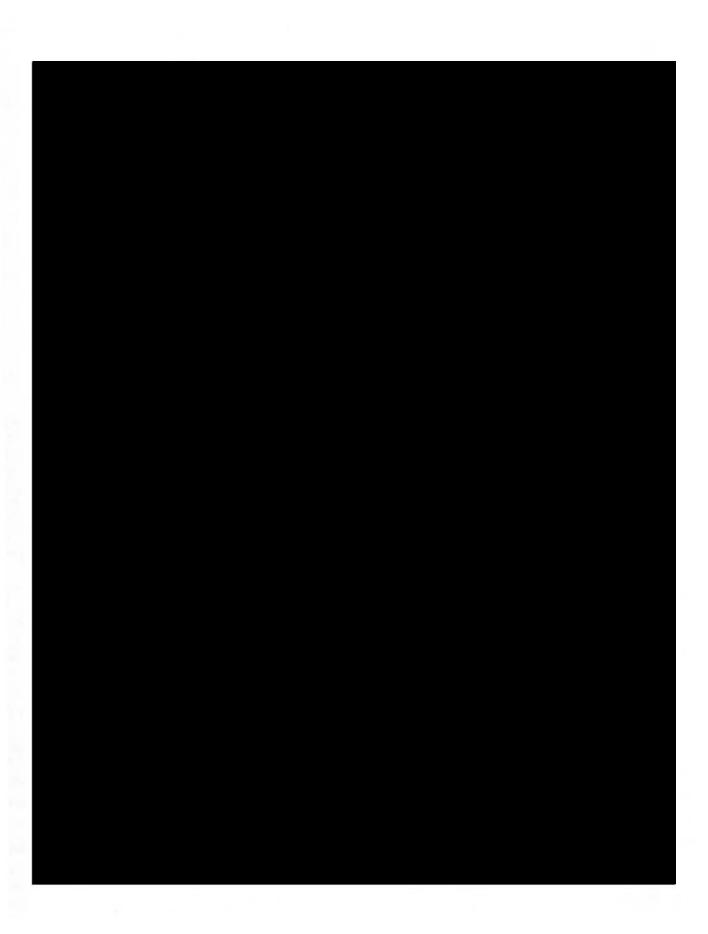
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 176 of 203



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Schwartz, Robin

From:

McAllister, Timothy E.

Sent:

Thursday, September 24, 2015 6:02 PM

To:

Blazewicz, Stanley J.

Subject:

FW: Action Required - Algonquin

Attachments:

Stan,

Thanks.

Tim

Timothy E. McAllister

Assistant General Counsel and Director, US Corporate and M&A National Grid 40 Sylvan Road Waltham, MA 02451-1120

Tel: 781.907.1880 Fax: 781.296.8092 Cell: 617.877.3006

timothy.mcallister@nationalgrid.com

Please consider the environment before printing this email.

From: Thomson, Frances

Sent: Thursday, September 24, 2015 4:08 PM

To: McAllister, Timothy E.

Subject: Action Required - Algonquin

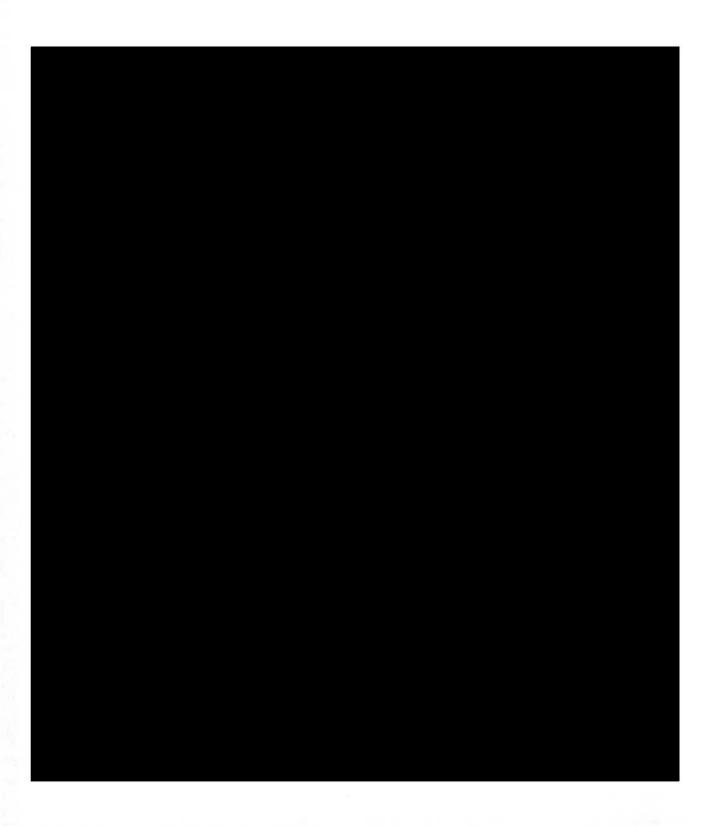
Tim,

We still need the member consent signed for the T drive.

Thank you, Frances

Frances Gage
Global Corporate, M&A and Corporate Secretariat
National Grid
40 Sylvan Road, W1.005
Waltham, MA 02451
(781) 907-1894 - Office
(781) 389-3874 - Cell
Frances.Gage@nationalgrid.com

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Schwartz, Robin			
From: Sent: To: Subject:	Das, Reshmi Tuesday, September 29, 2015 4:16 PM Burlingame, Richard; Hartshorne, Prescott RE	t	
Original Message- From: Burlingame, Ric Sent: Tuesday, Septer To: Hartshorne, Presc Subject: RE:	chard nber 29, 2015 4:12 PM		
Original Message- From: Hartshorne, Pro Sent: Tuesday, Septer To: Das, Reshmi Cc: Burlingame, Richa Subject: RE:	escott nber 29, 2015 3:06 PM		
107.7	nber 29, 2015 12:49 PM rd; Hartshorne, Prescott		
Hi guys,			
Thanks.			
Reshmi			
	mber 17, 2015 3:57 PM rd; Hartshorne, Prescott		

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 184 of 203

Rick/Prescott,	
والمراجع المراجع	
Thanks.	
Reshmi	
Original Message	
rom: Reshmi.Das@nationalgrid.com [mailto:Reshmi.Das@nationalgrid.com]	
ent: Thursday, September 17, 2015 3:36 PM	
o: Das, Reshmi	

Subject: Scanned from a Xerox Multifunction Printer

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 185 of 203

chwartz, Robin

From:

Hartshorne, Prescott

Sent:

Thursday, October 08, 2015 9:53 AM

To:

Das, Reshmi

Cc:

Burlingame, Richard

Subject:

Attachments:

Prescott

From: Das, Reshmi

Sent: Wednesday, October 07, 2015 4:55 PM To: Hartshorne, Prescott; Burlingame, Richard

Subject: FW:

Rick/Prescott,

Thank you. Reshmi

Reshmi Das

Senior Counsel Global Corporate, Finance and M&A National Grid 175 East Old Country Road Hicksville, NY 11801

Tel: 516.545.3459

reshmi.das@nationalgrid.com

From: Kyriakidis, Linda

Sent: Wednesday, October 07, 2015 4:51 PM

To: Das, Reshmi Subject: form

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 186 of 203



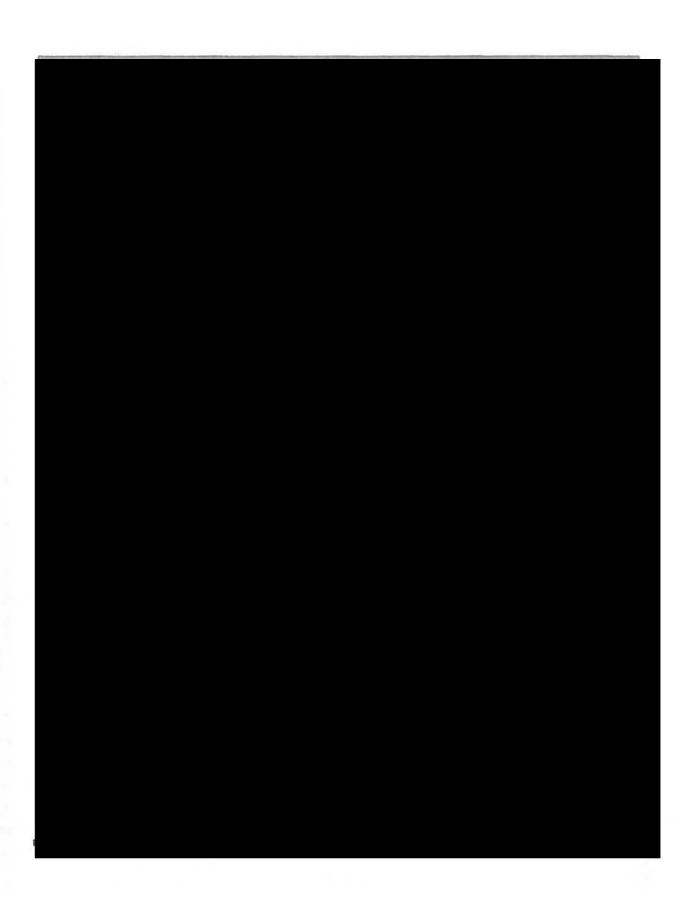
Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 187 of 203



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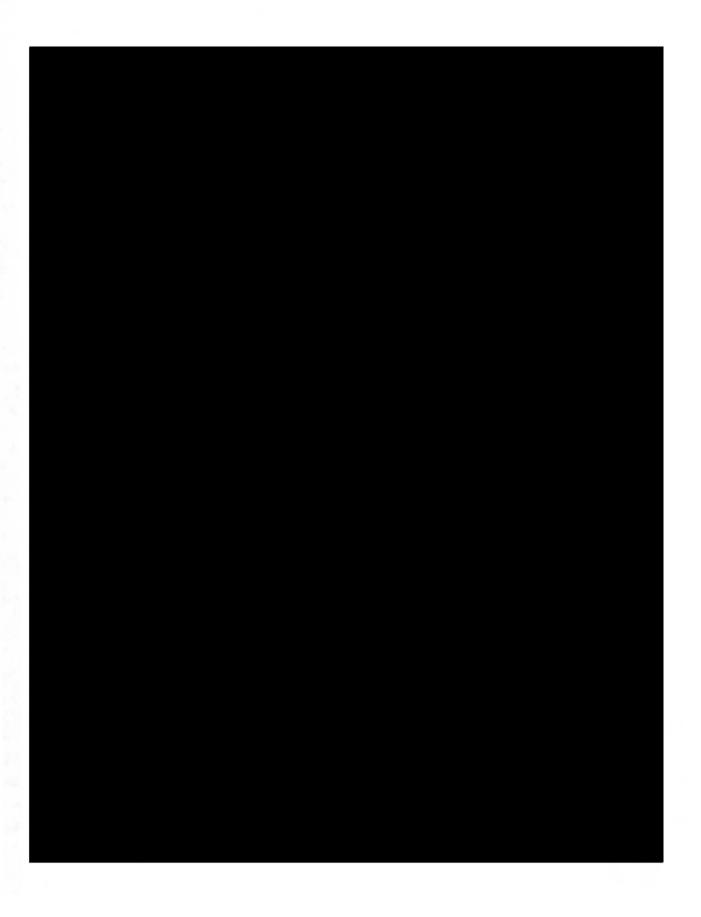
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Schwartz, Robin

From: Meehan, James (LEGAL)

Tuesday, November 17, 2015 3:28 PM Sent:

To: Das, Reshmi Subject: Accession

Attachments: National Grid Algonquin Accession.pdf

Kind regards Jim

James P. Meehan Assistant General Counsel Legal Department National Grid 40 Sylvan Road Waltham, MA 02451

Tel: (781) 907-1884

james.meehan@nationalgrid.com

Please consider the environment before printing this e-mail.

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 199 of 203

Schwartz, Robin

From:

Burlingame, Richard

Sent:

Wednesday, September 30, 2015 10:18 AM

To:

Das, Reshmi

Cc:

Hartshorne, Prescott

Subject:

RE: National Grid Algonquin LLC

OK. Good job counsel.

From: Das, Reshmi

Sent: Wednesday, September 30, 2015 10:16 AM

To: Burlingame, Richard Cc: Hartshorne, Prescott

Subject: RE: National Grid Algonquin LLC

Rick, working with Susan Greene's team. Should get soon. Thanks.

From: Burlingame, Richard

Sent: Wednesday, September 30, 2015 10:16 AM

To: Das, Reshmi Cc: Hartshorne, Prescott

Subject: FW: National Grid Algonquin LLC

On question 5 for the employer identification number we should put "applied for". We do not have a federal ID # yet.

From: Greene, Susan

Sent: Wednesday, September 30, 2015 9:51 AM

To: Burlingame, Richard

Cc: Ermanski, Robert; Moldavskiy, Svetlana Subject: RE: National Grid Algonquin LLC

Yes it is fine to day that.

Susan Greene

National Grid | Director of State and Local Taxes

Office: 929-324-4754 | Mobile: 862-200-6240 | susan.greene@nationalgrid.com

*Please note new office phone number

From: Burlingame, Richard

Sent: Wednesday, September 30, 2015 9:47 AM

To: Greene, Susan

Cc: Ermanski, Robert; Moldavskiy, Svetlana Subject: RE: National Grid Algonquin LLC

OK. Thanks. We need to fill out a BEA form related to investments by Foreign Owned Companies and they ask for this. I will have the lawyers put "Applied For" on the Form if that is OK?

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 200 of 203

Rick.

From: Greene, Susan

Sent: Wednesday, September 30, 2015 9:43 AM

To: Burlingame, Richard

Cc: Ermanski, Robert; Moldavskiy, Svetlana Subject: RE: National Grid Algonquin LLC

Rick,

We are trying to get one. I was unsuccessful applying with the IRS on line as for some reason they did not recognize National Grid Development Holdings, Inc. Svetlana has filed out the SS-4 but has to work with someone at the IRS directly to get this resolved. She has been calling and has had difficulty getting through. She is continuing to pursue getting the EIN.

Regards,

Susan

Susan Greene

National Grid | Director of State and Local Taxes

Office: 929-324-4754 | Mobile: 862-200-6240 | susan.greene@nationalgrid.com

*Please note new office phone number

From: Burlingame, Richard

Sent: Tuesday, September 29, 2015 3:30 PM

To: Greene, Susan

Subject: RE: National Grid Algonquin LLC

Susan, can you find out the Federal ID# for this entity? Thanks, Rick.

From: Thomson, Frances

Sent: Tuesday, September 01, 2015 3:07 PM

To: Thaesler, Karl; Di Gilio, Christopher T.; Chi, Wai Sang; Greene, Susan; Lundahl, Walter J.; Rayner, Heather; Das,

Reshmi; Mulcahy, Brian J.; McAllister, Timothy E.; Hunter, Carolyn; Burlingame, Richard

Subject: National Grid Algonquin LLC

All,

We formed a new limited liability company as of today, September 1, 2015. The name of the company is National Grid Algonquin LLC and 100% of its interest will be held by its parent, National Grid Development Holdings Corp. I've attached a copy of the Certificate of Formation for your records.

Please let me know if you have any questions and feel free to forward this email as you deem necessary.

Thank you, Frances

Frances Gage
Global Corporate, M&A and Corporate Secretariat
National Grid
40 Sylvan Road, W1.005
Waltham, MA 02451
(781) 907-1894 - Office
(781) 389-3874 - Cell
Frances.Gage@nationalgrid.com

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 201 of 203

Schwartz, Robin

From:

Greene, Susan

Sent:

Wednesday, September 30, 2015 3:23 PM

To:

Burlingame, Richard; Das, Reshmi

Subject:

FW: National Grid Algonquin LLC

EIN is below.

Regards,

Susan

Susan Greene

National Grid | Director of State and Local Taxes

Office: 929-324-4754 | Mobile: 862-200-6240 | susan.greene@nationalgrid.com

*Please note new office phone number

From: Moldavskiy, Svetlana

Sent: Wednesday, September 30, 2015 3:06 PM

To: Greene, Susan Cc: Ermanski, Robert

Subject: National Grid Algonquin LLC

Susan,

The EIN for this entity is 47-5196641.

If you look at the letter attached, National Grid Development Holdings Corp, the owner of the National Grid Algonquin LLC, is still known to the IRS as THEC Holdings Corp.

Sincerely,



Grid Algonquin ...

Svetlana

Svetlana Moldavskiy

nationalgrid

Manager, U.S. Income Tax Research & Planning 40 Sylvan Rd. Waltham, MA 02451 (t.) 781.907.2392

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 202 of 203

IRS DEPARTMENT OF THE TREASURY
INTERNAL REVENUE SERVICE
CINCINNATI OH 45999-0023

Date of this notice: 09-30-2015

Employer Identification Number: 47-5196641

Form: SS-4

Number of this notice: CP 575 G

NATIONAL GRID ALGONQUIN LLC % THEC HOLDINGS CORP SOLE MBR 1 METROTECH CTR FL 15 BROOKLYN, NY 11201

For assistance you may call us at: 1-800-829-4933

IF YOU WRITE, ATTACH THE STUB AT THE END OF THIS NOTICE.

WE ASSIGNED YOU AN EMPLOYER IDENTIFICATION NUMBER

Thank you for applying for an Employer Identification Number (EIN). We assigned you EIN 47-5196641. This EIN will identify you, your business accounts, tax returns, and documents, even if you have no employees. Please keep this notice in your permanent records.

When filing tax documents, payments, and related correspondence, it is very important that you use your EIN and complete name and address exactly as shown above. Any variation may cause a delay in processing, result in incorrect information in your account, or even cause you to be assigned more than one EIN. If the information is not correct as shown above, please make the correction using the attached tear off stub and return it to us.

A limited liability company (LLC) may file Form 8832, Entity Classification Election, and elect to be classified as an association taxable as a corporation. If the LLC is eligible to be treated as a corporation that meets certain tests and it will be electing S corporation status, it must timely file Form 2553, Election by a Small Business Corporation. The LLC will be treated as a corporation as of the effective date of the S corporation election and does not need to file Form 8832.

To obtain tax forms and publications, including those referenced in this notice, visit our Web site at www.irs.gov. If you do not have access to the Internet, call 1-800-829-3676 (TTY/TDD 1-800-829-4059) or visit your local IRS office.

IMPORTANT REMINDERS:

- * Keep a copy of this notice in your permanent records. This notice is issued only one time and the IRS will not be able to generate a duplicate copy for you. You may give a copy of this document to anyone asking for proof of your EIN.
- * Use this EIN and your name exactly as they appear at the top of this notice on all your federal tax forms.
- * Refer to this EIN on your tax-related correspondence and documents.

If you have questions about your EIN, you can call us at the phone number or write to us at the address shown at the top of this notice. If you write, please tear off the stub at the bottom of this notice and send it along with your letter. If you do not need to write us, do not complete and return the stub.

Your name control associated with this EIN is NATI. You will need to provide this information, along with your EIN, if you file your returns electronically.

Thank you for your cooperation.

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-24 Page 203 of 203

(IRS USE ONLY) 575G 09-30-2015 NATI O 999999999 SS-4

Keep this part for your records.

CP 575 G (Rev. 7-2007)

Return this part with any correspondence so we may identify your account. Please correct any errors in your name or address.

CP 575 G

999999999

Your Telephone Number Best Time to Call DATE OF THIS NOTICE: 09-30-2015 () - EMPLOYER IDENTIFICATION NUMBER: 47-5196641

FORM: SS-4

NOBOD

INTERNAL REVENUE SERVICE CINCINNATI OH 45999-0023 blobbblablablablalladladladlablal

NATIONAL GRID ALGONQUIN LLC % THEC HOLDINGS CORP SOLE MBR 1 METROTECH CTR FL 15 BROOKLYN, NY 11201

Massachusetts Electric Company
Nantucket Electric Company
d/b/a National Grid
D.P.U. 16-05
Responses to the Attorney General's First Set of Information Requests
April 25, 2016
Exhibit AG-1-25
Page 1 of 1

<u>Information Request AG-1-25</u>

Request:

Please identify the entities with an equity interest in the proposed LNG storage facility located in Acushnet, MA.

Response:

Algonquin Gas Transmission LLC owns 100% of the proposed LNG storage facility located in Acushnet, MA. Affiliates of Spectra Energy, Eversource Energy and National Grid own 100% of Algonquin Gas Transmission LLC according to the following ownership interests: Spectra Algonquin Holdings, LLC owns a 40 percent Class B membership interest, Eversource Gas Transmission LLC owns a 40 percent Class B membership interest, and National Grid Algonquin LLC owns a 20 percent Class B membership interest.

Massachusetts Electric Company
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D.P.U. 16-05
Responses to the Attorney General's First Set of Information Requests
April 25, 2016
Exhibit AG-1-26
Page 1 of 1

<u>Information Request AG-1-26</u>

Request:

Please identify the sources of investment to fund the LNG storage facility in Acushnet, MA. For each source of investment, please indicate whether the source will fund only the LNG storage facility, or instead will fund Access Northeast Pipeline project as a whole.

Response:

The Class B Members of Algonquin Gas Transmission LLC will provide 100% of the equity funding for the LNG storage facility in Acushnet, MA through their Class B capital contributions to Algonquin Gas Transmission LLC which are made according to their respective Class B ownership percentages as described in response to AG 1-25 and which contributions are directed to the ANE Project as a whole.

REDACTED

Massachusetts Electric Company
Nantucket Electric Company
d/b/a National Grid
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Responses to the Attorney General's First Set of Information Requests
April 25, 2016
Exhibit AG-1-27
Page 1 of 1

<u>Information Request AG-1-27</u>

Request:

Please identify the total cost associated with designing and building the proposed LNG storage facility located in Acushnet, MA, in isolation from the rest of the proposed Access Northeast Pipeline project.

Response:

Under current projections, the total cost of designing and building the proposed LNG storage facility located at Acushnet, MA will be approximately

Massachusetts Electric Company
Nantucket Electric Company
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Page 1 of 1

<u>Information Request AG-1-28</u>

Request:

Please produce any documents containing analyses comparing the cost of LNG or regasified LNG purchased from the Acushnet storage facility versus the cost of gas or regasified LNG purchased from an existing LNG import facility existing in New England.

Response:

Neither Massachusetts Electric Company nor Nantucket Electric Company are in possession of such documents. The Access Northeast project was proposed as an integrated project that included both firm transportation and LNG storage. The Company analyzed that proposal as an integrated project and did not attempt to isolate the LNG portion of the project for purposes of comparing it to the cost of regasified LNG purchased from an existing LNG import facility in New England.

Massachusetts Electric Company
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<u>Information Request AG-1-29</u>

Request:

Refer to Exhibit NG-TJB/JEA-1, at page 32, line 2. Please explain in detail how pipeline capacity would indirectly reach a generator.

Response:

In its RFP, the Company indicated that Bidders would be "responsible for the development of incremental infrastructure for the delivery of natural gas to generators in New England on a primary firm basis." Such deliveries would reach generators directly.

Indirect deliveries can occur when pipeline capacity delivers directly to a local gas distribution company serving an electric generator or when pipeline capacity delivers directly to another pipeline that connects to a generator.

Massachusetts Electric Company
Nantucket Electric Company
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Responses to the Attorney General's First Set of Information Requests
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Page 1 of 1

Information Request AG-1-30

Request:

Refer to Exhibit NG-TJB/JEA-1, at page 14. Please update the table at lines 7 and 8 for the period December 2015 – February 2016.

Response:

Please refer to the updated table below.

Algonquin City Gate vs. Henry Hub	Number of Days - Winter (Dec -Feb)				
Basis Differential	2011/12	2012/13	2013/14	2014/15	2015/16
Greater than \$2/MMBtu	21	65	77	72	32
Greater than \$5/MMBtu	4	41	64	53	1
Greater than \$10/MMBtu	0	28	51	21	0
Greater than \$20/MMBtu	0	10	20	9	0
Greater than \$30/MMBtu	0	1	7	0	0
Greater than \$40/MMBtu	0	0	3	0	0

Massachusetts Electric Company
Nantucket Electric Company
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D.P.U. 16-05
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Exhibit AG-1-31
Page 1 of 1

Information Request AG-1-31

Request:

Refer to Exhibit NG-TJB/JEA-1, at page 15. Please update the table at line 1 for the winter of 2015-2016.

Response:

Please refer to the table below which has been updated to include the average gas price for the winter of 2015-2016. The electric energy market total costs provided in the table are costs which were calculated and presented by ISO-New England (e.g., see page 28 of Attachment AG-1-31(a), and page 43 of Attachment AG-1-31(b)). The updated table does not include the comparable cost for the winter of 2015-2016, as that cost has not yet been presented by ISO-NE.

	Winter (Dec -Feb)				
	2011/12	2012/13	2013/14	2014/15	2015/16
Avg. Gas Price @ Algonquin City Gate (\$/mmBtu) Total Cost of ISO-NE Electric Energy Market	\$ 4.40	\$ 11.26	\$ 19.56	\$ 10.73	\$3.40
(\$Billions)	\$ 1.2	\$ 2.9	\$ 5.0	\$ 2.8	

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-31(a) Page 1 of 53

JANUARY 21, 2015

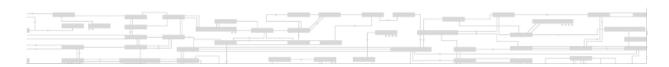


State of the Grid: Managing a System in Transition

ISO on Background

Gordon van Welie

PRESIDENT AND CEO



Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-31(a) Page 2 of 53

About the ISO on Background Series

- Informal opportunity for media to learn more about trends affecting New England's electricity industry
- Hosted by ISO New England senior management
- Content is on-the-record
- Please hold questions until the Q&A session at the end of the presentation
- Presentation and remarks will be posted at www.iso-ne.com>About Us>News and Media>Press Releases

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-31(a) Page 3 of 53

Agenda

11:00-11:10 a.m. Welcome; About ISO New England

Ellen Foley, Director, Corporate Communications

11:10-11:50 a.m. State of the Power Grid 2015: Managing a System in

Transition

Gordon van Welie, President and CEO

11:50-12:15 p.m. **Question and Answer Session**

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-31(a) Page 4 of 53

Presentation Overview

- About ISO New England
- State of the Power Grid: Managing a System in Transition
 - Winter operational experiences highlight natural gas dependency, and risks from resource retirements
- Wholesale Energy and Capacity Market Price Signals
- Identifying Risks, Developing Solutions
- Conclusions

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ABOUT ISO NEW ENGLAND



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About ISO New England

- Regulated by the Federal Energy Regulatory Commission (FERC)
- Reliability coordinator for New England under the North American Electric Reliability Corporation (NERC)
- Nearly two decades of experience overseeing New England's restructured electric power system
- Independent of companies doing business in the marketplace



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Transmission System

Distribution System



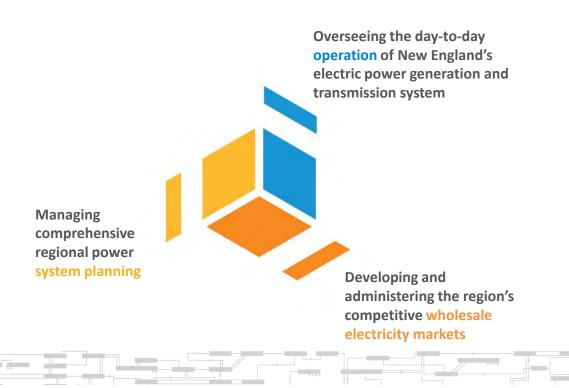
- Electricity produced by more than 350 generators
- Generators sell the electricity through either wholesale markets managed by ISO-NE or contracts with utilities and competitive suppliers
- Region's 8,500 miles of high-voltage transmission lines move electricity to substations where it is stepped down in voltage to feed into distribution lines
- Federal regulation (FERC)
- ISO New England operates

- Region's 6.5 million homes and businesses create demand
- Utilities and competitive suppliers buy electricity via markets or supply contracts
- Utilities distribute electricity to businesses and homes
- State regulation (public utilities commissions)
- Utilities own and operate

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Reliability is the Core of ISO New England's Mission

Fulfilled by three interconnected and interdependent responsibilities



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STATE OF THE POWER GRID: MANAGING A SYSTEM IN TRANSITION



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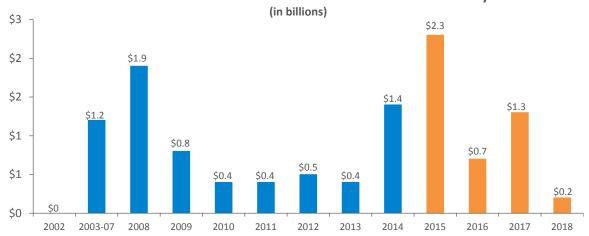
The Big Picture

- Regional investment in high-voltage transmission system upgrades has brought significant reliability and market efficiency benefits
 - Robust transmission grid is the foundation for further investment in resources, including renewables
- Competitive wholesale electricity markets have led to a more efficient bulk electric system
 - Billions of dollars in private investment in generation
 - More than 15,000 megawatts in generation developed in the past 18 years
 - Market prices have revealed areas of need
- New England's power plant fleet is undergoing a major transition
 - Most power plants developed in the last 18 years use natural gas; lower prices, lower emissions
 - Retirements of coal- and oil-fired units, and a nuclear unit
 - Public policies are encouraging renewable energy wind and solar and energy efficiency; but those additions offset only a small portion of the need for more traditional sources of electrical energy
- Region is challenged by a lack of natural gas pipeline infrastructure, and is losing non-gas power plants, resulting in serious threats to power system reliability
- Additional energy infrastructure (generation, transmission, gas pipeline, fuel storage) needed
- Electricity prices are on an upward trajectory until the needed energy infrastructure is added

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New Transmission Investment in New England





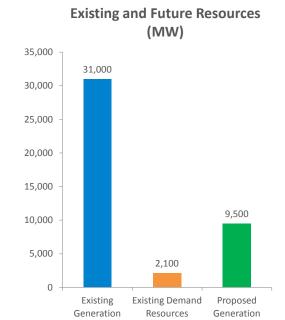
Cumulative Investment through 2014		\$7.0 billion	
Esti	mated Future Investment through 2018	\$4.5 billion	

Source: ISO New England RSP Transmission Project Listing, October 2014
Estimated future investment includes projects under construction, planned and proposed

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New England's Generation and Demand Resources at a Glance

- 350 generators in the region
- 31,000 MW of generating capacity
- 9,500 MW of proposed generation
- 3,500 MW of generation capacity retiring over the next five years
- 700 MW of active demand response and 1,400 MW of energy efficiency with capacity supply obligations

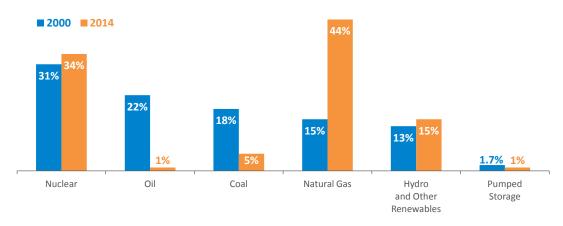


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Dramatic Changes in the Energy Mix

The fuels used to produce New England's electric energy have shifted as a result of economic and environmental factors

Percent of Total **Electric Energy** Production by Fuel Type (2000 vs. 2014)

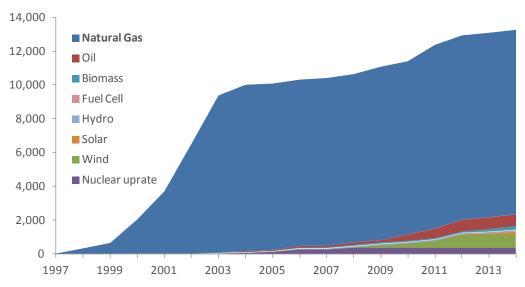


Source: ISO New England Net Energy and Peak Load by Source

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Most of the New Generation Added Since 1997 is Fueled by Natural Gas

Cumulative New Generating Capacity in New England



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While Demand for Natural Gas has Increased, the Pipeline Infrastructure has not Kept Pace

- Why? Unlike electric transmission, new pipelines will not be built without customers signed up for long-term contracts for capacity
- Historically, natural gas generators have not entered into long-term contracts for pipeline capacity
- Several developers have proposed expansion of pipeline and/or storage capacity in region; however, the added capacity is under contract to natural gas local distribution companies (LDCs), not electric generators
- Gas LDCs cannot contract for gas infrastructure expansion beyond the needs of their commercial and residential natural gas customers
- A variety of factors, including economics and legal and regulatory restrictions, hamper private investment in more natural gas infrastructure. The question becomes, how will this infrastructure get built, and who will pay for it?

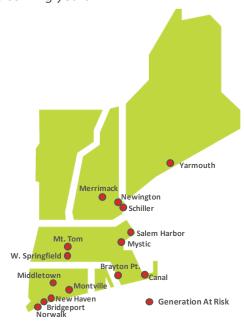
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Region is Losing Non-Gas Resources

3,500 MW of generation has retired or will in the coming years

Major Retirements Underway:

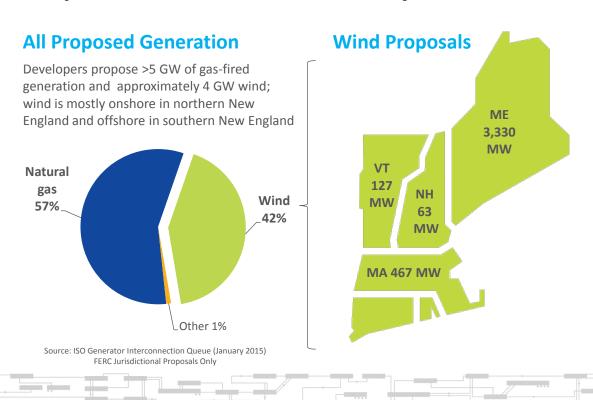
- Salem Harbor Station (749 MW)
 - 4 units (coal & oil)
- Vermont Yankee Station (604 MW)
 - 1 unit (nuclear)
- Norwalk Harbor Station (342 MW)
 - 3 units (oil)
- Brayton Point Station (1,535 MW)
 - 4 units (coal & oil)
- Mount Tom Station (143 MW)
 - 1 unit (coal)
- Additional retirements are looming



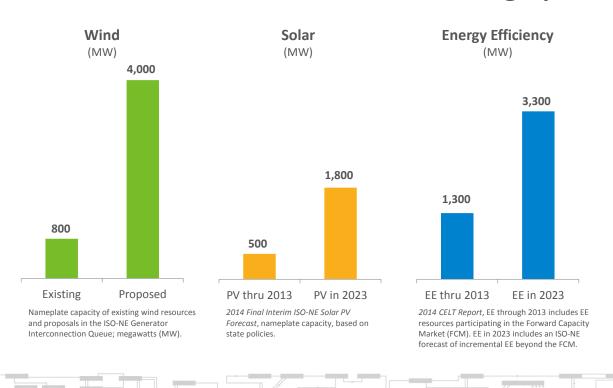
Source: Generator Retirement Study, ISO New England, 2012.

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Proposed Generation is Primarily Gas and Wind



Renewable and EE Resources Are Trending Up



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Resource Shift Creates Reliability Challenges

- New England's generation fleet is changing rapidly – older, fossil-fired units are retiring and reliance on natural gas for power generation is rising
- ISO-NE must rely increasingly on resources with uncertain performance and availability
 - Intermittent resources (wind, solar) may not produce power at the times it is needed most
 - Natural gas resources lack fuel storage and rely on "just-in-time" fuel
 - Coal, oil-steam fleet is aging, prone to mechanical problems, subject to increasingly stringent environmental regulations
- Reliable operation of the New England power system is challenged by these developments, particularly in winter



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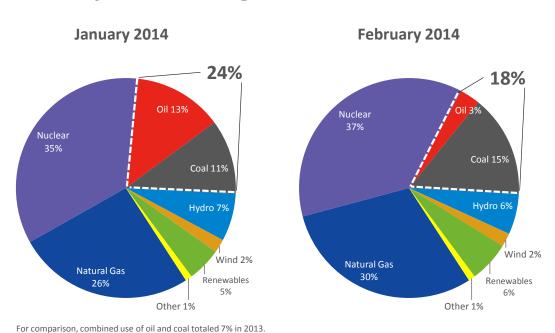
Observations from Winter Operations

Operational options are limited and becoming more constrained

- Gas pipelines are severely constrained when weather is very cold, sometimes limiting gas generation to minimal levels
- Oil-fired generators were vitally important to reliability last winter
 - Oil-supply chain is fragile, unable to respond quickly during adverse weather conditions and/or when demand is high; shows importance of sufficient oil in tanks before winter starts
 - Post-winter retirements of non-gas generators in 2014 removed capability (2.6 million megawatt-hours) greater than that procured through the 2013/2014 Winter Reliability Program (1.9 million MWh)
- Winter reliability programs and recent market enhancements will help improve power system operations
- The region is highly vulnerable to the loss of large non-gas generators during cold weather (e.g., nuclear units)

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Use of Oil and Coal for Electric Energy Is Generally Low, but High in Cold Winter Months



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ISO Developed a New Reliability Program for Winter 2014/2015

Key Drivers:

- Generators' difficulty in replenishing oil supplies mid-winter
- Gas pipelines have been more constrained than anticipated
- Retirement of a significant amount of non-gas generation
- Objective: Augment scarce pipeline gas and improve the region's overall fuel adequacy

Solution:

- Create an incentive for generators to secure fuel supply and delivery arrangements going into the winter
- Offset costs for generators to commission dual-fuel capability
- Offset part of the carrying costs of firm fuel purchased by generators (fuel oil and LNG) that is unused at the end of the winter season
- Compensation for new demand-response services

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WHOLESALE ENERGY AND CAPACITY MARKET PRICE SIGNALS



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New England's Wholesale Markets at a Glance

- More than 400 buyers and sellers in the markets
- \$10.4 billion traded in wholesale electricity markets in 2014*
 - \$9.1 billion in energy markets
 - \$1.3 billion in capacity and ancillary services markets
- Forward and spot markets
- Prices vary by time and location, and by changes in demand and available resources

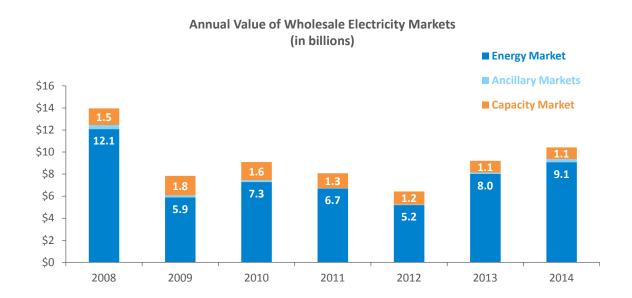


^{*} Note: 2014 wholesale electricity market data is still preliminary and subject to reconciliation

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Total Value of Markets Varies with Fuel Costs

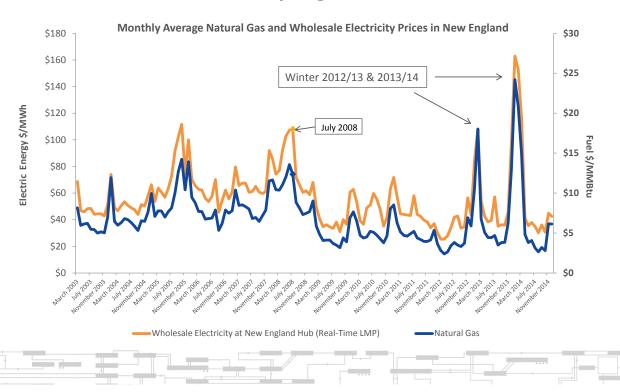
Annual wholesale market costs have ranged from \$6 billion to \$14 billion



Source: 2013 Report of the Consumer Liaison Group, Appendix C Note: 2014 data is still preliminary and subject to reconciliation

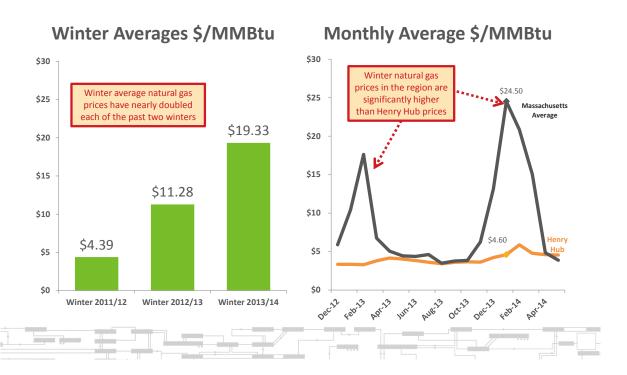
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High Natural Gas Prices Drove Wholesale Electricity Prices to Record Monthly Highs



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Natural Gas Prices Have Spiked in Recent Winters; Above Henry Hub Price



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Total Cost of Wholesale Electricity Rose Each of the Last Three Winters

\$1.2 billion in 2011/12; \$2.9 billion in 2012/13; \$5.1 billion in 2013/14



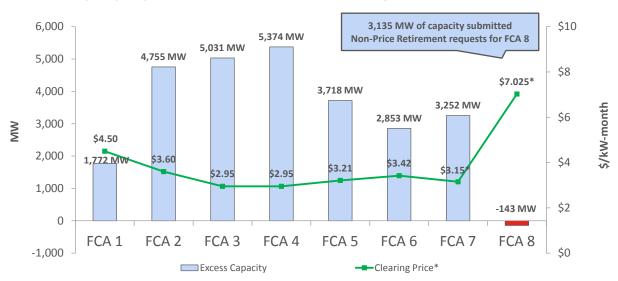
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Forward Capacity Market Objectives and Results

- Forward Capacity Market (FCM) has two main objectives:
 - Ensure sufficient resources to meet New England's electricity demand and reliability standards, and
 - Ensure that sufficient resources are procured in a cost-effective manner on a level playing field for different technologies, existing and new
- Eight Forward Capacity Auctions (FCA) have been conducted and four commitment periods completed
 - Each auction has procured sufficient resources with a surplus, except for a slight shortfall in FCA #8 (for 2017/2018)
 - Market has generated participation from diverse types of resources
 - Including demand-response and energy-efficiency resources
 - Lowest-cost resources have been developed and brought to market
 - FCM has eliminated reliance on reliability arrangements with generators

Capacity Prices Vary with Changes in Supply

Capacity Surplus or Deficit (MW) and Auction Clearing Prices (\$/kWh-month)



^{*} Prices cleared at the floor price in the first seven auctions due to excess capacity; therefore, resources were paid a slightly lower prorated price. The clearing price in NEMA/Boston was \$14.999/kW-month for FCA 7 (new capacity received \$14.999/kW-month and existing capacity received an administrative price of \$6.66/kW-month). The clearing price in FCA 8 was \$15.00/kW-month (new capacity in all zones and existing capacity in NEMA/Boston received \$15.00/kW-month and existing capacity in all other zones received an administrative price of \$7.025/kW-month).

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IDENTIFYING RISKS, DEVELOPING SOLUTIONS



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Identifying Risks to Continued System Reliability

Reliability requires a flexible, high-performance fleet:

- Natural Gas Dependency
 - "Just-in-time" fuel delivery presents an immediate risk to reliability
- Power Plant Retirements
 - New England will need new ways to meet peak demand as aging plants close
- Renewable Resource Integration
 - Balancing variable generation with reliability will require changes in system operations



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Developing Solutions in Markets and Operations to Improve Reliability

Recent Improvements

- Day-Ahead Energy Market timeline shift
- Increased level of reserves
- Better informationsharing with natural gas pipeline operators
- Energy Market Offer Flexibility project
 - Hourly offers
 - Negative pricing to
 - -\$150/MWh



- Winter Programs
 - -2013/14
 - -2014/15
 - 2015/16 & beyond

Longer-Term

- Capacity Market
 - Pay for Performance
 - Sloped demand curve
 - Improved zonal modeling

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ISO-NE/ICF International Research Confirms Need for New Pipeline Infrastructure or Significant, Timely Investments in Alternative Sources of Electrical Energy

- Demand for gas for home heating continues to limit gas supply for power generation
- Lower than anticipated LNG supplies reduces available relief from gas imports
- Constraints limit gas supplies and compromise electric reliability, especially in winter season
 - Outages or unplanned events create reliability concerns year-round as well
- All other studies have yielded similar findings: need for additional energy infrastructure





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Conclusions

- Rapid change is transforming New England's power generation fleet
 - Increasingly dependent on natural gas for power, affecting grid reliability & wholesale energy prices
 - Public policy goals are driving a second wave of transformation toward more renewables, distributed generation, & energy efficiency; more high-voltage transmission will be needed for new wind facilities
 - Retiring resources are non-natural-gas-fired; their replacements will be natural gas and wind
- New resources are needed to replace retiring resources, particularly in Greater Boston and Southeastern Mass. and Rhode Island
- Reliability will be threatened, and prices will spike, until the effects of natural gas
 pipeline constraints are alleviated with additional investments in fuel
 infrastructure (gas pipelines, fuel storage, more transmission to bring in energy)
- ISO-NE has spearheaded numerous market enhancements to provide greater reliability and efficient pricing, but these alone are not likely to spur investment in additional pipeline infrastructure
- The ISO will take steps to ensure continued reliability

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Questions





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APPENDIX



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- For More Information....
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- New England's Energy Use at a Glance
- New England's Electricity Use Varies by Season
- Transmission Projects to Maintain Reliability Have Progressed in Each State
- ISO Continuously Studies Transmission System Needs to Maintain Reliability
- On- and Off-shore Merchant Transmission Proposals Vie to Move Renewable Energy to New England Load Centers
- Greater Boston Area Needs Resources and Transmission
- Southeastern Mass and Rhode Island Areas Need Resources and Transmission
- FERC's Winter Market Assessment Found NE had Highest Winter Power and Natural Gas Futures
- Energy Market Offer Flexibility Enhancements
- Reserve Constraint Penalty Factor Changes
- Problems with Existing Capacity Market Design
- Pay for Performance

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For More Information...

- Subscribe to the ISO Newswire
 - <u>ISO Newswire</u> is your source for regular news about ISO New England and the wholesale electricity industry within the six-state region
- Log on to ISO Express
 - ISO Express provides real-time data on New England's wholesale electricity markets and power system operations
- Follow the ISO on Twitter
 - @isonewengland
- Download the ISO to Go App
 - ISO to Go is a free mobile application that puts real-time wholesale electricity pricing and power grid information in the palm of your hand









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Links to EIA* Reports Regarding New England Prices & Pipeline Constraints

- 1/20/2015 EIA, NERC assessment examines winter power system reliability, fuel diversity http://www.eia.gov/todayinenergy/detail.cfm?id=19631#
- 1/12/2015 EIA, Wholesale power prices increase across the country in 2014 http://www.eia.gov/todayinenergy/detail.cfm?id=19531#tabs SpotPriceSlider-2
- 11/24/2014 EIA, Boston, New York City winter natural gas prices expected to remain high http://www.eia.gov/todayinenergy/detail.cfm?id=18931
- 8/11/2014 EIA, Northeast natural gas spot prices particularly sensitive to temperature swings http://www.eia.gov/todayinenergy/detail.cfm?id=17491
- 2/21/2014 EIA, New England spot natural gas prices hit record levels this winter http://www.eia.gov/todayinenergy/detail.cfm?id=15111
- 1/21/2014 EIA, Northeast and Mid-Atlantic power prices react to winter freeze and natural gas constraints http://www.eia.gov/todayinenergy/detail.cfm?id=14671
- 1/9/2014 EIA, Energy Market Alert: Northeastern Winter Natural Gas and Electricity Issues http://www.eia.gov/special/alert/east_coast/

^{*}US Energy Information Administration: www.eia.gov

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Links to EIA Reports, continued

- 1/7/2014 EIA, Energy Market Alert: Northeastern Winter Natural Gas and Electricity Issues; http://www.eia.gov/special/alert/east coast/pdf/energy market alert Jan 7 2014.pdf
- 12/6/2013 EIA, December natural gas prices spike in Boston http://www.eia.gov/todayinenergy/detail.cfm?id=14071
- 4/12/2013 EIA, Winter natural gas price spikes in New England spur generation from other fuels http://www.eia.gov/todayinenergy/detail.cfm?id=10791
- 3/25/2013 EIA, Over half of US natural gas pipeline projects in 2012 were in the Northeast (New England remains isolated); http://www.eia.gov/todayinenergy/detail.cfm?id=10511
- 1/18/2013 EIA, Constraints in New England likely to affect regional energy prices this winter http://www.eia.gov/forecasts/steo/special/pdf/2013 sp 01.pdf
- 1/23/2012 EIA, Spot natural gas prices at Marcellus trading point reflect pipeline constraints http://www.eia.gov/todayinenergy/detail.cfm?id=7210
- 9/29/2011 EIA, Markets indicate possible natural gas pipeline constraints in the Northeast this winter http://www.eia.gov/todayinenergy/detail.cfm?id=3290
- 2/17/2011 EIA, Pipeline constraints raise average spot natural gas prices in the Northeast this winter http://www.eia.gov/todayinenergy/detail.cfm?id=170

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New England's Energy Use at a Glance

- 6.5 million households and businesses;
 14 million population
- 28,130 MW all-time summer peak demand set on August 2, 2006
- 22,818 MW all-time winter peak demand set on January 15, 2004
- Region's peak demand forecasted to grow 1.3% annually
- Region's overall electricity demand forecasted to grow 1.0% annually
- Energy efficiency slows growth in peak demand and flattens overall electricity demand

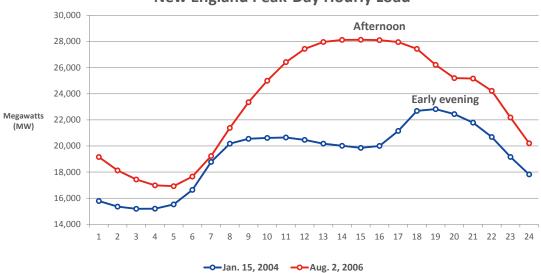


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New England's Electricity Use Varies by Season

Air-conditioning and lighting loads drive seasonal peaks





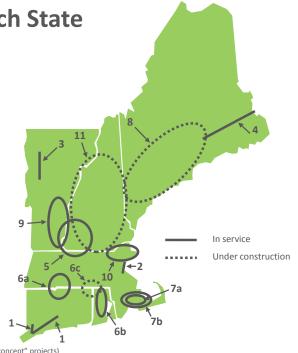


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Transmission Projects to Maintain Reliability
Have Progressed in Each State

1. Southwest CT Phases I & II

- 2. Boston NSTAR 345 kV Project, Phases I & II
- 3. Northwest Vermont
- 4. Northeast Reliability Interconnect
- 5. Monadnock Area
- 6. New England East-West Solution
 - a. Greater Springfield Reliability Project
 - b. Rhode Island Reliability Project
 - c. Interstate Reliability Project
- 7. Southeast Massachusetts
 - a. Short-term upgrades
 - b. Long-term Lower SEMA Project
- 8. Maine Power Reliability Program
- 9. Vermont Southern Loop
- 10. Merrimack Valley/North Shore Reliability
- 11. New Hampshire/Vermont Upgrades



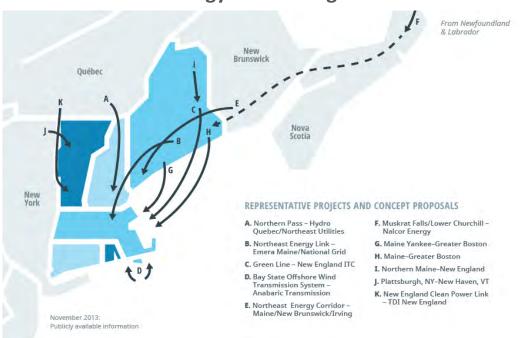
Source: RSP Transmission Project Listing, October 2014; (does not include "concept" projects)

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ISO Continuously Studies Transmission System Needs to Maintain Reliability 1. Greater Hartford and Central Connecticut 2. Southwest Connecticut 3. Eastern Connecticut 4. Southeast Massachusetts and Rhode Island 5. Greater Boston 6. Pittsfield and Greenfield Under study 7. New Hampshire and Vermont 8. Maine Source: ISO New England Key Study Areas at http://www.iso-ne.com/system-planning/key-study-areas

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On- and Off-shore Merchant Transmission Proposals Vie to Move Renewable Energy to New England Load Centers

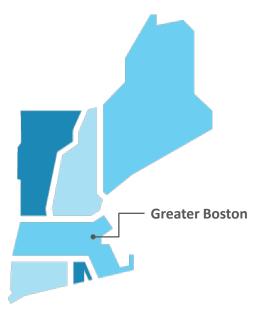


Note: These projects are NOT reliability projects, but ISO New England's role is to ensure the reliable interconnection of these types of projects.

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Greater Boston Area Needs Resources and Transmission

- Electricity demand is rising, while at the same time internal resources and transmission supplying the area are limited
- Generator retirements and delays to new generation projects add to challenges
- System operators are challenged given the limited transmission import capability
- Long-term transmission solutions (scheduled to be in service by the 2017–2018 timeframe) are long overdue



Greater Boston includes Boston and the North Shore

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Southeastern Mass and Rhode Island Areas Need Resources and Transmission

- A SEMA/RI area study, led by the ISO, shows overloads of transmission facilities following contingencies
- Brayton Point retirement led ISO to restudy the area, and potential new FCM resources, if realized, could prompt further restudy
- ISO and stakeholders are reviewing needs and potential market resource alternatives



SEMA/RI is the area south of Boston, plus Cape Cod, and Rhode Island

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FERC's Winter Market Assessment Found NE had Highest Winter Power and Natural Gas Futures

		Location	2015^	2014*
Source: Derived from ICE and Nymex data. Nanuary and February 2015 as of October 1 January and February 2014 as of October 1 SP-15 2014 prices from October 31 2013		Algonquin (New England)	\$21.45	\$11.76
	G	Transco Zone 6 non-NY (Mid-Atlantic)	\$9.09	\$4.78
	а	Dominion South (Marcellus)	\$2.85	\$3.66
	S	Southern California Border	\$4.30	\$3.95
		Henry Hub	\$4.08	\$3.87
Power Note: Prices in MWh Peak financial wap prices.	P	Massachussets Hub	\$183.88	\$99.88
Gas Note: Prices in \$MMBtu. Regional futures natural gas prices are the sum of the Henry Hub futures contract price plus the regional basis futures.	0	RIM Western Hub	\$72.60	\$44.90
	w e	Northwest (Mid-C)	\$37.73	\$35.75
	r	Southern California (SP-15)	\$46.13	\$42.25

Source: FERC's Winter 2014-2015 Energy Market Assessment, October 16, 2014

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Energy Market Offer Flexibility Enhancements

- ISO and NEPOOL developed enhancements to the energy market to provide greater *flexibility* for market participants to adjust their supply offers in the *day-ahead* and *real-time* markets.
 - Offers may now be changed in real time (during the operating day)
 - Offers are now hourly (versus an offer for all hours of the day)
 - Offers may be negative (as low as -\$150/MWh)
- Offers should now reflect near real-time price of fuel, improving dispatch efficiency, price formation, and incentives to follow dispatch instructions

Enhancements went into effect on December 3, 2014

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Reserve Constraint Penalty Factor Changes

- When reserves are scarce (below required amounts), realtime reserve prices are set at the Reserve Constraint Penalty Factor rates
 - The real-time reserve clearing price is reflected in the energy price
- Per FERC order, the Reserve Constraint Penalty Factor rates were increased
 - 30-Minute Operating Reserves from \$500/MWh to \$1,000/MWh
 - 10-Minute Non-Spinning Reserves from \$850/MWh to \$1,500/MWh

- This is also expected to enhance incentives to perform in the near-term until larger capacity market reforms take effect
- Enhancements went into effect on December 3, 2014

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Problems with Existing Capacity Market Design

- Currently, capacity payments are linked to resource availability and poorly linked to resource performance
 - Performance means actual delivery of energy or reserves
- Consequently, supply offers do not include the value of performance
- The market doesn't distinguish between resources based on performance, hence there is little incentive for resource owners to make investments to improve performance

ISO New England's pay-for-performance proposal is a comprehensive solution

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Pay for Performance

- Capacity payments will be closely tied to performance during system deficiencies—the amount of energy and/or reserves provided
- Provides strong incentives for resources to make investments that improve performance
 - Examples: more secure fuel arrangements, capital improvements, improved maintenance and staffing, etc.
- Market participants have the *flexibility* to select the best, least-cost investments to ensure performance
- Goes into effect in 2018-2019 for resources that clear in FCA #9



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APRIL 10, 2015 | BOSTON, MA



NEPOOL Participants Committee Report

Winter 2014/15 Review

Vamsi Chadalavada

EXECUTIVE VICE PRESIDENT AND CHIEF OPERATING OFFICER

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2014/15 WINTER RELIABILITY PROGRAM

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2014/15 Winter Reliability Program

- Oil Program
 - As of Dec 1, 2014:
 - 3.8 million barrels of the initial inventory requirement had been met for a maximum cost exposure of \$68.7M
 - 16 program units exceeded initial requirements, representing an additional 0.68 million barrels
- LNG Program
 - As of Dec 1, 2014:
 - Current participation of 6 units, representing 500,000
 MMBTU, for a maximum cost exposure of \$1.5M
- DR Program
 - As of Dec 1, 2014:
 - 3 assets participated to provide 14 MW for a total cost of \$75,600 (@\$1,800/MW-Month)

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2014/15 Winter Reliability Program

- Dual Fuel Commissioning (DFC) Program
 - Participation:
 - 6 Units submitted intent to commission Dual Fuel Capability
 - 4 Units for 2014/15 (1,039 MW)
 - 2 Units for 2015/16 (735 MW)
 - Total winter seasonal claimed capability commissioned is 1,774
 MW
 - DFC Activity and related NCPC:
 - Units commissioned: 3 successful (722.5 MW), 1 outstanding (316.9 MW), 2 pending (2015/16; 734.8 MW)
 - Total NCPC Commissioning Cap: \$5.7M
 - 2014/15: \$3.56M
 - 2015/16: \$2.19M
 - NCPC incurred: \$1.0M

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Winter Reliability Program Results: Demand Response

- 1 of 30 possible dispatches used over a 5 hour period on 12/4/2014
- Average performance exceeded the winter obligation
 - Audit conducted in January 2015 demonstrated that the winter obligation was met incrementally to FCM obligations

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2014/15 Winter Fuel Burn

- Winter Reliability Program Oil Burn
 - Total program fuel burn during December 2014 through February 2015 is 2,717,500 bbl
 - Total program oil burn last winter was 2,700,500 bbl
- Winter Reliability Program LNG Burns
 - None of the LNG that was contracted for this winter was utilized

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2014/15 Winter Reliability Program Final Costs for Oil, LNG and DR Components

- Winter Reliability Program Oil Costs
 - Total Oil Eligible for Program Payment as of March 15: 2,559,847 Barrels
 - Oil Program Cost (Pre-Penalties): \$46.1M
 - Total Penalties: \$2.2M
 - Total Oil Program Cost: \$43.9M
- Winter Reliability Program LNG Costs
 - LNG Cost (Pre-Penalties): \$1.5M
 - Total Penalties: \$100K
 - Total LNG Program Cost: \$1.4M
- Winter Reliability Program DR Costs
 - Total DR Program Capacity Cost: \$75.6K

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2014/15 WINTER WEATHER

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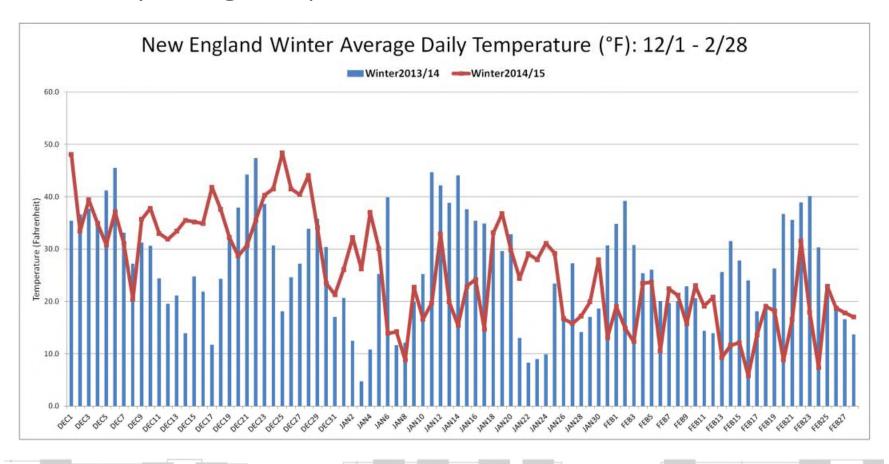
Winter 2014/15 Compared to Winter 2013/14

- <u>December 2014</u>: Milder than previous year
 - Lower demand
 - Less restriction on Natural Gas system
 - Less need for oil
- January 2015: Colder average temperature but previous year had pockets of extreme cold temperatures
 - Slightly lower energy demand
 - Less oil burned than last January
- <u>February 2015</u>: Coldest month in recent history when comparing average temperature and cumulative HDDs (data starts 1960)
 - Higher demand
 - High pipeline capacity utilization
 - Significantly more oil burned

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Average Temperature Comparison

Daily Average Temperature 2013/14 vs 2014/15

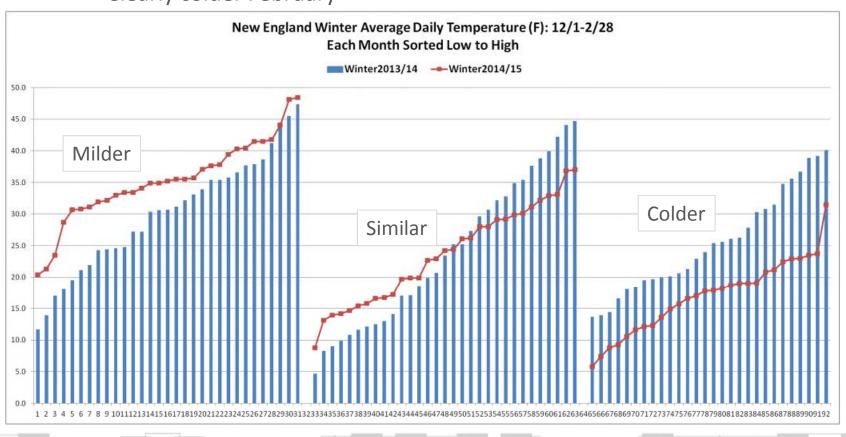


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Average Temperature Comparison

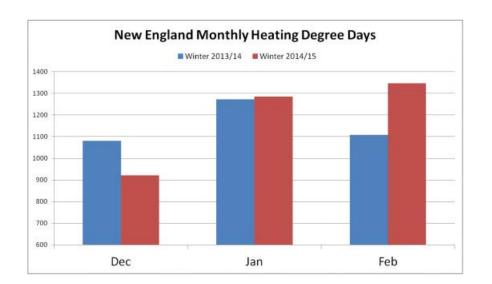
- Sorted by Low to High Temperature, Monthly
 - Clearly milder December
 - Clearly colder February



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Heating Degree Days by Month

- Heating Degree Days (HDDs) apply a single value to describe how cold a day is. More HDDs mean colder temperatures.
- HDDs show milder December and colder February
- January looks comparable, but 13/14 had higher highs and lower lows and resulted in a similar average



 $HDD = 65 - \left(\frac{T_{Hhgh} + T_{Low}}{2}\right)$

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WINTER READINESS

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Winter Preparations

- Prior to the start of the winter of 2014/15:
 - Prior year, still in effect:
 - Advanced the Day Ahead Market Timeline to allow more time to procure gas
 - Replacement Reserve Pricing
 - Tighter criteria for FCM Reserve Shortage Events
 - Increased Coordination and Communication
 - Winter Preparedness Seminar with Designated Entities
 - Winter Reliability Program
 - For Winter 14/15:
 - Energy Market Offer Flexibility Enhancements (December 3, 2014)
 - Expanded the Winter Reliability Program to include LNG and Dual Fuel Conversions

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Other Preparations for Winter – Coordination and Communication

ISO-NE stepped up communications through:

- Regular conference calls with NPCC Reliability Coordinators
 - Beginning in December and continuing through the cold weather
- Regular communications with gas pipelines
 - Routine review of gas purchases via pipeline Electronic Bulletin Boards for generators known to be committed on natural gas
 - Information Policy changes were made to improve gas-electric coordination per FERC Order 787
 - Exchange of more detailed information on both the gas and electric side proved helpful
- Winter preparedness seminars
 - ISO-NE offered both online and live training
- Fuel surveys
 - Initially monthly; became more frequent at different points in the winter

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2014/15 WINTER OPERATIONS

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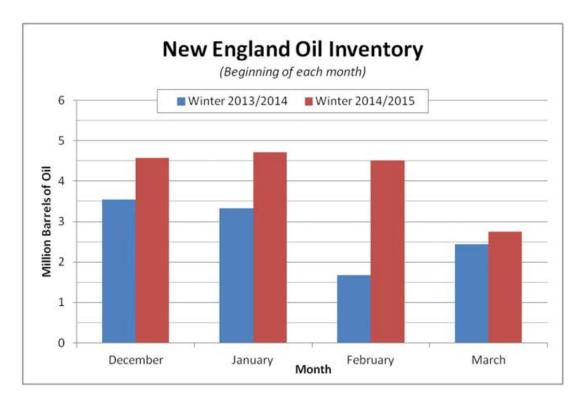
Winter Operations Summary

- The New England Power Grid operated well throughout the winter
- Close coordination with generators and gas pipeline operators helped operate the grid reliably during really cold days
- Increased LNG injections were very helpful in maintaining grid reliability
- The Winter Reliability Program, was instrumental in augmenting the fuel security of the region, primarily by boosting oil inventory in the region
- Cold weather in February depleted fuel supplies after mild
 December kept oil tanks fuller than last season
- Some problems late in the season with fuel barges getting through the ice and weather to dock and unload cargoes

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Monthly Oil Inventory

- More oil as we entered into February 2015 than in 2014
- Significantly more oil depleted during February 2015

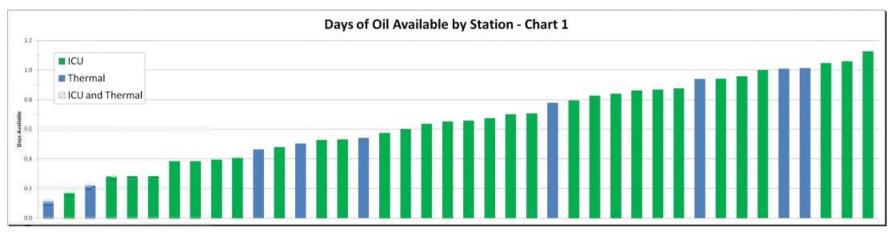


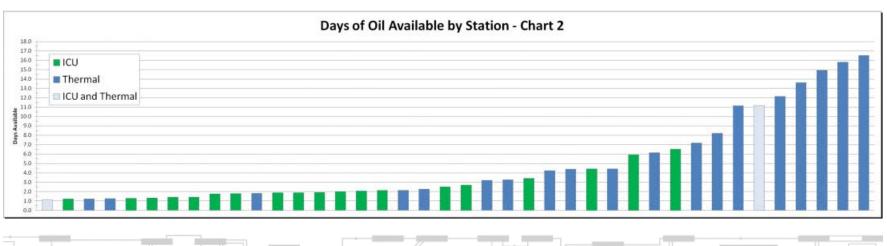
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March Oil Inventory Surveys

 End of 2015 winter oil inventories – Less than 3 days at Most Facilities

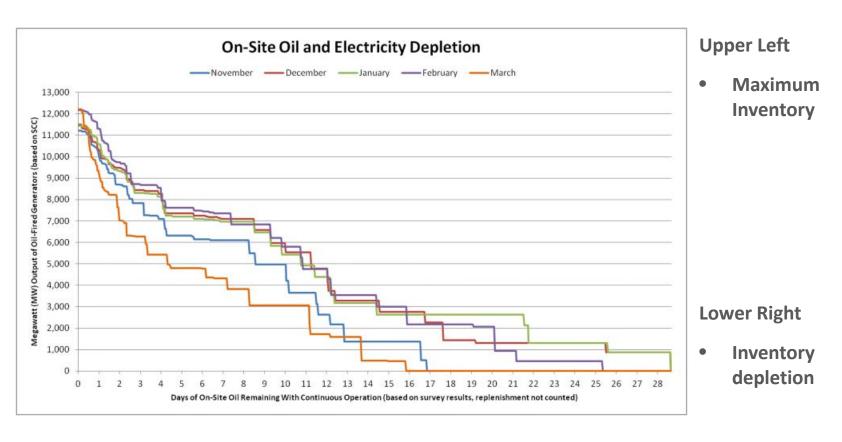




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On-Site Oil and Electricity Output Depletion Based on Fuel Survey Responses



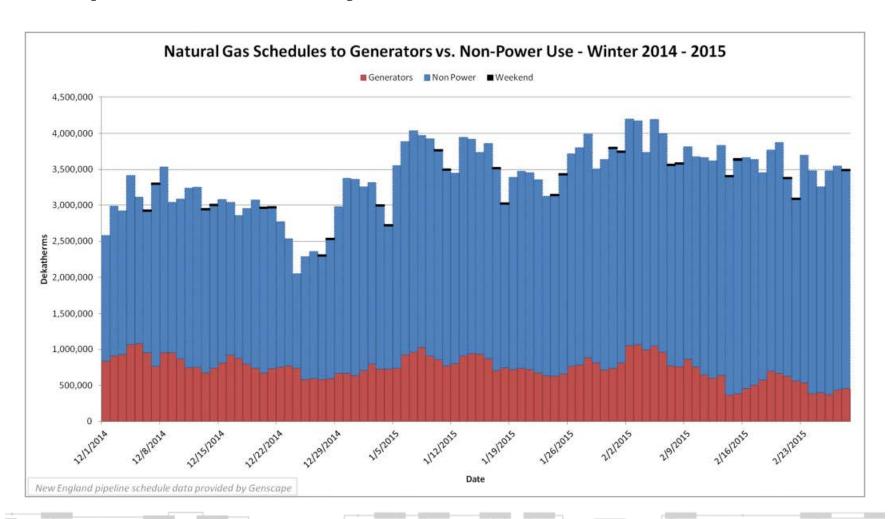
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Pipelines Continue to be Primarily For Non-Power Use

- The natural gas pipeline infrastructure was built to primarily supply firm customers
- Peak overall natural gas demand requires large volumes from the east (including LNG) to supplement constrained supply from the West
- Majority of the pipeline capacity is for Local Gas Distribution
 Companies

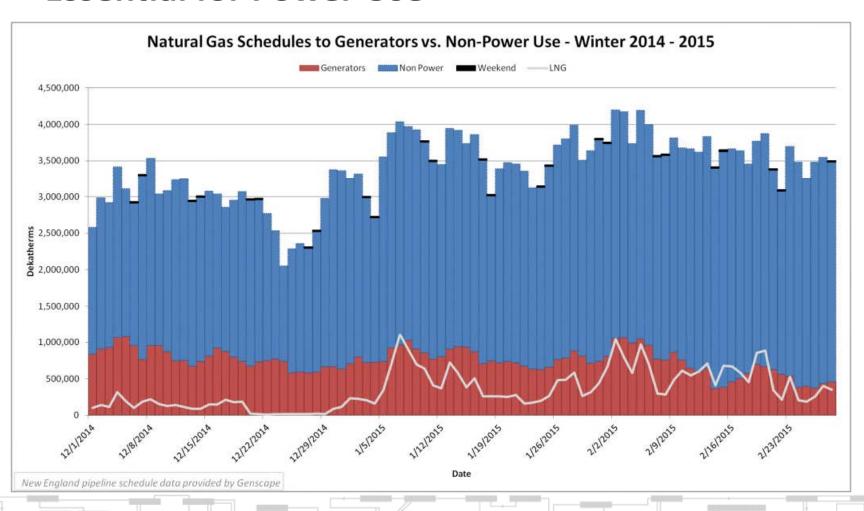
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Pipelines Primarily For Non-Power Use



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Pipelines Primarily For Non-Power Use; LNG Essential for Power Use



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Natural Gas Demand On The Rise

- Multiple days of record breaking single-day natural gas demand this year
- Continuing trend of rising average natural gas demand across all users

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Pipeline Utilization: Highest Natural Gas Supply Days

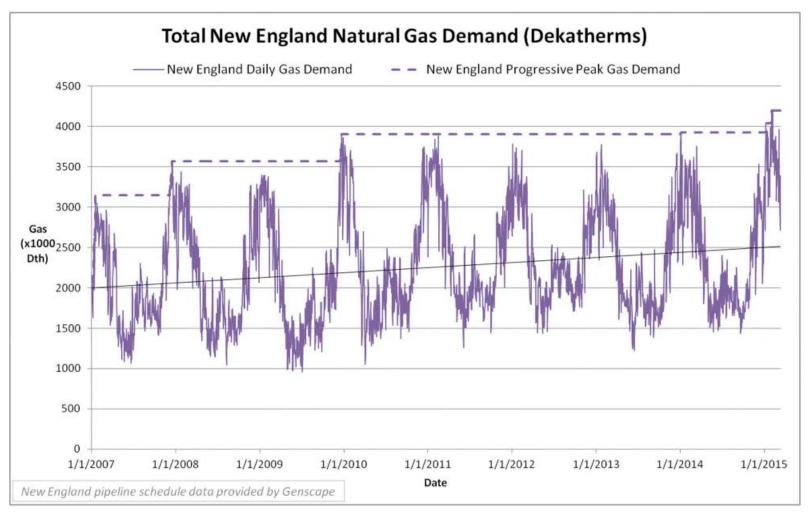
	All values shown as MMBTU scheduled							
Pipeline	Location	Oper Capacity	2/5/2015	2/2/2015	2/3/2015	1/7/2015	2/6/2015	1/28/2015
Algonquin	Stony Point	1,583,000	1,522,000	1,494,000	1,517,000	1,343,000	1,486,000	1,518,000
Tennessee	Station 245	1,083,300	1,055,954	1,031,956	1,052,473	1,057,514	1,024,318	1,054,023
Iroquois	Waddington**	1,150,000	1,159,707	1,057,020	1,149,931	1,004,092	1,239,817	1,164,471
M&N	Baileyville (includes Canaport)	850,000	736,059	845,683	713,731	798,047	515,402	660,090
PNGTS	E. Hereford	168,000	259,335	238,141	259,334	217,377	259,206	259,322
	Total	4,834,300	4,733,055	4,666,800	4,692,469	4,420,030	4,524,743	4,655,906
AGT/TGP	Distrigas	457,180	252,676	94,239	132,333	306,422	163,907	196,791
Algonquin	Northeast Gateway	400,000	141,187	322,871	149,320	199,819	166,343	0
	Total	5,691,480	5,126,918	5,083,910	4,974,122	4,926,271	4,854,993	4,852,697

** Not all gas is consumed in ISO-NE's footprint, especially Capacity at Iroquois

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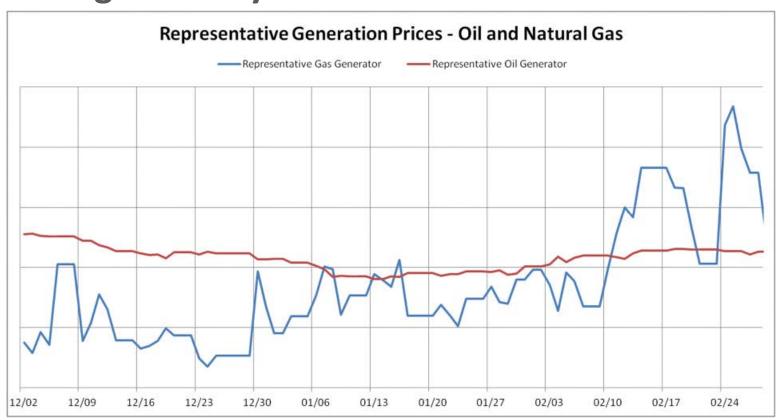
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Rising Natural Gas Demand in New England



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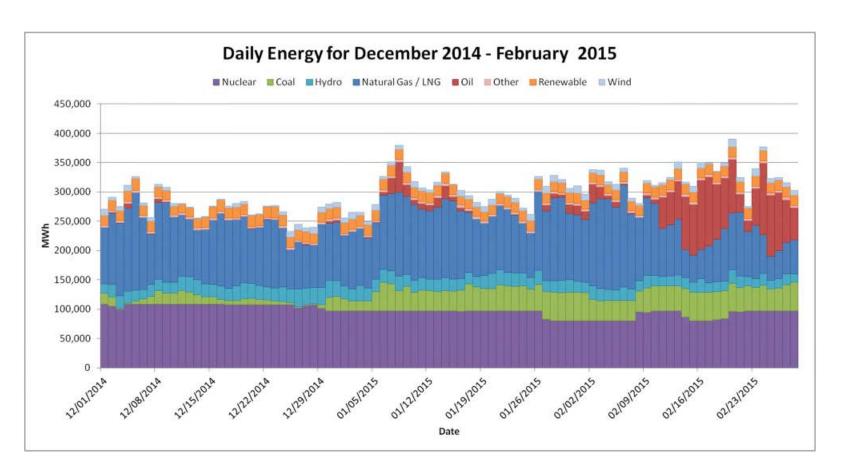
Oil More Economic Than Natural Gas, Especially During February 2015



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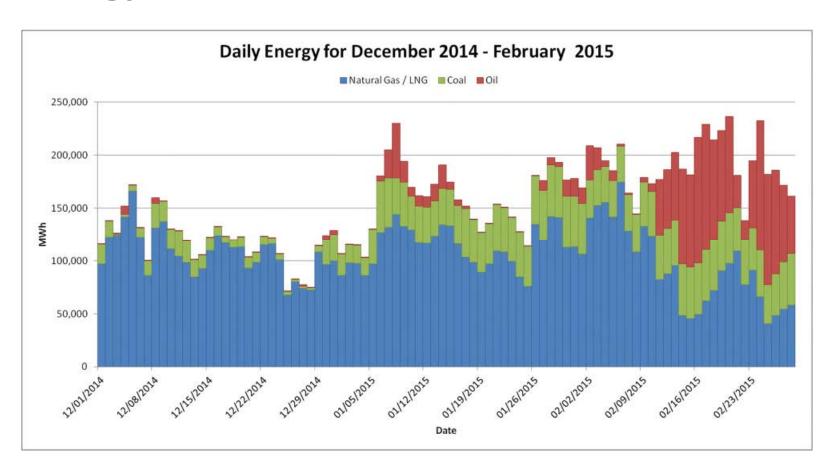
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Colder Temps – Oil and Coal In Rate Daily Energy Contribution From All Fuel Categories



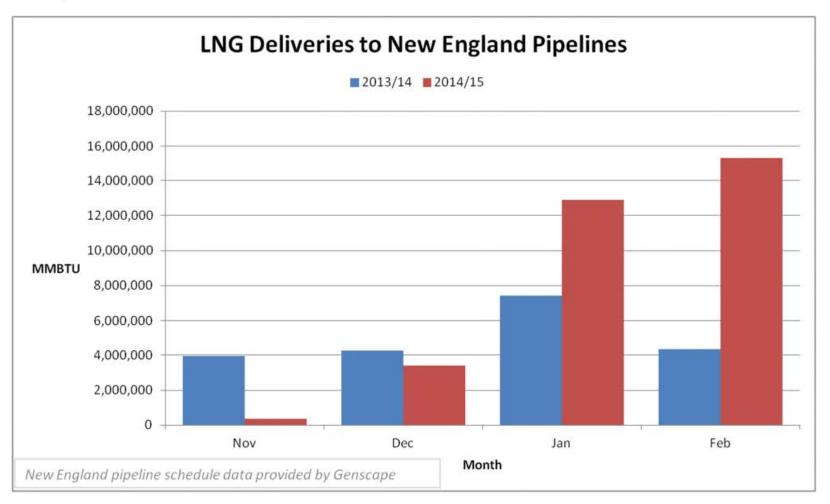
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Colder Temps – Oil and Coal In Rate Energy Contribution from Gas, Oil, and Coal



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Significant Increase in LNG This Year



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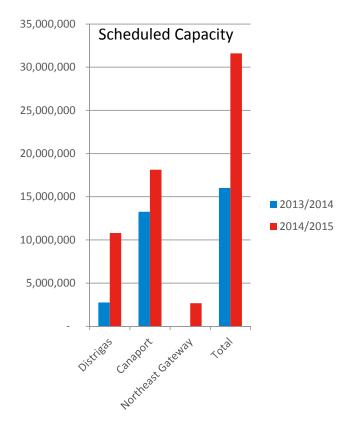
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Observations from Winter Operations

LNG into New England Pipelines (shown in MMBTU scheduled)

	Decembe			
	DECEMBER	JANUARY	FEBRUARY	TOTAL FACILITY
Distrigas	1,013,199	815,439	932,475	2,761,113
Canaport	3,237,722	6,609,209	3,419,294	13,266,225
Northeast Gateway	-	-	-	-
TOTAL/MONTH	4,250,921	7,424,648	4,351,769	16,027,338

	Decembe			
	DECEMBER	JANUARY	FEBRUARY	TOTAL FACILITY
Distrigas	707,137	5,634,040	4,450,831	10,792,008
Canaport	2,681,902	6,177,325	9,270,340	18,129,567
Northeast Gateway	-	1,070,443	1,605,378	2,675,821
TOTAL/MONTH	3,389,039	12,881,808	15,326,549	31,597,396



Source: Genscape

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Global LNG Prices

National Natural Gas Market Overview: World LNG Landed Prices

Federal Energy Regulatory Commission • Market Oversight • www.ferc.gov/oversight

World LNG Estimated January 2015 Landed Prices



Source: Waterborne Energy, Inc. Data in SUS/MMBtu. Landed prices are based on a nefback calculation.

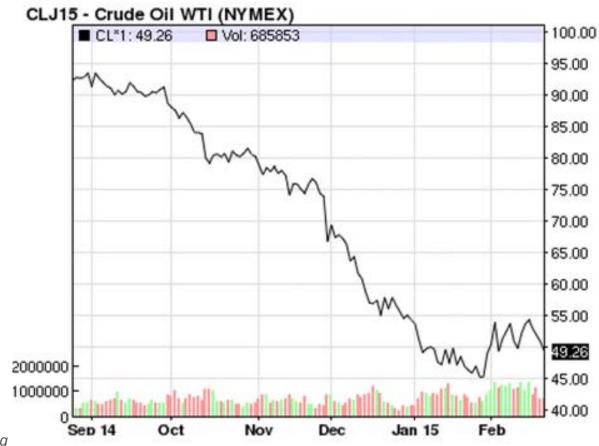
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Oil Prices Fell Dramatically this Winter End of day Commodity Futures Price Quotes for Crude Oil WTI (NYMEX)



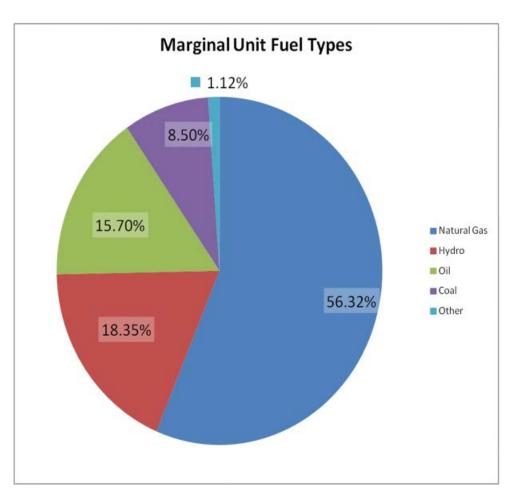
Source: Nasdaq

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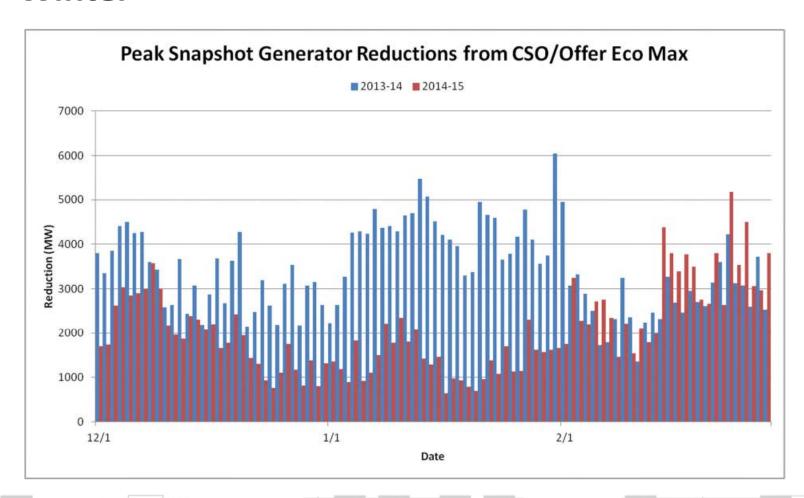
Marginal Fuel This Winter

- Natural gas is the predominant marginal fuel
- Oil was on the margin
 15.7% of the time
- All hours for Winter 2014/15



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Fleet Performance Overall Better Than Last Winter



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PRICES DURING 2014/15 WINTER

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Energy Pricing

- Fuel prices lower in 2014/15 than in 2013/14
 - Gas Prices down 46%
 - Oil Prices down 50%
- LMPs down 44%
 - DA and RT LMPs were closer, on average, than during previous two winters
 - Energy Market down 45% due to lower LMPs

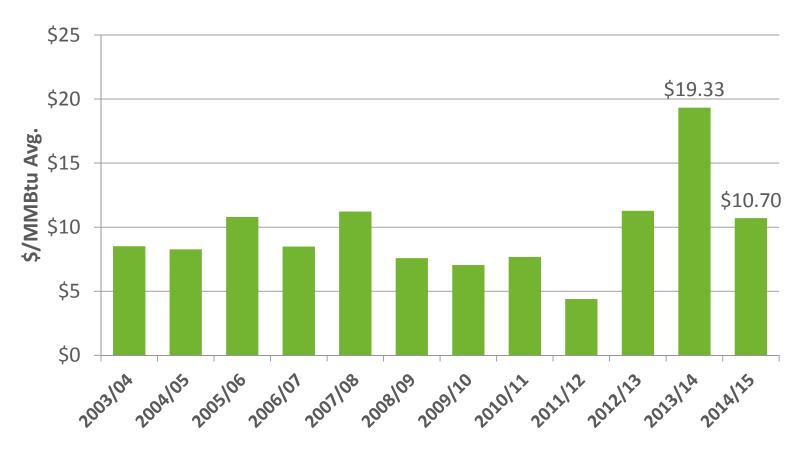
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Energy Pricing

- NCPC totaled \$34.9M
 - Down 68% from previous winter (\$109.7M) and down 54% from winter of 2012/13 (\$76.1M)

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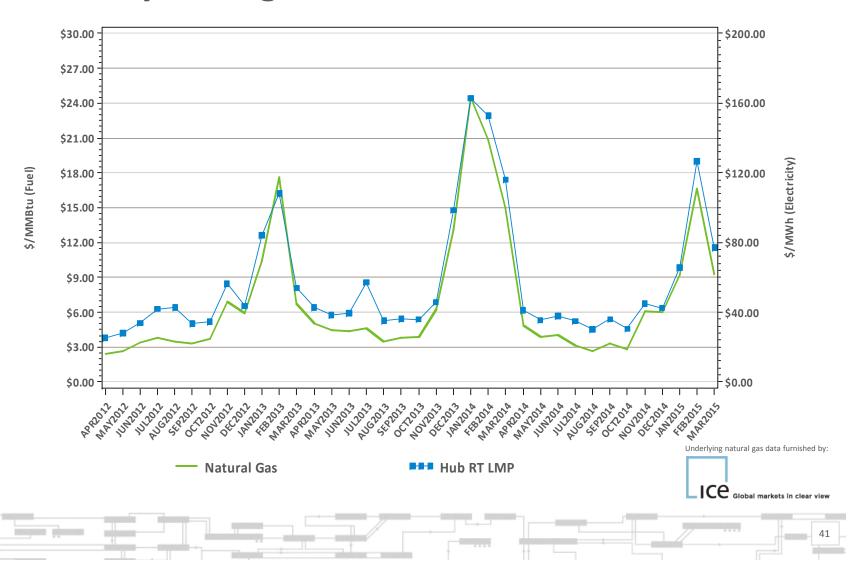
Winter Gas Prices



^{*} Algonquin Citygate price, December – February average

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Monthly Average Fuel Price and RT Hub LMP



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Comparison of 2013/14 and 2014/15 Winter Prices: DA vs. RT LMPs (\$/MWh)

Arithmetic Average

Dec'13-Feb'14	Hub	NEMA	СТ	ME	NH	VT	RI	SEMA	WCMA
Day-Ahead	\$138.71	\$139.98	\$135.52	\$133.33	\$138.18	\$136.40	\$140.03	\$140.07	\$138.72
Real-Time	\$137.59	\$138.52	\$135.99	\$125.43	\$132.13	\$133.65	\$137.87	\$138.21	\$137.36
RT Delta %	-0.8%	-1.0%	0.3%	-5.9%	-4.4%	-2.0%	-1.5%	-1.3%	-1.0%
Dec'14-Feb'15	Hub	NEMA	СТ	ME	NH	VT	RI	SEMA	WCMA
Day-Ahead	\$77.51	\$77.88	\$76.33	\$73.80	\$76.33	\$76.61	\$77.78	\$77.89	\$77.54
Real-Time	\$76.64	\$77.52	\$75.34	\$71.76	\$74.31	\$74.89	\$76.86	\$77.22	\$76.47
RT Delta %	-1.1%	-0.5%	-1.3%	-2.8%	-2.6%	-2.2%	-1.2%	-0.9%	-1.4%
Annual Diff.	Hub	NEMA	СТ	ME	NH	VT	RI	SEMA	WCMA
Yr over Yr DA	-44.1%	-44.4%	-43.7%	-44.6%	-44.8%	-43.8%	-44.5%	-44.4%	-44.1%
Yr over Yr RT	-44.3%	-44.0%	-44.6%	-42.8%	-43.8%	-44.0%	-44.3%	-44.1%	-44.3%

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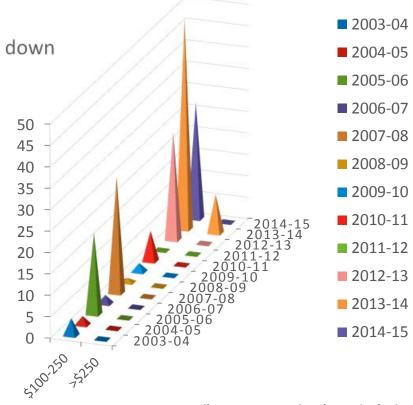
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Winter Wholesale Prices

 30% of average daily real-time prices were above \$100/MWh, down from 64% last winter

Number of Days

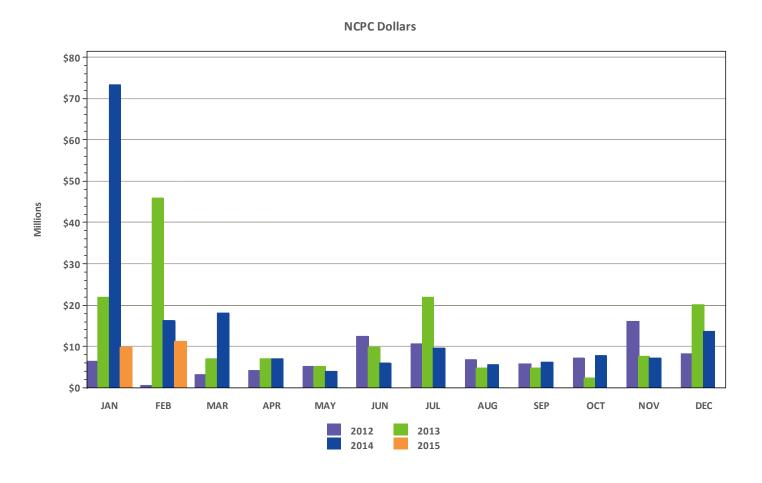
- Average daily real-time prices did not exceed \$250 this winter
- Energy market costs were \$2.77B this winter, down from \$5.05B last winter



Daily Average Locational Marginal Prices

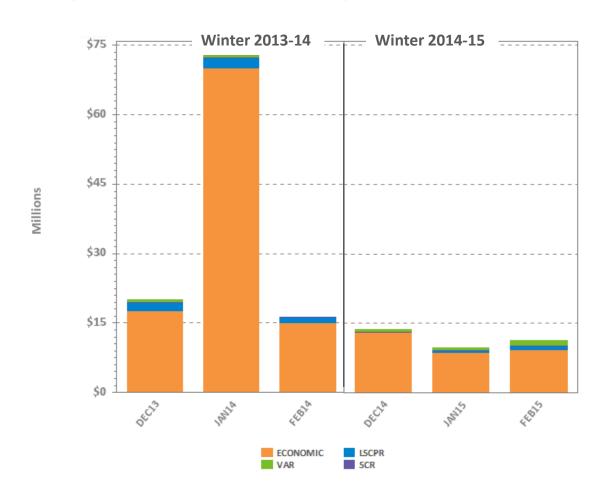
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Uplift Payments to Participants Decreased



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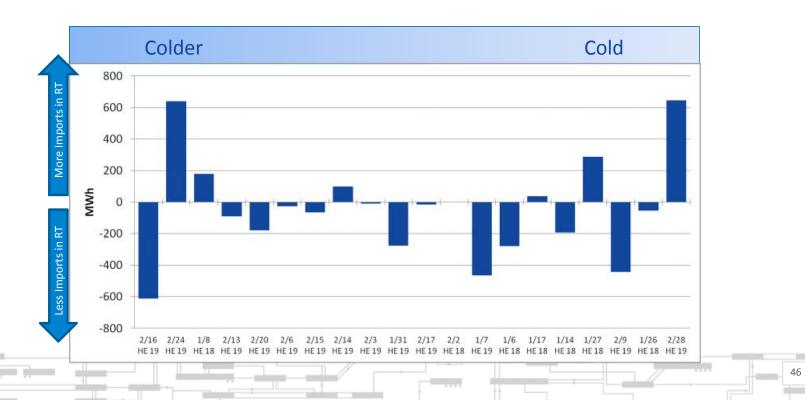
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Net Change in Import Supply Between DA and RT at Peak Hour on Coldest Days, Winter 2014-15

 Increased coordination between neighboring areas in preparation for winter led to fewer curtailments between Day Ahead imports and Real Time imports



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Winter Operations Report Conclusion

- While operations this winter was relatively uneventful, challenges remain for future winters with fuel security and additional retirements
- Increased usage of oil and coal units, with additional retirements or colder weather, could limit generator output due to environmental limits
- The ISO will continue to work with stakeholders on addressing the transition winters between now and 2017/18, when the Pay-For-Performance design takes effect

ISO Newswire - Updates

New England power system performed well through winter 2014/2015

Tuesday, April 7, 2015 at 10:30AM

ISO New England in Industry News & Developments, Inside ISO New England, energy efficiency, new england states, peak demand, system operations, wholesale prices

Now that the winter of 2014/2015 is one for the history books, this much we know is certain: no two New England winters are alike. A confluence of regional and global factors, advance planning and preparations, and delayed cold weather during winter 2014/2015 helped alleviate the operational issues and record-high prices seen during the previous winter.

The primary factors that helped ensure power system reliability in New England and keep price volatility in check, include:

- The 2014/2015 Winter Reliability Program provided incentives to generators to have oil inventory stored on site, or to have a contract for LNG deliveries to supplement pipeline gas supplies before the start of winter.
- December was mild, and the coldest winter weather didn't arrive until February, when days were longer and electricity consumption was lower.
- More liquefied natural gas (LNG) supplies were drawn to New England from world LNG markets, because of the region's high natural gas prices during the previous winter and high forward prices for delivery during winter 2014/2015.
- Global oil prices dropped dramatically during 2014, making oil-fired generation often more
 economic to run than natural-gas-fired generation and dampening both gas and electricity
 price volatility.
- Energy-efficiency measures helped reduce total power consumption and peak demand.

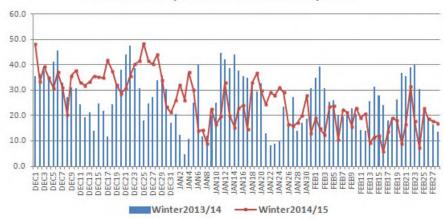
As a result, New England's generating resources and high-voltage power grid performed well throughout December, January, and February. Nevertheless, natural gas pipeline constraints continue to affect grid operations, wholesale energy costs, and the resource mix used to meet demand during the winter months.

2014/2015 winter weather

Weather is one of the biggest drivers of peak demand and overall power usage: milder temperatures translate into lower demand, and extreme temperatures push up demand. While the region experienced fairly moderate weather during December 2014, temperatures dropped in January and became downright arctic in February. With an average monthly temperature of 16.9° F in New England, February 2015 was the *coldest month on record*, based on ISO New England

historical statistics, which date back to 1960.

New England Winter Daily Average Temperature (°F) Winter 2014/2015 vs. Winter 2014/2013



February 2015 set another record as the cold temperatures pushed up total energy usage higher than any other February. Yet, when considering the weather and temperatures were mild in December and average for January, peak demand and total winter electricity consumption were both lower than in winter 2013/2014:

- Demand for power reached its highest level on January 8, 2015, at 20,556 MW; the previous winter's peak occurred on December 17, 2013, at 21,453 MW.
- New Englanders consumed 33,654 gigawatt-hours (GWh) of electricity from December 2014 through February 2015, slightly less than the 33,991 GWh consumed during the same period of the previous winter.

Although February was the coldest month, demand for electricity peaked in January for this winter period. As temperatures plummeted in February, consumer demand was lower because the holiday season had largely passed, which reduced the amount of electricity needed for decorative lighting. And in general, as the days grow longer, heating, lighting, and cooking activities don't fall into such a narrow time frame when people arrive home.

Other reasons for lower peak demand and consumption include the frequent snow storms that led to schools, businesses, and in some cases government offices closing, as well as the effects of increased energy-efficiency in New England. Compared to the previous winter, regional energy-efficiency measures reduced peak demand by an additional 265 MW.

For detailed statistics, see the "Winter by the Numbers" tables below.

Winter power system operations

The New England power grid and the power plant fleet operated very well throughout the winter's varying temperatures, so that sufficient resources were available to meet peak demand and provide reserves at all times.

ISO Newswire - Updates

"Given the difficulties we experienced the last few winters, we expected similarly challenging conditions this winter," said Peter Brandien, vice president of system operations at ISO New England. "But from a system operations standpoint, the season was fairly uneventful overall, due mainly to preparations made well before the winter season began.

"First, close coordination with natural-gas-fired generators and natural gas pipeline operators helped ensure grid reliability even when temperatures plummeted and demand for gas and power climbed," continued Brandien. "Along with this, heavy injections of LNG into the eastern portion of New England's system were helpful because this increased the amount of gas coming into the region, while circumventing the pipelines bringing in gas from the west, which were already running at full capacity throughout the winter. And once again, the Winter Reliability Program proved invaluable, significantly boosting oil inventory in the region before the start of winter. In February, generation from oil-fired power plants was especially critical in meeting demand for power when the weather turned bitterly cold, and also when LNG deliveries became intermittent when one LNG import terminal ran out of fuel and another terminal was unable to dock and unload cargoes because of poor weather conditions."

Significant market improvements that took effect in December 2014 also contributed to improved generator performance. The energy market offer flexibility changes, for example, now allow generators to update their offers to sell energy during the operating day, so if the cost of fuel (e.g., natural gas) changes, they can reflect the updated price in their offers. Higher reserve prices have also been placed into effect for times when the system has limited power reserves and is at heightened reliability risk. Both of these market changes increase the financial incentives for generation owners to improve their fuel supply arrangements and generating plant performance.

System operators implemented Operating Procedure 4, Actions during a Capacity Deficiency once during the winter because of an event originating outside New England. On December 4, 2014, Hydro Québec experienced outages on two of its major transmission lines and had to significantly cut electricity exports to New England and other neighboring areas. The ISO brought additional generation online to maintain grid reliability in New England and also to provide support to our northern neighbors as they worked to restore their system to normal operations. OP-4 was implemented at 4:15 p.m. and was cancelled at 8:45 p.m. For the rest of the winter, power imports from Québec were regular and steady, and helped meet regional demand for electricity.

Winter Reliability Program boosted oil inventory, helped ensure reliability through record cold

ISO Newswire - Updates

Given the resource performance challenges and reliability risks to the grid during the previous two winter seasons, ISO New England implemented a second Winter Reliability Program for 2014/2015 to address potential fuel-availability issues. Several elements of this winter's program were consistent with the first, but there were also some fundamental differences, including the compensation structure. Under the 2014/2015 winter program, generators receive an end-of-season payment to help offset some—but not all—of the carrying costs associated with leftover oil inventory or unused LNG contracts. This design change was made to encourage generators that burn oil to rely on upfront inventory, rather than replenishments, and to incentivize natural-gas-fired generators to contract for LNG as a peaking fuel to augment the use of pipeline gas. Read more about the structure of the program.

The program helped achieve the desired effect—by the start of the winter, the region was well positioned with fuel inventory: by December 1, 2014, 79 units (both oil-fired and dual-fuel) had more than 4 million barrels of oil in their fuel tanks. Like the previous winter, that oil inventory was instrumental in allowing the region to withstand the severe cold weather conditions.

From December through February, the region burned 2,717,500 barrels of program oil. Data showing the total amount of program oil used through March 15 (the end date of the oil aspect of the program) is being compiled.

While six natural-gas-fired generators participated in the winter program and arranged contracts for LNG, none of the contracts were utilized, likely because the contracted prices were higher than the cost of buying LNG or natural gas on the spot market this winter.

The 14 megawatts of demand-response resources participating in the program were activated once for a five-hour period during the OP-4 event in December.

Three resources with a total combined capacity of about 720 MW successfully commissioned dual-fuel capability this winter, under provisions of the Winter Reliability Program designed to promote these reliability-enhancing investments by power plant owners. Three other gas-fired facilities have committed to becoming dual-fuel capable by next winter.

Further analysis of the program is underway and will be shared with stakeholders in the coming weeks, but preliminary figures show that the total program cost will come in under \$50 million, which is below the \$66 million cost of the first winter program.

Greater fuel availability, lower fuel prices helped reduce wholesale electricity prices

Wholesale electric energy prices during winter 2014/2015 were well below the previous winter's prices: the average cost of wholesale electric energy from December 2014 through February 2015 was \$76.64/megawatt-hour (MWh), while last winter's average price was \$137.60/MWh.

The total cost of wholesale energy from December 2014 through February 2015 was \$2.77 billion, 45 percent less than the \$5.05 billion for the same three-month period the previous winter. The overall lower wholesale energy costs can be credited to increased supplies of LNG to

the region and lower oil and natural gas prices. For more information on wholesale prices, see the "Winter by the Numbers" tables below.

Futures Prices Were Elevated in October 2014

	Location	2015^	2014*
	Algonquin (New England)	\$21.45	\$11.76
G	Transco Zone 6 non-NY (Mid-Atlantic)	\$9.09	\$4.78
	Dominion South (Marcellus)	\$2.85	\$3.66
5	Southern California Border	\$4.30	\$3.95
	Henry Hub	\$4.08	\$3.87
P	Maissachussets Hub	\$183.88	\$99.88
•	FIRM Wastern Hub	\$72.60	\$44.90
w	Northwest (Mid-C)	\$37,73	\$35.75
Ŧ	Southern California (SP-15)	\$46.13	\$42.25

Source: Winter 2014-15 Energy Market

Assessment, FERC, October 16, 2014More LNG attracted to New England LNG is a globally-priced commodity and its availability in New England is dependent on worldwide demand. New England's record-high natural gas and wholesale energy prices during winter 2013/2014, along with high forward prices late last year, provided strong economic signals to LNG suppliers to bring tankers to the region this winter. An October 2014 FERC analysis noted that winter futures prices in New England for both natural gas and power were the highest in the US.

In addition, the estimated landing prices for LNG revealed that the New England region was predicted to have the highest prices *in the world*—and nearly twice as high as prices in Europe, Asia, and South America.

World LNG Estimated January 2015 Landed Prices



Source: National Natural Gas Market Overview, FERC, December 2014 (slide 13). (Source data from Waterborne Energy, Inc.)

According to the Northeast Gas Association (NGA), both the Distrigas LNG terminal in Everett, MA, and the Canaport LNG terminal in New Brunswick, Canada, recorded steady throughput this winter, and the Northeast Gateway facility, located offshore from Gloucester, MA, received

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ISO Newswire - Updates

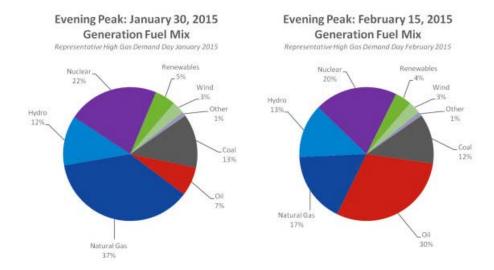
its first LNG shipment in four years, in January 2015 (Source: Regional Market Update, Northeast Gas Association, March 20, 2015, slide 9).

From December through February, New England saw the injection of about 31 Bcf of gas from LNG imports into the region—nearly twice as much as the 16 Bcf of gas from LNG imports the previous winter.

"LNG was in substantially greater supply this winter than last, and this additional LNG heightened competition in the wholesale fuels markets which, in turn, helped moderate the cost of both pipeline gas and LNG this past winter," explained Matthew White, Chief Economist at ISO New England. "Compared to winter 2013/2014, the increased fuel supplies resulted in much lower price levels this winter."

However, while increased competition in the gas market helped to dampen prices over the course of the winter, the amount of Marcellus shale gas that could be delivered to the region from the west remained limited by New England's constrained pipeline system. During many cold days in February, daily spot-market natural gas prices hovered in a range of \$20 to \$30 per million British thermal units (MMBtu), which is high by historical standards. These higher gas prices increased winter wholesale electricity prices: February's average wholesale energy price was \$126.70/MWh, which makes it the third-highest average monthly wholesale energy price in New England. The highest and second-highest prices were logged the previous winter, during January and February 2014, respectively.

Lower oil prices and diverse fuel mix also helped moderate energy prices, meet demand Worldwide oil prices fell to approximately half what they were the previous winter, which dramatically reduced the cost of operating oil-fired power plants. While nuclear and natural gas were the dominant fuels used to produce power this winter, oil and coal resources were competitively priced and, at times, were a large part of the fuel mix—especially during the coldest month of February 2015. On some days, oil and coal together fueled more than 40% of the region's power needs, as shown in the pie chart.

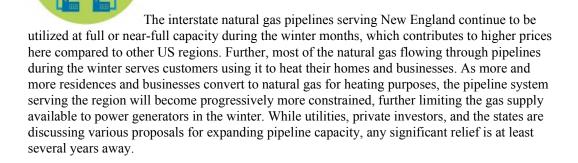


"The New England wholesale electricity market experienced the effects of the drop in oil prices, just as automobile drivers have seen relief at the gas pump over the past several months," White explained. "The plunge from \$100/barrel oil in winter 2013/2014 to less than \$50/barrel oil this winter made oil-fired power plants price-competitive with coal-fired and even high-efficiency gas-fired plants. Coupled with the increased competition in the natural gas markets that helped keep a lid on the price of natural gas for much of the winter, low oil prices put downward pressure on the cost of wholesale energy, helping to curb wholesale power prices well below those of the previous winter of 2013/14."

Implications for future winters

Many of the factors that contributed to smooth power grid operations and lower wholesale energy prices this winter are difficult to predict, and resulted in part from changing conditions in global fuel markets. Importantly, it remains to be seen whether they will recur similarly in future winters.

Natural gas pipeline constraints



ISO Newswire - Updates

LNG import variability

LNG tankers follow the money around the world each winter. Consequently, the LNG imports that helped increase gas supplies in the region this winter—and helped moderate prices—were here because of last winter's (2013/2014) high prices. If another part of the world experiences high LNG demand as the global economy recovers, global LNG suppliers may no longer find New England their preferred destination in future winters. Lower LNG supplies in future winters would exacerbate New England's gas pipeline constraints and infrastructure challenges, and heighten the potential for a return to the high wholesale energy prices experienced in winter 2013/2014.

Uncertainty of future oil prices

Low oil prices resulted in greater dispatch of oil-fired power plants this winter, which helped to dampen the price of wholesale electricity. However, global oil markets—and therefore oil prices—are notoriously fickle. Should oil prices go back up, the cost of operating oil-fired power plants will rise as well.



Generator environmental limits

Increased operation of oil- and coal-fired plants comes with environmental costs for the region: greater air emissions. For example, New England's generator air emissions figures increased in 2013, as higher-emitting units were needed more often to serve peak demand and to make up for decreased natural gas-fired generation during the winter months. Additionally, the runtimes of generators that burn oil are limited by state and federal emissions restrictions and the potential for these limitations will continue to be a factor during future winter operations.

Resource retirements

The continued retirements of aging oil and other non-gas generators from the region's fleet of power plants will further increase New England's reliance on natural gas for power production and exacerbate natural gas infrastructure constraints. In 2014, two large power plants went offline permanently: the remaining coal and oil units at Salem Harbor station (585 MW) and the Vermont Yankee Nuclear station (615 MW). Brayton Point Station—a 1,535 MW coal- and oil-powered plant that the region relied on heavily throughout the 2014/2015 winter—will be retired by June 1, 2017, and as many as 6,000 MW of other non-gas resources are at risk for retirement in coming years. In total, the retirements from 2014 through 2018 represent more than 10% of the region's generating capacity.

Ensuring reliability during the winter months

ISO New England has made longer-term changes to the Forward Capacity Market design, most significantly Pay-for-Performance, which will create strong incentives for generators to firm up their fuel supply and improve their overall performance. These changes will take effect in 2018. In the interim, the ISO has used targeted reliability programs that have improved regional fuel adequacy and maintained grid reliability for the past two winters. Earlier this year, the Federal Energy Regulatory Commission (FERC) required ISO New England to implement a market-based solution for the winters between now and 2018. Citing the difficulty in creating a market-based

solution on top of the existing patchwork of generator obligations, ISO New England has asked FERC to permit the continuation of the winter reliability programs—with an expanded scope to include more resource types—until new performance and investment incentives take effect. If this request isn't accepted by FERC, the ISO will propose a seasonal increase in energy market reserve pricing during times of system stress—the only market-based solution that can be implemented before next winter. However, the ISO has concerns that changes to the energy market may not provide the same assurances of "fuel in the tank" as the recent winter reliability programs.

Winter by the Numbers - Monthly Comparison

	Dec-14	Dec-13	% change	Jan-15	Jan-14	% change	Feb-15	Feb-14	% change
Avg monthly temperature (°F)	35.3	30.1	17.3%	23,5	24	-2.1%	16.9	25.4	-33.5%
Total energy consumption (Gigawatt-hours)	10,926	11,500	-5.0%	11,713	12,022	-2.6%	11,015	10,468	5.2%
Peak demand (Megawatts)	19,812	21,453	-7.6%	20,556	21,334	-3.6%	20,070	19,654	2.1%
Date of peak	12/8/2014	12/17/2013		1/8/2015	1/7/2014	-	2/16/15	2/11/2014	-
Temperature at peak (℉)	24	15	-	19	8	-	13	18	-
Dewpoint at peak (°F)	15	11	-	-2	-12	-	-10	0	-
Avg wholesale energy price (\$/megawatt-hour at Hub)	\$42.47	\$98.53	-56.9%	\$65.59	\$162.88	-59,7%	\$126.70	\$152.84	-17,1%
Avg gas price at Algonquin (\$/million British thermal units)	\$6.13	\$13.09	-53.2%	\$9.34	\$24.19	-61.4%	\$17.27	\$20.85	-17.2%
Total value of energy markets (in billions)	\$0.498 B	\$1.1618	-57.1%	\$0.871 8	\$2,190 8	-60.2%	\$1,400 B	\$1,703 B	-17,8%

Winter by the Numbers - Year-over-Year Comparison

	Winter 2014/2015	Winter 2014/2013	% change
Avg monthly temperature (°F)	25.5	26.5	-3.8%
Total energy consumption (Gigawatt-hours)	33,654	33,991	-1.0%
Peak demand (Megawatts)	20,556	21,453	+4.2%
Date of peak	1/8/2015	12/17/2013	+
Temperature at peak (°F)	19	15	
Dewpoint at peak (°F)	-2	11	-
Avg wholesale energy price (\$/megawatt-hour at Hub)	\$76.64	\$137.60	-44.3%
Avg gas price at Algonquin (\$/million British thermal units)	\$10.70	\$19.33	-44.6%
Total value of energy markets (in billions)	\$2.77 B	\$5.05 B	-45.1%

More information

For background on how natural gas infrastructure constraints, resource retirements, and other challenges are affecting the grid, see the 2015 Regional Electricity Outlook.

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Responses to the Attorney General's First Set of Information Requests
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Information Request AG-1-32

Request:

Refer to Exhibit NG-TJB/JEA-1, at page 18, line 17 through page 19, line 6. Please explain why Massachusetts Electric and Nantucket Electric are not acquiring firm transportation capacity and LNG in the same percentage proportions, nor the same percentage proportions as the Access Northeast Pipeline project of 500,000 Dth FT and 400,000 Dth LNG.

Response:

Massachusetts Electric Company and Nantucket Electric Company are acquiring firm transportation capacity and LNG in the same percentage proportions as the Access Northeast Pipeline Project ("ANE") and the same percentage proportions as each other.

ANE offers total transportation capacity of 900,000 dt/day. Of that total, the Project provides for transportation of 500,000 dt/day (approximately 55.6%) from western receipt points (Ramapo, Mahwah and/or Brookfield) and 400,000 dt/day (approximately 44.4%) from LNG Storage at Acushnet.

Nantucket Electric has subscribed to total transportation of 900 dt/day. Of that total, 500 dt/day (approximately 55.6%) from western receipt points and 400 dt/day (approximately 44.4%) from LNG storage at Acushnet.

Massachusetts Electric has subscribed to total transportation of 180,000 dt/day. Of that total, 100,000 dt/day (approximately 55.6%) from western receipt points and 80,000 dt/day (approximately 44.4%) from LNG storage at Acushnet.

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Information Request AG-1-33

Request:

Refer to Exhibit NG-TJB/JEA-1, at page 37, lines 6-12.

- a. Please explain how it is anticipated that supply would be obtained by Massachusetts Electric to fill the 39,600 Dth of capacity on the Market Path in excess of the Supply Path project capacity. Provide copies of any analyses or documents that address or evaluate the acquisition of incremental supplies of 39,600 Dth; and
- b. Please explain why Nantucket Electric would acquire more capacity on the Supply Path than on the Market Path. How will the additional 158 Dth/day of Supply Path capacity be used?

Response:

- a. It is anticipated that gas supplies would be purchased at Wright, NY, to fill the 39,600 Dth/d (the amount by which the Market Path capacity exceeds the Supply Path capacity). It is expected that Constitution Pipeline will be in-service on or before the in-service date of the NED Market Project. Constitution is expected to deliver 650,000 Dth/d of supplies to the NED Market Path receipt location at Wright, NY. Also, it is expected that NED Supply Path will be in-service at or around the same time as NED Market Path. NED Supply is expected to deliver 1,052,000 Dth/d into NED Market Path at Wright, NY.
- b. In Exhibit NG-TJB/JEA-1, at 19, lines 6-8 the Market Path and Supply Path contract quantities for Nantucket Electric were inadvertently transposed. The Supply Path quantity is 302 Dth per day and the Market Path quantity is 500 Dth per day as set forth in Exhibit NG-TJB/JEA-3.

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Information Request AG-1-34

Request:

Refer to Exhibit NG-TJB/JEA-1, at page 38, line 12. Please describe in detail the term "indirect deliveries."

Response:

Please see response to Information Request AG-1-29.

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<u>Information Request AG-1-35</u>

Request:

Refer to Exhibit NG-TJB/JEA-1, at page 45, lines 11-14; page 45, lines 19-21; and page 46, lines 1-2. Please explain how the net benefits of the NED Project (\$1.4 billion) can exceed the net benefits of both the NED and ANE Projects (\$1.2 billion), and if this is the case, why would National Grid proceed with both projects when the NED project alone would provide the maximum benefit?

Response:

Black & Veatch conducted a risk-adjusted expected value analysis, over the full range of probabilities of success which could be assumed for each project, to determine probability-weighted expected net benefits of moving forward with the NED project only, with the ANE project only, and with both projects together. Based on this analysis, as cited in Exhibit NG-JNC-3, at 27, "contracting on both ANE and NED pipelines has the highest risk-adjusted value under most scenarios after factoring in the probability of project successes. Unless NED's probability of success is greater than or equal to 90%, contracting with both ANE and NED is the best option." Please also refer to Exhibit NG-JNC-3 at 26-27 and Exhibit NEER-1-22 for further explanation of how Black & Veatch calculated these risk-adjusted expected values.

However, given Kinder Morgan's recent decision to suspend work on the NED Project, the Company is now pursuing approval of the ANE Agreements only. As demonstrated in Exhibit NG-JNC-3, at 24, the ANE Project is projected to provide a present value of over \$10 billion of net benefits to customers regionally, with a present value of approximately \$4.8 billion in net benefits for Massachusetts customers.

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Information Request AG-1-36

Request:

Refer to Exhibit NG-TJB/JEA-1, at page 70, lines 14-17. Please identify the extent to which benefits will be reduced.

Response:

The Company did not analyze the potential change in benefits to the EDC customers without the FERC exemption to limit capacity releases to electric generators on a preferential basis. The Company does not know how much capacity would not be available to generators if the capacity was available to all market participants. The intent of the FERC exemption is to allow for limited capacity releases to all generators in New England which will increase reliability of electric supply and lower electric prices. The EDCs cannot guarantee that capacity will be available to the generators when needed to generate electricity without the FERC exemption.

See also the Company's Response to Information Request NEER-1-47.

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Information Request AG-1-37

Request:

Refer to Exhibit NG-PJA-1, at page 13, fn 2. Please provide the additional information provided by GDF Suez.

Response:

Please see Attachment AG-1-4(b), for the questions to and information provided by GDF Suez.

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<u>Information Request AG-1-38</u>

Request:

Refer to Exhibit NG-JNC-3:

- a. Figure 3. Please provide the data points relied upon to prepare this graph and identify the source of the data;
- b. Figure 7. Please provide the data points relied upon to prepare this graph and identify the source of the data:
- c. Figure 7 and preceding paragraph. Please explain why, for 2016, LDC Load is greater than the 3,500 Mcf/day of Interstate capacity and 1,100 Mcf/day in LNG peak shaving deliverability. Explain how low load in excess of 4,600 Mcf/day would be served.
- d. Figure 10. Please provide the data points relied upon to prepare this graph and identify the source of the data;
- e. Figure 11. Please provide the data points relied upon to prepare this graph and identify the source of the data; and
- f. Page 29 (both tables). Please provide the data points relied upon to prepare this graph and identify the source of the data.

Response:

- (a,b,d,e,f) Please see Attachment AG-1-38(a) (HIGHLY SENSITIVE CONFIDENTIAL) for the requested data from Exhibit NG-JNC-3.
- (a) Figure 3 data is from Black & Veatch's long-term gas and electric market forecast.
- (b) Figure 7 data is based on Black & Veatch's analysis of: the interstate pipelines' index of customers; the publically available information regarding Spectra's AIM, Tennessee's Connecticut Expansion, and Spectra's Atlantic Bridge projects; and Black & Veatch's projection of LDC design day demand growth.
- (c) In 2016, Black & Veatch assumed that Spectra's AIM and Tennessee Gas Pipeline's Connecticut Expansion would be placed into service by the start of the 2016 winter season, allowing loads in excess of 4,600 MMcf/d to be served.

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- (d) In Figure 10, the historical Algonquin, city-gate prices are from Platts, and the projections are from Black & Veatch's long-term gas market forecast.
- (e) In Figure 11, the projected electric prices are from Black & Veatch's long-term electric market forecast.
- (f) The data provided in the tables on page 29 are from Black & Veatch's estimate of long-term economic benefits for each scenario. It is based on the same data as Exhibit NG-JNC-3 Table 3, using a lower discount rate.

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NG-JNC -3 Figure 3 Data Units: MMcf/d

Column	Α	В	С	D	E
Line #	Year	Residential	Commercial	Industrial	Power Gen
1	2016	621	570	333	1,208
2	2017	636	584	334	1,304
3	2018	650	599	334	1,342
4	2019	665	615	335	1,366
5	2020	682	630	335	1,362
6	2021	691	643	336	1,368
7	2022	697	653	336	1,398
8	2023	704	663	337	1,408
9	2024	710	671	338	1,381
10	2025	717	679	338	1,395
11	2026	723	687	339	1,397
12	2027	730	696	339	1,432
13	2028	736	704	340	1,423
14	2029	742	713	340	1,445
15	2030	747	721	341	1,442
16	2031	753	728	342	1,418
17	2032	760	736	342	1,374
18	2033	766	745	343	1,406
19	2034	772	753	343	1,388
20	2035	779	761	344	1,445
21	2036	785	769	345	1,439
22	2037	792	778	345	1,452
23	2038	798	787	346	1,436
24	2039	805	795	346	1,449
25	2040	812	804	347	1,463
26	CAGR (2016-2040)	1.12%	1.44%	0.17%	0.80%

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NG-JNC -3 Figure 7 Data Units: MMcf/d

Column	Α	В	C Existing Pipeline Capacity	D With AIM, Atlantic Bridge	E With LNG Peakshaving
Line #	Year	LDC Firm Load	Serving LDC Load	and TGP CT Expansion	Capabilities
1	2016	5,001	3,460	3,874	4,974
2	2017	5,118	3,460	4,007	5,107
3	2018	5,237	3,460	4,007	5,107
4	2019	5,358	3,460	4,007	5,107
5	2020	5,486	3,460	4,007	5,107
6	2021	5,584	3,460	4,007	5,107
7	2022	5,656	3,460	4,007	5,107
8	2023	5,729	3,460	4,007	5,107
9	2024	5,798	3,460	4,007	5,107
10	2025	5,852	3,460	4,007	5,107
11	2026	5,901	3,460	4,007	5,107
12	2027	5,952	3,460	4,007	5,107
13	2028	6,003	3,460	4,007	5,107
14	2029	6,053	3,460	4,007	5,107
15	2030	6,094	3,460	4,007	5,107
16	2031	6,142	3,460	4,007	5,107
17	2032	6,190	3,460	4,007	5,107
18	2033	6,239	3,460	4,007	5,107
19	2034	6,287	3,460	4,007	5,107
20	2035	6,337	3,460	4,007	5,107
21	2036	6,387	3,460	4,007	5,107
22	2037	6,436	3,460	4,007	5,107
23	2038	6,486	3,460	4,007	5,107
24	2039	6,536	3,460	4,007	5,107
25	2040	6,587	3,460	4,007	5,107

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NG-JNC -3 Figure 10 Data Units: \$/MMBtu

Column	Α	В	C	D	E	F
44.75		on Service	100 No. 60 No.	Algonqu		
Line #	Month-Year	Historical	Base Case	With NED Only	With ANE Only	With Both NED and ANE
1	1/1/2008					
2	2/1/2008	v*				
3	3/1/2008					
4	4/1/2008					
5	5/1/2008					
6	6/1/2008					
7	7/1/2008					
8	8/1/2008					
9	9/1/2008	1				
10	10/1/2008					
11	11/1/2008					
12	12/1/2008					
13	1/1/2009					
14	2/1/2009					
15	3/1/2009					
16	4/1/2009					
17	5/1/2009	1				
18	6/1/2009					
19	7/1/2009					
20	8/1/2009	> 1				
21	9/1/2009					
22	10/1/2009					
23	11/1/2009					
24	12/1/2009					
25	1/1/2010					
26	2/1/2010					
27	3/1/2010					
28	4/1/2010					
29	5/1/2010					
30	6/1/2010					
31	7/1/2010					
32	8/1/2010	· ·				
33	9/1/2010					
34	10/1/2010					
35	11/1/2010					
36	12/1/2010					
37	1/1/2011					
38	2/1/2011					
39	3/1/2011					
40	4/1/2011					
41	5/1/2011					

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NG-JNC -3 Figure 10 Data Units: \$/MMBtu

Column	A	В	C	D	E	F
Line # Month-Year		Historical	Base Case	Algonqu With NED Only	With Both NED and ANE	
42	6/1/2011	nistorical	Base Case	With NED Only	With ANE Only	WITH BOTH NED and AIVE
43	7/1/2011					
44	8/1/2011					
45	9/1/2011					
46	10/1/2011					
47	11/1/2011					
48	12/1/2011					
49	1/1/2012					
50	2/1/2012					
51	3/1/2012					
52	4/1/2012					
53	5/1/2012					
54	6/1/2012					
55	7/1/2012					
56	8/1/2012					
57	9/1/2012					
58	10/1/2012					
59	11/1/2012					
60	12/1/2012					
61	1/1/2013					
62	2/1/2013					
63	3/1/2013					
64	4/1/2013					
65	5/1/2013					
66	6/1/2013					
67	7/1/2013					
68	8/1/2013					
69	9/1/2013					
70	10/1/2013					
71	11/1/2013					
72	12/1/2013					
73	1/1/2014					
74	2/1/2014					
75	3/1/2014					
76	4/1/2014					
77	5/1/2014					
78	6/1/2014					
79	7/1/2014					
80	8/1/2014					
81	9/1/2014					
82	10/1/2014					

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Column	Α	В	С	D	E	F
Line #	Month-Year	Historical	Base Case	Algonqu With NED Only	uin City-Gates Basis With ANE Only	With Both NED and ANE
83	11/1/2014					
84	12/1/2014					
85	1/1/2015					
86	2/1/2015					
87	3/1/2015					
88	4/1/2015					
89	5/1/2015					
90	6/1/2015					
91	7/1/2015					
92	8/1/2015					
93	9/1/2015					
94	10/1/2015					
95	11/1/2015					
96	12/1/2015					
97	1/1/2016		\$2.29	\$2.29	\$2.29	\$2.29
98	2/1/2016		\$2.65	\$2.65	\$2.65	\$2.65
99	3/1/2016		\$1.22	\$1.22	\$1.22	\$1.22
100	4/1/2016		\$0.14	\$0.14	\$0.14	\$0.14
101	5/1/2016		-\$0.01	-\$0.01	-\$0.01	-\$0.01
102	6/1/2016		-\$0.06	-\$0.06	-\$0.06	-\$0.06
103	7/1/2016		-\$0.06	-\$0.06	-\$0.06	-\$0.06
104	8/1/2016		-\$0.09	-\$0.09	-\$0.09	-\$0.09
105	9/1/2016		-\$0.04	-\$0.04	-\$0.04	-\$0.04
106	10/1/2016		-\$0.01	-\$0.01	-\$0.01	-\$0.01
107	11/1/2016		\$0.26	\$0.26	\$0.26	\$0.26
108	12/1/2016		\$0.85	\$0.85	\$0.85	\$0.85
109	1/1/2017		\$1.50	\$1.50	\$1.50	\$1.50
110	2/1/2017		\$1.72	\$1.72	\$1.72	\$1.72
111	3/1/2017		\$0.63	\$0.63	\$0.63	\$0.63
112	4/1/2017		\$0.16	\$0.16	\$0.16	\$0.16
113	5/1/2017		\$0.05	\$0.05	\$0.05	\$0.05
114	6/1/2017		-\$0.01	-\$0.01	-\$0.01	-\$0.01
115	7/1/2017		\$0.10	\$0.10	\$0.10	\$0.10
116	8/1/2017		\$0.08	\$0.08	\$0.08	\$0.08
117	9/1/2017		\$0.11	\$0.11	\$0.11	\$0.11
118	10/1/2017		\$0.15	\$0.15	\$0.15	\$0.15
119	11/1/2017		\$0.29	\$0.29	\$0.29	\$0.29
120	12/1/2017		\$1.00	\$1.00	\$1.00	\$1.00
121	1/1/2018		\$2.99	\$2.99	\$2.99	\$2.99
122	2/1/2018		\$2.75	\$2.75	\$2.75	\$2.75
123	3/1/2018		\$0.76	\$0.76	\$0.76	\$0.76

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Column	Α	В	С	D	E	F
				Algonquin City-Gates Basis		
Line #	Month-Year	Historical	Base Case	With NED Only	With ANE Only	With Both NED and ANE
124	4/1/2018		\$0.24	\$0.24	\$0.24	\$0.24
125	5/1/2018		\$0.16	\$0.16	\$0.16	\$0.16
126	6/1/2018		\$0.14	\$0.14	\$0.14	\$0.14
127	7/1/2018		\$0.13	\$0.13	\$0.13	\$0.13
128	8/1/2018		\$0.12	\$0.12	\$0.12	\$0.12
129	9/1/2018		\$0.13	\$0.13	\$0.13	\$0.13
130	10/1/2018		\$0.16	\$0.16	\$0.16	\$0.16
131	11/1/2018		\$0.54	\$0.28	\$0.35	\$0.28
132	12/1/2018		\$1.24	\$0.76	\$1.23	\$0.76
133	1/1/2019		\$3.04	\$1.26	\$3.04	\$1.26
134	2/1/2019		\$3.50	\$1.46	\$3.50	\$1.44
135	3/1/2019		\$0.89	\$0.50	\$0.79	\$0.50
136	4/1/2019		\$0.32	\$0.25	\$0.32	\$0.24
137	5/1/2019		\$0.19	\$0.11	\$0.18	\$0.11
138	6/1/2019		\$0.17	\$0.09	\$0.16	\$0.09
139	7/1/2019		\$0.15	\$0.06	\$0.15	\$0.06
140	8/1/2019		\$0.13	\$0.05	\$0.13	\$0.05
141	9/1/2019		\$0.15	\$0.08	\$0.14	\$0.07
142	10/1/2019		\$0.16	\$0.11	\$0.16	\$0.11
143	11/1/2019		\$0.52	\$0.28	\$0.35	\$0.25
144	12/1/2019		\$1.13	\$0.69	\$0.72	\$0.69
145	1/1/2020		\$3.44	\$1.08	\$1.80	\$1.09
146	2/1/2020		\$2.86	\$1.21	\$1.43	\$1.20
147	3/1/2020		\$0.76	\$0.48	\$0.57	\$0.46
148	4/1/2020		\$0.29	\$0.22	\$0.29	\$0.19
149	5/1/2020		\$0.14	\$0.09	\$0.12	\$0.05
150	6/1/2020		\$0.11	\$0.03	\$0.08	\$0.00
151	7/1/2020		\$0.12	\$0.06	\$0.12	\$0.05
152	8/1/2020		\$0.10	\$0.04	\$0.10	\$0.02
153	9/1/2020		\$0.13	\$0.06	\$0.10	\$0.03
154	10/1/2020		\$0.15	\$0.09	\$0.13	\$0.08
155	11/1/2020		\$0.53	\$0.30	\$0.36	\$0.26
156	12/1/2020		\$1.19	\$0.71	\$0.80	\$0.70
157	1/1/2021		\$3.94	\$1.23	\$1.52	\$1.12
158	2/1/2021		\$4.50	\$1.47	\$1.52	\$1.36
159	3/1/2021		\$0.88	\$0.50	\$0.62	\$0.50
160	4/1/2021		\$0.30	\$0.23	\$0.28	\$0.17
161	5/1/2021		\$0.15	\$0.10	\$0.12	\$0.04
162	6/1/2021		\$0.10	\$0.03	\$0.07	-\$0.01
163	7/1/2021		\$0.09	\$0.05	\$0.09	\$0.01
164	8/1/2021		\$0.08	\$0.04	\$0.07	\$0.00

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Column	Α	В	С	D	E	F	
					Algonquin City-Gates Basis		
Line #	Month-Year	Historical	Base Case	With NED Only	With ANE Only	With Both NED and ANE	
165	9/1/2021		\$0.11	\$0.06	\$0.09	\$0.01	
166	10/1/2021		\$0.16	\$0.09	\$0.12	\$0.04	
167	11/1/2021		\$0.44	\$0.28	\$0.35	\$0.24	
168	12/1/2021		\$1.08	\$0.68	\$0.75	\$0.66	
169	1/1/2022		\$4.56	\$1.47	\$1.24	\$1.07	
170	2/1/2022		\$4.98	\$1.63	\$1.25	\$1.28	
171	3/1/2022		\$0.90	\$0.51	\$0.58	\$0.51	
172	4/1/2022		\$0.30	\$0.24	\$0.26	\$0.16	
173	5/1/2022		\$0.14	\$0.11	\$0.14	\$0.05	
174	6/1/2022		\$0.11	\$0.05	\$0.10	\$0.00	
175	7/1/2022		\$0.10	\$0.07	\$0.09	\$0.02	
176	8/1/2022		\$0.08	\$0.04	\$0.07	-\$0.01	
177	9/1/2022		\$0.12	\$0.06	\$0.10	\$0.01	
178	10/1/2022		\$0.17	\$0.10	\$0.12	\$0.03	
179	11/1/2022		\$0.48	\$0.29	\$0.37	\$0.26	
180	12/1/2022		\$1.21	\$0.68	\$0.74	\$0.65	
181	1/1/2023		\$5.06	\$1.59	\$1.28	\$1.00	
182	2/1/2023		\$5.49	\$1.68	\$1.45	\$1.24	
183	3/1/2023		\$1.03	\$0.55	\$0.61	\$0.54	
184	4/1/2023		\$0.30	\$0.24	\$0.27	\$0.16	
185	5/1/2023		\$0.14	\$0.09	\$0.11	\$0.04	
186	6/1/2023		\$0.09	\$0.04	\$0.07	-\$0.01	
187	7/1/2023		\$0.10	\$0.05	\$0.04	-\$0.01	
188	8/1/2023		\$0.06	\$0.02	\$0.01	-\$0.05	
189	9/1/2023		\$0.09	\$0.05	\$0.07	\$0.00	
190	10/1/2023		\$0.18	\$0.09	\$0.13	\$0.02	
191	11/1/2023		\$0.47	\$0.27	\$0.42	\$0.25	
192	12/1/2023		\$1.41	\$0.59	\$0.65	\$0.58	
193	1/1/2024		\$5.27	\$1.72	\$1.43	\$1.00	
194	2/1/2024		\$4.67	\$1.41	\$1.28	\$1.09	
195	3/1/2024		\$1.07	\$0.54	\$0.59	\$0.49	
196	4/1/2024		\$0.32	\$0.24	\$0.28	\$0.17	
197	5/1/2024		\$0.13	\$0.08	\$0.08	\$0.03	
198	6/1/2024		\$0.07	\$0.01	\$0.03	-\$0.03	
199	7/1/2024		\$0.08	\$0.03	\$0.04	-\$0.05	
200	8/1/2024		\$0.05	-\$0.01	\$0.01	-\$0.07	
201	9/1/2024		\$0.09	\$0.02	\$0.04	-\$0.01	
202	10/1/2024		\$0.16	\$0.09	\$0.12	\$0.02	
203	11/1/2024		\$0.51	\$0.27	\$0.36	\$0.24	
204	12/1/2024		\$1.68	\$0.59	\$0.60	\$0.55	
205	1/1/2025		\$5.91	\$1.90	\$1.51	\$1.05	

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-38(a) Page 8 of 14

Column	Α	В	С	D	E	F		
				Algonqı	Algonquin City-Gates Basis			
Line #	Month-Year	Historical	Base Case	With NED Only	With ANE Only	With Both NED and ANE		
206	2/1/2025		\$6.17	\$1.83	\$1.88	\$1.20		
207	3/1/2025		\$1.11	\$0.54	\$0.57	\$0.52		
208	4/1/2025		\$0.33	\$0.22	\$0.28	\$0.16		
209	5/1/2025		\$0.10	\$0.07	\$0.05	\$0.00		
210	6/1/2025		\$0.04	\$0.00	\$0.03	-\$0.03		
211	7/1/2025		\$0.08	\$0.03	\$0.08	\$0.00		
212	8/1/2025		\$0.06	-\$0.01	\$0.04	-\$0.04		
213	9/1/2025		\$0.08	\$0.04	\$0.06	\$0.01		
214	10/1/2025		\$0.16	\$0.09	\$0.14	\$0.04		
215	11/1/2025		\$0.52	\$0.29	\$0.38	\$0.26		
216	12/1/2025		\$1.93	\$0.70	\$0.80	\$0.70		
217	1/1/2026		\$6.00	\$2.18	\$1.84	\$1.13		
218	2/1/2026		\$6.25	\$2.27	\$2.18	\$1.24		
219	3/1/2026		\$1.20	\$0.57	\$0.59	\$0.56		
220	4/1/2026		\$0.36	\$0.24	\$0.31	\$0.19		
221	5/1/2026		\$0.09	\$0.07	\$0.07	\$0.02		
222	6/1/2026		\$0.03	\$0.01	\$0.04	-\$0.04		
223	7/1/2026		\$0.05	-\$0.01	\$0.06	-\$0.03		
224	8/1/2026		\$0.02	-\$0.02	\$0.02	-\$0.06		
225	9/1/2026		\$0.05	\$0.02	\$0.06	-\$0.03		
226	10/1/2026		\$0.11	\$0.05	\$0.14	\$0.02		
227	11/1/2026		\$0.58	\$0.29	\$0.37	\$0.25		
228	12/1/2026		\$2.20	\$0.69	\$0.77	\$0.68		
229	1/1/2027		\$6.07	\$2.23	\$2.00	\$1.24		
230	2/1/2027		\$6.26	\$2.41	\$2.35	\$1.29		
231	3/1/2027		\$1.26	\$0.59	\$0.58	\$0.56		
232	4/1/2027		\$0.35	\$0.19	\$0.28	\$0.15		
233	5/1/2027		\$0.06	\$0.04	\$0.07	-\$0.02		
234	6/1/2027		-\$0.02	-\$0.02	\$0.00	-\$0.08		
235	7/1/2027		\$0.13	\$0.03	\$0.05	-\$0.03		
236	8/1/2027		\$0.10	-\$0.01	\$0.04	-\$0.05		
237	9/1/2027		\$0.15	\$0.08	\$0.10	\$0.05		
238	10/1/2027		\$0.20	\$0.13	\$0.14	\$0.07		
239	11/1/2027		\$0.70	\$0.34	\$0.45	\$0.31		
240	12/1/2027		\$2.45	\$0.73	\$0.89	\$0.72		
241	1/1/2028		\$6.21	\$2.70	\$2.36	\$1.58		
242	2/1/2028		\$6.20	\$2.14	\$2.13	\$1.30		
243	3/1/2028		\$1.37	\$0.65	\$0.68	\$0.56		
244	4/1/2028		\$0.41	\$0.25	\$0.28	\$0.16		
245	5/1/2028		\$0.13	\$0.08	\$0.05	\$0.03		
246	6/1/2028		\$0.05	-\$0.01	-\$0.02	-\$0.06		

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-38(a) Page 9 of 14

Column	Α	В	С	D	Е	F	
					Algonquin City-Gates Basis		
Line #	Month-Year	Historical	Base Case	With NED Only	With ANE Only	With Both NED and ANE	
247	7/1/2028		\$0.01	-\$0.03	-\$0.05	-\$0.07	
248	8/1/2028		-\$0.02	-\$0.07	-\$0.07	-\$0.11	
249	9/1/2028		\$0.06	\$0.03	\$0.00	-\$0.03	
250	10/1/2028		\$0.09	\$0.08	\$0.05	\$0.01	
251	11/1/2028		\$0.77	\$0.31	\$0.43	\$0.30	
252	12/1/2028		\$2.68	\$0.75	\$0.92	\$0.60	
253	1/1/2029		\$6.35	\$2.91	\$2.56	\$1.77	
254	2/1/2029		\$6.48	\$2.76	\$2.99	\$1.64	
255	3/1/2029		\$1.63	\$0.66	\$0.75	\$0.55	
256	4/1/2029		\$0.43	\$0.20	\$0.24	\$0.14	
257	5/1/2029		\$0.05	\$0.04	-\$0.01	-\$0.04	
258	6/1/2029		-\$0.06	-\$0.08	-\$0.10	-\$0.15	
259	7/1/2029		-\$0.13	-\$0.13	-\$0.16	-\$0.17	
260	8/1/2029		-\$0.18	-\$0.16	-\$0.20	-\$0.23	
261	9/1/2029		-\$0.04	-\$0.04	-\$0.08	-\$0.12	
262	10/1/2029		-\$0.01	-\$0.02	-\$0.04	-\$0.08	
263	11/1/2029		\$0.80	\$0.31	\$0.37	\$0.31	
264	12/1/2029		\$3.29	\$0.82	\$1.11	\$0.45	
265	1/1/2030		\$6.31	\$2.89	\$2.46	\$1.72	
266	2/1/2030		\$6.44	\$2.78	\$3.09	\$1.57	
267	3/1/2030		\$1.71	\$0.65	\$0.65	\$0.49	
268	4/1/2030		\$0.38	\$0.19	\$0.19	\$0.13	
269	5/1/2030		-\$0.05	-\$0.01	-\$0.10	-\$0.08	
270	6/1/2030		-\$0.26	-\$0.19	-\$0.33	-\$0.23	
271	7/1/2030		-\$0.35	-\$0.22	-\$0.39	-\$0.27	
272	8/1/2030		-\$0.39	-\$0.27	-\$0.44	-\$0.33	
273	9/1/2030		-\$0.25	-\$0.14	-\$0.30	-\$0.19	
274	10/1/2030		-\$0.20	-\$0.08	-\$0.26	-\$0.14	
275	11/1/2030		\$0.74	\$0.29	\$0.30	\$0.31	
276	12/1/2030		\$3.55	\$0.75	\$0.86	\$0.36	
277	1/1/2031		\$6.53	\$3.05	\$2.87	\$1.97	
278	2/1/2031		\$6.71	\$3.26	\$3.59	\$1.65	
279	3/1/2031		\$1.99	\$0.73	\$0.85	\$0.42	
280	4/1/2031		\$0.39	\$0.15	\$0.12	\$0.10	
281	5/1/2031		-\$0.21	-\$0.11	-\$0.24	-\$0.17	
282	6/1/2031		-\$0.58	-\$0.29	-\$0.64	-\$0.33	
283	7/1/2031		-\$0.67	-\$0.35	-\$0.73	-\$0.41	
284	8/1/2031		-\$0.72	-\$0.38	-\$0.76	-\$0.44	
285	9/1/2031		-\$0.59	-\$0.25	-\$0.64	-\$0.29	
286	10/1/2031		-\$0.54	-\$0.19	-\$0.60	-\$0.26	
287	11/1/2031		\$0.79	\$0.32	\$0.23	\$0.32	

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-38(a) Page 10 of 14

Line # Month-Year Historical Base Case With NED Only With ANE Only With Both NED and ANE 288 12/1/2031 \$3.84 \$0.89 \$1.15 \$0.30 289 1/1/2032 \$6.72 \$3.36 \$3.44 \$2.30 290 2/1/2032 \$6.56 \$3.05 \$2.70 \$1.50 291 3/1/2032 \$2.38 \$0.84 \$0.83 \$0.39 292 4/1/2032 \$0.33 \$0.14 \$0.08 \$0.09 293 5/1/2032 \$0.38 \$0.14 \$0.08 \$0.09 293 5/1/2032 \$0.38 \$0.16 \$0.37 \$0.21 294 6/1/2032 \$0.79 \$0.40 \$0.83 \$0.47 295 7/1/2032 \$0.89 \$0.42 \$0.92 \$0.51 296 8/1/2032 \$0.93 \$0.51 \$0.96 \$0.59 297 9/1/2032 \$0.07 \$0.36 \$0.82 \$0.44 298 10/1/2032 \$0.83 <th>Column</th> <th>Α</th> <th>В</th> <th>С</th> <th colspan="2">D E F</th> <th>F</th>	Column	Α	В	С	D E F		F
288 12/1/2031 \$3.84 \$0.89 \$1.15 \$0.30 289 1/1/2032 \$6.72 \$3.36 \$3.44 \$2.30 290 2/1/2032 \$6.56 \$3.05 \$2.70 \$1.50 291 3/1/2032 \$2.38 \$0.84 \$0.83 \$0.39 292 4/1/2032 \$0.33 \$0.14 \$0.08 \$0.09 293 5/1/2032 -\$0.38 -\$0.16 -\$0.37 -\$0.21 294 6/1/2032 -\$0.79 -\$0.40 -\$0.83 -\$0.47 295 7/1/2032 -\$0.89 -\$0.42 -\$0.92 -\$0.51 296 8/1/2032 -\$0.93 -\$0.51 -\$0.96 -\$0.59 297 9/1/2032 -\$0.79 -\$0.36 -\$0.82 -\$0.44 298 10/1/2032 -\$0.74 -\$0.33 -\$0.77 -\$0.39 299 11/1/2032 \$0.83 \$0.45 \$0.17 \$0.30 300 12/1/2032 \$4.57 \$0.99 \$1.31<					Algonqı	uin City-Gates Basis	
289 1/1/2032 \$6.72 \$3.36 \$3.44 \$2.30 290 2/1/2032 \$6.56 \$3.05 \$2.70 \$1.50 291 3/1/2032 \$2.38 \$0.84 \$0.83 \$0.39 292 4/1/2032 \$0.33 \$0.14 \$0.08 \$0.09 293 5/1/2032 -\$0.38 -\$0.16 -\$0.37 -\$0.21 294 6/1/2032 -\$0.79 -\$0.40 -\$0.83 -\$0.47 295 7/1/2032 -\$0.89 -\$0.42 -\$0.92 -\$0.51 296 8/1/2032 -\$0.93 -\$0.51 -\$0.96 -\$0.59 297 9/1/2032 -\$0.79 -\$0.36 -\$0.82 -\$0.44 298 10/1/2032 -\$0.74 -\$0.33 -\$0.77 -\$0.39 299 11/1/2032 \$0.83 \$0.45 \$0.17 \$0.30 300 12/1/2032 \$4.57 \$0.99 \$1.31 \$0.35	Line #	Month-Year	Historical	Base Case	With NED Only	With ANE Only	With Both NED and ANE
290 2/1/2032 \$6.56 \$3.05 \$2.70 \$1.50 291 3/1/2032 \$2.38 \$0.84 \$0.83 \$0.39 292 4/1/2032 \$0.33 \$0.14 \$0.08 \$0.09 293 5/1/2032 -\$0.38 -\$0.16 -\$0.37 -\$0.21 294 6/1/2032 -\$0.79 -\$0.40 -\$0.83 -\$0.47 295 7/1/2032 -\$0.89 -\$0.42 -\$0.92 -\$0.51 296 8/1/2032 -\$0.93 -\$0.51 -\$0.96 -\$0.59 297 9/1/2032 -\$0.79 -\$0.36 -\$0.82 -\$0.44 298 10/1/2032 -\$0.74 -\$0.33 -\$0.77 -\$0.39 299 11/1/2032 \$0.83 \$0.45 \$0.17 \$0.30 300 12/1/2032 \$4.57 \$0.99 \$1.31 \$0.35	288	12/1/2031		\$3.84	\$0.89	\$1.15	\$0.30
291 3/1/2032 \$2.38 \$0.84 \$0.83 \$0.39 292 4/1/2032 \$0.33 \$0.14 \$0.08 \$0.09 293 5/1/2032 -\$0.38 -\$0.16 -\$0.37 -\$0.21 294 6/1/2032 -\$0.79 -\$0.40 -\$0.83 -\$0.47 295 7/1/2032 -\$0.89 -\$0.42 -\$0.92 -\$0.51 296 8/1/2032 -\$0.93 -\$0.51 -\$0.96 -\$0.59 297 9/1/2032 -\$0.79 -\$0.36 -\$0.82 -\$0.44 298 10/1/2032 -\$0.74 -\$0.33 -\$0.77 -\$0.39 299 11/1/2032 \$0.83 \$0.45 \$0.17 \$0.30 300 12/1/2032 \$4.57 \$0.99 \$1.31 \$0.35	289	1/1/2032		\$6.72	\$3.36	\$3.44	\$2.30
292 4/1/2032 \$0.33 \$0.14 \$0.08 \$0.09 293 5/1/2032 -\$0.38 -\$0.16 -\$0.37 -\$0.21 294 6/1/2032 -\$0.79 -\$0.40 -\$0.83 -\$0.47 295 7/1/2032 -\$0.89 -\$0.42 -\$0.92 -\$0.51 296 8/1/2032 -\$0.93 -\$0.51 -\$0.96 -\$0.59 297 9/1/2032 -\$0.79 -\$0.36 -\$0.82 -\$0.44 298 10/1/2032 -\$0.74 -\$0.33 -\$0.77 -\$0.39 299 11/1/2032 \$0.83 \$0.45 \$0.17 \$0.30 300 12/1/2032 \$4.57 \$0.99 \$1.31 \$0.35	290	2/1/2032		\$6.56	\$3.05	\$2.70	\$1.50
293 5/1/2032 -\$0.38 -\$0.16 -\$0.37 -\$0.21 294 6/1/2032 -\$0.79 -\$0.40 -\$0.83 -\$0.47 295 7/1/2032 -\$0.89 -\$0.42 -\$0.92 -\$0.51 296 8/1/2032 -\$0.93 -\$0.51 -\$0.96 -\$0.59 297 9/1/2032 -\$0.79 -\$0.36 -\$0.82 -\$0.44 298 10/1/2032 -\$0.74 -\$0.33 -\$0.77 -\$0.39 299 11/1/2032 \$0.83 \$0.45 \$0.17 \$0.30 300 12/1/2032 \$4.57 \$0.99 \$1.31 \$0.35	291	3/1/2032		\$2.38	\$0.84	\$0.83	\$0.39
294 6/1/2032 -\$0.79 -\$0.40 -\$0.83 -\$0.47 295 7/1/2032 -\$0.89 -\$0.42 -\$0.92 -\$0.51 296 8/1/2032 -\$0.93 -\$0.51 -\$0.96 -\$0.59 297 9/1/2032 -\$0.79 -\$0.36 -\$0.82 -\$0.44 298 10/1/2032 -\$0.74 -\$0.33 -\$0.77 -\$0.39 299 11/1/2032 \$0.83 \$0.45 \$0.17 \$0.30 300 12/1/2032 \$4.57 \$0.99 \$1.31 \$0.35	292	4/1/2032		\$0.33	\$0.14	\$0.08	\$0.09
295 7/1/2032 -\$0.89 -\$0.42 -\$0.92 -\$0.51 296 8/1/2032 -\$0.93 -\$0.51 -\$0.96 -\$0.59 297 9/1/2032 -\$0.79 -\$0.36 -\$0.82 -\$0.44 298 10/1/2032 -\$0.74 -\$0.33 -\$0.77 -\$0.39 299 11/1/2032 \$0.83 \$0.45 \$0.17 \$0.30 300 12/1/2032 \$4.57 \$0.99 \$1.31 \$0.35	293	5/1/2032		-\$0.38	-\$0.16	-\$0.37	-\$0.21
296 8/1/2032 -\$0.93 -\$0.51 -\$0.96 -\$0.59 297 9/1/2032 -\$0.79 -\$0.36 -\$0.82 -\$0.44 298 10/1/2032 -\$0.74 -\$0.33 -\$0.77 -\$0.39 299 11/1/2032 \$0.83 \$0.45 \$0.17 \$0.30 300 12/1/2032 \$4.57 \$0.99 \$1.31 \$0.35	294	6/1/2032		-\$0.79	-\$0.40	-\$0.83	-\$0.47
297 9/1/2032 -\$0.79 -\$0.36 -\$0.82 -\$0.44 298 10/1/2032 -\$0.74 -\$0.33 -\$0.77 -\$0.39 299 11/1/2032 \$0.83 \$0.45 \$0.17 \$0.30 300 12/1/2032 \$4.57 \$0.99 \$1.31 \$0.35	295	7/1/2032		-\$0.89	-\$0.42	-\$0.92	-\$0.51
298 10/1/2032 -\$0.74 -\$0.33 -\$0.77 -\$0.39 299 11/1/2032 \$0.83 \$0.45 \$0.17 \$0.30 300 12/1/2032 \$4.57 \$0.99 \$1.31 \$0.35	296	8/1/2032		-\$0.93	-\$0.51	-\$0.96	-\$0.59
299 11/1/2032 \$0.83 \$0.45 \$0.17 \$0.30 300 12/1/2032 \$4.57 \$0.99 \$1.31 \$0.35	297	9/1/2032		-\$0.79	-\$0.36	-\$0.82	-\$0.44
300 12/1/2032 \$4.57 \$0.99 \$1.31 \$0.35	298	10/1/2032		-\$0.74	-\$0.33	-\$0.77	-\$0.39
	299	11/1/2032		\$0.83	\$0.45	\$0.17	\$0.30
301 1/1/2033 \$6.99 \$3.42 \$3.79 \$2.57	300	12/1/2032		\$4.57	\$0.99	\$1.31	\$0.35
	301	1/1/2033		\$6.99	\$3.42	\$3.79	\$2.57
302 2/1/2033 \$7.23 \$4.29 \$4.69 \$2.30	302	2/1/2033		\$7.23	\$4.29	\$4.69	\$2.30
303 3/1/2033 \$2.57 \$0.99 \$0.85 \$0.43	303	3/1/2033		\$2.57	\$0.99	\$0.85	\$0.43
304 4/1/2033 \$0.24 \$0.08 -\$0.12 \$0.05	304	4/1/2033		\$0.24	\$0.08	-\$0.12	\$0.05
305 5/1/2033 -\$0.72 -\$0.35 -\$0.72 -\$0.41	305	5/1/2033		-\$0.72	-\$0.35	-\$0.72	-\$0.41
306 6/1/2033 -\$1.19 -\$0.74 -\$1.25 -\$0.79	306	6/1/2033		-\$1.19	-\$0.74	-\$1.25	-\$0.79
307 7/1/2033 -\$1.28 -\$0.79 -\$1.35 -\$0.83	307	7/1/2033		-\$1.28	-\$0.79	-\$1.35	-\$0.83
308 8/1/2033 -\$1.32 -\$0.89 -\$1.37 -\$0.92	308	8/1/2033		-\$1.32	-\$0.89	-\$1.37	-\$0.92
309 9/1/2033 -\$1.18 -\$0.72 -\$1.21 -\$0.76	309	9/1/2033		-\$1.18	-\$0.72	-\$1.21	-\$0.76
310 10/1/2033 -\$1.10 -\$0.69 -\$1.16 -\$0.71	310	10/1/2033		-\$1.10	-\$0.69	-\$1.16	-\$0.71
311 11/1/2033 \$0.83 \$0.44 -\$0.01 \$0.18	311	11/1/2033		\$0.83	\$0.44	-\$0.01	\$0.18
312 12/1/2033 \$5.02 \$1.22 \$1.18 \$0.54	312	12/1/2033		\$5.02	\$1.22	\$1.18	\$0.54
313 1/1/2034 \$7.25 \$3.95 \$4.58 \$2.78	313	1/1/2034		\$7.25	\$3.95	\$4.58	\$2.78
314 2/1/2034 \$7.55 \$4.89 \$4.74 \$2.80	314	2/1/2034		\$7.55	\$4.89	\$4.74	\$2.80
315 3/1/2034 \$2.73 \$1.25 \$0.84 \$0.41	315	3/1/2034		\$2.73	\$1.25	\$0.84	\$0.41
316 4/1/2034 \$0.01 -\$0.10 -\$0.40 -\$0.15	316	4/1/2034		\$0.01	-\$0.10	-\$0.40	-\$0.15
317 5/1/2034 -\$1.07 -\$0.71 -\$1.09 -\$0.78	317	5/1/2034		-\$1.07	-\$0.71	-\$1.09	-\$0.78
318 6/1/2034 -\$1.53 -\$1.05 -\$1.55 -\$1.14	318	6/1/2034		-\$1.53	-\$1.05	-\$1.55	-\$1.14
319 7/1/2034 -\$1.62 -\$1.09 -\$1.67 -\$1.17	319	7/1/2034		-\$1.62	-\$1.09	-\$1.67	-\$1.17
320 8/1/2034 -\$1.67 -\$1.20 -\$1.69 -\$1.24	320	8/1/2034		-\$1.67	-\$1.20	-\$1.69	-\$1.24
321 9/1/2034 -\$1.49 -\$1.02 -\$1.50 -\$1.09	321	9/1/2034		-\$1.49	-\$1.02	-\$1.50	-\$1.09
322 10/1/2034 -\$1.38 -\$1.00 -\$1.43 -\$1.04	322	10/1/2034		-\$1.38	-\$1.00	-\$1.43	-\$1.04
323 11/1/2034 \$0.80 \$0.41 -\$0.11 \$0.11	323			\$0.80	\$0.41	-\$0.11	\$0.11
324 12/1/2034 \$5.46 \$1.54 \$1.14 \$0.81	324	12/1/2034		\$5.46	\$1.54	\$1.14	\$0.81
325 1/1/2035 \$8.22 \$5.22 \$5.30 \$3.35	325	1/1/2035		\$8.22	\$5.22	\$5.30	\$3.35
326 2/1/2035 \$8.67 \$5.57 \$6.31 \$3.30	326	2/1/2035			\$5.57	\$6.31	\$3.30
327 3/1/2035 \$3.01 \$1.48 \$1.03 \$0.54	327	3/1/2035		\$3.01	\$1.48	\$1.03	\$0.54
328 4/1/2035 -\$0.04 -\$0.05 -\$0.44 -\$0.14	328	4/1/2035		-\$0.04	-\$0.05	-\$0.44	-\$0.14

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-38(a) Page 11 of 14

Column	Α	В	С	D	Е	F	
				Algonquin City-Gates Basis			
Line #	Month-Year	Historical	Base Case	With NED Only	With ANE Only	With Both NED and ANE	
329	5/1/2035		-\$1.23	-\$0.80	-\$1.26	-\$0.85	
330	6/1/2035		-\$1.71	-\$1.20	-\$1.73	-\$1.25	
331	7/1/2035		-\$1.79	-\$1.24	-\$1.83	-\$1.28	
332	8/1/2035		-\$1.85	-\$1.33	-\$1.88	-\$1.35	
333	9/1/2035		-\$1.66	-\$1.16	-\$1.67	-\$1.20	
334	10/1/2035		-\$1.52	-\$1.13	-\$1.61	-\$1.14	
335	11/1/2035		\$0.97	\$0.52	-\$0.17	\$0.10	
336	12/1/2035		\$5.27	\$1.89	\$1.44	\$0.97	
337	1/1/2036		\$9.75	\$6.77	\$5.75	\$4.43	
338	2/1/2036		\$8.04	\$5.41	\$5.97	\$3.14	
339	3/1/2036		\$3.48	\$1.77	\$1.04	\$0.63	
340	4/1/2036		-\$0.19	-\$0.13	-\$0.64	-\$0.19	
341	5/1/2036		-\$1.55	-\$1.09	-\$1.57	-\$1.13	
342	6/1/2036		-\$2.04	-\$1.49	-\$2.08	-\$1.55	
343	7/1/2036		-\$2.10	-\$1.56	-\$2.18	-\$1.60	
344	8/1/2036		-\$2.16	-\$1.63	-\$2.22	-\$1.65	
345	9/1/2036		-\$1.98	-\$1.44	-\$2.00	-\$1.48	
346	10/1/2036		-\$1.82	-\$1.40	-\$1.94	-\$1.43	
347	11/1/2036		\$0.94	\$0.48	-\$0.34	-\$0.08	
348	12/1/2036		\$5.26	\$2.21	\$1.45	\$1.16	
349	1/1/2037		\$10.10	\$8.32	\$6.05	\$5.62	
350	2/1/2037		\$9.92	\$8.10	\$7.31	\$5.72	
351	3/1/2037		\$3.80	\$2.06	\$1.11	\$0.66	
352	4/1/2037		-\$0.14	-\$0.03	-\$0.67	-\$0.15	
353	5/1/2037		-\$1.70	-\$1.09	-\$1.67	-\$1.14	
354	6/1/2037		-\$2.27	-\$1.66	-\$2.31	-\$1.70	
355	7/1/2037		-\$2.29	-\$1.82	-\$2.39	-\$1.82	
356	8/1/2037		-\$2.40	-\$1.83	-\$2.47	-\$1.84	
357	9/1/2037		-\$2.19	-\$1.60	-\$2.20	-\$1.62	
358	10/1/2037		-\$2.02	-\$1.51	-\$2.11	-\$1.49	
359	11/1/2037		\$0.89	\$0.49	-\$0.50	-\$0.10	
360	12/1/2037		\$5.21	\$2.26	\$1.71	\$1.34	
361	1/1/2038		\$10.23	\$8.31	\$6.24	\$5.86	
362	2/1/2038		\$10.29	\$8.24	\$7.58	\$6.00	
363	3/1/2038		\$4.04	\$2.47	\$1.11	\$0.63	
364	4/1/2038		-\$0.30	-\$0.17	-\$0.90	-\$0.28	
365	5/1/2038		-\$2.02	-\$1.37	-\$1.92	-\$1.34	
366	6/1/2038		-\$2.60	-\$1.93	-\$2.62	-\$2.00	
367	7/1/2038		-\$2.63	-\$2.08	-\$2.70	-\$2.12	
368	8/1/2038		-\$2.72	-\$2.09	-\$2.77	-\$2.14	
369	9/1/2038		-\$2.49	-\$1.86	-\$2.51	-\$1.91	

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-38(a) Page 12 of 14

Column	Α	В	С	D	E	F		
				Algonquin City-Gates Basis				
Line #	Month-Year	Historical	Base Case	With NED Only	With ANE Only	With Both NED and ANE		
370	10/1/2038		-\$2.32	-\$1.80	-\$2.42	-\$1.80		
371	11/1/2038		\$0.78	\$0.39	-\$0.75	-\$0.22		
372	12/1/2038		\$5.16	\$2.56	\$1.51	\$1.39		

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-38(a) Page 13 of 14

NG-JNC -3 Figure 11 Data Units: Nominal \$/MWh

Column	Α	В	С	D	F	G	Н	I
			Whole Sale New En	gland Electric Price (Nominal\$/MWh)	Price Diffe	erential to Base Ca	se (Nominal\$/MWh)
Line #	Year	Base Case	With NED Only	With ANE Only	With Both NED and ANE	With NED Only	With ANE Only	With Both NED and ANE
1	2019	\$44.74	\$41.22	\$44.18	\$41.47	-\$3.52	-\$0.55	-\$3.26
2	2020	\$46.86	\$43.28	\$44.50	\$43.30	-\$3.58	-\$2.36	-\$3.56
3	2021	\$50.18	\$44.45	\$45.33	\$44.35	-\$5.73	-\$4.85	-\$5.83
4	2022	\$53.82	\$45.39	\$45.68	\$44.71	-\$8.43	-\$8.13	-\$9.11
5	2023	\$59.55	\$50.14	\$50.54	\$49.31	-\$9.41	-\$9.01	-\$10.24
6	2024	\$65.08	\$55.18	\$55.81	\$54.40	-\$9.90	-\$9.27	-\$10.68
7	2025	\$71.34	\$59.57	\$60.36	\$58.57	-\$11.77	-\$10.97	-\$12.77
8	2026	\$78.41	\$66.36	\$67.31	\$65.00	-\$12.05	-\$11.10	-\$13.41
9	2027	\$84.29	\$70.51	\$71.54	\$69.10	-\$13.78	-\$12.75	-\$15.19
10	2028	\$86.48	\$73.38	\$74.46	\$71.89	-\$13.10	-\$12.02	-\$14.59
11	2029	\$94.04	\$80.00	\$81.59	\$77.94	-\$14.04	-\$12.45	-\$16.10
12	2030	\$97.20	\$82.70	\$83.70	\$80.50	-\$14.51	-\$13.51	-\$16.70
13	2031	\$103.27	\$89.40	\$90.76	\$86.97	-\$13.87	-\$12.51	-\$16.29
14	2032	\$105.83	\$91.07	\$91.61	\$87.57	-\$14.76	-\$14.23	-\$18.26
15	2033	\$109.95	\$95.08	\$96.43	\$91.55	-\$14.87	-\$13.52	-\$18.40
16	2034	\$110.46	\$94.96	\$96.22	\$90.90	-\$15.50	-\$14.24	-\$19.56
17	2035	\$118.62	\$103.09	\$105.56	\$98.22	-\$15.53	-\$13.07	-\$20.40
18	2036	\$121.00	\$107.35	\$108.03	\$101.40	-\$13.65	-\$12.97	-\$19.60
19	2037	\$127.92	\$114.17	\$113.76	\$108.68	-\$13.75	-\$14.16	-\$19.24
20	2038	\$137.66	\$124.16	\$122.41	\$118.24	-\$13.49	-\$15.25	-\$19.41

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-38(a) Page 14 of 14

NG-JNC -3 Page 29 Table Data

Column		В	С	D	E	F	G	Н
Line #	Total Project	Cost-Benefits	Summary 20 Levelized)19-2038 (\$ Bil	1	Discount I resent Val		
		Annual	Annual	Annual Net	Total	Total		Benefit to
	Project	Benefits	Costs	Benefits	Benefits	Costs	Net Benefits	Cost Ratio
1	With NED Only			1.5			21.8	5.1
2	With ANE Only			1.3			18.6	3.7
3	With Both NED and ANE			1.4			20.7	2.7
4								
5	Massachusett	ts Cost-Benefit	s Summary 2	019-2038 (\$ B	illions) - Lowe	r Discount	Rate (2.54%)	
6			Levelized		P	resent Val	ue	
		Annual	Annual	Annual Net	Total	Total		Benefit to
7	Project	Benefits	Costs	Benefits	Benefits	Costs	Net Benefits	Cost Ratio
8	With NED Only			0.7			10.2	5.4
9	With ANE Only			0.6			8.7	3.9
10	With Both NED and ANE			0.7			9.9	2.9

Massachusetts Electric Company
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Responses to the Attorney General's First Set of Information Requests
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<u>Information Request AG-1-39</u>

Request:

Refer to Exhibit NG-AEL-1, page 7, lines 12-16. What is the bill impact if only the NED project is approved?

Response:

As shown in Exhibit NG-AEL-4 at 1 in D.P.U. 16-07, the illustrative monthly bill impact for a 600 kWh Mass. Electric residential Basic Service customer is a levelized bill reduction of \$6.77, or 5.7%, assuming that only the NED contract is approved.

Massachusetts Electric Company
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<u>Information Request AG-1-40</u>

Request:

Please provide a copy of all analyses and studies evaluating the availability of firm gas supplies at the following Algonquin direct interconnections:

- a. Millennium Pipeline at Ramapo, NY;
- b. Tennessee at Mahwah, NJ; and
- c. Iroquois at Brookfield, CT.

Response:

Black & Veatch believes that there will be sufficient firm gas supplies at the Algonquin direct interconnects with Millennium Pipeline at Ramapo, Tennessee Pipeline at Mahwah, and Iroquois Pipeline at Brookfield based on the information provided in the RFP response. The Algonquin ANE Project Proposal, on pg C-7, states that by the proposed in-service date there will be 2,107,000 Dth/d of upstream supply available at Mahwah and Ramapo, with potential for incremental gas supplies at Brookfield. The ANE project is also offering secondary access to existing pipelines like Texas Eastern, Columbia Gas, and Transcontinental, and future interconnects with Penn East which total another 2,900,000 Dth/d. Black & Veatch did not perform any further analyses or studies evaluating the availability of firm gas supplies at the Algonquin direct interconnects stated above.

Massachusetts Electric Company
Nantucket Electric Company
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April 25, 2016
Exhibit AG-1-41
Page 1 of 1

<u>Information Request AG-1-41</u>

Request:

Please provide the daily volumes and applicable monthly and daily index prices for each location referenced in AG 1-40 for the periods November 1, 2013 – March 31, 2014; November 1, 2014 – March 31, 2015; and November 1, 2015 – March 31, 2016.

Response:

In Attachment AG-1-41(a), Black & Veatch has provided the daily volumes of gas that is flowing at each location referenced in the Company's response to Information Request AG-1-40 for the winter periods stated above. It is Black & Veatch's understanding that the current gas pricing for Mahwah and Ramapo are based on the Texas Eastern, M-3 price, and Brookfield is based on the Iroquois, Zone 2 price. These daily index prices and traded volumes are provided in Attachment AG-1-41(b) (HIGHLY SENSITIVE CONFIDENTIAL INFORMATION) and the monthly index prices and traded volumes are provided in Attachment AG-1-41(c) (HIGHLY SENSITIVE CONFIDENTIAL INFORMATION). Please note that the Platts volumes only account for physical fixed price transactions reported at each location and therefore do not represent all traded volume. There are also volumes that are executed at the Index Price that are excluded from this volume data provided by Platts since all companies are not required to report all fixed or Index price transactions. The daily flow volumes in Attachment AG-1-41(a) provide an indication of the historical volumes at the referenced locations. In the future, additional individual price assessments may develop at Mahwah and Ramapo, if sufficient trading develops at each location.

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-41 (a) Page 1 of 13

Column	Α	В			
Line #	Tab	Description			
1	November 2013 - March 2014	Daily gas volumes flowing into Algonquin from November 1, 2013 to March 21, 2014 at locations: a) Mahwah, NJ b) Ramapo, NY c) Brookfield, CT			
2	November 2014 - March 2015	Daily gas volumes flowing into Algonquin from November 1, 2014 to March 21, 2016 at locations: a) Mahwah, NJ b) Ramapo, NY c) Brookfield, CT			
3	November 2015 - March 2016	Daily gas volumes flowing into Algonquin from November 1, 2015 to March 21, 2016 at locations: a) Mahwah, NJ b) Ramapo, NY c) Brookfield, CT			

- 4 Daily gas volumes were obtained from the Electronic Bulletin Board from each Pipeline
- a) Mahwah, NJ Volumes receipt at Algonquin from Tennessee Gas Pipeline
- 6 b) Ramapo, NY Volumes receipt at Algonquin from Millennium Pipeline
- 7 c) Brookfield, CT Volumes delivered from Iroquois Gas Transmission into Algonquin

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-41(a) Page 2 of 13

Column	A	В	С	D	
			ly Volumes (MI	Mcf)	
Line #	Date	Mahwah, NJ	Ramapo, NY	Brookfield, CT	
1	11/1/2013	934	1,108	2	
2	11/2/2013	951	1,103	36	
3	11/3/2013	928	1,164	53	
4	11/4/2013	820	549	60	
5	11/5/2013	785	559	45	
6	11/6/2013	809	541	29	
7	11/7/2013	846	538	25	
8	11/8/2013	822	602	45	
9	11/9/2013	819	604	29	
10	11/10/2013	825	574	44	
11	11/11/2013	824	618	61	
12	11/12/2013	822	594	26	
13	11/13/2013	851	557	44	
14	11/14/2013	875	207	61	
15	11/15/2013	868	289	28	
16	11/16/2013	864	241	3	
17	11/17/2013	867	198	3	
18	11/18/2013	858	251	3	
19	11/19/2013	835	264	34	
20	11/20/2013	827	320	40	
21	11/21/2013	826	430	27	
22	11/22/2013	828	549	22	
23	11/23/2013	836	541	50	
24	11/24/2013	827	498	43	
25	11/25/2013	822	519	46	
26	11/26/2013	837	509	24	
27	11/27/2013	883	480	28	
28	11/28/2013	830	535	52	
29	11/29/2013	829	527	52	
30	11/30/2013	828	527	51	
31	12/1/2013	863	514	49	
32	12/2/2013	857	513	27	
33	12/3/2013	861	539	31	
34	12/4/2013	867	585	23	
35	12/5/2013	872	573	15	
36	12/6/2013	863	64	19	
37	12/7/2013	839	281	55	
38	12/8/2013	833	516	56	
39	12/9/2013	833	496	35	

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-41(a) Page 3 of 13

Column	Α	В	С	D
		Dai	ly Volumes (MI	Mcf)
Line #	Date	Mahwah, NJ	Ramapo, NY	Brookfield, CT
40	12/10/2013	817	577	52
41	12/11/2013	817	565	78
42	12/12/2013	806	549	69
43	12/13/2013	817	550	69
44	12/14/2013	820	500	68
45	12/15/2013	815	494	68
46	12/16/2013	806	524	71
47	12/17/2013	810	521	71
48	12/18/2013	818	546	70
49	12/19/2013	833	580	63
50	12/20/2013	864	546	31
51	12/21/2013	877	487	35
52	12/22/2013	855	492	35
53	12/23/2013	865	508	42
54	12/24/2013	830	535	43
55	12/25/2013	849	572	52
56	12/26/2013	845	561	64
57	12/27/2013	851	561	54
58	12/28/2013	861	572	39
59	12/29/2013	854	554	33
60	12/30/2013	851	584	53
61	12/31/2013	843	554	53
62	1/1/2014	830	552	41
63	1/2/2014	812	541	43
64	1/3/2014	835	528	58
65	1/4/2014	835	559	57
66	1/5/2014	863	554	48
67	1/6/2014	838	540	47
68	1/7/2014	851	495	102
69	1/8/2014	832	531	71
70	1/9/2014	828	564	67
71	1/10/2014	862	551	58
72	1/11/2014	862	542	36
73	1/12/2014	864	548	45
74	1/13/2014	881	541	28
75	1/14/2014	896	603	35
76	1/15/2014	895	615	47
77	1/16/2014	888	652	59

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-41(a) Page 4 of 13

Column	Α	В	С	D
		Dai	ly Volumes (MI	Mcf)
Line #	Date	Mahwah, NJ	Ramapo, NY	Brookfield, CT
78	1/17/2014	883	645	56
79	1/18/2014	888	544	64
80	1/19/2014	882	539	67
81	1/20/2014	849	547	51
82	1/21/2014	851	609	80
83	1/22/2014	818	640	123
84	1/23/2014	837	636	66
85	1/24/2014	855	595	145
86	1/25/2014	842	566	78
87	1/26/2014	849	582	88
88	1/27/2014	835	581	120
89	1/28/2014	836	583	117
90	1/29/2014	797	631	112
91	1/30/2014	835	646	65
92	1/31/2014	859	569	64
93	2/1/2014	868	634	47
94	2/2/2014	867	633	77
95	2/3/2014	848	630	57
96	2/4/2014	858	617	66
97	2/5/2014	869	553	65
98	2/6/2014	843	553	56
99	2/7/2014	835	555	56
100	2/8/2014	845	562	56
101	2/9/2014	837	563	56
102	2/10/2014	823	563	49
103	2/11/2014	848	595	41
104	2/12/2014	854	559	56
105	2/13/2014	858	539	54
106	2/14/2014	852	545	54
107	2/15/2014	845	543	55
108	2/16/2014	842	546	40
109	2/17/2014	836	546	55
110	2/18/2014	843	597	44
111	2/19/2014	863	598	39
112	2/20/2014	879	606	41
113	2/21/2014	883	631	30
114	2/22/2014	879	585	46
115	2/23/2014	879	602	46

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-41(a) Page 5 of 13

Column	А	В	С	D
		Dai	ly Volumes (MI	Mcf)
Line #	Date	Mahwah, NJ	Ramapo, NY	Brookfield, CT
116	2/24/2014	826	548	55
117	2/25/2014	815	532	66
118	2/26/2014	815	543	62
119	2/27/2014	820	538	58
120	2/28/2014	809	542	43
121	3/1/2014	825	506	20
122	3/2/2014	824	507	18
123	3/3/2014	828	535	28
124	3/4/2014	810	540	36
125	3/5/2014	826	527	51
126	3/6/2014	818	535	55
127	3/7/2014	843	536	40
128	3/8/2014	889	0	44
129	3/9/2014	887	0	46
130	3/10/2014	890	204	46
131	3/11/2014	893	541	50
132	3/12/2014	886	624	38
133	3/13/2014	831	619	34
134	3/14/2014	866	619	28
135	3/15/2014	871	590	50
136	3/16/2014	872	578	44
137	3/17/2014	841	615	55
138	3/18/2014	863	624	45
139	3/19/2014	880	630	57
140	3/20/2014	905	616	64
141	3/21/2014	893	616	54
142	3/22/2014	860	560	67
143	3/23/2014	888	624	54
144	3/24/2014	836	614	38
145	3/25/2014	866	624	53
146	3/26/2014	871	614	59
147	3/27/2014	887	614	49
148	3/28/2014	893	625	18
149	3/29/2014	906	606	42
150	3/30/2014	906	633	36
151	3/31/2014	891	634	39

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-41(a) Page 6 of 13

Column	A	В	С	D
			ly Volumes (MI	
Line #	Date	Mahwah, NJ	Ramapo, NY	Brookfield, CT
1	11/1/2014	893	634	37
2	11/2/2014	901	639	37
3	11/3/2014	891	646	37
4	11/4/2014	897	608	27
5	11/5/2014	893	653	36
6	11/6/2014	888	676	36
7	11/7/2014	897	742	59
8	11/8/2014	903	739	41
9	11/9/2014	906	704	41
10	11/10/2014	904	672	41
11	11/11/2014	870	662	29
12	11/12/2014	905	653	48
13	11/13/2014	906	717	48
14	11/14/2014	907	742	39
15	11/15/2014	902	721	85
16	11/16/2014	899	720	85
17	11/17/2014	904	715	85
18	11/18/2014	871	672	37
19	11/19/2014	900	697	29
20	11/20/2014	901	707	46
21	11/21/2014	887	725	105
22	11/22/2014	907	708	48
23	11/23/2014	906	692	38
24	11/24/2014	906	635	37
25	11/25/2014	906	747	33
26	11/26/2014	906	712	53
27	11/27/2014	904	727	96
28	11/28/2014	901	719	92
29	11/29/2014	897	743	102
30	11/30/2014	900	674	53
31	12/1/2014	896	706	35
32	12/2/2014	904	709	37
33	12/3/2014	909	714	49
34	12/4/2014	902	734	60
35	12/5/2014	906	716	39
36	12/6/2014	902	709	59
37	12/7/2014	889	725	58
38	12/8/2014	896	725	60
39	12/9/2014	904	763	29

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Column	Α	В	С	D
		Dai	ly Volumes (MI	· ·
Line #	Date	Mahwah, NJ	Ramapo, NY	Brookfield, CT
40	12/10/2014	905	789	61
41	12/11/2014	904	771	64
42	12/12/2014	906	784	63
43	12/13/2014	901	787	56
44	12/14/2014	900	756	56
45	12/15/2014	898	731	56
46	12/16/2014	904	656	57
47	12/17/2014	906	711	64
48	12/18/2014	902	749	60
49	12/19/2014	904	759	66
50	12/20/2014	906	751	63
51	12/21/2014	904	746	65
52	12/22/2014	905	702	59
53	12/23/2014	882	672	62
54	12/24/2014	879	632	64
55	12/25/2014	874	584	66
56	12/26/2014	879	645	66
57	12/27/2014	879	602	66
58	12/28/2014	861	645	74
59	12/29/2014	888	658	74
60	12/30/2014	900	701	67
61	12/31/2014	879	725	42
62	1/1/2015	883	731	65
63	1/2/2015	862	729	66
64	1/3/2015	899	712	60
65	1/4/2015	894	711	64
66	1/5/2015	861	733	66
67	1/6/2015	854	700	42
68	1/7/2015	829	732	27
69	1/8/2015	857	711	51
70	1/9/2015	848	689	70
71	1/10/2015	861	688	42
72	1/11/2015	866	688	57
73	1/12/2015	862	700	51
74	1/13/2015	835	682	64
75	1/14/2015	882	680	65
76	1/15/2015	835	721	62
77	1/16/2015	827	699	67

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Column	А	В	С	D
			ly Volumes (MI	Mcf)
Line #	Date	Mahwah, NJ	Ramapo, NY	Brookfield, CT
78	1/17/2015	836	674	60
79	1/18/2015	859	623	65
80	1/19/2015	846	656	59
81	1/20/2015	840	648	59
82	1/21/2015	847	692	67
83	1/22/2015	850	693	64
84	1/23/2015	864	688	62
85	1/24/2015	852	658	86
86	1/25/2015	843	676	67
87	1/26/2015	821	699	50
88	1/27/2015	810	685	35
89	1/28/2015	813	696	61
90	1/29/2015	850	694	63
91	1/30/2015	829	679	65
92	1/31/2015	813	690	61
93	2/1/2015	843	635	38
94	2/2/2015	845	650	25
95	2/3/2015	839	684	65
96	2/4/2015	859	704	67
97	2/5/2015	832	676	35
98	2/6/2015	836	671	73
99	2/7/2015	844	690	66
100	2/8/2015	865	684	66
101	2/9/2015	832	701	73
102	2/10/2015	835	685	73
103	2/11/2015	831	695	71
104	2/12/2015	829	681	64
105	2/13/2015	805	680	49
106	2/14/2015	827	738	41
107	2/15/2015	799	704	23
108	2/16/2015	800	708	32
109	2/17/2015	788	702	46
110	2/18/2015	833	707	46
111	2/19/2015	826	734	44
112	2/20/2015	823	733	46
113	2/21/2015	838	543	56
114	2/22/2015	856	656	53
115	2/23/2015	815	675	42

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Column	А	В	С	D
		Dai	ly Volumes (MI	Mcf)
Line #	Date	Mahwah, NJ	Ramapo, NY	Brookfield, CT
116	2/24/2015	823	683	76
117	2/25/2015	833	620	72
118	2/26/2015	835	516	80
119	2/27/2015	840	703	70
120	2/28/2015	822	706	70
121	3/1/2015	832	695	61
122	3/2/2015	836	697	65
123	3/3/2015	873	690	57
124	3/4/2015	891	727	54
125	3/5/2015	847	774	60
126	3/6/2015	827	774	63
127	3/7/2015	852	770	61
128	3/8/2015	883	776	61
129	3/9/2015	873	781	66
130	3/10/2015	879	760	68
131	3/11/2015	879	786	40
132	3/12/2015	883	776	56
133	3/13/2015	890	795	55
134	3/14/2015	886	797	40
135	3/15/2015	889	802	55
136	3/16/2015	897	774	55
137	3/17/2015	877	818	62
138	3/18/2015	868	813	59
139	3/19/2015	879	796	68
140	3/20/2015	873	779	55
141	3/21/2015	890	812	59
142	3/22/2015	877	808	61
143	3/23/2015	877	800	61
144	3/24/2015	870	823	55
145	3/25/2015	897	818	58
146	3/26/2015	905	750	51
147	3/27/2015	906	776	62
148	3/28/2015	886	811	55
149	3/29/2015	888	828	55
150	3/30/2015	905	820	61
151	3/31/2015	893	816	59

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Column	A	В	С	D
			ly Volumes (MI	Mcf)
Line #	Date	Mahwah, NJ	Ramapo, NY	Brookfield, CT
1	11/1/2015	715	353	191
2	11/2/2015	744	355	197
3	11/3/2015	744	352	193
4	11/4/2015	751	317	197
5	11/5/2015	765	353	196
6	11/6/2015	773	362	156
7	11/7/2015	727	350	189
8	11/8/2015	751	368	204
9	11/9/2015	741	372	214
10	11/10/2015	741	367	196
11	11/11/2015	877	457	63
12	11/12/2015	841	598	63
13	11/13/2015	835	660	69
14	11/14/2015	876	671	58
15	11/15/2015	860	656	64
16	11/16/2015	889	635	64
17	11/17/2015	861	720	78
18	11/18/2015	906	692	66
19	11/19/2015	906	684	29
20	11/20/2015	893	722	27
21	11/21/2015	885	724	56
22	11/22/2015	892	732	51
23	11/23/2015	862	731	53
24	11/24/2015	893	733	66
25	11/25/2015	783	741	49
26	11/26/2015	869	683	28
27	11/27/2015	849	673	28
28	11/28/2015	832	706	62
29	11/29/2015	848	750	62
30	11/30/2015	852	736	58
31	12/1/2015	857	706	49
32	12/2/2015	839	705	70
33	12/3/2015	823	754	129
34	12/4/2015	843	754	91
35	12/5/2015	826	754	67
36	12/6/2015	827	742	69
37	12/7/2015	842	754	83
38	12/8/2015	837	723	79
39	12/9/2015	850	699	57

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Column	A	В	С	D
			ly Volumes (MI	•
Line #	Date	Mahwah, NJ	Ramapo, NY	Brookfield, CT
40	12/10/2015	863	664	49
41	12/11/2015	858	690	44
42	12/12/2015	773	685	28
43	12/13/2015	779	685	28
44	12/14/2015	850	685	28
45	12/15/2015	879	663	46
46	12/16/2015	853	601	61
47	12/17/2015	875	690	84
48	12/18/2015	865	716	75
49	12/19/2015	836	726	62
50	12/20/2015	874	734	71
51	12/21/2015	879	659	74
52	12/22/2015	873	689	51
53	12/23/2015	876	669	37
54	12/24/2015	794	671	8
55	12/25/2015	780	638	27
56	12/26/2015	792	688	43
57	12/27/2015	797	689	53
58	12/28/2015	832	731	62
59	12/29/2015	871	758	63
60	12/30/2015	872	739	62
61	12/31/2015	877	769	58
62	1/1/2016	877	704	81
63	1/2/2016	871	749	81
64	1/3/2016	886	751	72
65	1/4/2016	859	720	49
66	1/5/2016	853	719	53
67	1/6/2016	852	707	62
68	1/7/2016	864	668	72
69	1/8/2016	868	709	56
70	1/9/2016	872	697	50
71	1/10/2016	906	701	52
72	1/11/2016	877	798	61
73	1/12/2016	834	776	68
74	1/13/2016	848	780	37
75	1/14/2016	868	761	60
76	1/15/2016	869	721	62
77	1/16/2016	841	702	93

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Column	Α	В	С	D
		Dai	ly Volumes (MI	Mcf)
Line #	Date	Mahwah, NJ	Ramapo, NY	Brookfield, CT
78	1/17/2016	822	749	81
79	1/18/2016	821	772	44
80	1/19/2016	825	767	43
81	1/20/2016	849	763	64
82	1/21/2016	838	763	72
83	1/22/2016	842	763	62
84	1/23/2016	831	772	61
85	1/24/2016	834	762	71
86	1/25/2016	847	699	71
87	1/26/2016	878	689	69
88	1/27/2016	879	731	61
89	1/28/2016	869	762	64
90	1/29/2016	845	762	65
91	1/30/2016	871	758	76
92	1/31/2016	876	721	73
93	2/1/2016	891	713	61
94	2/2/2016	894	731	81
95	2/3/2016	890	693	54
96	2/4/2016	892	709	77
97	2/5/2016	888	759	65
98	2/6/2016	871	741	63
99	2/7/2016	872	756	63
100	2/8/2016	884	756	63
101	2/9/2016	861	759	58
102	2/10/2016	866	745	59
103	2/11/2016	866	680	57
104	2/12/2016	837	675	69
105	2/13/2016	850	666	29
106	2/14/2016	817	678	28
107	2/15/2016	834	626	41
108	2/16/2016	891	622	53
109	2/17/2016	888	671	62
110	2/18/2016	859	689	67
111	2/19/2016	868	717	58
112	2/20/2016	872	697	70
113	2/21/2016	864	716	70
114	2/22/2016	858	733	68
115	2/23/2016	860	761	57

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Column	А	В	С	D
		Dai	ly Volumes (MI	Mcf)
Line #	Date	Mahwah, NJ	Ramapo, NY	Brookfield, CT
116	2/24/2016	882	705	48
117	2/25/2016	874	743	58
118	2/26/2016	856	768	56
119	2/27/2016	847	733	73
120	2/28/2016	853	683	86
121	2/29/2016	883	689	80
122	3/1/2016	867	738	43
123	3/2/2016	855	725	56
124	3/3/2016	811	731	57
125	3/4/2016	848	710	54
126	3/5/2016	863	738	43
127	3/6/2016	847	738	43
128	3/7/2016	864	727	29
129	3/8/2016	869	711	41
130	3/9/2016	847	688	7
131	3/10/2016	851	669	13
132	3/11/2016	863	685	30
133	3/12/2016	873	687	30
134	3/13/2016	890	689	31
135	3/14/2016	895	651	31
136	3/15/2016	886	657	19
137	3/16/2016	890	675	24
138	3/17/2016	873	683	24
139	3/18/2016	844	702	41
140	3/19/2016	881	702	55
141	3/20/2016	878	710	58
142	3/21/2016	863	652	54
143	3/22/2016	872	653	35
144	3/23/2016	866	618	7
145	3/24/2016	877	650	7
146	3/25/2016	882	676	19
147	3/26/2016	879	735	19
148	3/27/2016	885	722	19
149	3/28/2016	881	627	19
150	3/29/2016	875	691	23
151	3/30/2016	881	689	8
152	3/31/2016	1,091	656	7

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1	Platts Gas	Platts Gas	Platts Gas	Platts Gas
	Iroquois Zone 2	Iroquois Zone 2	Texas Eastern M3	Texas Eastern M3
	Daily Midpoint Price	Daily Volume	Monthly Price	Monthly Volume
	(USD/MMB)	Volume (000 MMBtu/day)	(USD/MMB)	Volume (000 MMBtu/day)
11/1/2013				
11/2/2013				
11/3/2013				
11/4/2013				
11/5/2013				
11/6/2013				
11/7/2013				
11/8/2013				
11/9/2013				
11/10/2013				
11/11/2013				
11/12/2013				
11/13/2013				
11/14/2013				
11/15/2013				
11/16/2013				
11/17/2013				
11/18/2013				
11/19/2013				
11/20/2013				
11/21/2013				
11/22/2013				
11/23/2013				
11/24/2013				
11/25/2013				
11/26/2013				
11/27/2013				
11/28/2013				
11/29/2013				
11/30/2013				
12/1/2013				
12/2/2013				
12/3/2013				
12/4/2013				
12/5/2013				
12/6/2013				
12/7/2013 12/8/2013				
12/8/2013				
12/10/2013				
12/11/2013				
12/11/2013				
12/13/2013				
12/14/2013				
12/15/2013				
12/16/2013				
12/17/2013				
12/18/2013				
12/19/2013				
12/20/2013				
12/21/2013				
12/22/2013				
12/23/2013				
12/24/2013				

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	Iroquois Zone 2	Iroquois Zone 2	Texas Eastern M3	Texas Eastern M3
	Daily Midpoint Price	Daily Volume	Monthly Price	Monthly Volume
	(USD/MMB)	Volume (000 MMBtu/day)	(USD/MMB)	Volume (000 MMBtu/day)
12/25/2012				
12/25/2013 12/26/2013				
12/20/2013				
12/27/2013				
12/29/2013				
12/30/2013 12/31/2013				
1/1/2014				
1/2/2014				
1/3/2014				
1/4/2014				
1/5/2014				
1/6/2014				
1/7/2014				
1/8/2014				
1/9/2014				
1/10/2014				
1/11/2014				
1/11/2014				
1/13/2014				
1/14/2014				
1/15/2014				
1/16/2014				
1/17/2014				
1/18/2014				
1/19/2014				
1/20/2014				
1/21/2014				
1/22/2014				
1/23/2014				
1/24/2014				
1/25/2014				
1/26/2014				
1/27/2014				
1/28/2014				
1/29/2014				
1/30/2014				
1/31/2014				
2/1/2014				
2/2/2014				
2/3/2014				
2/4/2014				
2/5/2014				
2/6/2014				
2/7/2014				
2/8/2014				
2/9/2014				
2/10/2014				
2/11/2014				
2/12/2014				
2/13/2014				
2/14/2014				
2/15/2014				
2/16/2014				

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	Platts Gas	Platts Gas	Platts Gas	Platts Gas
	Iroquois Zone 2	Iroquois Zone 2	Texas Eastern M3	Texas Eastern M3
	Daily Midpoint Price	Daily Volume	Monthly Price	Monthly Volume
	(USD/MMB)	Volume (000 MMBtu/day)	(USD/MMB)	Volume (000 MMBtu/day)
2/17/2014				
2/17/2014				
2/18/2014				
2/19/2014 2/20/2014				
2/20/2014				
2/21/2014				
2/22/2014				
2/23/2014				
2/25/2014				
2/26/2014				
2/27/2014				
2/28/2014				
3/1/2014				
3/2/2014				
3/3/2014				
3/4/2014				
3/5/2014				
3/6/2014				
3/7/2014				
3/8/2014				
3/9/2014				
3/10/2014				
3/11/2014				
3/12/2014				
3/13/2014				
3/14/2014				
3/15/2014				
3/16/2014				
3/17/2014				
3/18/2014				
3/19/2014				
3/20/2014				
3/21/2014				
3/22/2014 3/23/2014				
3/23/2014				
3/25/2014				
3/25/2014				
3/27/2014				
3/28/2014				
3/29/2014				
3/30/2014				
3/31/2014				
11/1/2014				
11/2/2014				
11/3/2014				
11/4/2014				
11/5/2014				
11/6/2014				
11/7/2014				
11/8/2014				
11/9/2014				
11/10/2014				

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1 1	N 6	1 515	l 515	Page 4 of 9 Platts Gas
	Platts Gas	Platts Gas	Platts Gas	
	Iroquois Zone 2	Iroquois Zone 2	Texas Eastern M3	Texas Eastern M3
	Daily Midpoint Price	Daily Volume	Monthly Price	Monthly Volume
	(USD/MMB)	Volume (000 MMBtu/day)	(USD/MMB)	Volume (000 MMBtu/day)
11/11/2014				
11/11/2014				
11/13/2014				
11/13/2014				
11/15/2014				
11/16/2014				
11/17/2014				
11/18/2014				
11/19/2014				
11/20/2014				
11/21/2014				
11/22/2014				
11/23/2014				
11/24/2014				
11/25/2014				
11/26/2014				
11/27/2014				
11/28/2014				
11/29/2014				
11/30/2014				
12/1/2014				
12/2/2014				
12/3/2014				
12/4/2014				
12/5/2014				
12/6/2014				
12/7/2014				
12/8/2014				
12/9/2014				
12/10/2014				
12/11/2014				
12/12/2014				
12/13/2014 12/14/2014				
12/14/2014				
12/15/2014				
12/17/2014				
12/17/2014				
12/19/2014				
12/20/2014				
12/21/2014				
12/22/2014				
12/23/2014				
12/24/2014				
12/25/2014				
12/26/2014				
12/27/2014				
12/28/2014				
12/29/2014				
12/30/2014				
12/31/2014				
1/1/2015				
1/2/2015				
1/3/2015				

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İ i	Platts Gas	Platts Gas	Platts Gas	Page 5 of 9 Platts Gas
			Texas Eastern M3	Texas Eastern M3
	Iroquois Zone 2	Iroquois Zone 2		
	Daily Midpoint Price	Daily Volume	Monthly Price	Monthly Volume
	(USD/MMB)	Volume (000 MMBtu/day)	(USD/MMB)	Volume (000 MMBtu/day)
1/4/2015				
1/5/2015				
1/6/2015				
1/7/2015				
1/8/2015				
1/9/2015				
1/10/2015				
1/11/2015				
1/12/2015				
1/13/2015				
1/14/2015				
1/15/2015				
1/16/2015				
1/17/2015				
1/18/2015				
1/19/2015				
1/20/2015				
1/21/2015				
1/22/2015				
1/23/2015				
1/24/2015				
1/25/2015				
1/26/2015				
1/27/2015				
1/28/2015				
1/29/2015				
1/30/2015				
1/31/2015				
2/1/2015				
2/2/2015				
2/3/2015				
2/4/2015				
2/5/2015 2/6/2015				
2/0/2015				
2/8/2015				
2/9/2015				
2/10/2015				
2/11/2015				
2/12/2015				
2/13/2015				
2/14/2015				
2/15/2015				
2/16/2015				
2/17/2015				
2/18/2015				
2/19/2015				
2/20/2015				
2/21/2015				
2/22/2015				
2/23/2015				
2/24/2015				
2/25/2015				
2/26/2015				

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	Iroquois Zone 2	Iroquois Zone 2	Toyas Fastern M2	Toyas Fastern M2
	-	Iroquois Zone 2	Texas Eastern M3	Texas Eastern M3
	Daily Midpoint Price	Daily Volume	Monthly Price	Monthly Volume
	(USD/MMB)	Volume (000 MMBtu/day)	(USD/MMB)	Volume (000 MMBtu/day)
2/27/2015				
2/28/2015				
3/1/2015				
3/2/2015				
3/3/2015				
3/4/2015				
3/5/2015				
3/6/2015				
3/7/2015				
3/8/2015				
3/9/2015				
3/10/2015				
3/11/2015				
3/12/2015				
3/13/2015				
3/14/2015				
3/15/2015				
3/16/2015				
3/17/2015				
3/18/2015				
3/19/2015				
3/20/2015 3/21/2015				
3/22/2015				
3/23/2015				
3/24/2015				
3/25/2015				
3/26/2015				
3/27/2015				
3/28/2015				
3/29/2015				
3/30/2015				
3/31/2015				
11/1/2015				
11/2/2015				
11/3/2015				
11/4/2015				
11/5/2015 11/6/2015				
11/6/2015				
11/8/2015				
11/9/2015				
11/10/2015				
11/11/2015				
11/12/2015				
11/13/2015				
11/14/2015				
11/15/2015				
11/16/2015				
11/17/2015				
11/18/2015				
11/19/2015				
11/20/2015				

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	Platts Gas	Platts Gas	Platts Gas	Page 7 of 9 Platts Gas
	Iroquois Zone 2	Iroquois Zone 2	Texas Eastern M3	Texas Eastern M3
	Daily Midpoint Price	Daily Volume	Monthly Price	Monthly Volume
	(USD/MMB)	Volume (000 MMBtu/day)	(USD/MMB)	Volume (000 MMBtu/day)
11/21/2015				
11/22/2015				
11/23/2015				
11/24/2015				
11/25/2015				
11/26/2015				
11/27/2015				
11/28/2015				

11/29/2015 11/30/2015 12/1/2015 12/2/2015 12/3/2015 12/4/2015 12/5/2015 12/6/2015 12/7/2015 12/8/2015 12/9/2015 12/10/2015 12/11/2015 12/12/2015 12/13/2015 12/14/2015 12/15/2015 12/16/2015 12/17/2015 12/18/2015 12/19/2015 12/20/2015 12/21/2015 12/22/2015 12/23/2015 12/24/2015 12/25/2015 12/26/2015 12/27/2015 12/28/2015 12/29/2015 12/30/2015 12/31/2015 1/1/2016 1/2/2016 1/3/2016 1/4/2016 1/5/2016 1/6/2016 1/7/2016 1/8/2016 1/9/2016 1/10/2016 1/11/2016 1/12/2016 1/13/2016

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Platts Gas

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1 1	51 6	1 21	l	Page 8 of 9 Platts Gas
	Platts Gas	Platts Gas	Platts Gas	
	Iroquois Zone 2	Iroquois Zone 2	Texas Eastern M3	Texas Eastern M3
	Daily Midpoint Price	Daily Volume	Monthly Price	Monthly Volume
	(USD/MMB)	Volume (000 MMBtu/day)	(USD/MMB)	Volume (000 MMBtu/day)
1/14/2016				
1/15/2016				
1/16/2016				
1/17/2016				
1/18/2016				
1/19/2016				
1/20/2016				
1/21/2016				
1/22/2016				
1/23/2016				
1/24/2016				
1/25/2016				
1/26/2016				
1/27/2016				
1/28/2016				
1/29/2016				
1/30/2016				
1/31/2016				
2/1/2016				
2/2/2016				
2/3/2016				
2/4/2016				
2/5/2016				
2/6/2016				
2/7/2016				
2/8/2016				
2/9/2016				
2/10/2016				
2/11/2016 2/12/2016				
2/12/2016				
2/13/2016				
2/15/2016				
2/16/2016				
2/17/2016				
2/18/2016				
2/19/2016				
2/20/2016				
2/21/2016				
2/22/2016				
2/23/2016				
2/24/2016				
2/25/2016				
2/26/2016				
2/27/2016				
2/28/2016				
2/29/2016				
3/1/2016				
3/2/2016				
3/3/2016				
3/4/2016 3/5/2016				
3/5/2016 3/6/2016				
3/6/2016				
3///2010				

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	Platts Gas Iroquois Zone 2 Daily Midpoint Price	Platts Gas Iroquois Zone 2 Daily Volume	Platts Gas Texas Eastern M3 Monthly Price	Page 9 of 9 Platts Gas Texas Eastern M3 Monthly Volume
	(USD/MMB)	Volume (000 MMBtu/day)	(USD/MMB)	Volume (000 MMBtu/day)
3/8/2016				
3/9/2016				
3/10/2016				
3/11/2016				
3/12/2016				
3/13/2016				
3/14/2016				
3/15/2016				
3/16/2016				
3/17/2016				
3/18/2016				
3/19/2016				
3/20/2016				
3/21/2016				
3/22/2016				
3/23/2016				
3/24/2016				
3/25/2016				
3/26/2016				
3/27/2016				
3/28/2016				
3/29/2016				
3/30/2016				
3/31/2016				

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	Platts Gas Iroquois Zone 2 Monthly Price (USD/MMB)	Platts Gas Iroquois Zone 2 Monthly Volume Volume (000 MMBtu/day)	Platts Gas Texas Eastern M3 Monthly Price (USD/MMB)	Platts Gas Texas Eastern M3 Monthly Volume Volume (000 MMBtu/day)
11/1/2013				
12/1/2013				
1/1/2014				
2/1/2014				
3/1/2014				
11/1/2014				
12/1/2014				
1/1/2015				
2/1/2015				
3/1/2015				
11/1/2015				
12/1/2015				
1/1/2016				
2/1/2016				
3/1/2016				

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<u>Information Request AG-1-42</u>

Request:

Please identify the projected monthly quantities of gas to be delivered under Massachusetts Electric's and Nantucket Electric's Algonquin Access Northeast firm transportation contracts, the monthly quantities of gas withdrawn under each Company's Access Northeast contract for LNG service, and the quantities of gas to be delivered under each Company's NED firm transportation contracts to support electric generation for the years 2018-2024. Please provide all analyses and calculations supporting the projections.

Response:

Black & Veatch's analysis focused on the regional gas and electric price impacts of the ANE and NED projects, and did not model separately each individual EDC contract on ANE and NED. Therefore, projected monthly quantities to be delivered under Massachusetts Electric and Nantucket Electric's firm transportation LNG storage service contracts on ANE and NED service are not available. Black & Veatch has provided the total annual average deliveries on ANE and NED over the years 2018-2024 in Attachment AG-1-42(a) (HIGHLY SENSITIVE CONFIDENTIAL INFORMATION).

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Column	Α	В	С	D	E
		To	otal Annual Average	e Volumes (MMcf/	'd)
	Scenario	With ANE Only	With NED Only	With Both N	IED and ANE
Line #	Year	ANE	NED	ANE	NED
1	2018				
2	2019				
3	2020				
4	2021				
5	2022				
6	2023				
7	2024				

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Information Request AG-1-43

Request:

Please explain whether the 400,000 Dth/day from the new Algonquin LNG facility could be placed in service without the 500,000 Dth/day of firm transportation capacity under the Access Northeast project.

Response:

The ANE Project was proposed by Algonquin as an integrated project that includes both firm transportation capacity and LNG facilities.

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Information Request AG-1-44

Request:

Please provide a copy of all analyses prepared evaluating the impact of the Access Northeast project on the price of Marcellus Shale supplies.

Response:

Over the 2019-2038 analysis period Black & Veatch's analysis indicates the Access Northeast project will have a limited impact on the price of Marcellus Shale supplies. As shown in Attachment AG-1-44(a) (HIGHLY SENSITIVE CONFIDENTIAL INFROMATION), the ANE project has an average annual price impact of \$0.04/MMBtu or 0.81% on the Marcellus Shale gas price. The price impact is limited due to the expectations of continued growth in the Marcellus and Utica Shale.

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В

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E

1.11%

0.94%

0.81%

D

\$0.05

\$0.04

\$0.04

Units: 2015\$/MMBtu

A

Column

19

20

21

2037

2038

Average

Average Annual Marcellus Shale Price **Absolute** Percentage Line # Year **Base Case** With ANE Only Differential Differential \$0.00 1 2019 0.05% 2 2020 \$0.01 0.21% 3 2021 \$0.00 0.13% 4 2022 \$0.01 0.41% 5 2023 \$0.02 0.52% 6 2024 \$0.02 0.48% 7 2025 \$0.01 0.30% 8 2026 \$0.01 0.27% 9 2027 \$0.03 0.61% 10 2028 \$0.04 0.86% 11 2029 \$0.06 1.32% 12 2030 \$0.07 1.44% 13 2031 \$0.06 1.38% 14 2032 \$0.08 1.63% 15 2033 \$0.06 1.28% 16 2034 \$0.06 1.30% 17 2035 \$0.05 1.17% 18 2036 \$0.04 0.80%

C

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Information Request AG-1-45

Request:

Please explain whether the construction of pipeline facilities from an existing LNG facility to Algonquin was evaluated by National Grid. If yes, provide all documents associated with the evaluation. If no, please explain why no such evaluation was pursued.

Response:

No. The construction of pipeline facilities from an existing LNG facility to Algonquin was not evaluated because it was not proposed by any of the Bidders in response to the RFP.

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Information Request AG-1-46

Request:

Refer to NG-TJB/JEA-1, at page 52, line 21 through page 53, line 2. Please provide a copy of all resource alternative evaluations conducted by the National Grid Evaluation Team.

Response:

Please refer to D.P.U. 16-05 Exhibits NG-PJA-1, NG-PJA-3, NG-PJA-4, NG-PJA-5, NG-JNC-1, NG-JNC-3, and NG-CSW-1 for the information on the resource alternative evaluations conducted by or for the National Grid Evaluation Team. Also, please refer to Attachment AG-1-46(a) (HIGHLY SENSITIVE CONFIDENTIAL INFORMATION) for results of additional analysis of LNG proposals conducted by Black and Veatch for National Grid in February of 2016, as part of the National Grid Evaluation Team's consultation and coordination with the Rhode Island Division of Public Utilities and Carriers and Office of Energy Resources in the consideration of potential natural gas infrastructure solutions pursuant to Chapter 31 of Title 39 of the General Laws of Rhode Island, the Affordable Clean Energy Security Act.

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Nominal\$ (N4N4\										
Column	A	В	С	D Total Annual Benefits	E	F	G	Н	l Total Annual Costs	J	K
Dan H	W	MACHENIED OF L	MATERIAL COLL	With Both NED and ANE	with one con-	With Repsol	With MED Out	With AND Oak	With Both NED and ANE	With CDE Corre	With Repsol
Line # 1	Year 2019	With NED Only	With ANE Only	WITH BOTH NED and ANE	With GDF Suez	with Repsoi	With NED Only	With ANE Only	ANE	With GDF Suez	with kepsoi
2	2019										
3	2020										
4	2022										
5	2023										
6	2024										
7	2025										
8	2026										
9 10	2027 2028										
11	2028										
12	2030										
13	2031										
14	2032										
15	2033										
16	2034										
17	2035										
18 19	2036 2037										
20	2037										
Nominal\$ (
Nominal\$ (Column	MM) A	В	c	D	E	F	G	н	1	J	К
		В		D uual Benefits for Present Value		F	G		al Costs for Present Value		К
Column	A		Total Ann	ual Benefits for Present Value	e Analysis			Total Annu	With Both NED and	Analysis	
Column Line #	A Year	B With NED Only				F With Repsol	G With NED Only				K With Repsol
Column	A		Total Ann	ual Benefits for Present Value	e Analysis			Total Annu	With Both NED and	Analysis	
Column Line #	Year 2016 2017 2018		Total Ann	ual Benefits for Present Value	e Analysis			Total Annu	With Both NED and	Analysis	
Line # 1 2 3 4	Year 2016 2017 2018 2019		Total Ann	ual Benefits for Present Value	e Analysis			Total Annu	With Both NED and	Analysis	
Line # 1 2 3 4 5	Year 2016 2017 2018 2019 2020		Total Ann	ual Benefits for Present Value	e Analysis			Total Annu	With Both NED and	Analysis	
Column Line # 1 2 3 4 5 6	Year 2016 2017 2018 2019 2020 2021		Total Ann	ual Benefits for Present Value	e Analysis			Total Annu	With Both NED and	Analysis	
Column Line # 1 2 3 4 5 6 7	Year 2016 2017 2018 2019 2020 2021 2022		Total Ann	ual Benefits for Present Value	e Analysis			Total Annu	With Both NED and	Analysis	
Line # 1 2 3 4 5 6 7 8	Year 2016 2017 2018 2019 2020 2021 2022 2023		Total Ann	ual Benefits for Present Value	e Analysis			Total Annu	With Both NED and	Analysis	
Line # 1 2 3 4 5 6 7 7 8 9 9	Year 2016 2017 2018 2019 2020 2021 2022		Total Ann	ual Benefits for Present Value	e Analysis			Total Annu	With Both NED and	Analysis	
Line # 1 2 3 4 5 6 7 8	Year 2016 2017 2018 2019 2020 2021 2022 2023 2024		Total Ann	ual Benefits for Present Value	e Analysis			Total Annu	With Both NED and	Analysis	
Column Line # 1 2 3 4 5 6 7 8 9 10 11 12	Year 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027		Total Ann	ual Benefits for Present Value	e Analysis			Total Annu	With Both NED and	Analysis	
Column Line # 1 2 3 4 5 6 7 8 9 10 11 12 13	Year 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028		Total Ann	ual Benefits for Present Value	e Analysis			Total Annu	With Both NED and	Analysis	
Column Line # 1 2 3 4 5 6 7 8 9 10 11 12 13	Year 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029		Total Ann	ual Benefits for Present Value	e Analysis			Total Annu	With Both NED and	Analysis	
Column Line # 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	A Year 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030		Total Ann	ual Benefits for Present Value	e Analysis			Total Annu	With Both NED and	Analysis	
Column Line # 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	A Year 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031		Total Ann	ual Benefits for Present Value	e Analysis			Total Annu	With Both NED and	Analysis	
Column Line # 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	Year 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030		Total Ann	ual Benefits for Present Value	e Analysis			Total Annu	With Both NED and	Analysis	
Column Line # 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	Year 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032		Total Ann	ual Benefits for Present Value	e Analysis			Total Annu	With Both NED and	Analysis	
Column Line # 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	A Year 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035		Total Ann	ual Benefits for Present Value	e Analysis			Total Annu	With Both NED and	Analysis	
Column Line # 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	Year 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036		Total Ann	ual Benefits for Present Value	e Analysis			Total Annu	With Both NED and	Analysis	
Column Line # 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	A Year 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037		Total Ann	ual Benefits for Present Value	e Analysis			Total Annu	With Both NED and	Analysis	
Column Line # 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	Year 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036		Total Ann	ual Benefits for Present Value	e Analysis			Total Annu	With Both NED and	Analysis	

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Summary of Annual Benefits and Costs

Nominal\$ (MM)

Column A B C D E F G H

Total Project Cost-Benefits Summary 2019-2038 (\$ Billions)

Line #	Line #		Levelized		Present Value			
	Project	Benefits	Costs	Benefits	Benefits	Total Costs	Net Benefits	Cost Ratio
1	With NED Only			\$1.4			\$12.1	4.7
2	With ANE Only			\$1.1			\$10.2	3.5
3	With Both NED and ANE			\$1.2			\$10.9	2.5
4	With GDF Suez			\$0.6			\$4.9	2.3
5	With Repsol			\$0.2			\$2.1	1.7
5								_

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<u>Information Request AG-1-47</u>

Request:

Under the Electric Reliability Service Program:

- a. What assurances are there that generators will seek or request the assignment of Algonquin Access Northeast or Tennessee NED capacity, or purchase Algonquin LNG service?; and
- b. Please explain whether Algonquin and Tennessee will be able to market Access Northeast and NED capacity that is not assigned or otherwise utilized and sell that capacity on an interruptible basis.

Response:

- a. The Company has no assurances that the generators will seek or request the assignment of Algonquin's Access Northeast capacity, Tennessee's NED capacity or purchase Algonquin LNG service. The EDCs intend to issue multiple capacity release RFPs (see Exhibit NG-TJB/JEA-6, Figure 1). If the generators decide not to participate, then the capacity is still available to be sold by the Capacity Manager to any market participant. The revenue from the capacity release or bundled sale by the Capacity Manager will benefit the EDC capacity holders' customers by offsetting the pipeline capacity contract costs.
- b. Consistent with FERC's policies stated in 18 C.F.R. § 284.9(a), all interstate pipelines that provide firm transportation service under the applicable regulation are required to offer transportation service on an interruptible basis. This ensures that capacity not used by firm shippers is available to the market.

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<u>Information Request AG-1-48</u>

Request:

Please provide a copy of all analyses which evaluate the recovery of Access Northeast and NED costs from generators.

Response:

All cost-benefit analysis scenarios prepared by Black & Veatch Corporation for the Company included the cost of the applicable project but assumed zero revenue from capacity release or bundled sales. Any revenue from capacity releases or bundled sales would provide incremental benefits to the EDC customers.

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Information Request AG-1-49

Request:

Please provide a copy of all communications received by National Grid from generators or their agents concerning the Electric Reliability Service Program, including the assignment of capacity and the purchase of LNG service.

Response:

The Company has received no direct communications from generators concerning the Electric Reliability Service Program. All communications have been either through this docket or Algonquin's filing with FERC (154 FERC ¶ 61,269, Docket No. RP16-618-000 (2016)) to exempt from capacity release bidding requirements certain types of capacity releases of firm transportation by electric distribution companies that are participating in state-regulated electric reliability programs.

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Information Request AG-1-50

Request:

Please identify each LNG liquefaction facility in New England not operated by a regulated utility.

Response:

To the best of the Company's knowledge there are no LNG liquefaction facilities in New England not operated by a regulated utility.

Although there are no non-regulated liquefaction facilities in New England there are other facilities that have the ability to store or import LNG. The three import facilities are: Distrigas facility in Everett, MA; Northeast Gateway facility offshore Cape Ann, MA; and the Neptune facility offshore Cape Ann, MA. New England also has two locations with LNG storage: Distrigas facility in Everett, MA, and the NGLNG facility in Providence, RI. Although not in New England, the Canaport facility in Saint John, New Brunswick, Canada is an import facility with LNG storage and can supply New England through the Maritimes & Northeast Pipeline.

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<u>Information Request AG-1-51</u>

Request:

Please identify the extent to which generators currently rely on Algonquin and Tennessee interruptible transportation service for the delivery of gas supplies.

Response:

The Company does not have access to interruptible transportation services relied upon by the generators on Algonquin and Tennessee pipelines. The Company requested this information from the Algonquin and Tennessee. Tennessee reported that for calendar years 2013, 2014 and 2015 no interruptible transportation was delivered to generators in Tennessee Zone 6. Algonquin did not provide data specifically to generators only but provided all interruptible transportation that was used to deliver to Algonquin citygates. Please see Attachment AG-1-51 for interruptible transportation used for delivery to Algonquin citygates.

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<u>Information Request AG-1-52</u>

Request:

In the National Grid's opinion, please explain in detail why New England natural gas prices during the winter of 2015-2016 have not been significantly higher than prices in other nearby regions.

Response:

In National Grid's opinion the reason natural gas prices in New England have not been significantly higher than prices in other nearby regions is the unseasonably warm winter. Using Boston Logan Airport weather data, the region experienced a November through March which was 18% warmer than normal based on the number of Heating Degree Days ("HDD"). In each of the five winter months the monthly HDD total was less than the normal HDD. The unseasonably warm winter resulted in lower natural gas heating demand and lower electric loads and therefore lower demand for natural gas for generation. Monthly loads in the New England ISO region were down in the period November through February from the previous period by 5.5% in November, 7.2% in December, 6.4% in January, and 8.5% in February. The much warmer than normal winter resulted in much higher underground natural gas storage, higher local LNG supplies, and less stress on the liquid fuels, all providing assurance that there would be greater supply available to meet demand.

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Information Request AG-1-53

Request:

Refer to the Spectra Energy and Spectra Energy Partners Analyst Meeting presentation, 2016 – 2018 Financial Plan & Outlook, February 4, 2016, page 66.

- a. Please explain what is meant by "[s]calable for future growth".
- b. Please explain the factors that might cause the Access Northeast Project to be increased in scale and describe how the project's scale would be increased.
- c. Please describe the "[m]ultiple supply options".

Response:

This Information Request refers to a document that was not created by Massachusetts Electric Company or Nantucket Electric Company, and therefore they are unable to explain what is meant by its terms.

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Information Request AG-1-54

Request:

Refer to the Spectra Energy and Spectra Energy Partners Analyst Meeting Transcript, February 4, 2016, page 23.

- a. Please provide a table that lists the "25 power plants interested in receiving gas off our system" in the PJM and New England regions.
- b. Please provide a table that lists the "5000 megawatts of generation that ISO New England has deemed critical to have firm supply".

Response:

National Grid did not participate in this meeting, and is therefore unable to provide additional information regarding the quoted statements.

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<u>Information Request AG-1-55</u>

Request:

Please provide monthly and daily volumes and applicable monthly and daily index prices for the following trading locations for the periods November 1, 2013 – March 31, 2014; November 1, 2014 – March 31, 2015; and November 1, 2015 – March 31, 2016:

- a. Algonquin city-gates;
- b. Tennessee, Zone 6 delivered; and
- c. Tennessee, Zone 6 (300 Leg) delivered.

Response:

(a-c) Please see Attachment AG-1-55(a) (CONFIDENTIAL) for the monthly price and fixed price traded volumes for Algonquin city-gates and Tennessee, Zone 6 delivered for the periods requested. The Platts Inside FERC monthly pricing guide does not publish pricing and volume data for Tennessee, Zone 6 (300 Leg). Please see Attachment AG-1-55(b) (CONFIDENTIAL) for the daily price and fixed price traded volumes for Algonquin city-gates, Tennessee, Zone 6 delivered and Tennessee, Zone 6 (300 Leg) delivered for the delivered periods requested. Platts did not start publishing daily pricing and traded volumes for Tennessee, Zone 6 (300 Leg) delivered Platts until February 2015. The Platts volumes only account for fixed price transactions reported at each location and therefore do not include all traded volume. Some of the volumes traded at each location are executed at the Index Price and therefore are not included in the volume report and since all companies do not report fixed price transactions it would also not include volumes transacted by these companies.

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	Platts Gas Algonquin CG	Platts Gas Algonquin CG	Platts Gas Tenn Zn6 Delivered	Platts Gas Tenn Zn6 Delivered
	Monthly Price	Monthly Volume	Monthly Price	Monthly Volume
	(USD/MMB)	Volume (000 MMBtu/day)	(USD/MMB)	Volume (000 MMBtu/day)
11/1/2013				
12/1/2013				
1/1/2014				
2/1/2014				
3/1/2014				
11/1/2014				
12/1/2014				
1/1/2015				
2/1/2015				
3/1/2015				
11/1/2015				
12/1/2015				
1/1/2016				
2/1/2016				
3/1/2016				

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				Attachment AG 1-55(b)			
Platts Gas	Platts Gas	Platts Gas	Platts Gas	Platts Gas	Page 1 of 6	1	
Algonquin CG	Algonquin CG	Tenn Zn6 Delivered	Tenn Zn6 Delivered	Tenn Zn6 300 Leg Delivered	Tenn Zn6 300 Leg Delivered	ı	
Daily Midpoint Price	Daily Volume	Monthly Price	Monthly Volume	Monthly Price	Monthly Volume	ı	
(USD/MMB)	Volume (000 MMBtu/day)	(USD/MMB)	Volume (000 MMBtu/day)	(USD/MMB)	Volume (000 MMBtu/day)	ı	

	Algonquin CG Daily Midpoint Price	Algonquin CG Daily Volume	Tenn Zn6 Delivered	Tenn Zn6 Delivered Monthly Volume	Tenn Zn6 300 Leg Delivered Monthly Price	Tenn Zn6 300 Leg Delivered Monthly Volume
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	Algonquin CG	Algonquin CG Daily Volume	Tenn Zn6 Delivered	Tenn Zn6 Delivered Monthly Volume	Tenn Zn6 300 Leg Delivered	Tenn Zn6 300 Leg Delivered Monthly Volume
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Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG 1-55(b)

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Massachusetts Electric Company
Nantucket Electric Company
d/b/a National Grid
D.P.U. 16-05
Responses to the Attorney General's First Set of Information Requests
April 25, 2016
Exhibit AG-1-56
Page 1 of 1

<u>Information Request AG-1-56</u>

Request:

Reference the response to the July 6, 2015 Initial New Hampshire Staff Questions to Eversource/Access Northeast in the Investigation into Potential Approaches to Mitigate Wholesale Electricity Prices. Please provide a copy of the MOUs executed by Massachusetts Electric and Nantucket Electric.

Response:

Please see Attachments AG-1-56(a) and AG-1-56(b).

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-56(a) Page 1 of 9

MEMORANDUM OF UNDERSTANDING

ACCESS NORTHEAST PROJECT

This Memorandum of Understanding (this "MOU") is effective as of February 11, 2015 ("Effective Date"), by and between Algonquin Gas Transmission, LLC, a Delaware limited liability company ("AGT") and Maritimes & Northeast Pipeline, L.L.C. ("Maritimes") (AGT and Maritimes together referred to as "Pipelines"), and Massachusetts Electric Company d/b/a National Grid, a Massachusetts corporation ("Customer"). AGT, Maritimes and Customer may each be referred to herein as a "Party" and collectively as the "Parties."

RECITALS

WHEREAS, Pipelines own and operate interstate natural gas transmission systems in the Northeastern United States;

WHEREAS, Pipelines are proposing to expand such interstate natural gas transmission systems, to be utilized in conjunction with existing storage assets, in order to offer additional service in connection with the Access Northeast Project, the details of which were publicly announced on September 16, 2014 (the "AN Project");

WHEREAS, Pipelines and Customer desire to set forth a framework for negotiations with respect to a possible transaction pursuant to which Pipelines would provide Customer service on the AN Project facilities ("Possible Transaction").

NOW, THEREFORE, in consideration of the mutual covenants set forth herein, Pipelines and Customer agree as follows:

- 1. <u>Purpose</u>. The purpose of this MOU is to: (a) describe the basis on which the Possible Transaction may be evaluated and the definitive written agreements implementing the Possible Transaction (the "<u>Definitive Agreements</u>") may be negotiated, prepared and executed as soon as mutually practicable by the Parties, but in all events by June 30, 2015, (b) set forth certain legally binding and enforceable provisions of the Parties contained in Sections 1, and 3 through 19 of this MOU ("<u>Binding Provisions</u>"), and (c) set forth in <u>Exhibit A</u> attached hereto certain non-binding and non-enforceable key commercial terms constituting an expression of the mutual interest of the Parties relating to the Possible Transaction. Each Party agrees to evaluate the Possible Transaction and negotiate the Definitive Agreements in good faith.
- 2. Development of the AN Project. Pipelines, either individually or in conjunction with existing storage asset owners, will have primary responsibility for developing the route(s), designing the facilities, estimating the capital costs, developing a timeline, proposing the services, rates and terms and conditions of service, coordinating and conducting stakeholder outreach and outreach to the staff of the Federal Energy Regulatory Commission ("FERC"), and determining the ultimate viability of the AN Project based on the commercial terms, constructability of facilities and market demand and/or market interest of Customer and third parties. Customer will provide input to the stakeholder outreach strategy as reasonably requested by Pipelines, and where appropriate Customer will participate directly in specific outreach activities. If Customer is awarded capacity on the AN Project, Pipelines and Customer will meet

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-56(a) Page 2 of 9

periodically thereafter to discuss the status of the AN Project and to negotiate Definitive Agreements, including, without limitation, a precedent agreement and, subject to satisfaction of any conditions precedent contained in such precedent agreement, service agreement(s) and rate agreement(s). Attached hereto as Exhibit A is a list of key commercial terms, including estimated contract quantities, which the parties anticipate would be incorporated into a definitive precedent agreement, service agreement(s) and rate agreement(s), as appropriate. It is the intent of the Parties for Pipelines to conduct an open season ("Open Season") to solicit indications of interest in the AN Project in the form of requests for the AN Project service from interested parties as soon as reasonably practicable. In carrying out their responsibilities in this Section 2, Pipelines will take into account the requirements of Customer as well as all others requesting service in the Open Season, other interested stakeholders, and applicable laws, regulations and findings of governmental agencies. For purposes of the Open Season referenced in this Section 2, this MOU and the terms set forth in Exhibit A will constitute Customer's non-binding bid in the Open Season, including the transportation capacity allocation based on the Customer's relative electric load share ratio. To the extent other customers subscribe to portions of the AN Project, the relative capacity allocations in Exhibit A shall be modified to take into account the relative electric load shares of, and transportation capacity allocations to, such additional customers.

3. Execution of Definitive Agreements. The Parties acknowledge that the signing and delivery of the Definitive Agreements will be subject to conditions precedent, such as: (a) negotiation of mutually satisfactory terms and conditions to be included in the Definitive Agreements; and (b) approval of the Definitive Agreements by the senior management and board of directors of each Party. Notwithstanding anything herein to the contrary, (i) no Party shall be under any obligation to execute any Definitive Agreement; and (ii) the terms and conditions of any Definitive Agreement must be approved by each Party in its sole discretion.

Confidential Information and Publicity.

(a) Notwithstanding Section 4(b) below, and subject to the Parties' prior approval of any public announcements or disclosures related to Customer's participation in the AN Project, it is understood and agreed by the Parties that the intent of the marketing effort for the AN Project will be to disclose to other potential AN Project customers that Pipelines and Customer expect that, following the Open Season, they will enter into negotiations for Customer to be an anchor shipper for the AN Project. Customer agrees that Pipelines shall be permitted to make public announcements and disclosures related to the Open Season, the fact of such expected negotiations between Pipelines and Customer, and the MDTQ, target service commencement date and primary term requested by Customer herein for purposes of the Open Season, without Pipelines obtaining any further approvals from Customer. Likewise, Pipelines agree that Customer shall be permitted to discuss the AN Project with its state regulators and other stakeholders. including the fact of such expected negotiations among Pipelines and Customer, the MDTQ, target service commencement date and primary term requested by Customer herein for purposes of the Open Season, without obtaining any further approvals from Pipelines.

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-56(a) Page 3 of 9

- Pipelines and Customer hereby acknowledge the confidential nature of and agree not to disclose any information that is disclosed or otherwise shared during the development of the AN Project and negotiation of the precedent agreement to any person or entity other than the representatives of Pipelines and Customer who need to know such matters for the purpose of evaluating the AN Project and the Possible Transaction, and who are first informed of the confidential nature of this MOU. Without limiting the foregoing in this Section 4(b), neither Party hereto, nor any of its Affiliates, shall make any public announcement concerning this MOU, or the AN Project, except as heretofore agreed in Section 4(a), without first obtaining the prior written consent of the other Party; provided, however, that a Party, or any of its Affiliates, shall have the right to make such disclosure to the extent required by any court or other governmental or regulatory authorities (including, without limitation, by oral question, interrogatory, request for information or documents, subpoena, civil or criminal investigative demand or other process), applicable law or rule of the relevant U.S. securities association or stock exchange or by FERC or Customer's state regulatory agencies if such Party (a) limits the disclosure to the minimum that such Party determines, based on advice of its legal counsel, is required by such applicable law or rule, including, in the case of FERC or Customer's state regulatory agencies, seeking confidential treatment for such disclosure, unless the other Party agrees in writing to a greater level of disclosure, and (b) to the extent legally permissible, provides the other Party the content of the proposed disclosure, the reason(s) such disclosure is required, and the time and place the disclosure will be made, in each case as far in advance of the disclosure as reasonably practicable.
- 5. <u>Costs.</u> All costs and expenses incurred by a Party or any of its Affiliates in connection with the Possible Transaction, including, without limitation, the negotiation and execution of this MOU, any due diligence review and/or the negotiations related to the Possible Transaction, and preparation and execution of the Definitive Agreements, shall be borne solely by the Party or its Affiliates that incurred such costs or expenses, unless otherwise provided in any cost sharing arrangements that may be set forth in the executed Definitive Agreements.
- 6. Term and Termination. The term of this MOU (the "Term") shall be from the Effective Date of this MOU until the earliest of: (a) the Parties' mutual agreement to terminate this MOU; (b) the execution of the Definitive Agreements; or (c) June 30, 2015. Notwithstanding the termination of this MOU, either Party hereto nevertheless shall be entitled to seek any remedy to which it may be entitled at law or in equity for any breach by the other Party of the Binding Provisions that occurs during the Term, which right shall survive termination of this MOU for such limited purpose. If the Definitive Agreements are entered into by the Parties, such Definitive Agreements shall supersede this MOU, and this MOU shall become null and void in all respects.
- 7. <u>No Joint Venture</u>. By execution of this MOU, the Parties are not creating any partnership, joint venture, agency, or fiduciary obligations between the Parties. Rather, the Parties are independent contractors and neither Party has any power to bind the other Party for any purpose.
- 8. <u>Amendments.</u> This MOU may only be amended or modified by a written agreement signed by both Parties.

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-56(a) Page 4 of 9

- Legal Effect. Each Party acknowledges and agrees that the Binding Provisions are intended to be and shall be legally binding and enforceable. Except for the matters specifically set forth in the Binding Provisions, this MOU (including specifically the recitals and Exhibit A) is not intended to, and does not, create any legally binding obligations or liabilities on the part of Pipelines, Customer, or any of their respective Affiliates. Except as expressly: (a) set forth in the Binding Provisions, or (b) provided in any definitive agreement that the Parties may enter into in the future, no past or future action, course of conduct, or failure to act relating to the Possible Transaction, or relating to the negotiation of the terms of the Possible Transaction or any of the Definitive Agreements (including, without limitation, oral statements or understandings, handshakes, reliance and changes of position), shall give rise to or serve as a basis for any obligation or other liability, on the part of Pipelines, Customer, or any of their respective Affiliates with respect to the Possible Transaction. No Party makes any representations or warranties until the execution of (and as set forth in) the Definitive Agreements. IN NO EVENT SHALL ANY PARTY BE LIABLE TO ANOTHER PARTY FOR ANY PUNITIVE. EXEMPLARY, INDIRECT, INCIDENTAL, SPECIAL CONSEQUENTIAL DAMAGES ARISING OUT OF OR IN ANY MANNER RELATED TO THIS MOU, IRRESPECTIVE OF THE CAUSE OR NEGLIGENCE OF ANY PARTY HERETO. NOTWITHSTANDING ANYTHING TO THE CONTRARY IN THIS SECTION 9, THE LIMITATION OF LIABILITY PROVISIONS IN THE FOREGOING SENTENCE OF THIS SECTION 9 SHALL NOT APPLY TO ANY PARTY'S CLAIM ARISING FROM ANOTHER PARTY'S FAILURE TO PERFORM IN COMPLIANCE WITH ITS OBLIGATIONS UNDER SECTION 4 ABOVE AND SUCH FAILURE AROSE FROM, RELATED TO, OR OCCURRED AS A RESULT OF THE WILLFUL MISCONDUCT OR GROSS NEGLIGENCE OF SUCH OTHER PARTY.
- 10. <u>Notices</u>. Any notice, request or other communication required or permitted to be given under this MOU must be in writing and will be sent by one of the following means: electronic mail, facsimile transmission, hand delivery or courier to the other Party at the addresses set forth below:

Pipelines: Algonquin Gas Transmission, LLC,

Maritimes & Northeast Pipeline, L.L.C.

890 Winter Street

Suite 300

Waltham, MA 02451

Attn: Rich Paglia, President Maritimes & Northeast Pipeline, L.L.C. and Vice President, Marketing Spectra Energy

Phone: 617-560-1310 Facsimile: 617-560-1581

Email: RMPaglia@spectraenergy.com

Customer: Massachusetts Electric Company d/b/a National Grid

100 East Old Country Road Hicksville, NY 11801

Attn: John Allocca, Director, FERC Compliance &

Contracting

Phone: 516-545-3108

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-56(a) Page 5 of 9

Facsimile: 516-806-4442

Email: john.allocca@nationalgrid.com

Any such notice, request or other communication shall be deemed to have been duly given or made and to have become effective at the time of receipt thereof if received during normal business hours in the place of receipt, or otherwise at the opening of business on the business day in the place of receipt, immediately following the day of receipt. Notices given hereunder by electronic mail or facsimile will be deemed to have been effectively given the day indicated on the confirmation accompanying the electronic submission or facsimile. Any Party may, by written notice to another Party, change the address to which notices, requests or other communications to such Party are to be delivered.

- 11. <u>Counterparts</u>. This MOU may be executed in any number of counterparts with the same effect as if each Party had signed the same document. All counterparts shall be construed together and constitute one and the same instrument. This MOU may be executed by delivery of facsimile or electronic signatures.
- 12. Third Party Beneficiaries. Nothing in this MOU is intended or shall be construed to confer any rights or remedies on any Person other than the Parties and their respective successors and permitted assigns.
- 13. Assignment. This MOU shall inure to the benefit of and be binding upon the Parties' respective successors and permitted assigns. No Party shall assign any of its rights or obligations under this MOU to any Person without the prior written consent of the other non-assigning Party, which consent may be withheld at the discretion of the non-assigning Party; provided, either Party may, subject to giving prior notice to the other Party, assign this MOU to one of its Affiliates and Pipelines may assign this MOU to a joint venture or similar entity that may be created for the AN Project, provided, further, however, that such permitted assignment shall not release such assigning Party from its obligations hereunder.
- 14. <u>No Waiver</u>. Failure by a Party to exercise, or any delay on the part of a Party in exercising, any right, remedy, power or privilege under this MOU shall not operate as a waiver of any such right, remedy, power or privilege. No single or partial exercise of any right, remedy, power or privilege hereunder shall preclude any other or further exercise of the same or of any other right, remedy, power or privilege.
- 15. <u>Headings</u>. The headings of the Sections of this MOU are inserted for convenience only and do not constitute a part hereof or affect in any way the meaning or interpretation of this MOU.
- 16. Governing Law. THIS MOU SHALL BE GOVERNED BY, CONSTRUED AND ENFORCED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK WITHOUT REGARD TO ANY CONFLICTS OF LAWS RULE THAT WOULD APPLY THE LAWS OF ANOTHER JURISDICTION.
- 17. Forum. Any dispute (other than to enforce a judgment) must be brought in state or federal court in New York City, New York; each Party hereby irrevocably waives any right to trial by jury.

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-56(a) Page 6 of 9

- 18. <u>Entire Agreement</u>. This MOU constitutes the entire agreement between the Parties hereto with respect to the subject matter herein and supersede and cancel any prior agreements, representations, warranties, or communications, whether oral or written, between the Parties relating to the Possible Transaction.
- 19. <u>Definitions</u>. For purposes of this MOU, the following capitalized terms shall have the following meanings:

"Affiliate" shall mean, when used with respect to a specified Person at any time, any other Person that directly or indirectly, through one or more intermediaries, Controls, is Controlled by, or is under common Control with, such specified Person at such time.

"Control" shall mean, when used with respect to any specified Person, (i) the possession, directly or indirectly, of the power or authority to direct or cause the direction of the management and policies of such specified Person (which, in the case of a publicly traded master limited partnership, means such power or authority with respect to the general partner thereof), whether through the ownership of voting securities, as a trustee, by contract, or otherwise, or (ii) the ownership of more than 50% of the voting ownership interest in such specified Person.

"Person" shall mean any natural person, firm, individual, corporation, business trust, joint venture, association, company, limited liability company, partnership or other organization or entity, whether incorporated or unincorporated, or any governmental entity.

[Signature Page Follows]

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-56(a) Page 7 of 9

This MOU is agreed to by the Parties as of the Effective Date.

Algonquin Gas Transmission, LLC

By:

Name:

Title:

Maritimes & Northeast Pipeline, L.L.C.

By its Managing Member

M&N Management Company, LLC

Name:

Title:

Massachusetts Electric Company d/b/a National Grid

Name: Marcy L. Reed

Title: President

Exhibit A

NON-BINDING TERMS

ACCESS NORTHEAST PROJECT - ENERGY RELIABILITY SERVICE1

Key Commercial Terms 2,3

Shipper: Massachusetts Electric Company d/b/a National Grid

Pipeline(s): Algonquin Gas Transmission, LLC ("AGT") and Maritimes & Northeast

Pipeline, L.L.C. ("M&N-US") (collectively referred to herein as

"Pipelines")

MDTQ: 229,000 Dth/d

MHTQ: 9,542 Dth/hour - 4,198 Dth/hour sourced from primary market area

storage receipt points)

MSQ: 1,511,280 Dth

Primary Term: 20 years with extension rights plus Right of First Refusal ("ROFR");

Primary Pipeline Receipt Point Options:

Other receipt points not listed below to be discussed as appropriate.

 AGT interconnect with Millennium Pipeline Company, LLC at Ramapo, NY or with Tennessee Gas Pipeline Company, LLC at Mahwah, NJ; or

Wright, NY (via Iroquois Pipeline)

Primary Storage Receipt Point(s):

AGT interconnect with market area storage site(s)

¹ This service includes a combination of pipeline and LNG peaking transportation services, to be set forth in a tariff for Energy Reliability Service (ERS).

² This Exhibit A is not intended to identify all commercial and legal provisions, some of which may have already been discussed.

³ This Exhibit A (i) is intended for discussion purposes only; (ii) does not constitute an offer, an acceptance or establish a contract between the parties; (iii) does not obligate the Parties to negotiate or enter into any possible transaction; and (iv) does not obligate either Party to proceed with or continue any such negotiations or transaction.

Primary Delivery Point(s): Power Plant Aggregation Areas identified below

"Connecticut" - 62,339 Dth/day

"SEMA - G System" - 38,167 Dth/day

"Massachusetts" - 57,250 Dth/day

"Maine" - 71,244 Dth/day

In Service: November 1, 2018

Rate(s): To be Negotiated - Negotiated Rates to be adjusted via a capital
cost tracker as mutually agreed upon and final rate subject to change based on the
final combination of pipeline and LNG services as mutually agreed upon

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-56(b) Page 1 of 9

MEMORANDUM OF UNDERSTANDING

ACCESS NORTHEAST PROJECT

This Memorandum of Understanding (this "MOU") is effective as of February 11, 2015 ("Effective Date"), by and between Algonquin Gas Transmission, LLC, a Delaware limited liability company ("AGT") and Maritimes & Northeast Pipeline, L.L.C. ("Maritimes") (AGT and Maritimes together referred to as "Pipelines"), and Nantucket Electric Company d/b/a National Grid, a Massachusetts corporation ("Customer"). AGT, Maritimes and Customer may each be referred to herein as a "Party" and collectively as the "Parties."

RECITALS

WHEREAS, Pipelines own and operate interstate natural gas transmission systems in the Northeastern United States;

WHEREAS, Pipelines are proposing to expand such interstate natural gas transmission systems, to be utilized in conjunction with existing storage assets, in order to offer additional service in connection with the Access Northeast Project, the details of which were publicly announced on September 16, 2014 (the "AN Project");

WHEREAS, Pipelines and Customer desire to set forth a framework for negotiations with respect to a possible transaction pursuant to which Pipelines would provide Customer service on the AN Project facilities ("Possible Transaction").

NOW, THEREFORE, in consideration of the mutual covenants set forth herein, Pipelines and Customer agree as follows:

- 1. <u>Purpose</u>. The purpose of this MOU is to: (a) describe the basis on which the Possible Transaction may be evaluated and the definitive written agreements implementing the Possible Transaction (the "<u>Definitive Agreements</u>") may be negotiated, prepared and executed as soon as mutually practicable by the Parties, but in all events by June 30, 2015, (b) set forth certain legally binding and enforceable provisions of the Parties contained in Sections 1, and 3 through 19 of this MOU ("<u>Binding Provisions</u>"), and (c) set forth in <u>Exhibit A</u> attached hereto certain non-binding and non-enforceable key commercial terms constituting an expression of the mutual interest of the Parties relating to the Possible Transaction. Each Party agrees to evaluate the Possible Transaction and negotiate the Definitive Agreements in good faith.
- 2. <u>Development of the AN Project</u>. Pipelines, either individually or in conjunction with existing storage asset owners, will have primary responsibility for developing the route(s), designing the facilities, estimating the capital costs, developing a timeline, proposing the services, rates and terms and conditions of service, coordinating and conducting stakeholder outreach and outreach to the staff of the Federal Energy Regulatory Commission ("FERC"), and determining the ultimate viability of the AN Project based on the commercial terms, constructability of facilities and market demand and/or market interest of Customer and third parties. Customer will provide input to the stakeholder outreach strategy as reasonably requested by Pipelines, and where appropriate Customer will participate directly in specific outreach activities. If Customer is awarded capacity on the AN Project, Pipelines and Customer will meet

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-56(b) Page 2 of 9

periodically thereafter to discuss the status of the AN Project and to negotiate Definitive Agreements, including, without limitation, a precedent agreement and, subject to satisfaction of any conditions precedent contained in such precedent agreement, service agreement(s) and rate agreement(s). Attached hereto as Exhibit A is a list of key commercial terms, including estimated contract quantities, which the parties anticipate would be incorporated into a definitive precedent agreement, service agreement(s) and rate agreement(s), as appropriate. It is the intent of the Parties for Pipelines to conduct an open season ("Open Season") to solicit indications of interest in the AN Project in the form of requests for the AN Project service from interested parties as soon as reasonably practicable. In carrying out their responsibilities in this Section 2, Pipelines will take into account the requirements of Customer as well as all others requesting service in the Open Season, other interested stakeholders, and applicable laws, regulations and findings of governmental agencies. For purposes of the Open Season referenced in this Section 2, this MOU and the terms set forth in Exhibit A will constitute Customer's non-binding bid in the Open Season, including the transportation capacity allocation based on the Customer's relative electric load share ratio. To the extent other customers subscribe to portions of the AN Project, the relative capacity allocations in Exhibit A shall be modified to take into account the relative electric load shares of, and transportation capacity allocations to, such additional customers.

3. Execution of Definitive Agreements. The Parties acknowledge that the signing and delivery of the Definitive Agreements will be subject to conditions precedent, such as: (a) negotiation of mutually satisfactory terms and conditions to be included in the Definitive Agreements; and (b) approval of the Definitive Agreements by the senior management and board of directors of each Party. Notwithstanding anything herein to the contrary, (i) no Party shall be under any obligation to execute any Definitive Agreement; and (ii) the terms and conditions of any Definitive Agreement must be approved by each Party in its sole discretion.

Confidential Information and Publicity.

(a) Notwithstanding Section 4(b) below, and subject to the Parties' prior approval of any public announcements or disclosures related to Customer's participation in the AN Project, it is understood and agreed by the Parties that the intent of the marketing effort for the AN Project will be to disclose to other potential AN Project customers that Pipelines and Customer expect that, following the Open Season, they will enter into negotiations for Customer to be an anchor shipper for the AN Project. Customer agrees that Pipelines shall be permitted to make public announcements and disclosures related to the Open Season, the fact of such expected negotiations between Pipelines and Customer, and the MDTQ, target service commencement date and primary term requested by Customer herein for purposes of the Open Season, without Pipelines obtaining any further approvals from Customer. Likewise, Pipelines agree that Customer shall be permitted to discuss the AN Project with its state regulators and other stakeholders, including the fact of such expected negotiations among Pipelines and Customer, the MDTQ, target service commencement date and primary term requested by Customer herein for purposes of the Open Season, without obtaining any further approvals from Pipelines.

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-56(b) Page 3 of 9

- Pipelines and Customer hereby acknowledge the confidential nature of and agree not to disclose any information that is disclosed or otherwise shared during the development of the AN Project and negotiation of the precedent agreement to any person or entity other than the representatives of Pipelines and Customer who need to know such matters for the purpose of evaluating the AN Project and the Possible Transaction, and who are first informed of the confidential nature of this MOU. Without limiting the foregoing in this Section 4(b), neither Party hereto, nor any of its Affiliates, shall make any public announcement concerning this MOU, or the AN Project, except as heretofore agreed in Section 4(a), without first obtaining the prior written consent of the other Party; provided, however, that a Party, or any of its Affiliates, shall have the right to make such disclosure to the extent required by any court or other governmental or regulatory authorities (including, without limitation, by oral question, interrogatory, request for information or documents, subpoena, civil or criminal investigative demand or other process), applicable law or rule of the relevant U.S. securities association or stock exchange or by FERC or Customer's state regulatory agencies if such Party (a) limits the disclosure to the minimum that such Party determines, based on advice of its legal counsel, is required by such applicable law or rule, including, in the case of FERC or Customer's state regulatory agencies, seeking confidential treatment for such disclosure, unless the other Party agrees in writing to a greater level of disclosure, and (b) to the extent legally permissible, provides the other Party the content of the proposed disclosure, the reason(s) such disclosure is required, and the time and place the disclosure will be made, in each case as far in advance of the disclosure as reasonably practicable.
- 5. <u>Costs</u>. All costs and expenses incurred by a Party or any of its Affiliates in connection with the Possible Transaction, including, without limitation, the negotiation and execution of this MOU, any due diligence review and/or the negotiations related to the Possible Transaction, and preparation and execution of the Definitive Agreements, shall be borne solely by the Party or its Affiliates that incurred such costs or expenses, unless otherwise provided in any cost sharing arrangements that may be set forth in the executed Definitive Agreements.
- 6. <u>Term and Termination</u>. The term of this MOU (the "<u>Term</u>") shall be from the Effective Date of this MOU until the earliest of: (a) the Parties' mutual agreement to terminate this MOU; (b) the execution of the Definitive Agreements; or (c) June 30, 2015. Notwithstanding the termination of this MOU, either Party hereto nevertheless shall be entitled to seek any remedy to which it may be entitled at law or in equity for any breach by the other Party of the Binding Provisions that occurs during the Term, which right shall survive termination of this MOU for such limited purpose. If the Definitive Agreements are entered into by the Parties, such Definitive Agreements shall supersede this MOU, and this MOU shall become null and void in all respects.
- 7. No Joint Venture. By execution of this MOU, the Parties are not creating any partnership, joint venture, agency, or fiduciary obligations between the Parties. Rather, the Parties are independent contractors and neither Party has any power to bind the other Party for any purpose.
- 8. <u>Amendments</u>. This MOU may only be amended or modified by a written agreement signed by both Parties.

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-56(b) Page 4 of 9

- Legal Effect. Each Party acknowledges and agrees that the Binding Provisions are intended to be and shall be legally binding and enforceable. Except for the matters specifically set forth in the Binding Provisions, this MOU (including specifically the recitals and Exhibit A) is not intended to, and does not, create any legally binding obligations or liabilities on the part of Pipelines, Customer, or any of their respective Affiliates. Except as expressly: (a) set forth in the Binding Provisions, or (b) provided in any definitive agreement that the Parties may enter into in the future, no past or future action, course of conduct, or failure to act relating to the Possible Transaction, or relating to the negotiation of the terms of the Possible Transaction or any of the Definitive Agreements (including, without limitation, oral statements or understandings, handshakes, reliance and changes of position), shall give rise to or serve as a basis for any obligation or other liability, on the part of Pipelines, Customer, or any of their respective Affiliates with respect to the Possible Transaction. No Party makes any representations or warranties until the execution of (and as set forth in) the Definitive Agreements. IN NO EVENT SHALL ANY PARTY BE LIABLE TO ANOTHER PARTY FOR ANY PUNITIVE, EXEMPLARY, INDIRECT. INCIDENTAL, SPECIAL CONSEQUENTIAL DAMAGES ARISING OUT OF OR IN ANY MANNER RELATED TO THIS MOU, IRRESPECTIVE OF THE CAUSE OR NEGLIGENCE OF ANY PARTY HERETO. NOTWITHSTANDING ANYTHING TO THE CONTRARY IN THIS SECTION 9, THE LIMITATION OF LIABILITY PROVISIONS IN THE FOREGOING SENTENCE OF THIS SECTION 9 SHALL NOT APPLY TO ANY PARTY'S CLAIM ARISING FROM ANOTHER PARTY'S FAILURE TO PERFORM IN COMPLIANCE WITH ITS OBLIGATIONS UNDER SECTION 4 ABOVE AND SUCH FAILURE AROSE FROM, RELATED TO, OR OCCURRED AS A RESULT OF THE WILLFUL MISCONDUCT OR GROSS NEGLIGENCE OF SUCH OTHER PARTY.
- 10. <u>Notices</u>. Any notice, request or other communication required or permitted to be given under this MOU must be in writing and will be sent by one of the following means: electronic mail, facsimile transmission, hand delivery or courier to the other Party at the addresses set forth below:

Pipelines: Algonquin Gas Transmission, LLC,

Maritimes & Northeast Pipeline, L.L.C.

890 Winter Street

Suite 300

Waltham, MA 02451

Attn: Rich Paglia, President Maritimes & Northeast Pipeline, L.L.C. and Vice President, Marketing Spectra Energy

Phone: 617-560-1310 Facsimile: 617-560-1581

Email: RMPaglia@spectraenergy.com

Customer: Nantucket Electric Company d/b/a National Grid

100 East Old Country Road Hicksville, NY 11801

Attn: John Allocca, Director FERC Compliance &

Contracting

Phone: 516-545-3108

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-56(b) Page 5 of 9

Facsimile: 516-806-4442

Email: john.allocca@nationalgrid.com

Any such notice, request or other communication shall be deemed to have been duly given or made and to have become effective at the time of receipt thereof if received during normal business hours in the place of receipt, or otherwise at the opening of business on the business day in the place of receipt, immediately following the day of receipt. Notices given hereunder by electronic mail or facsimile will be deemed to have been effectively given the day indicated on the confirmation accompanying the electronic submission or facsimile. Any Party may, by written notice to another Party, change the address to which notices, requests or other communications to such Party are to be delivered.

- 11. <u>Counterparts</u>. This MOU may be executed in any number of counterparts with the same effect as if each Party had signed the same document. All counterparts shall be construed together and constitute one and the same instrument. This MOU may be executed by delivery of facsimile or electronic signatures.
- 12. <u>Third Party Beneficiaries</u>. Nothing in this MOU is intended or shall be construed to confer any rights or remedies on any Person other than the Parties and their respective successors and permitted assigns.
- 13. <u>Assignment</u>. This MOU shall inure to the benefit of and be binding upon the Parties' respective successors and permitted assigns. No Party shall assign any of its rights or obligations under this MOU to any Person without the prior written consent of the other non-assigning Party, which consent may be withheld at the discretion of the non-assigning Party; *provided*, either Party may, subject to giving prior notice to the other Party, assign this MOU to one of its Affiliates and Pipelines may assign this MOU to a joint venture or similar entity that may be created for the AN Project, *provided*, *further*, *however*, that such permitted assignment shall not release such assigning Party from its obligations hereunder.
- 14. <u>No Waiver</u>. Failure by a Party to exercise, or any delay on the part of a Party in exercising, any right, remedy, power or privilege under this MOU shall not operate as a waiver of any such right, remedy, power or privilege. No single or partial exercise of any right, remedy, power or privilege hereunder shall preclude any other or further exercise of the same or of any other right, remedy, power or privilege.
- 15. <u>Headings</u>. The headings of the Sections of this MOU are inserted for convenience only and do not constitute a part hereof or affect in any way the meaning or interpretation of this MOU.
- 16. Governing Law. THIS MOU SHALL BE GOVERNED BY, CONSTRUED AND ENFORCED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK WITHOUT REGARD TO ANY CONFLICTS OF LAWS RULE THAT WOULD APPLY THE LAWS OF ANOTHER JURISDICTION.
- 17. Forum. Any dispute (other than to enforce a judgment) must be brought in state or federal court in New York City, New York; each Party hereby irrevocably waives any right to trial by jury.

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-56(b) Page 6 of 9

- 18. <u>Entire Agreement</u>. This MOU constitutes the entire agreement between the Parties hereto with respect to the subject matter herein and supersede and cancel any prior agreements, representations, warranties, or communications, whether oral or written, between the Parties relating to the Possible Transaction.
- 19. <u>Definitions</u>. For purposes of this MOU, the following capitalized terms shall have the following meanings:

"Affiliate" shall mean, when used with respect to a specified Person at any time, any other Person that directly or indirectly, through one or more intermediaries, Controls, is Controlled by, or is under common Control with, such specified Person at such time.

"Control" shall mean, when used with respect to any specified Person, (i) the possession, directly or indirectly, of the power or authority to direct or cause the direction of the management and policies of such specified Person (which, in the case of a publicly traded master limited partnership, means such power or authority with respect to the general partner thereof), whether through the ownership of voting securities, as a trustee, by contract, or otherwise, or (ii) the ownership of more than 50% of the voting ownership interest in such specified Person.

"Person" shall mean any natural person, firm, individual, corporation, business trust, joint venture, association, company, limited liability company, partnership or other organization or entity, whether incorporated or unincorporated, or any governmental entity.

[Signature Page Follows]

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-56(b) Page 7 of 9

Algonquin Gas Transmission, LLC

By:
Name: William To Mardian

Maritimes & Northeast Pipeline, L.L.C.

By its Managing Member

Man Management Company, LLC

Title:

Nantucket Electric Company d/b/a National Grid

By: Marcy Lakeed
Title: President

Exhibit A

NON-BINDING TERMS

ACCESS NORTHEAST PROJECT - ENERGY RELIABILITY SERVICE

Key Commercial Terms 2.3

Shipper: Nantucket Electric Company d/b/a National Grid

Pipeline(s): Algonquin Gas Transmission, LLC ("AGT") and Maritimes & Northeast

Pipeline, L.L.C. ("M&N-US") (collectively referred to herein as

"Pipelines")

MDTQ: 2,000 Dth/d

MHTQ: 83.33 Dth/hour - 36.67 Dth/hour sourced from primary market area

storage receipt points)]

MSQ: 13,200 Dth

Primary Term: 20 years with extension rights plus Right of First Refusal ("ROFR");

Primary Pipeline Receipt Point Options: Other receipt points not listed below to be discussed as appropriate.

- AGT interconnect with Millennium Pipeline Company, LLC at Ramapo, NY or with Tennessee Gas Pipeline Company, LLC at Mahwah, NJ; or
- Wright, NY (via Iroquois Pipeline)

Primary Storage Receipt Point(s):

AGT interconnect with market area storage site(s)

¹ This service includes a combination of pipeline and LNG peaking transportation services, to be set forth in a tariff for Energy Reliability Service (ERS).

² This Exhibit A is a service of the se

² This Exhibit A is not intended to identify all commercial and legal provisions, some of which may have already been discussed.

³ This Exhibit A (i) is intended for discussion.

³ This Exhibit A (i) is intended for discussion purposes only: (ii) does not constitute an offer, an acceptance or establish a contract between the parties, (iii) does not obligate the Parties to negotiate or enter into any possible transaction; and (iv) does not obligate either Party to proceed with or continue any such negotiations or transaction.

Massachusetts Electric Company Nantucket Electric Company d/b/a National Grid D.P.U. 16-05 Attachment AG-1-56(b) Page 9 of 9

Primary Delivery Point(s): Power Plant Aggregation Areas identified below

"Connecticut" - 544 Dth/day

"SEMA - G System" - 334 Dth/day

"Massachusetts" - 500 Dth/day

"Maine" - 622 Dth/day

In Service: November 1, 2018

o Rate(s): To be Negotiated - Negotiated Rates to be adjusted via a capital cost tracker as mutually agreed upon and final rate subject to change based on the final combination of pipeline and LNG services as mutually agreed upon