

September 9, 2020

**BY HAND DELIVERY AND ELECTRONIC MAIL**

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

**RE: Docket 5066 – 2020 Gas Cost Recovery Filing  
Responses to Division Data Requests – Set 1**

Dear Ms. Massaro:

I have enclosed an electronic version of National Grid's<sup>1</sup> responses to the Division of Public Utilities and Carriers' First Set of Data Requests in the above-referenced docket.<sup>2</sup>

This filing also contains a Request for Protective Treatment of Confidential Information pursuant to Rule 810-RICR-00-00-1.3(H) of the Public Utilities Commission's (PUC) Rules of Practice and Procedure and R.I. Gen. Laws § 38-2-2(4)(B).

National Grid seeks protection from public disclosure certain confidential gas-cost pricing information and commercial contract terms, which are provided in responses to the following data requests: DIV 1-1, DIV 1-2, DIV 1-5, DIV 1-6, DIV 1-15, DIV 1-21, DIV 1-27, and DIV 1-28.

Accordingly, National Grid has provided the PUC with one complete unredacted copy of the confidential materials electronically via the Company's encryption software, Egress Switch. National Grid has included electronic redacted copies of these materials for the public filing.

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<sup>1</sup> The Narragansett Electric Company d/b/a National Grid (National Grid or Company).

<sup>2</sup> Per practice during the COVID-19 emergency period, the Company is providing PDF versions of the enclosures. The Company will provide the Commission Clerk with hard copies and, if needed, additional hard copies of the enclosures at a later date.

Luly E. Massaro, Commission Clerk  
Docket 5066 – Responses to Division Data Requests – Set 1  
September 9, 2020  
Page 2 of 2

Thank you for your attention to this matter. If you have any questions, please contact me at 781-907-2121.

Very truly yours,



Raquel J. Webster

Enclosures

cc: Docket 5066 Service List  
Leo Wold, Esq.  
John Bell, Division  
Al Mancini, Division (w/Confidential versions via Egress Switch)  
Jerome D. Mierzwa, Division Consultant (w/Confidential version via Egress Switch)

Certificate of Service

I hereby certify that a copy of the cover letter and any materials accompanying this certificate was electronically transmitted to the individuals listed below.



\_\_\_\_\_  
Joanne M. Scanlon

September 9, 2020  
Date

**Docket No. 5066 – National Grid – 2020 Annual Gas Cost Recovery Filing (GCR) - Service List as of 9/8/2020**

<b>Name/Address</b>	<b>E-mail</b>	<b>Phone</b>
Raquel J. Webster, Esq. National Grid 40 Sylvan Road Waltham, MA 02451 Jennifer Hutchinson, Esq. National Grid 280 Melrose Street Providence, RI 02907	<a href="mailto:raquel.webster@nationalgrid.com">raquel.webster@nationalgrid.com;</a>	781-907-2121
	<a href="mailto:Celia.obrien@nationalgrid.com">Celia.obrien@nationalgrid.com;</a>	
	<a href="mailto:Joanne.scanlon@nationalgrid.com">Joanne.scanlon@nationalgrid.com;</a>	
	<a href="mailto:Theresa.Burns@nationalgrid.com">Theresa.Burns@nationalgrid.com;</a>	
	<a href="mailto:Jennifer.hutchinson@nationalgrid.com">Jennifer.hutchinson@nationalgrid.com;</a>	
Leticia C. Pimentel, Esq. Steven Boyajian, Esq. Robinson & Cole LLP One Financial Plaza, 14 <sup>th</sup> Floor Providence, RI 02903	<a href="mailto:lpimentel@rc.com">lpimentel@rc.com;</a>	401-709-3337
	<a href="mailto:SBoyajian@rc.com">SBoyajian@rc.com;</a>	
Ann Leary Marybeth Carroll Samara Jaffe Ryan Scheib John Protano Theodore Poe Michael Pini National Grid 40 Sylvan Road Waltham, MA 02541	<a href="mailto:Ann.Leary@nationalgrid.com">Ann.Leary@nationalgrid.com;</a>	
	<a href="mailto:MaryBeth.Carroll@nationalgrid.com">MaryBeth.Carroll@nationalgrid.com;</a>	
	<a href="mailto:Samara.jaffe@nationalgrid.com">Samara.jaffe@nationalgrid.com;</a>	
	<a href="mailto:Elizabeth.Arangio@nationalgrid.com">Elizabeth.Arangio@nationalgrid.com;</a>	
	<a href="mailto:ryan.scheib@nationalgrid.com">ryan.scheib@nationalgrid.com;</a>	
	<a href="mailto:John.protano@nationalgrid.com">John.protano@nationalgrid.com;</a>	
	<a href="mailto:Theodore.poe@nationalgrid.com">Theodore.poe@nationalgrid.com;</a>	
	<a href="mailto:Michael.pini@nationalgrid.com">Michael.pini@nationalgrid.com;</a>	
Leo Wold, Esq. Dept. of Attorney General 150 South Main St. Providence, RI 02903	<a href="mailto:Leo.wold@dpuc.ri.gov">Leo.wold@dpuc.ri.gov;</a>	401-780-2177
	<a href="mailto:John.bell@dpuc.ri.gov">John.bell@dpuc.ri.gov;</a>	
	<a href="mailto:Al.mancini@dpuc.ri.gov">Al.mancini@dpuc.ri.gov;</a>	
	<a href="mailto:Margaret.hogan@dpuc.ri.gov">Margaret.hogan@dpuc.ri.gov;</a>	
	<a href="mailto:dmacrae@riag.ri.gov">dmacrae@riag.ri.gov;</a>	

	<a href="mailto:MFolcarelli@riag.ri.gov">MFolcarelli@riag.ri.gov</a> ;	
Jerome Mierzwa Exeter Associates, Inc. 10480 Little Patuxent Parkway, Suite 300 Columbia, MD 21044	<a href="mailto:jmierzwa@exeterassociates.com">jmierzwa@exeterassociates.com</a> ;	
<b>File an original &amp; nine (9) copies w/:</b> Luly E. Massaro, Commission Clerk Patricia Lucarelli, Commission Counsel Public Utilities Commission 89 Jefferson Blvd. Warwick, RI 02888	<a href="mailto:Luly.massaro@puc.ri.gov">Luly.massaro@puc.ri.gov</a> ;	401-780-2107
	<a href="mailto:Patricia.lucarelli@puc.ri.gov">Patricia.lucarelli@puc.ri.gov</a> ;	
	<a href="mailto:Alan.nault@puc.ri.gov">Alan.nault@puc.ri.gov</a> ;	
	<a href="mailto:Todd.bianco@puc.ri.gov">Todd.bianco@puc.ri.gov</a> ;	
Office of Energy Resources Christopher Kearns Nicholas Ucci	<a href="mailto:Christopher.Kearns@energy.ri.gov">Christopher.Kearns@energy.ri.gov</a> ;	
	<a href="mailto:Nicholas.ucci@energy.ri.gov">Nicholas.ucci@energy.ri.gov</a> ;	

**STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS**  
**RHODE ISLAND PUBLIC UTILITIES COMMISSION**

	)	
	)	
Annual Gas Cost Recovery Filing	)	Docket No. 5066
2020	)	
	)	
	)	

**MOTION OF THE NARRAGANSETT ELECTRIC  
COMPANY D/B/A NATIONAL GRID FOR PROTECTIVE  
TREATMENT OF CONFIDENTIAL INFORMATION**

Pursuant to Rule 810-RICR-00-00-1.3(H) of the PUC’s Rules of Practice and Procedure (Rue 1.3(H)) and R.I. Gen. Laws § 38-2-2(4)(B), National Grid<sup>1</sup> respectfully requests that the Rhode Island Public Utilities Commission (“PUC”) grant protection from public disclosure certain confidential, competitively sensitive, and proprietary information submitted in the Company’s responses(Data Request Responses) to the Rhode Island Division of Public Utilities an Carriers’ First Set of Data Requests Directed to National Grid in the above-captioned docket (Division’s Data Requests). The Company also respectfully requests that, pending entry of that finding, the PUC preliminarily grant the Company’s request for confidential treatment of the designated Data Request Responses pursuant to Rule 1.3(H)(2).

**I. BACKGROUND**

On August 19, 2020, National Grid received the Division’s Data Requests regarding it’s 2020 Annual Gas Cost Recovery filing, which the Company filed on September 1, 2020. The Division’s Data Requests seek a significant volume of confidential gas cost pricing information

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<sup>1</sup> The Narragansett Electric Company d/b/a National Grid (National Grid or the Company).

and contract terms, which are provided in the following Data Request Responses or the accompanying attachments: DIV 1-1, DIV 1-2, DIV 1-5, DIV 1-6, DIV 1-15, DIV 1-21, DIV 1-27, and DIV 1-28. In accordance with Rule 1.3(H)(3), National Grid has provided redacted public and unredacted confidential versions of its responses to these eight data requests.

The Company requests that, pursuant to Rule 1.3(H), the PUC afford confidential treatment to the gas cost pricing information and contract terms contained in the following Data Request Responses or accompanying attachments: DIV 1-1, DIV 1-2, DIV 1-5, DIV 1-6, DIV 1-15, DIV 1-21, DIV 1-27, and DIV 1-28.

## **II. LEGAL STANDARD**

Rule 1.3(H) provides that access to public records shall be granted in accordance with the Access to Public Records Act (APRA), R.I. Gen. Laws § 38-2-1, *et seq.* Under the APRA, all documents and materials submitted in connection with the transaction of official business by an agency are deemed to be “public record[s],” unless the information contained in such documents and materials falls within one of the exceptions specifically identified in R.I. Gen. Laws § 38-2-2(4). To the extent that information provided to the PUC falls within one of the designated exceptions to the public records law, the PUC has the authority under the terms of APRA to deem such information as confidential and to protect that information from public disclosure.

In that regard, R.I. Gen. Laws § 38-2-2(4)(B) provides that the following types of records shall not be deemed public:

Trade secrets and commercial or financial information obtained from a person, firm, or corporation which is of a privileged or confidential nature.

The Rhode Island Supreme Court has held that this confidential information exemption applies where the disclosure of information would be likely either (1) to impair the government’s ability to obtain necessary information in the future; or (2) to cause substantial harm to the competitive

position of the person from whom the information was obtained. *Providence Journal*, 774 A.2d 40 (R.I. 2001).

The first prong of the test is satisfied when information is provided to the governmental agency and that information is of a kind that would customarily not be released to the public by the person from whom it was obtained. *Providence Journal*, 774 A.2d at 47.

### **III. BASIS FOR CONFIDENTIALITY**

The gas cost pricing information and confidential contract terms – which are provided in Data Request Responses DIV 1-1, DIV 1-2, DIV 1-5, DIV 1-6, DIV 1-15, DIV 1-21, DIV 1-27, and DIV 1-28 – are confidential and privileged information of the type that National Grid would not ordinarily make public. As such, the information should be protected from public disclosure. Public disclosure of such information could impair National Grid’s ability to obtain advantageous pricing or other terms in the future, thereby causing substantial competitive harm. Accordingly, National Grid is providing the information on a voluntary basis to assist the PUC with its decision-making in this proceeding, but respectfully requests that the PUC provide confidential treatment to the information.

### **IV. CONCLUSION**

For the foregoing reasons, National Grid respectfully requests that the PUC grant its Motion for Protective Treatment of Confidential Information.

[SIGNATURE ON NEXT PAGE]

Respectfully submitted,

**THE NARRAGANSETT ELECTRIC  
COMPANY d/b/a NATIONAL GRID**

By its attorney,

A handwritten signature in blue ink that reads "Raquel Webster". The signature is fluid and cursive, with the first name "Raquel" being more prominent than the last name "Webster".

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Raquel J. Webster (Bar #9064)  
National Grid  
40 Sylvan Road  
Waltham, MA 02451  
Tel. 781-907-2121  
[Raquel.webster@nationalgrid.com](mailto:Raquel.webster@nationalgrid.com)

Dated: September 9, 2020



Division 1-1

Request:

Please provide a complete *monthly* history of the Company's gas purchase activity for the period April 2019 through July 2020. Please provide the Company's response in Excel format. The history should include the following:

- a. Rates paid to each supplier and under each pipeline/contract/rate schedule by component (i.e., demand/reservation, variable, deliverability, capacity, injection/withdrawal, commodity, etc.), separately for firm and interruptible gas purchase, transportation, and storage transactions;
- b. The applicable quantity for each component identified in subpart (a);
- c. The applicable cost for each component identified in subpart (a);
- d. For each gas supply purchase, identify the transporting pipeline(s) and receipt and delivery points. Provide a key identifying pipeline receipt points by zone (e.g., TGP 4);
- e. For all gas supply purchases made under interruptible delivery arrangements, indicate whether transportation charges are incorporated within or are in addition to the commodity gas costs;
- f. For gas supply purchases, identify the dates of flow; and
- g. Separately identify any transactions made to support off-system sales.

Response:

Please see the attached Excel spreadsheet, Attachment DIV 1-1 for (a) – (f), for the information concerning the Company's gas purchase activity for the period of April 2019 through July 2020 requested in (a) – (f) above.

Attachment DIV 1-1 contains commercially sensitive and confidential information; therefore, the Company is providing confidential and redacted versions of Attachment DIV 1-1, subject to a Motion for Protective Treatment.

With respect to (g), the Company does not associate specific purchases to specific sales to calculate margins. As described in Section III.E of the Company's Natural Gas Portfolio Management Plan, approved by the Rhode Island Public Utilities Commission in Docket No. 4038, the Company calculates a weighted average price of all purchased supply and uses that cost to calculate margins against all Company sales.

The Narragansett Electric Company

d/b/a National Grid

Undocketed

In Re: 2020 Annual Gas Cost Recovery Filing  
Responses to the Division's First Set of Data Requests  
Issued on August 19, 2020

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Attachment DIV 1-1

Please see Excel Version of Attachment DIV 1-1

Prepared by or under the supervision of:

The Narragansett Electric Company

d/b/a National Grid

Docket No. 5066

In Re: 2020 Annual Gas Cost Recovery Filing  
Responses to the Division's First Set of Data Requests  
Issued on August 19, 2020

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Division 1-2

Request:

Excluding those agreements which govern Canadians pipeline contracts, please provide a copy of each Asset Management Agreement in effect during the period April 2019 through July 2020.

Response:

Please see Attachment DIV 1-2 for all Asset Management Agreements in effect during the period April 2019 through July 2020.

Attachment DIV 1-2 contains commercially sensitive and confidential information; therefore, the Company is providing confidential and redacted versions of Attachment DIV 1-2, subject to a Motion for Protective Treatment.

REDACTED



**Transaction Confirmation**  
**Asset Management Arrangement (Package 3)**  
**The Narragansett Electric Company d/b/a National Grid**

**TRANSACTION CONFIRMATION**

Date: September 17, 2019  
Transaction Confirmation #: \_\_\_\_\_

This Transaction Confirmation was awarded pursuant to National Grid's Request for Proposals for Asset Management Arrangements dated August 13, 2019. This Transaction Confirmation is subject to the Base Contract between Seller and Buyer, dated August 1, 2009. ***This Transaction Confirmation will not become binding until executed by both parties.***

**SELLER OR ASSET MANAGER:**

EDF Trading North America, LLC  
601 Travis Street, Suite 1700  
Houston, TX 77002  
Attn: Contract Administration  
Phone: (281) 781-0333  
Fax: (281) 653-1454  
Trader: Daniel Mraz

**BUYER:**

The Narragansett Electric Company d/b/a National Grid  
100 East Old County Road  
Hicksville, New York 11801  
Attn: Contract Administration  
Phone: (516) 545-6068  
Fax: (516) 545-5466  
Transporters: Union Gas Limited ("Union"), TransCanada  
Pipelines Limited ("TransCanada"), Iroquois  
Gas Transmission System, L.P. ("Iroquois")  
Tennessee Gas Pipeline Company, L.L.C.  
("Tennessee").  
Transporters Contract Number:  
Trader: Samara Jaffe

**Contract Price:** See Special Conditions Section C below.

**Term:** Begin: November 1, 2019                      End: October 31, 2020

**Performance Obligation and Contract Quantity:** See Special Conditions below.

**Delivery Point(s):** Subject to Buyer's right to exercise the Additional Call, the primary Delivery Point shall be the point of interconnection between Tennessee and Buyer's distribution system that is the primary Delivery Point under the Tennessee Asset.

**Special Conditions:**

**A. Definitions**

"Assets" means the Agreements summarized as follows:

Pipeline	Contract	Quantity Dt/day	Quantity Gj/day	Receipt Point	Delivery Point
Union	M12164	1,025	1,081	Dawn	Parkway
TransCanada	42386	1,012	1,068	Parkway	Waddington
Iroquois	50001	1,012	NA	Waddington	Wright
Tennessee	95345	1,000	NA	Wright	Lincoln, RI

"CFTC" shall mean the Commodities Futures Trading Commission.

"Credit Support Provider" means EDF Trading Limited.

"Dekatherm" or "Dth" or "dt" means one (1) MMBtu.

"EBB" means Buyer's Electronic Bulletin Board utilized for confirmation of Gas. "FERC" means the Federal Energy Regulatory Commission.

"FERC" means the Federal Energy Regulatory Commission.

"Letter of Credit" means an irrevocable, non-transferable, standby letter of credit issued by a major U.S. commercial bank, a U.S. branch office of a foreign bank, or U.S. financial institution, in any case with a credit rating of at least "A-" by S&P and "A3" by Moody's in a form reasonable acceptable to the Buyer. All costs related to any Letter of Credit shall be for the account of the Seller.

"Moody's" means Moody's Investors Services, Inc., or its successor.

"S&P" means S&P Global Ratings, or its successor.

## B. Gas Service and Capacity Assignment

1. **Release and Assignment of Assets:** During the Term, Buyer will release/assign, on a pre-arranged, zero rate, non-biddable basis, at no cost to Seller, the Assets. With respect to pipeline transportation service in Canada: (i) Buyer shall assign to Seller Union Gas Limited ("Union") firm transportation service as described in Contract M12164 from Dawn to Parkway in an amount of 1,081 GJ/Day pursuant to a temporary assignment with Union; and (ii) Buyer shall assign to Seller TransCanada Pipelines Limited ("TransCanada") firm transportation service as described in Contract 42386 from Parkway to Waddington in an amount of 1,068 GJ/Day pursuant to a temporary assignment with TransCanada. Buyer shall be responsible for the payment of all demand charges related to the Assets. Notwithstanding the foregoing, Seller shall initially pay the demand charges to TransCanada and Union and Buyer shall reimburse Seller for 100% of the demand charges related to the Assets for the volumes delivered by Seller to Buyer under this Transaction Confirmation. Reimbursement of such charges shall be paid in U.S. dollars and based on the Bank of Canada's monthly average exchange rate for the month of business as published on the last business day of the month of production. Seller shall be responsible for all variable costs in connection with the Assets during the Term unrelated to deliveries for Buyer. Buyer and Seller each agree to take such actions and execute all documents as may be required to effectuate the assignment of the Assets from Buyer to Seller. All assignments shall be subject to recall in the event that an Event of Default occurs with respect to Seller as the Defaulting Party.

### 2. Gas Supply Requirements:

A. On any day during the period of November 1, 2019 through March 31, 2020 of the Term, Buyer shall have the right, but not the obligation, to call on Seller to deliver up to the MDQ at the Tennessee Delivery Point. The MDQ shall be adjusted upward or downward based upon the deliverability and applicable fuel retention on each of Union, TransCanada, Iroquois and Tennessee. Subject to satisfaction of these Gas Supply Requirements, Asset Manager shall have the right to optimize the assigned capacity for its own account. Subject to the following:

- i. At least five business days prior to the 1st day of the following month of delivery, Buyer shall have the right, but not the obligation, to request Base-Load delivery of such Gas Supply at the Delivery Point up to the MDQ during this delivery period.
- ii. Further, subject to Buyer having exercised its Base-Load rights, Buyer shall have a right to call on a quantity up to the remaining MDQ.
- iii. **Additional Call** – In addition to the Gas Supply Requirements set forth in Special Condition B(2)(A) of this Transaction Confirmation, on any Day during the period of November 1, 2019 through March 31, 2020 of the Term, Buyer shall have the right, but not the obligation, to call on a quantity of Gas up to the contract quantity of each of the Iroquois and Tennessee Assets at the primary Delivery Point(s) under each such released Asset. Seller's delivery obligations under this Additional Call provision and its delivery obligation pursuant to all Gas Supply Requirements provisions above shall not be cumulative and may only be exercised after Buyer has exhausted its rights pursuant to firm base-load and daily call supplies (i.e., Buyer's right to request gas at the Iroquois or Tennessee Delivery Point(s) pursuant to these Gas Supply Requirements provisions and under this Additional Call provision shall be reduced by quantities requested at any upstream Delivery Point).

B. **Termination Right:** If at any time during the Term, an Event of Default occurs with respect to Seller as the Defaulting Party, unless such failure is excused by the Buyer's non-performance or caused by Force Majeure, Buyer shall have the right to terminate this Transaction Confirmation and recall the Assets.

**C. Nominations**

Buyer shall make all nominations for all delivery of Gas hereunder prior to 10:00 a.m. prevailing Eastern Standard Time on the Business Day prior to the Gas Day on which delivery of Gas is requested. Friday nomination shall be for Saturday through Monday (ratably). Holidays are as determined by ICE and shall be treated the same as weekends (i.e., nominated ratably on Business Day prior to the Holiday).

Buyer shall arrange for Seller's use and access of the EBB. Seller shall utilize the EBB to schedule all Gas purchased pursuant to this AMA to the Delivery Point(s) for confirmation by National Grid's Gas Control. Use of the EBB or other means of requests for confirmation of meter bounce transactions at the Delivery Point or other points of interconnection with Buyer's facilities shall be strictly prohibited. Use of the EBB or other means of requests for confirmation of meter bounce transactions at the Delivery Point or other points of interconnection with Buyer's facilities shall be strictly prohibited.

**D. Price** The commodity price for Gas purchased pursuant to Special Condition 2 shall be as follows:

1. The commodity price for Gas called on through the exercise of a daily call pursuant to Special Condition B(2)(A)(ii) shall be equal to [REDACTED]
2. The commodity price for Gas called on through the Base-Load option pursuant to Special Condition B(2)(A)(i) shall be equal to [REDACTED]
3. The commodity price for Gas called on through the Additional Call option pursuant to Special Condition B(2)(B) shall be equal to [REDACTED]

**E. Asset Management Fee**

Subject to the delivery obligations set forth above, Seller shall have the right to optimize the assigned capacity for its own account. In exchange for such right, during the Term, Seller shall make a payment to Buyer of [REDACTED] payable in equal monthly installments of [REDACTED]

**F. Credit Provisions**

**Independent Amount.** In the event Seller (i) has a Credit Rating at or below BBB- by S&P and/or Baa3 by Moody's, or (ii) is unrated, Seller shall provide Buyer with an Independent Amount in the form of either (a) a guaranty from a Credit Support Provider rated at least BBB- by S&P and/or Baa3 by Moody's, (b) cash, or (c) a Letter of Credit, in either case, in an amount equal to 10% of the potential mark to market exposure for the transactions hereunder calculated as a function of price volatilities as well as the notional volume; provided, however, that the potential mark to market exposure shall be zero (0) when Seller's price is set at the Gas Daily Index.

**Collateral Requirement.** The "Collateral Requirement" for Seller means the Exposure (as defined below), minus the sum of (i) the amount of cash previously transferred by Seller to Buyer, (ii) the amount of cash held by Buyer as posted collateral as the result of drawing under any Letter of Credit maintained by Seller for the benefit of Buyer, and (iii) the undrawn value of each such Letter of Credit; provided, however, that the Collateral Requirement for Seller will be deemed to be zero (0) if (i) Seller or its Credit Support Provider has a Credit Rating of at least BBB- by S&P and/or Baa3 by Moody's, and (ii) no Event of Default with respect to Seller has occurred and is continuing. Seller may provide the Collateral Requirement in the form of either (a) a guaranty from a Credit Support Provider rated at least BBB- by S&P and/or Baa3 by Moody's, (b) cash, or (c) a Letter of Credit. The "collateral Requirement" for Buyer means zero (0).

"Exposure" shall be calculated as the sum of:

- (i) all amounts that have been invoiced, but not yet paid for the transactions under this Transaction Confirmation; plus
- (ii) all amounts that have been accrued, but not yet invoiced for the transactions under this Transaction Confirmation; plus
- (iii) the mark to market amount for each Day remaining in the term for each transaction under this Transaction Confirmation; reduced by
- (iv) the Independent Amount, if any, previously provided by the Seller to the Buyer.

REDACTED

**G. Asset Management Arrangement ("AMA")**

The parties acknowledge and agree that the transactions hereunder (including the release of capacity) constitute an Asset Management Arrangement and that such arrangement qualifies as a bona fide "asset management arrangement" pursuant to FERC Order No. 712, and related FERC regulations and policy as may be amended from time to time, and that Seller is acting as Asset Manager as defined in 18 CFR 284.8(h)(3), as may be amended from time to time. The parties further agree that all transactions contemplated under this Transaction Confirmation are intended to be in full compliance with the applicable rules, regulations and policies of the FERC, including Order No. 712 and shall be executed in conformance therewith. If it is determined that this transaction does not constitute an AMA, the parties agree to modify the transaction as required while maintaining, to the extent possible, the economics of the transaction.

**H. Import/Export Reporting**

Any import/export reporting requirements applicable to the quantities of natural gas delivered to Buyer hereunder, whether of the National Energy Board, the U.S. Department of Energy Office of Fossil Energy, the U.S. Customs Service, or any other regulatory body having jurisdiction over the volumes, are the responsibility of Asset Manager.

**I. Changes in Law**

If the FERC, CFTC, or other applicable regulatory body shall implement any change in law, rule, regulation, tariff or practice that is binding on Seller or Buyer and materially and adversely affects such party's ability to perform its obligations hereunder, the parties shall negotiate in good faith an amendment to this Transaction Confirmation or take other appropriate action the effect of which is to restore each party, as closely as possible, to its same position as prior to such change. If, within sixty (60) days after the implementation of such change, the parties are unable to agree on such amendment or such other appropriate action, each party will continue to perform its obligations hereunder to the maximum extent possible under the applicable law, rule, regulation, tariff or practice, taking all reasonable steps to mitigate the effect of such change on each other.

Seller: EDF Trading North America, LLC

By: Kathy Stroman  
Name: Kathy Stroman  
Title: Confirmations Mgr  
Date: 10/1/19

Buyer: The Narragansett Electric Company d/b/a National Grid

By: [Signature]  
Name: John V. Vaughn  
Title: Authorized Signatory  
Date: 10/04/2019

[Signature]



**Asset Management Arrangement (Package No. 4)  
Transaction Confirmation  
The Narragansett Electric Company d/b/a National Grid**

#6876230  
6876231  
6876240

TRANSACTION CONFIRMATION

	Date: <u>August 23, 2019</u> Transaction Confirmation #: _____
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The transaction described in this Transaction Confirmation was awarded pursuant to National Grid's Request for Proposals for Asset Management Arrangements dated August 13, 2019. The portions of this Transaction Confirmation relating to the purchase and sale of gas are subject to the NAESB Base Contract for the Sale and Purchase of Natural Gas between Seller and Buyer, dated January 1, 2012 (as may be amended or supplemented, the "Base Contract"). This Transaction Confirmation will not become binding until executed by both parties. All capitalized terms used but not defined herein shall be as defined in the Base Contract.

**SELLER:**  
Freepoint Commodities, LLC  
58 Commerce Road  
Stamford, CT 06902  
Attn: Contract Department  
Phone: 203-542-6000  
Fax: 203-724-0906

**BUYER:**  
The Narragansett Electric Company d/b/a National Grid  
100 East Old County Road  
Hicksville, New York 11801  
Attn: Contract Administration  
Phone: (516) 545-6068  
Fax: (516) 545-5466  
Base Contract No.  
Transporters: Tennessee Gas Pipeline Company, L.L.C.  
("Tennessee")  
Trader: Samara Jaffe

**Contract Price:** See Special Conditions Section C below.

**Term:** Begin: November 1, 2019 End: through and including October 31, 2020

**Performance Obligation and Contract Quantity:** See Special Conditions below.

**Delivery Point(s):** The point of interconnection between Tennessee and Buyer's facilities at Cranston, RI and Lincoln, RI.

**Special Conditions:**

**A. Definitions**

"Assets" means Buyer's FT-A Contracts with Tennessee having primary receipts at Dracut, MA (pin number 412538) and primary deliveries in Zone 6 the point(s) of interconnection between Tennessee and Buyer's facilities in Cranston, RI, NY (pin number 420750) and Lincoln, RI (pin number 420758). The maximum delivered quantity of the Assets is 22,300 dt/day ("MDQ"), which is allocated as 20,000 dt/day at Cranston and 2,300 dt/day at Lincoln. *MJ*

"Credit Support Provider" means a legal entity proposed by Seller and acceptable to Buyer.

"CFTC" means the Commodity Futures Trading Commission.

"Dekatherm" or "Dth" or "dt" means one (1) MMBtu.

"EBB" means Buyer's Electronic Bulletin Board utilized for confirmation of Gas.

"FERC" means the Federal Energy Regulatory Commission.



REDACTED

"Letter of Credit" means an irrevocable, non-transferable, standby letter of credit issued by a major U.S. commercial bank, a U.S. branch office of a foreign bank, or U.S. financial institution, in any case with a credit rating of at least "A-" by S&P and "A3" by Moody's, in a form reasonably acceptable to the Buyer. All costs related to any Letter of Credit shall be for the account of the Seller.

"Moody's" means Moody's Investors Service, Inc. or its successor.

"S&P" means S&P Global Ratings, or its successor.

#### B. Gas Service and Capacity Release

- a. **Release of Assets:** During the Term, Buyer shall release the Assets on a pre-arranged, non-biddable basis, at no cost to Seller. Buyer shall be responsible for the payment of all demand charges related to the Assets. Seller shall be responsible for all variable costs in connection with the Assets during the Term unrelated to deliveries for Buyer. Buyer and Seller each agree to take such actions and execute such documents as may be required to effectuate the release of the Assets from Buyer to Seller.
  - b. **Daily Call:** On any day during the period of **December 1, 2019 through April 30, 2020**, Buyer shall have the right, but not the obligation, to call on a quantity of Gas up to the MDQ at the Delivery Point(s).
  - c. **Termination Option:** If at any time during the Term, Seller fails to deliver Gas required to be delivered hereunder, unless such failure is excused by the Buyer's non-performance or caused by Force Majeure, Buyer shall have the right to terminate this Transaction Confirmation and recall the Assets.
- C. **Price:** For the first ten (10) days on which Buyer exercises the call option pursuant to Special Condition B(b) (the "Call Option"), the Price for gas delivered in respect of such exercise (per dth) shall be equal to the price published in row [REDACTED]

#### D. Nominations

Buyer shall make all nominations for delivery of all Gas Supply Requirements prior to 10:00 AM, prevailing Eastern Standard Time on the Business Day prior to the Gas Day on which delivery of Gas is requested. Friday nomination shall be for Saturday through Monday (ratably). Holidays are as determined by ICE and shall be treated the same as weekends (*i.e.*, nominated ratably on the Business Day prior to the Holiday).

Buyer shall arrange for Seller's use and access of the EBB. Seller shall utilize the EBB to schedule all Gas purchased pursuant to this AMA to the Delivery Point(s) for confirmation by National Grid's Gas Control. Use of the EBB or other means of requests for confirmation of meter bounce transactions at the Delivery Point or other points of interconnection with Buyer's facilities shall be strictly prohibited.

#### E. Asset Management Fee

Subject to the delivery obligations set forth above, Seller shall have the right to optimize the released capacity for its own account. In exchange for such right, during the Term, Seller shall make a payment to Buyer of [REDACTED] payable in equal monthly installments of [REDACTED]. This payment shall be reflected as a credit to Buyer in Seller's invoice for the applicable Month.

#### F. Credit Provisions

**Independent Amount.** In the event Seller (i) has a Credit Rating at or below BBB- by S&P and/or Baa3 by Moody's, or (ii) is unrated, Seller shall provide Buyer with an Independent Amount in the form of either (a) a guaranty from a Credit Support Provider rated at least BBB- by S&P and/or Baa3 by Moody's, (b) cash, or (c) a Letter of Credit, in either case, in an amount equal to 10% of the potential mark to market exposure for the transactions hereunder calculated as a function of price volatilities as well as the notional volume, provided, however, that the potential mark to market exposure shall be zero (0) when Seller's price is set at the Gas Daily index-based price.

**Collateral Requirement.** The "Collateral Requirement" for Seller means the Exposure (as defined below), minus the sum of (i) the amount of cash previously transferred by Seller to Buyer, (ii) the amount of cash held by Buyer as posted collateral as the result of drawing under any Letter of Credit maintained by Seller for the benefit of Buyer, and (iii) the undrawn value of each Letter of Credit; provided, however, that the Collateral Requirement for Seller will be deemed to be zero (0) if (i) Seller has a Credit Rating of at least BBB- by S&P and/or Baa3 by Moody's, and (ii) no Event of Default with respect to Seller has occurred and is continuing. Seller may

REDACTED

provide the Collateral Requirement in the form of either (a) a guaranty from a Credit Support Provider rated at least BBB- by S&P and/or Baa3 by Moody's, (b) cash, or (c) a Letter of Credit. The "Collateral Requirement" for Buyer means zero (0).

Exposure. shall be calculated as the sum of:

- (i) all amounts that have been invoiced, but not yet paid for the transactions under this Transaction Confirmation; plus
- (ii) all amounts that have been accrued, but not yet invoiced for the transactions under this Transaction Confirmation; plus
- (iii) the mark to market amount for each Day remaining in the term for each transaction under this Transaction Confirmation; reduced by
- (iv) the Independent Amount, if any, previously provided by the Seller to the Buyer.

**G. Asset Management Arrangement**


The Parties agree that the transactions hereunder constitute an Asset Management Arrangement, as defined by FERC in Order No. 712 (as modified and clarified) and in accordance with FERC's rules and regulations, and that Seller is acting as Asset Manager as defined in 18 CFR 284.8(h)(3).

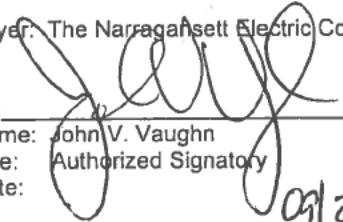
**H. Changes in Law**

If the FERC, CFTC or other applicable regulatory body shall implement any change in law, rule, regulation, tariff or practice that is binding on Seller or Buyer and materially and adversely affects such party's ability to perform its obligations hereunder, the parties shall negotiate in good faith an amendment to this Agreement or take other appropriate action the effect of which is to restore each party, as closely as possible, to its same position as prior to such change. If, within sixty (60) Days after the implementation of such change, the parties are unable to agree on such amendment or such other appropriate action, each party will continue to perform its obligations hereunder to the maximum extent possible under the applicable law, rule, regulation, tariff or practice, taking all reasonable steps to mitigate the effect of such change on each other.

Seller: Freeport Commodities, LLC

Buyer: The Narragansett Electric Company d/b/a National Grid

By:   
Name: Abi Mathew  
Title: Director, operations  
Date: 9/9/19

By:   
Name: John V. Vaughn  
Title: Authorized Signatory  
Date: 09/20/2019

T.V.



**Asset Management Arrangement (Package No. 7)  
The Narragansett Electric Company d/b/a National Grid**

**TRANSACTION CONFIRMATION**

Date: September 27, 2019  
Transaction Confirmation #: \_\_\_\_\_

This Transaction Confirmation was awarded pursuant to National Grid's Request for Proposal for Asset Management Arrangements dated August 13, 2019, which is incorporated into and made a part hereof. This Transaction Confirmation is subject to the Base Contract for Sale and Purchase of Natural Gas between Seller and Buyer, dated January 22, 2016. ***This Transaction Confirmation will not become binding until executed by both parties.***

**SELLER:**  
Spotlight Energy, LLC  
Attn: \_\_\_\_\_  
Phone: 832-271-6767  
Fax: 832-779-5455  
Base Contract No. \_\_\_\_\_  
Transporters: \_\_\_\_\_  
Transporters Contract Number: \_\_\_\_\_  
Trader: \_\_\_\_\_

**BUYER:**  
The Narragansett Electric Company d/b/a National Grid  
100 East Old County Road  
Hicksville, New York 11801  
Attn: Contract Administration  
Phone: (516) 545-6068  
Fax: (516) 545-5466  
Base Contract No. \_\_\_\_\_  
Transporters: Columbia Gas Transmission L.L.C. ("TCO")  
Trader: Samara Jaffe

**Contract Price:** See Special Conditions Section C below.

**Term:** Begin: November 1, 2019      End: October 31, 2020

**Performance Obligation and Contract Quantity:** See Special Conditions below .

**Delivery Point(s):** The point of interconnection between TCo and Algonquin Gas Transmission LLC ("AGT") into AGT known as TCo-Hanover.

**Special Conditions:**

**A. Definitions**

"Assets" means Buyer's FTS contract 31523 with TCo, having primary receipts at Broadrun and primary deliveries in at the interconnection between TCo and Algonquin Gas Transmission, LLC ("AGT") at TCo-Hanover and a maximum daily quantity of 10,000 Dth/Day ("MDQ").

"CFTC" means the U.S. Commodity Futures Trading Commission.

"Dekatherm" or "Dth" or "dt" means one (1) MMBtu.

"FERC" means the Federal Energy Regulatory Commission.

"Letter of Credit" means an irrevocable, non-transferable, standby letter of credit issued by a major U.S. commercial bank, a U.S. branch office of a foreign bank, or U.S. financial institution, in any case with a credit rating of at least "A-" by S&P and "A3" by Moody's, in a form reasonably acceptable to the Buyer. All costs related to any Letter of Credit shall be paid for by the Pledging Party.

"Moody's" means Moody's Investors Service, Inc. or its successor.

"Pledging Party" shall have the meaning set forth in F (Collateral Requirement) below.

REDACTED

"Secured Party" shall be the party other than the Pledging Party.

"S&P" means S&P Global Ratings, or its successor.

#### B. Gas Service and Capacity Release

- a. **Release of Assets:** During the Term, Buyer shall release the Assets on a pre-arranged, non-biddable basis, at no cost to Seller. Buyer shall be responsible for the payment of all demand charges related to the Assets. Seller shall be responsible for all variable costs in connection with the Assets during the Term unrelated to deliveries for Buyer. Buyer and Seller each agree to take such actions and execute such documents as may be required to effectuate the release of the Assets from Buyer to Seller.
- b. **Daily Call:** On any Day during the period of **November 1, 2019 through April 15, 2020**, Buyer shall have the right, but not the obligation, to call on a quantity of Gas up to the MDQ at the Delivery Point.
- c. **Termination Option:** If at any time during the Term, Seller fails to deliver Gas required to be delivered hereunder resulting in an Affected Transaction, unless such failure is excused by the Buyer's non-performance or caused by Force Majeure, Buyer shall have the right to terminate this Transaction Confirmation and recall the Assets.

C. **Price:** The price for Gas called on through the exercise of the Daily Call shall be equal to [REDACTED]

#### D. Nominations

Buyer shall make all requests for the Daily Call prior to 10:00 AM, prevailing Eastern Standard Time on the Business Day prior to the Day on which delivery of Gas is requested. Friday nomination shall be for Saturday through Monday (ratably). Holidays are as determined by ICE and shall be treated the same as weekends (*i.e.*, nominated ratably on the Business Day prior to the Holiday).

#### E. Asset Management Fee

Subject to Buyer's Daily Call option set forth above, Seller shall have the right to optimize the released capacity for its own account. In exchange for such right, during the Term, Seller shall make a payment to Buyer of [REDACTED] payable in equal monthly installments of [REDACTED]. This payment shall be reflected as a credit to Buyer in Seller's invoice for the applicable Month.

#### F. Credit Provisions

**Collateral Requirement.** The "Collateral Requirement" for a party (the "Pledging Party") means the Exposure (as defined below), minus the sum of (i) the amount of cash previously transferred to the Secured Party by the Pledging Party, (ii) the amount of cash held by the Secured Party as posted collateral as the result of drawing under any Letter of Credit maintained for the benefit of the Secured Party, and (iii) the undrawn value of each Letter of Credit; provided, however, that the Collateral Requirement for either party will be deemed to be zero (0) if (i) that party has a Credit Rating of at least BBB- by S&P and/or Baa3 by Moody's, and (ii) no Event of Default has occurred and is continuing. Either party may provide the Collateral Requirement in the form of either (a) a guaranty from a Guarantor if such Guarantor is rated at least BBB- by S&P and/or Baa3 by Moody's, (b) cash, or (c) a Letter of Credit.

**Exposure.** Exposure shall mean the Net Settlement Amount, as calculated by the Secured Party in good faith and in a commercially reasonable manner, that the Pledging Party would owe to the Secured Party if an Early Termination Date had been calculated as of the date of such calculation as provided for in Section 10 of the Base Contract; provided that such calculations shall be at the mid point between the bid price and the offer price.

#### G. Asset Management Arrangement

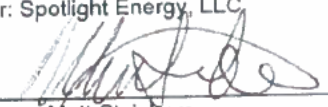
The parties agree that the transactions hereunder constitute an "Asset Management Arrangement", as defined by FERC in Order No. 712 (as modified and clarified) and in accordance with FERC's rules and regulations, and that Seller is acting as "Asset manager" as defined in 18 CFR 284.8(h)(3).

#### H. Changes in Law

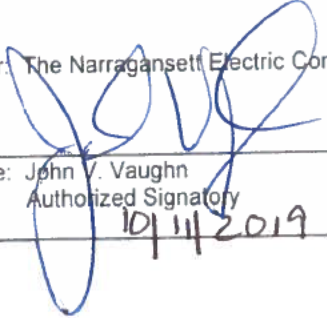

If the FERC, CFTC or other applicable regulatory body shall implement any change in law, rule, regulation, tariff or practice that is binding on Seller or Buyer and materially and adversely affects such party's ability to perform its obligations hereunder, the parties shall negotiate in good faith an amendment to this Agreement or take other appropriate action the effect of which is to restore each

party, as closely as possible, to its same position as prior to such change. If, within sixty (60) Days after the implementation of such change, the parties are unable to agree on such amendment or such other appropriate action, each party will continue to perform its obligations hereunder to the maximum extent possible under the applicable law, rule, regulation, tariff or practice, taking all reasonable steps to mitigate the effect of such change on each other.

Seller: Spotlight Energy, LLC

By:   
Name: Matt Steinberg  
Title: CEO  
Date: 9/27/19

Buyer: The Narragansett Electric Company d/b/a National Grid

By:   
Name: John V. Vaughn  
Title: Authorized Signatory  
Date: 10/11/2019 

Division 1-3

Request:

Reference Exhibit 15, of the 2020/21 Gas Long-Range Supply Plan. Please update Exhibit 15 for any changes in Resources and provide a description of each change.

Response:

Please see Attachment DIV 1-3 for an updated version of Exhibit 15. Changes in Resources from Exhibit 15 filed in the 2020/21 Gas Long-Range Supply Plan (LRP) are outlined below.

- A one-year supply deal at Everett, MA for 5,000 Dth/day with a 20-day call for the 2020/21 heating season is included in Attachment DIV 1-3. Exhibit 15 filed in the 2020/21 LRP, which contemplated the existing supply portfolio, did not include this additional supply deal at Everett. This one-year supply deal is different from the existing multiyear supply deal at Everett (NSB042-16), which was included in the 2020/21 LRP and Attachment DIV 1-3.
- A one-year supply deal at Dracut, MA for 15,000 Dth/day for the 2020/21 heating season is included in Attachment DIV 1-3. The Company will release the Tennessee capacity under an AMA and will have a call option at its city-gate. Exhibit 15 filed in the 2020/21 LRP assumed no supply deal at Dracut and no AMA relating to Tennessee capacity.
- Incremental summer liquid volumes (LNG) of 250,000 Dth for summer 2020/21 and 150,000 Dth for summer 2021/22 are included in Attachment DIV 1-3. Exhibit 15 filed in the 2020/21 LRP assumed no incremental summer liquid volumes. While the Company does not currently have these volumes under contract, they are included in the SENDOUT scenario to prevent the model from conserving LNG during the heating season to meet constraints requiring the tanks to be 100% full at the beginning of the following heating season. Both the 2020/21 LRP and Attachment DIV 1-3 include existing summer liquid volumes totaling 300,040 Dth.
- PNGTS Asset Management Arrangement for the 2020/21 gas year
  - The Company will release its Union and TransCanada capacity on this path under an AMA, but will maintain the Portland and Tennessee capacity. The Company will not have access to the Canadian capacity shown in Attachment DIV 1-3 during the non-heating season.

Division 1-3, page 2

- Dawn capacity path in Ontario, Canada to Tennessee Zone 6 via Iroquois Asset Management Arrangement for the 2020/21 gas year
  - The Company has included an AMA for the full pipeline path (Union/TransCanada/Iroquois/Tennessee) with an MDQ of 1,000 Dth/day. The Company will not have access to this capacity shown on Attachment DIV 1-3 during the non-heating season.

National Grid Rhode Island  
Comparison of Resources and Requirements  
Design Year (Sales and Customer Choice)  
(BBtu)

Design Day with Existing Resources
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		<u>2020-2021</u>	<u>2021-2022</u>	<u>2022-2023</u>	<u>2023-2024</u>	<u>2024-2025</u>
<u>REQUIREMENTS</u>						
Firm Sendout	Valley	67	69	71	73	73
	Providence	298	305	314	321	322
	Warren	11	11	12	12	12
	Westerly	6	7	7	7	7
Fuel Reimbursement		6	6	6	6	6
Underground Storage Refill		0	0	0	0	0
LNG Refill		0	0	0	0	0
<b>TOTAL</b>		<b>389</b>	<b>398</b>	<b>410</b>	<b>419</b>	<b>419</b>
<u>RESOURCES</u>						
TGP	Dawn PNGTS	29	29	29	29	29
	Dawn Iroquois	1	1	1	1	1
	Niagara	1	1	1	1	1
	Zone 4	41	41	41	41	41
	Dracut	20	0	0	0	0
	TGP Citygate	0	0	0	0	0
	Everett Multi Year	20	20	0	0	0
	Everett Swing	5	0	0	0	0
	Storage	11	11	11	11	11
TET/AGT	M2	49	49	49	49	49
	Dominion South Point	1	1	1	1	1
	TCO Appalachia	41	41	41	41	41
	Transco Leidy	1	1	1	1	1
	AIM (Ramapo)	8	9	9	9	9
	AIM (Millennium)	9	9	9	9	9
	M3	18	18	18	18	18
	AGT Citygate	14	14	14	0	0
	Storage	29	29	29	29	29
Liquid for Portables and Refill		0	6	6	0	0
LNG From Storage		91	119	119	1	24
Unserviced	Valley	0	0	23	19	19
	Providence	0	0	6	158	134
	Warren	0	0	2	2	2
	Westerly	0	0	0	0	0
		0	0	31	179	156
<b>TOTAL</b>		<b>389</b>	<b>398</b>	<b>410</b>	<b>419</b>	<b>419</b>



National Grid Rhode Island  
Comparison of Resources and Requirements  
Design Year (Sales and Customer Choice)  
(BBtu)

Design Heating Season (Nov-Mar) with Existing Resources

		<u>2020-2021</u>	<u>2021-2022</u>	<u>2022-2023</u>	<u>2023-2024</u>	<u>2024-2025</u>
<u>REQUIREMENTS</u>						
Firm Sendout	Valley	5,191	5,301	5,465	5,637	5,594
	Providence	22,952	23,439	24,166	24,925	24,736
	Warren	853	871	898	926	919
	Westerly	495	505	521	537	533
Fuel Reimbursement		716	727	727	735	728
Underground Storage Refill		0	0	0	0	0
LNG Refill		192	281	165	0	0
TOTAL		30,398	31,123	31,942	32,761	32,511
<u>RESOURCES</u>						
TGP	Dawn PNGTS	2,497	2,759	2,796	2,705	2,674
	Dawn Iroquois	77	81	105	109	108
	Niagara	136	162	140	143	102
	Zone 4	5,749	5,540	6,032	6,105	6,204
	Dracut	290	0	0	0	0
	TGP Citygate	0	0	0	0	0
	Everett Multi Year	651	651	0	0	0
	Everett Swing	24	0	0	0	0
	Storage	1,334	1,334	1,334	1,334	1,334
TET/AGT	M2	7,197	7,206	7,154	7,185	7,031
	Dominion South Point	82	82	82	81	77
	TCO Appalachia	5,535	5,754	5,403	5,605	5,576
	Transco Leidy	165	163	161	177	153
	AIM (Ramapo)	347	371	403	460	454
	AIM (Millennium)	1,379	1,357	1,379	1,329	1,321
	M3	1,210	1,186	1,497	1,827	1,796
	AGT Citygate	414	508	508	0	0
	Storage	2,581	2,656	2,642	2,648	2,650
Liquid for Portables and Refill		192	286	286	0	0
LNG From Storage		539	804	918	753	753
Unserved	Valley	0	64	144	145	178
	Providence	0	159	956	2,149	2,095
	Warren	0	0	3	5	5
	Westerly	0	0	0	0	0
		0	223	1,102	2,299	2,278
TOTAL		30,398	31,123	31,942	32,761	32,511

National Grid Rhode Island  
Comparison of Resources and Requirements  
Design Year (Sales and Customer Choice)  
(BBtu)

**Design Non-Heating Season (Apr-Oct) with Existing Resources**

		<u>2020-2021</u>	<u>2021-2022</u>	<u>2022-2023</u>	<u>2023-2024</u>	<u>2024-2025</u>
<b><u>REQUIREMENTS</u></b>						
Firm Sendout	Valley	2,011	2,075	2,122	2,122	2,129
	Providence	8,892	9,174	9,383	9,381	9,413
	Warren	330	341	349	349	350
	Westerly	192	198	202	202	203
Fuel Reimbursement		320	409	471	402	392
Underground Storage Refill		3,916	4,053	4,042	3,986	3,988
LNG Refill		480	658	887	887	887
<b>TOTAL</b>		<b>16,142</b>	<b>16,907</b>	<b>17,456</b>	<b>17,329</b>	<b>17,362</b>
<b><u>RESOURCES</u></b>						
TGP	Dawn PNGTS	21	304	30	31	32
	Dawn Iroquois	0	62	2	2	2
	Niagara	2	54	2	2	2
	Zone 4	3,501	2,969	4,851	7,399	7,093
	Dracut	0	0	0	0	0
	TGP Citygate	0	0	0	0	0
	Everett Multi Year	0	0	0	0	0
	Everett Swing	0	0	0	0	0
	Storage	0	0	0	0	0
TET/AGT	M2	5,902	9,447	9,511	6,620	6,426
	Dominion South Point	16	28	40	31	9
	TCO Appalachia	312	936	870	317	319
	Transco Leidy	17	19	37	37	37
	AIM (Ramapo)	26	54	27	28	29
	AIM (Millennium)	1,397	1,122	985	759	560
	M3	4,332	1,566	900	1,961	2,712
	AGT Citygate	0	0	0	0	0
	Storage	1	62	65	4	4
Liquid for Portables and Refill		480	150	0	0	0
LNG From Storage		134	134	134	134	134
Unserviced	Valley	0	0	2	0	0
	Providence	0	0	0	3	3
	Warren	0	0	0	0	0
	Westerly	0	0	0	0	0
		0	0	2	3	3
<b>TOTAL</b>		<b>16,142</b>	<b>16,907</b>	<b>17,456</b>	<b>17,329</b>	<b>17,362</b>

National Grid Rhode Island  
Comparison of Resources and Requirements  
Design Year (Sales and Customer Choice)  
(BBtu)

Design Annual with Existing Resources
---------------------------------------

		<u>2020-2021</u>	<u>2021-2022</u>	<u>2022-2023</u>	<u>2023-2024</u>	<u>2024-2025</u>
<u>REQUIREMENTS</u>						
Firm Sendout	Valley	7,202	7,376	7,587	7,759	7,723
	Providence	31,843	32,613	33,549	34,306	34,150
	Warren	1,184	1,212	1,247	1,275	1,269
	Westerly	686	703	723	739	736
Fuel Reimbursement		1,036	1,136	1,198	1,138	1,120
Underground Storage Refill		3,916	4,053	4,042	3,986	3,988
LNG Refill		673	938	1,052	887	887
<b>TOTAL</b>		<b>46,540</b>	<b>48,030</b>	<b>49,398</b>	<b>50,089</b>	<b>49,873</b>
<u>RESOURCES</u>						
TGP	Dawn PNGTS	2,518	3,063	2,826	2,736	2,705
	Dawn Iroquois	77	142	107	111	110
	Niagara	138	217	142	146	105
	Zone 4	9,250	8,509	10,883	13,503	13,297
	Dracut	290	0	0	0	0
	TGP Citygate	0	0	0	0	0
	Everett Multi Year	651	651	0	0	0
	Everett Swing	24	0	0	0	0
	Storage	1,334	1,334	1,334	1,334	1,334
TET/AGT	M2	13,099	16,652	16,665	13,806	13,457
	Dominion South Point	99	110	121	112	85
	TCO Appalachia	5,847	6,690	6,272	5,923	5,895
	Transco Leidy	182	182	198	214	190
	AIM (Ramapo)	372	425	430	488	484
	AIM (Millennium)	2,776	2,479	2,364	2,089	1,881
	M3	5,542	2,752	2,396	3,788	4,508
	AGT Citygate	414	508	508	0	0
	Storage	2,582	2,718	2,708	2,651	2,654
Liquid for Portables and Refill		673	436	286	0	0
LNG From Storage		673	938	1,052	887	887
Unservd	Valley	0	64	145	145	178
	Providence	0	159	956	2,152	2,099
	Warren	0	0	3	5	5
	Westerly	0	0	0	0	0
		0	223	1,104	2,302	2,281
<b>TOTAL</b>		<b>46,540</b>	<b>48,030</b>	<b>49,398</b>	<b>50,089</b>	<b>49,873</b>

National Grid Rhode Island  
Comparison of Resources and Requirements  
Cold Snap (Sales and Customer Choice)  
(BBtu)

**Cold Snap Heating Season (Nov-Mar) with Existing Resources**

		<u>2020-2021</u>	<u>2021-2022</u>	<u>2022-2023</u>	<u>2023-2024</u>	<u>2024-2025</u>
<b><u>REQUIREMENTS</u></b>						
Firm Sendout	Valley	4,662	4,761	4,909	5,060	5,024
	Providence	20,873	21,315	21,978	22,656	22,495
	Warren	753	768	792	817	811
	Westerly	450	460	474	488	485
Fuel Reimbursement		667	679	684	692	683
Underground Storage Refill		0	0	0	0	0
LNG Refill		192	211	116	0	0
<b>TOTAL</b>		<b>27,597</b>	<b>28,194</b>	<b>28,952</b>	<b>29,713</b>	<b>29,498</b>
<b><u>RESOURCES</u></b>						
TGP	Dawn PNGTS	1,801	2,005	2,121	2,179	2,108
	Dawn Iroquois	52	57	84	89	90
	Niagara	132	161	135	137	86
	Zone 4	5,116	4,908	5,734	5,760	5,986
	Dracut	226	0	0	0	0
	TGP Citygate	0	0	0	0	0
	Everett Multi Year	639	651	0	0	0
	Everett Swing	13	0	0	0	0
	Storage	1,334	1,334	1,334	1,334	1,334
TET/AGT	M2	7,070	7,093	7,116	7,031	6,723
	Dominion South Point	82	82	81	76	71
	TCO Appalachia	5,334	5,625	4,938	5,444	5,440
	Transco Leidy	146	139	136	160	133
	AIM (Ramapo)	136	163	259	304	304
	AIM (Millennium)	1,379	1,312	1,376	1,237	1,256
	M3	583	606	986	1,204	1,194
	AGT Citygate	231	256	409	0	0
	Storage	2,570	2,690	2,673	2,653	2,661
Liquid for Portables and Refill		192	211	212	0	0
LNG From Storage		561	735	869	753	753
Unserved	Valley	0	45	128	156	195
	Providence	0	121	360	1,189	1,159
	Warren	0	1	2	6	6
	Westerly	0	0	0	0	0
		0	167	489	1,351	1,359
<b>TOTAL</b>		<b>27,597</b>	<b>28,194</b>	<b>28,952</b>	<b>29,713</b>	<b>29,498</b>

National Grid Rhode Island  
Comparison of Resources and Requirements  
Cold Snap (Sales and Customer Choice)  
(BBtu)

**Cold Snap Non-Heating Season (Apr-Oct) with Existing Resources**

		<u>2020-2021</u>	<u>2021-2022</u>	<u>2022-2023</u>	<u>2023-2024</u>	<u>2024-2025</u>
<b><u>REQUIREMENTS</u></b>						
Firm Sendout	Valley	1,856	1,916	1,959	1,959	1,965
	Providence	8,312	8,577	8,771	8,769	8,798
	Warren	300	309	316	316	317
	Westerly	179	185	189	189	190
Fuel Reimbursement		309	396	458	390	381
Underground Storage Refill		3,905	4,064	4,046	3,989	3,997
LNG Refill		503	658	887	887	887
<b>TOTAL</b>		<b>15,365</b>	<b>16,105</b>	<b>16,626</b>	<b>16,498</b>	<b>16,534</b>
<b><u>RESOURCES</u></b>						
TGP	Dawn PNGTS	5	241	15	15	16
	Dawn Iroquois	0	62	1	1	1
	Niagara	1	48	1	1	1
	Zone 4	3,240	2,797	4,595	7,163	6,853
	Dracut	0	0	0	0	0
	TGP Citygate	0	0	0	0	0
	Everett Multi Year	0	0	0	0	0
	Everett Swing	0	0	0	0	0
	Storage	0	0	0	0	0
TET/AGT	M2	5,826	9,409	9,434	6,554	6,413
	Dominion South Point	16	27	35	24	7
	TCO Appalachia	270	841	789	268	268
	Transco Leidy	16	17	31	31	31
	AIM (Ramapo)	12	22	8	8	8
	AIM (Millennium)	1,397	1,094	945	717	524
	M3	3,943	1,224	601	1,581	2,277
	AGT Citygate	0	0	0	0	0
	Storage	1	41	39	2	2
Liquid for Portables and Refill		503	150	0	0	0
LNG From Storage		134	134	134	134	134
Unservd	Valley	0	0	0	0	0
	Providence	0	0	0	0	0
	Warren	0	0	0	0	0
	Westerly	0	0	0	0	0
<b>TOTAL</b>		<b>15,365</b>	<b>16,105</b>	<b>16,626</b>	<b>16,498</b>	<b>16,534</b>

National Grid Rhode Island  
Comparison of Resources and Requirements  
Cold Snap (Sales and Customer Choice)  
(BBtu)

Cold Snap Annual with Existing Resources
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		<u>2020-2021</u>	<u>2021-2022</u>	<u>2022-2023</u>	<u>2023-2024</u>	<u>2024-2025</u>
<u>REQUIREMENTS</u>						
Firm Sendout	Valley	6,518	6,676	6,868	7,019	6,989
	Providence	29,185	29,892	30,749	31,425	31,293
	Warren	1,052	1,078	1,109	1,133	1,128
	Westerly	629	644	663	677	675
Fuel Reimbursement		977	1,075	1,142	1,082	1,064
Underground Storage Refill		3,905	4,064	4,046	3,989	3,997
LNG Refill		695	869	1,003	887	887
TOTAL		42,962	44,299	45,578	46,211	46,032
<u>RESOURCES</u>						
TGP	Dawn PNGTS	1,806	2,246	2,136	2,194	2,124
	Dawn Iroquois	52	118	85	90	91
	Niagara	133	209	136	138	87
	Zone 4	8,356	7,705	10,328	12,923	12,839
	Dracut	226	0	0	0	0
	TGP Citygate	0	0	0	0	0
	Everett Multi Year	639	651	0	0	0
	Everett Swing	13	0	0	0	0
	Storage	1,334	1,334	1,334	1,334	1,334
TET/AGT	M2	12,896	16,502	16,550	13,585	13,137
	Dominion South Point	98	108	116	100	77
	TCO Appalachia	5,604	6,466	5,727	5,712	5,708
	Transco Leidy	162	155	167	191	164
	AIM (Ramapo)	148	185	267	312	312
	AIM (Millennium)	2,776	2,405	2,321	1,953	1,780
	M3	4,525	1,831	1,587	2,785	3,470
	AGT Citygate	231	256	409	0	0
	Storage	2,571	2,730	2,712	2,654	2,662
Liquid for Portables and Refill		695	361	212	0	0
LNG From Storage		695	869	1,003	887	887
Unservd	Valley	0	45	128	156	195
	Providence	0	121	360	1,189	1,159
	Warren	0	1	2	6	6
	Westerly	0	0	0	0	0
		0	167	489	1,351	1,359
TOTAL		42,962	44,299	45,578	46,211	46,032

The Narragansett Electric Company  
d/b/a National Grid  
RIPUC Docket No. 5066  
In Re: 2020 Annual Gas Cost Recovery Filing  
Responses to the Division's First Set of Data Requests  
Issued on August 19, 2020

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Division 1-4

Request:

Please explain whether Algonquin or Tennessee has indicated that it will be requiring the Company to address hourly or take station imbalances for the winter of 2020/21. Provide supporting documentation/communications.

Response:

Neither Algonquin nor Tennessee has issued any documentation/communications regarding the need for the Company to address hourly or take station imbalances specific to the winter of 2020/21. However, in previous communications, Algonquin has indicated that the Company and other shippers may be directed to maintain hourly and/or daily take station balances when and if system conditions dictate. The Company reasonably expects that, should near-design day weather conditions arise, the pipelines will look to hold the Company to its contractual limits to minimize imbalances across their systems to ensure reliable service, up to contracted quantities, to the Company and other shippers.

The Narragansett Electric Company  
d/b/a National Grid  
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Division 1-5

Request:

Please provide a copy of each contract for citygate delivered supplies in effect for the period April 2019 through October 2021.

Response:

See Attachment DIV 1-5 for all executed contracts for citygate delivered supplies in effect for the period April 2019 through October 2021.

Attachment DIV 1-5 contains commercially sensitive and confidential information; therefore, the Company is providing confidential and redacted versions of Attachment DIV 1-5, subject to a Motion for Protective Treatment.



TRANSACTION CONFIRMATION  
FOR IMMEDIATE DELIVERY

Letterhead/Logo	Date: September 26, 2019 Transaction Confirmation #: NSB19_24-42-20				
<p>This Transaction Confirmation is subject to the Base Contract between Seller, as assignee of ENGIE Gas &amp; LNG LLC and Buyer dated December 19, 2011. 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.</p>					
<p><b>SELLER:</b> Constellation LNG, LLC 1310 Point Street, 8<sup>th</sup> Floor Baltimore, MD 21231 Attn: Contract Administration Phone: 410-470-3500 Fax: 443-213-3558</p>	<p><b>BUYER:</b> The Narragansett Electric Company d/b/a National Grid c/o National Grid 100 East Old County Road Hicksville, New York 11801 Attn: Contract Administration Phone: (516) 545-6068 Fax: (516) 806-4442</p>				
<p><b>Contract Price:</b> Buyer shall pay to Seller a Contract Price, as set forth in the monthly invoice, equal to the sum of the following three components, as applicable for the billing month:</p> <ol style="list-style-type: none"> <li><u>Commodity Rate.</u> For each MMBtu of Gas delivered to Buyer during the Delivery Period, Buyer shall pay to Seller a rate per MMBtu equal to [REDACTED]</li> <li><u>Supply Demand Charge.</u> Additionally, Buyer shall pay a non-refundable annual demand charge payment to Seller equal to [REDACTED] for Firm delivery of Gas set forth herein ("Demand Charge"). The Demand Charge due and payable hereunder shall be paid to Seller in monthly installments of [REDACTED]. Such Demand Charge installments shall be invoiced by Seller on a monthly basis during the Winter Season and paid by Buyer in accordance with Section 7 of the Base Contract.</li> <li><u>Pipeline Transportation Charges:</u> In addition to the Supply Demand Charge, Buyer shall pay Seller for firm transportation charges incurred by Seller to make delivery of the MDQ specified herein to Buyer on Algonquin at the Delivery Points set forth herein, or at other locations agreed by Buyer and Seller. The payments will be invoiced monthly during the term (including any term extension) and calculated as follows: (i) for the months of April through October of each year, the charge for this component of the Contract Price will be equal to [REDACTED]; and (ii) for the months of November through March, the charge for this component of the Contract Price shall be equal to [REDACTED]. For the Initial Delivery Period, Buyer shall reimburse Seller for such Algonquin demand charges [REDACTED]; and for the Second Delivery Period, if applicable and subject to Buyer's Condition Precedent, Buyer shall reimburse Seller for such Algonquin demand charges [REDACTED]. Such transportation charges shall be invoiced by Seller on a monthly basis and paid by Buyer in accordance with Section 7 of the Base Contract.</li> </ol> <p>The Commodity Rate, Supply Demand Charge and Pipeline Transportation Charges components are hereinafter collectively referred to as the "Contract Price".</p>					
<p><b>Delivery Period:</b></p> <table border="0"> <tr> <td><u>Initial Delivery Period:</u> Begin: November 1, 2019</td> <td>End: March 31, 2022</td> </tr> <tr> <td><u>Second Delivery Period:</u> Begin: November 1, 2022</td> <td>End: March 31, 2024</td> </tr> </table> <p>The Initial Delivery Period and Second Delivery Period collectively referred to as the "Delivery Period" herein.</p>		<u>Initial Delivery Period:</u> Begin: November 1, 2019	End: March 31, 2022	<u>Second Delivery Period:</u> Begin: November 1, 2022	End: March 31, 2024
<u>Initial Delivery Period:</u> Begin: November 1, 2019	End: March 31, 2022				
<u>Second Delivery Period:</u> Begin: November 1, 2022	End: March 31, 2024				

REDACTED

Performance Obligation and Contract Quantity: Firm Gas service.

Firm (Variable Quantity): On any day during the months of November through March of the Delivery Period, Buyer shall have the right, but not the obligation, to purchase on a Firm basis a "Maximum Daily Quantity" or "MDQ" of Gas not to exceed 14,100 MMBtu/day and a Maximum Seasonal Quantity or "MSQ" of 507,600 MMBtu during the applicable Winter Season. "Winter Season" shall mean the period from November 1 of one year through and inclusive of March 31 of the following calendar year

**Delivery Point(s):** For Firm delivery service of Gas to Narragansett Gas and Electric Company delivery points on the Algonquin Gas Transmission, LLC ("Algonquin") at a primary firm point at Meter No. 00012 (Warren) in the maximum amount of 1,000 MMBtu/Day; at a secondary firm in-path point with primary delivery point at Meter No. 00018 (Bourne) in the maximum amount of 13,100 MMBtu/Day.

**Special Conditions:**

**Conditions Precedent:**

**Buyer and Seller:** Buyer and Seller are each party to settlement discussions with Algonquin related to the pipeline's cost of service in FERC Docket No. RP19-57-000. If Algonquin and the parties to the case are unable to reach a settlement agreement in the proceeding, or in any Section 4 rate proceeding that is filed by Algonquin, by [REDACTED], then either party to this Transaction Confirmation may terminate this Transaction Confirmation without liability for the Second Delivery Period.

**Buyer:** If Buyer is unable to obtain any input, guidance and/or informal or formal approvals and orders or other authorizations or consents as determined to be acceptable by Buyer, in its commercially reasonable discretion, from the Rhode Island Division of Public Utilities Commission by [REDACTED], then Buyer shall have the right, to be exercised by written notice no later than [REDACTED], to terminate this Transaction Confirmation, without liability for any period after the date such notice is tendered, provided however such notice date shall not be before [REDACTED].

Buyer shall have the right to terminate this Transaction Confirmation effective [REDACTED], without liability for the Second Delivery Period, if Seller has not entered into a negotiated rate agreement or discounted rate agreement with Algonquin for Pipeline Transportation Charges applicable during the Second Delivery Period that is deemed acceptable by Buyer by [REDACTED]; such termination right to be exercised by written notice to Seller by [REDACTED].

**Seller:** If Seller is unable to obtain a commitment from Exelon's senior management to extend the term of Seller's Algonquin contract No. 511057-R1 at least through [REDACTED] upon terms satisfactory to Seller in Seller's sole and absolute discretion by [REDACTED], then Seller shall have the right, to be exercised by written notice no later than [REDACTED], to terminate this Transaction Confirmation effective [REDACTED], without liability for the Second Delivery Period.

**Scheduling:** All Notices and communications given in connection with Nominations pursuant to Section 4 of the Base Contract may be provided by telephone [or instant messaging]. Buyer shall make all Nominations for deliveries of gas occurring on any weekday, weekend day (Saturday, Sunday and Monday), and any Holiday prior to [REDACTED] prevailing Eastern Standard Time on the Business Day prior to the Day of Gas flow; for purposes herein, "Holiday" shall mean any day that the Intercontinental Exchange ("ICE") designates as a holiday. [REDACTED].

**Damages:** On any Day Buyer nominates a quantity of Gas to at Meter No. 00012 (Warren) in accordance with this Transaction Confirmation and Seller fails to deliver the nominated quantity other than as a result of Force Majeure or the actions or inactions of Buyer, Seller shall reimburse Buyer for each undelivered MMBtu [REDACTED].

On any Day Buyer nominates a quantity of Gas to Algonquin Meter No. 00018 (Bourne) in accordance with this Transaction Confirmation and Seller fails to deliver the nominated quantity other than as a result of Force Majeure or the actions or inactions of Buyer, Seller shall reimburse Buyer for each undelivered MMBtu [REDACTED].

**Dodd-Frank Compliance:** The parties agree that for purposes of this Transaction Confirmation and as of the Trade Date each party is a producer, processor, commercial user of, or a merchant handling the commodity that is the subject of the Transaction

Confirmation and is entering into this Transaction Confirmation solely for the purposes related to its business as such. The parties confirm their intention that if any such commodity option transaction be physically settled, such that if exercised, it results in the sale of a commodity for either immediate or deferred delivery.

Document Conflict. In the event of a conflict between the terms and conditions of the (i) Transaction Confirmation, (ii) Special Provisions, and (iii) Base Contract, the terms and conditions of the documents shall govern in the priority listed in this provision.

Capitalized Terms: Capitalized terms used herein and not otherwise defined shall have the meaning set forth in the Base Contract, as amended, and as supplemented and modified by the Special provisions.

Seller: Constellation LNG, LLC

Buyer: The Narragansett Electric Company d/b/a National Grid

By:  \_\_\_\_\_

By:  \_\_\_\_\_

Title: SUP-Wholesales Trading \_\_\_\_\_

Title: John V. Vaughn  
Authorized Signatory \_\_\_\_\_

Date: 9/26/19 \_\_\_\_\_

Date: 10/16/2019 \_\_\_\_\_

*Ed*

**Redacted**  
Division 1-6

Request:

For the peak day during the 2019/20 winter season, please identify:

- a. The date, average temperature, wind speed, average temperature on the prior day, and HDDs;
- b. Total sendout;
- c. Firm throughput;
- d. FT-1 capacity exempt transport throughput;
- e. FT-1 capacity assigned transport throughput;
- f. FT-2 transport throughput;
- g. Deliveries to the Company on behalf of FT-1 capacity exempt transportation customers;
- h. Deliveries to the Company on behalf of FT-1 and FT-2 capacity assigned customers (separately);
- i. Capacity resource quantity by type assigned to FT-1 and FT-2 capacity assigned customers/suppliers (separately);
- j. Deliveries to the Company by capacity resource;
- k. Gas supply deliveries to the Company by source and price; and
- l. Delivery and consumption of non-firm load.

Response:

Please see the responses in the chart below:

a. Gas Day Date	December 19, 2019
a. Average Temperature	18 oF
a. Average Wind Speed	11 mph
a. Average Temperature (prior gas day)	24 oF
a. HDD	47
b. Total throughput	313,560 Dth
c. Firm throughput	313,560 Dth
d. FT-1 capacity exempt transport throughput	23,779 Dth
e. FT-1 capacity assigned transport throughput	18,199 Dth

The Narragansett Electric Company  
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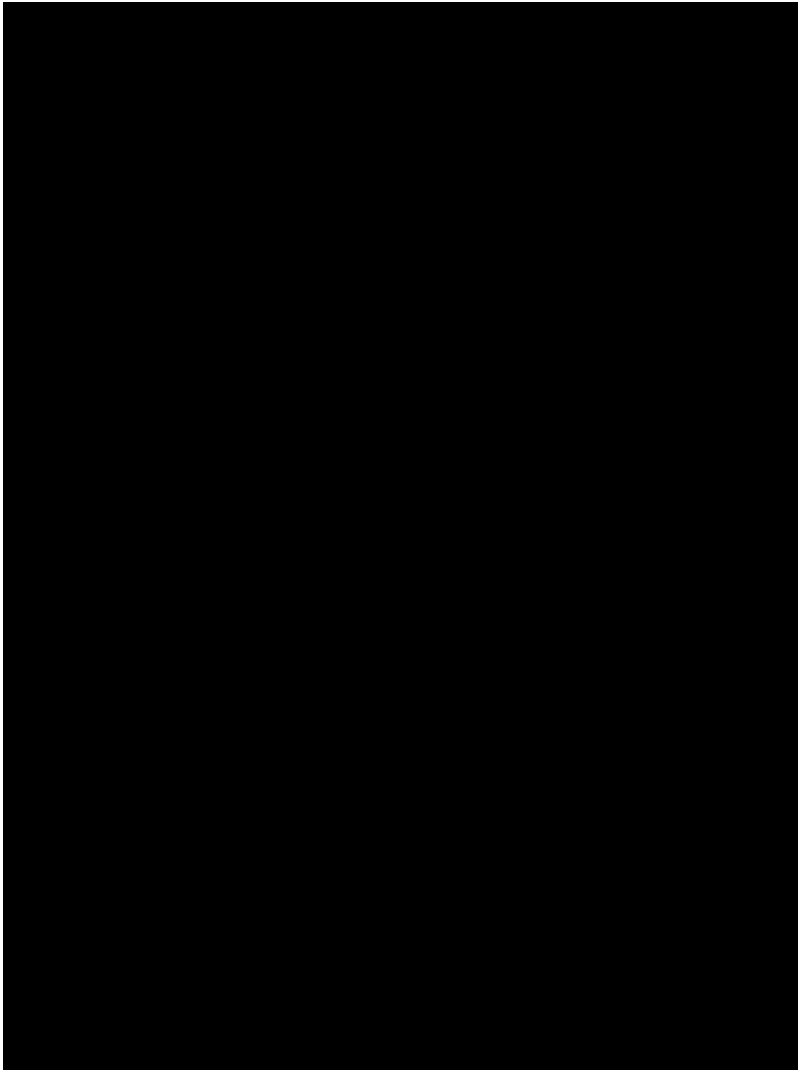
**Redacted**  
Division 1-6, page 2

f. FT-2 transport throughput	(not metered daily)										
g. Deliveries to the Company on behalf of FT-1 capacity exempt transportation customers	The Company does not have a breakdown of FT-1 deliveries by capacity-assigned and capacity-exempt; the marketer only nominates in total.										
h. Deliveries to the Company on behalf of FT-1 and FT-2 capacity assigned customers (separately)	Total FT-1 deliveries 32,900 Dth (see (g) above) Total FT-2 deliveries 47,612 Dth										
i. Capacity resource quantity by type assigned to FT-1 and FT-2 capacity assigned customers/suppliers (separately)	For December 2019: FT-1: 14,089 Dth pipeline FT-2: 27,863 Dth pipeline, 4,785 Dth storage, 18,431 Dth peaking.										
j. Deliveries to the Company by capacity resource	<table style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;"><u>Capacity Resource</u></th> <th style="text-align: center;"><u>Deliveries</u></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Pipeline</td> <td style="text-align: center;">175,303*</td> </tr> <tr> <td style="text-align: center;">Storage</td> <td style="text-align: center;">43,098</td> </tr> <tr> <td style="text-align: center;">Peaking/LNG</td> <td style="text-align: center;"><u>20,231</u></td> </tr> <tr> <td style="text-align: center;">Total</td> <td style="text-align: center;">238,632</td> </tr> </tbody> </table> <p>* Includes 971 Dth taken from the Company's Operational Balancing Agreement with Algonquin</p>	<u>Capacity Resource</u>	<u>Deliveries</u>	Pipeline	175,303*	Storage	43,098	Peaking/LNG	<u>20,231</u>	Total	238,632
<u>Capacity Resource</u>	<u>Deliveries</u>										
Pipeline	175,303*										
Storage	43,098										
Peaking/LNG	<u>20,231</u>										
Total	238,632										

The Narragansett Electric Company  
d/b/a National Grid  
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**Redacted**  
Division 1-6, page 3

	<u>Source</u>	<u>Deliveries</u>	<u>Delivered Price</u>
k. Gas supply deliveries to the Company by source and price			
l. Delivery and consumption of non-firm load	0 Dth		

Prepared by or under the supervision of:  
Theodore E. Poe, Jr., Elizabeth D. Arangio, and Terrence Kain

Division 1-7

Request:

Please provide an explanation and all supporting calculations, workpapers, and databases relied upon to develop the Company's design day total firm throughput and planning load throughput projections for the winter of 2020/21. Include relevant data showing how sales customer, FT-1 capacity exempt transport, FT-1 capacity assigned, and FT-2 capacity assigned transport demands were determined. Include the data in Excel format. Also, identify the actual predictive equations utilized and provide statistical model output and independent variable inputs.

Response:

As described in Section III.C.2 of its Gas Long-Range Resource and Requirements Plan for the forecast Period 2020/21 to 2024/25 ("Long Range Plan") in Docket No. 5043, the Company performs regression analysis, at the wholesale (citygate) level, for its capacity-eligible FT-1, capacity-exempt FT-1, and non-firm customers, in addition to its total throughput. Annually, when it performs this analysis, it relies on the most recent 12 months of daily data.

In the case of the 2020 submission, the twelve-month period was April 1, 2019 through March 31, 2020. By subtracting its daily capacity-eligible FT-1, capacity-exempt FT-1, and non-firm customer volumes from its total daily throughput volumes, the Company can infer the daily volume for the combined Sales and FT-2 capacity-eligible customers. Since these two customer groups are not metered daily, it relies on the ratios of the monthly volumes to infer the amount of daily Sales and daily FT-2 volumes separately. The growth in its retail (burner tip) forecast will inform the volumetric growth in the Sales, capacity-eligible FT-2, capacity-eligible FT-1, capacity-exempt FT-1, and non-firm customer groups.

The input data for the Company's regression analysis is provided herein as Attachment DIV 1-7. The details of the regression equation input data and form applied to these customer groups is described on pages 10-13 of the Long Range Plan. Below are the 2019-20 regression equations and their statistical results used in the Company's current forecast. HDD2 is the Slope1 coefficient, WE2 is the weekend variable, dT2 is the lagged temperature variable, and U1.HDD2 is the Slope2 coefficient.

Division 1-7, page 2

Total Throughput Wholesale Regression Equation

segmented.lm(obj = test2.lm, seg.Z = ~HDD2, psi = 10)

Estimated Break-Point(s):

Est.	St.Err
7.518	0.315

Meaningful coefficients of the linear terms:

	Estimate	Std. Error	t value	Pr(> t )	
(Intercept)	54756.11	872.13	62.784	< 2e-16	***
HDD2	836.00	102.29	8.173	5.31e-15	***
WE2	-3760.55	581.75	-6.464	3.35e-10	***
dT2	-1044.08	64.02	-16.308	< 2e-16	***
U1.HDD2	5573.72	117.72	47.349		NA

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Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 7961 on 357 degrees of freedom

Multiple R-Squared: 0.9867, Adjusted R-squared: 0.9865

FT-1 Wholesale Regression Equation

segmented.lm(obj = test2.lm, seg.Z = ~HDD2, psi = 10)

Estimated Break-Point(s):

Est.	St.Err
6.278	0.742

Meaningful coefficients of the linear terms:

	Estimate	Std. Error	t value	Pr(> t )	
(Intercept)	6540.762	81.242	80.510	< 2e-16	***
HDD2	63.387	9.564	6.628	1.26e-10	***
WE2	-757.081	50.693	-14.935	< 2e-16	***
dT2	-38.318	5.557	-6.896	2.44e-11	***
U1.HDD2	207.781	10.728	19.367		NA

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Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 693.5 on 357 degrees of freedom

Multiple R-Squared: 0.9549, Adjusted R-squared: 0.9543

Capacity-Exempt Wholesale Regression Equation

segmented.lm(obj = test2.lm, seg.Z = ~HDD2, psi = BP)



Division 1-7, page 3

Estimated Break-Point(s):  
Est. St.Err  
4.662 0.790

Meaningful coefficients of the linear terms:  
Estimate Std. Error t value Pr(>|t|)  
(Intercept) 12135.458 103.354 117.416 < 2e-16 \*\*\*  
HDD2 45.654 12.265 3.722 0.000229 \*\*\*  
WE2 -803.535 60.630 -13.253 < 2e-16 \*\*\*  
dT2 -56.456 6.637 -8.507 4.99e-16 \*\*\*  
U1.HDD2 231.099 13.485 17.137 NA

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Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 832 on 357 degrees of freedom  
Multiple R-Squared: 0.94, Adjusted R-squared: 0.9391

Non-Firm Wholesale Regression Equation

segmented.lm(obj = test2.lm, seg.Z = ~HDD2, psi = BP)

Estimated Break-Point(s):  
Est. St.Err  
35.714 0.408

Meaningful coefficients of the linear terms:  
Estimate Std. Error t value Pr(>|t|)  
(Intercept) 4993.787 51.932 96.160 < 2e-16 \*\*\*  
HDD2 -18.969 2.547 -7.447 7.22e-13 \*\*\*  
WE2 -180.790 48.404 -3.735 0.000218 \*\*\*  
dT2 30.898 5.302 5.828 1.26e-08 \*\*\*  
U1.HDD2 -508.085 37.534 -13.537 NA

---  
Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 663.5 on 357 degrees of freedom  
Multiple R-Squared: 0.5849, Adjusted R-squared: 0.5791

Sales+FT-2 Capacity-Eligible Regression Equation

segmented.lm(obj = test2.lm, seg.Z = ~HDD2, psi = 10)

Estimated Break-Point(s):  
Est. St.Err  
7.741 0.319

Meaningful coefficients of the linear terms:  
Estimate Std. Error t value Pr(>|t|)

The Narragansett Electric Company  
d/b/a National Grid  
RIPUC Docket No. 5066  
In Re: 2020 Annual Gas Cost Recovery Filing  
Responses to the Division's First Set of Data Requests  
Issued on August 19, 2020

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(Intercept)	31057.98	812.39	38.230	< 2e-16	***
HDD2	753.29	95.29	7.906	3.36e-14	***
WE2	-2027.74	541.90	-3.742	0.000213	***
dT2	-968.80	59.64	-16.245	< 2e-16	***
U1.HDD2	5155.37	109.65	47.015		NA

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Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 7415 on 357 degrees of freedom  
Multiple R-Squared: 0.9862, Adjusted R-squared: 0.986

DATE	HDD_REAL	TSO	S_FT2	FT1	FIRM_CE	NFS	dT	Weekend
4/1/2014	23	141496	107176	12980	17399	3942	-4	0
4/2/2014	20	138585	105795	12352	16670	3768	-5	0
4/3/2014	20	123377	91821	11667	16054	3835	-2	0
4/4/2014	23	136762	105572	11818	15333	4040	3	1
4/5/2014	22	137165	108341	10783	14050	3992	1	2
4/6/2014	18	119181	90908	10157	14352	3764	-5	1
4/7/2014	17	113061	83855	10390	15072	3745	-3	0
4/8/2014	14	105200	76787	10026	14671	3716	-4	0
4/9/2014	18	117321	86907	11318	15251	3846	3	0
4/10/2014	14	105478	77449	10182	14115	3732	-2	0
4/11/2014	9	72645	49853	7973	11756	3063	-7	1
4/12/2014	9	69305	48459	7047	11000	2799	-3	2
4/13/2014	6	70972	49272	7298	11540	2862	-3	1
4/14/2014	2	63156	40375	7803	12340	2638	-6	0
4/15/2014	16	99965	71283	10322	14684	3676	12	0
4/16/2014	27	158913	123568	13489	17364	4493	18	0
4/17/2014	28	159169	124827	13265	16527	4550	7	0
4/18/2014	22	127347	98637	11002	13840	3869	-6	1
4/19/2014	13	90517	66998	8331	12025	3162	-12	2
4/20/2014	21	105471	78656	9510	13599	3706	4	1
4/21/2014	15	85984	59675	9401	13347	3561	-2	0
4/22/2014	9	70153	45800	8639	12491	3223	-9	0
4/23/2014	17	110595	82180	10692	13913	3810	5	0
4/24/2014	13	102757	75247	10157	13370	3984	0	0
4/25/2014	15	85693	61079	8864	12335	3414	0	1
4/26/2014	19	107852	83523	8937	12022	3370	5	2
4/27/2014	18	111602	84606	9732	13658	3607	1	1
4/28/2014	16	100627	72162	10507	14052	3907	-3	0
4/29/2014	22	136534	104723	12048	15647	4117	5	0
4/30/2014	16	121730	92272	11061	14739	3658	-3	0
5/1/2014	9	74196	49724	8734	12040	3698	-10	0
5/2/2014	8	69990	46611	7852	11775	3752	-5	1
5/3/2014	6	60155	40588	6536	9913	3117	-3	2
5/4/2014	9	72698	50314	7566	11154	3664	2	1
5/5/2014	9	73750	49894	8717	11009	4129	2	0
5/6/2014	9	76292	52056	8964	11055	4217	0	0
5/7/2014	9	69892	46073	8447	11022	4349	0	0
5/8/2014	8	65136	42079	8130	11283	3644	-1	0
5/9/2014	7	62335	41341	7217	10894	2882	-2	1
5/10/2014	-3	48344	31615	5552	9281	1897	-11	2
5/11/2014	-3	51890	32449	6004	9926	3511	-5	1
5/12/2014	-2	53459	31484	7019	11161	3796	1	0
5/13/2014	13	64446	40686	8112	12035	3613	16	0
5/14/2014	5	55810	33636	7274	11171	3730	-1	0

5/15/2014	0	52905	30866	6821	10758	4460	-9	0
5/16/2014	3	50596	29915	6326	10403	3952	1	1
5/17/2014	2	49422	31525	5381	9219	3297	1	2
5/18/2014	5	54181	34688	5698	10358	3437	3	1
5/19/2014	5	57091	35292	6655	11477	3667	2	0
5/20/2014	6	56971	34250	7048	11717	3957	1	0
5/21/2014	5	54047	31945	6943	11297	3861	-1	0
5/22/2014	9	57834	35522	7108	11293	3911	4	0
5/23/2014	7	53506	33233	6609	10429	3236	0	1
5/24/2014	8	50238	33383	5652	8462	2741	0	2
5/25/2014	7	48013	31544	5285	8386	2798	-1	1
5/26/2014	-6	48910	30558	5181	9575	3596	-14	0
5/27/2014	5	53864	32561	6510	11131	3662	5	0
5/28/2014	16	77025	53048	8424	11530	4023	17	0
5/29/2014	11	62511	39424	7712	11375	3999	1	0
5/30/2014	8	53964	33478	6703	10321	3462	-6	1
5/31/2014	7	53998	35935	5734	9216	3114	-3	2
6/1/2014	1	49903	31545	5449	9788	3122	-7	1
6/2/2014	-2	49977	29088	6325	10751	3813	-6	0
6/3/2014	1	50527	29194	6415	10865	4053	2	0
6/4/2014	2	49765	28749	6443	10474	4100	3	0
6/5/2014	5	53799	32370	6643	10490	4297	4	0
6/6/2014	-3	47394	27988	5757	9895	3754	-7	1
6/7/2014	-7	42710	26411	4547	8733	3020	-8	2
6/8/2014	-9	45006	27135	4960	9630	3281	-4	1
6/9/2014	-2	48531	28161	6210	10721	3439	6	0
6/10/2014	0	49717	28624	6452	10811	3830	6	0
6/11/2014	1	50041	28835	6317	10694	4196	2	0
6/12/2014	0	49196	28424	6341	10465	3966	-1	0
6/13/2014	-1	46732	26961	5776	10336	3659	-2	1
6/14/2014	-1	44137	27363	4785	8822	3166	-1	2
6/15/2014	-5	45772	28146	5108	9209	3310	-4	1
6/16/2014	-4	48177	27599	5984	10682	3912	-1	0
6/17/2014	-8	48120	26820	5905	11034	4361	-4	0
6/18/2014	-12	46753	25701	5761	10988	4303	-6	0
6/19/2014	-4	48134	27459	5937	10501	4237	6	0
6/20/2014	-2	46034	27091	5469	9773	3702	6	1
6/21/2014	-1	41870	25827	4400	8646	2998	2	2
6/22/2014	-1	44510	26937	4902	9461	3211	1	1
6/23/2014	-1	47713	27315	6063	10806	3530	0	0
6/24/2014	-6	47026	26674	6063	10424	3865	-5	0
6/25/2014	-11	45695	25622	5802	10288	3983	-8	0
6/26/2014	-4	47258	26584	5934	10442	4299	5	0
6/27/2014	-4	44839	26056	5430	9641	3712	4	1
6/28/2014	-4	40153	24451	4546	8306	2850	0	2

6/29/2014	-7	41502	24769	4697	8915	3122	-3	1
6/30/2014	-11	43156	25099	5069	9073	3915	-6	0
7/1/2014	-13	43194	24431	5082	8950	4732	-4	0
7/2/2014	-15	42709	23949	5040	8992	4728	-3	0
7/3/2014	-12	40933	23501	4584	8469	4379	2	0
7/4/2014	-1	40147	23721	4220	8628	3578	13	1
7/5/2014	-7	39040	23577	4129	8258	3076	-1	2
7/6/2014	-10	40888	24054	4405	8931	3498	-6	1
7/7/2014	-13	43664	24491	5173	10039	3961	-5	0
7/8/2014	-13	45647	25888	5632	9931	4196	-2	0
7/9/2014	-11	45350	24279	5685	10402	4984	2	0
7/10/2014	-9	44707	24868	5594	10021	4225	3	0
7/11/2014	-6	43575	24058	5204	10191	4122	4	1
7/12/2014	-9	38350	22886	4261	8021	3182	-2	2
7/13/2014	-11	41540	24049	4648	9129	3714	-4	1
7/14/2014	-10	45695	26091	5507	10181	3916	0	0
7/15/2014	-9	48122	27443	5637	10372	4671	2	0
7/16/2014	-6	46850	25813	5984	10371	4682	4	0
7/17/2014	-7	46595	25628	6020	9995	4953	1	0
7/18/2014	-6	43443	24687	5395	9680	3682	1	1
7/19/2014	-5	39482	23593	4492	8356	3041	2	2
7/20/2014	-3	42822	25545	4923	8951	3403	3	1
7/21/2014	-7	45938	25941	5923	10134	3940	-3	0
7/22/2014	-12	45559	25595	5865	9957	4143	-7	0
7/23/2014	-13	48296	27405	5803	10209	4880	-4	0
7/24/2014	-6	44849	24372	6006	9956	4515	7	0
7/25/2014	-7	43396	24765	5280	9358	3993	3	1
7/26/2014	-8	39426	23815	4323	8006	3282	-2	2
7/27/2014	-8	42680	25576	4731	8997	3376	-1	1
7/28/2014	-8	46022	26155	5944	10379	3544	0	0
7/29/2014	-5	48023	27366	5907	10355	4395	3	0
7/30/2014	-4	48783	28129	5844	10356	4455	3	0
7/31/2014	-7	47968	27122	6094	9829	4924	-3	0
8/1/2014	-8	43784	23938	5224	10570	4052	-3	1
8/2/2014	2	41798	24497	4657	9621	3024	10	2
8/3/2014	-4	44109	25212	4949	10234	3715	-1	1
8/4/2014	-9	46628	25084	5887	11522	4135	-8	0
8/5/2014	-11	45434	24855	6033	10452	4093	-5	0
8/6/2014	-8	46913	24980	6154	11397	4383	2	0
8/7/2014	-4	47352	25631	6062	11585	4074	6	0
8/8/2014	-9	44493	24529	5292	11214	3458	-3	1
8/9/2014	-8	40466	23234	4300	10202	2730	-2	2
8/10/2014	-8	40863	23129	4443	10606	2685	1	1
8/11/2014	-7	44388	24247	5309	11505	3327	1	0
8/12/2014	-8	45598	23616	5822	12432	3729	-1	0

8/13/2014	-2	48038	25458	6186	12682	3712	6	0
8/14/2014	-2	47837	25727	6132	12097	3882	3	0
8/15/2014	0	46028	25263	5544	11624	3597	2	1
8/16/2014	-5	41310	23997	4377	10459	2478	-4	2
8/17/2014	-5	44654	25365	4851	11426	3012	-3	1
8/18/2014	-2	47763	26095	5831	12495	3342	3	0
8/19/2014	-3	47520	25957	5941	12247	3375	1	0
8/20/2014	-3	51085	28296	6109	12445	4236	-1	0
8/21/2014	-5	47879	25529	5929	12195	4226	-2	0
8/22/2014	-3	46571	25107	5560	11637	4267	1	1
8/23/2014	-1	42983	24606	4751	10487	3140	3	2
8/24/2014	-5	44856	25239	5043	11201	3373	-3	1
8/25/2014	-7	48544	26078	6020	12567	3880	-4	0
8/26/2014	-6	54341	31181	6046	12592	4522	0	0
8/27/2014	-12	52574	29214	6074	12707	4580	-6	0
8/28/2014	-5	48818	25607	6047	12622	4543	4	0
8/29/2014	0	46023	25215	5455	11721	3633	9	1
8/30/2014	-5	42008	23984	4626	10471	2928	-3	2
8/31/2014	-11	40020	22352	4201	10345	3121	-9	1
9/1/2014	-13	43084	23997	4765	10614	3709	-5	0
9/2/2014	-14	51248	28850	5975	12162	4261	-2	0
9/3/2014	-8	48060	25002	6142	11920	4997	6	0
9/4/2014	-10	48634	24751	6060	12867	4956	1	0
9/5/2014	-14	45014	23056	5287	12060	4611	-5	1
9/6/2014	-11	41370	22791	4369	10727	3483	1	2
9/7/2014	-3	45136	25130	4692	11644	3670	10	1
9/8/2014	-1	47836	25239	5618	12847	4133	6	0
9/9/2014	0	49914	26266	6038	12938	4671	2	0
9/10/2014	-2	48618	25596	6132	12465	4426	-2	0
9/11/2014	-4	53308	30260	6178	12510	4360	-3	0
9/12/2014	2	47738	25892	5576	12283	3988	5	1
9/13/2014	4	45051	26215	4597	10889	3351	5	2
9/14/2014	7	50794	29935	5305	12083	3472	4	1
9/15/2014	6	52805	29288	6350	13362	3806	1	0
9/16/2014	4	52672	29204	6399	13083	3986	-3	0
9/17/2014	4	54031	29243	6667	13610	4511	-1	0
9/18/2014	2	53354	29182	6552	13332	4288	-2	0
9/19/2014	12	57632	34660	6471	12467	4035	9	1
9/20/2014	-1	45765	27054	4572	10704	3436	-8	2
9/21/2014	-3	47019	26721	4903	11662	3733	-9	1
9/22/2014	7	54314	30551	6601	13181	3981	9	0
9/23/2014	5	54110	31236	6366	12522	3986	3	0
9/24/2014	3	53115	30105	6106	12675	4229	-3	0
9/25/2014	5	55737	32370	6121	12878	4369	1	0
9/26/2014	2	48650	28004	5115	11776	3755	-2	1

9/27/2014	-5	43371	25693	4146	10420	3111	-9	2
9/28/2014	-7	46552	27207	4423	11472	3450	-6	1
9/29/2014	1	50087	27679	5751	13063	3594	7	0
9/30/2014	7	54513	31690	6441	12917	3465	10	0
10/1/2014	7	57308	32965	7177	13422	3744	3	0
10/2/2014	11	66001	40060	7858	13836	4247	4	0
10/3/2014	9	60780	36942	6785	12962	4091	0	1
10/4/2014	9	53884	33118	5627	11925	3215	-1	2
10/5/2014	13	67746	44312	6804	12980	3651	4	1
10/6/2014	5	60237	35806	7177	13242	4013	-6	0
10/7/2014	-3	53299	28647	6787	13579	4286	-12	0
10/8/2014	7	57733	31860	7283	13898	4693	6	0
10/9/2014	9	65365	39180	7691	13526	4969	7	0
10/10/2014	9	64366	40089	7157	12921	4198	1	1
10/11/2014	19	83653	60236	6953	12598	3866	10	2
10/12/2014	13	74213	51176	6611	12624	3802	-1	1
10/13/2014	1	64202	40832	6453	12740	4177	-15	0
10/14/2014	-5	53245	29768	6398	13051	4028	-12	0
10/15/2014	-9	52055	27919	6383	13384	4370	-7	0
10/16/2014	1	53513	28539	6801	13707	4466	8	0
10/17/2014	1	51726	28517	6156	13205	3849	5	1
10/18/2014	5	52524	31923	5288	12437	2876	4	2
10/19/2014	21	92395	65602	7830	15381	3582	18	1
10/20/2014	13	92682	63639	9248	15929	3866	0	0
10/21/2014	7	69778	42944	8160	14801	3873	-10	0
10/22/2014	12	88809	59321	9242	16107	4138	2	0
10/23/2014	11	88770	58851	9382	15771	4767	2	0
10/24/2014	16	91838	62554	8888	15418	4979	5	1
10/25/2014	6	66047	42348	6419	13494	3786	-8	2
10/26/2014	13	90552	62513	8126	15474	4439	2	1
10/27/2014	13	89000	59039	8969	16035	4958	4	0
10/28/2014	3	64462	38891	7491	13985	4095	-10	0
10/29/2014	7	68776	40901	8224	14845	4806	-1	0
10/30/2014	14	94218	64393	9430	16261	4133	9	0
10/31/2014	16	99157	70631	8707	15847	3972	6	1
11/1/2014	23	140049	108878	9806	17164	4200	8	2
11/2/2014	26	171356	136139	11625	18853	4739	7	1
11/3/2014	15	133123	99348	10580	18595	4600	-10	0
11/4/2014	7	85166	56913	8046	15972	4236	-14	0
11/5/2014	9	87277	58124	8559	16354	4240	-2	0
11/6/2014	17	107432	76351	9894	17447	3740	9	0
11/7/2014	25	140417	105455	10997	19105	4860	12	1
11/8/2014	21	127164	96850	9112	17211	3991	0	2
11/9/2014	20	125212	94494	9412	17108	4198	-3	1
11/10/2014	19	113988	83649	9581	16682	4076	-2	0

11/11/2014	9	82388	55823	8176	14808	3581	-11	0
11/12/2014	16	107699	75479	10187	17483	4550	2	0
11/13/2014	23	134802	99288	11770	19077	4667	11	0
11/14/2014	29	176545	138403	12884	20097	5161	10	1
11/15/2014	33	188061	151034	12191	19904	4932	7	2
11/16/2014	25	161945	127127	11567	18862	4390	-6	1
11/17/2014	15	136351	101564	11450	19108	4229	-14	0
11/18/2014	35	215052	171677	15573	22436	5366	15	0
11/19/2014	29	209297	165674	15647	22627	5350	4	0
11/20/2014	28	189267	148089	14335	21705	5139	-4	0
11/21/2014	37	226784	183130	15455	22615	5584	9	1
11/22/2014	21	164285	130000	11423	18466	4396	-12	2
11/23/2014	15	113486	83814	9475	16641	3556	-14	1
11/24/2014	5	82530	55330	8320	15312	3568	-13	0
11/25/2014	14	108152	77412	9758	16865	4117	4	0
11/26/2014	29	183270	146047	12923	19678	4623	20	0
11/27/2014	29	177696	141708	11925	19362	4701	8	0
11/28/2014	36	218532	178048	14374	21050	5060	7	1
11/29/2014	23	181729	146724	12244	18433	4328	-10	2
11/30/2014	9	107040	78980	9020	15823	3218	-21	1
12/1/2014	15	122688	89075	11227	18299	4087	-1	0
12/2/2014	23	179763	140913	13592	20748	4510	11	0
12/3/2014	25	156648	120446	12432	19600	4170	6	0
12/4/2014	30	195308	154561	14288	21536	4923	6	0
12/5/2014	25	163138	126832	12061	19656	4590	-3	1
12/6/2014	25	156781	123846	10998	18246	3691	-3	2
12/7/2014	36	239215	196133	15307	22843	4933	11	1
12/8/2014	31	245227	199234	16625	23943	5425	1	0
12/9/2014	21	161625	123975	12875	20433	4341	-13	0
12/10/2014	27	176368	136349	13854	21520	4645	1	0
12/11/2014	33	215396	171984	15482	22819	5111	9	0
12/12/2014	31	198023	158006	13990	21275	4752	1	1
12/13/2014	29	186533	150680	12289	19160	4404	-3	2
12/14/2014	29	183166	146046	12611	20135	4375	-1	1
12/15/2014	29	184759	145160	13887	21127	4586	0	0
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12/28/2014	23	153930	121405	10509	18111	3906	1	1
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9/18/2015	-5	45347	22989	5649	11956	4754	2	1
9/19/2015	-7	46051	25814	4883	11726	3629	-1	2
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9/22/2015	3	50732	26324	6714	13056	4638	2	0
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9/26/2015	10	51789	29621	5303	11621	5244	7	2
9/27/2015	5	51040	28739	5537	12104	4660	-3	1
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9/30/2015	1	55136	31023	6812	12736	4566	2	0
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3/26/2017	26	180887	145242	12311	18934	4400	2	1
3/27/2017	23	164892	128752	12729	19252	4159	-4	0
3/28/2017	24	169449	132978	12873	19198	4401	-1	0
3/29/2017	23	191976	155820	13090	19179	3887	-1	0
3/30/2017	22	144790	111256	11873	18449	3212	-2	0
3/31/2017	28	192790	156629	13322	19374	3465	6	1
4/1/2017	28	198305	162269	12580	18945	4511	-3	2
4/2/2017	17	134516	103485	10273	17015	3743	11	1
4/3/2017	17	119273	87480	10866	17187	3740	6	0
4/4/2017	23	166262	130880	12964	18110	4309	-6	0
4/5/2017	22	149161	114978	12689	17760	3734	-2	0
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4/7/2017	20	141657	109404	11335	16935	3983	1	1
4/8/2017	20	134869	105524	9832	15753	3760	-1	2
4/9/2017	11	94929	68277	8640	14836	3176	9	1
4/10/2017	10	80469	54278	9245	13923	3023	6	0
4/11/2017	7	70101	44637	8868	13535	3061	4	0
4/12/2017	7	75682	49361	9000	14131	3191	2	0
4/13/2017	14	94544	66547	9780	14634	3583	-7	0
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4/16/2017	-7	53388	32501	5810	11816	3261	17	1
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4/28/2017	-1	55176	32481	6778	12200	3718	8	1
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5/10/2017	11	86524	59235	8982	14203	4104	6	0
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5/16/2017	-5	61858	39691	7461	11176	3530	16	0
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6/4/2017	5	53661	32451	6108	11719	3383	-1	1
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6/7/2017	6	61082	37255	7972	12420	3435	6	0
6/8/2017	4	56874	33644	7358	12232	3639	6	0
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12/12/2017	30	202836	163590	15215	20113	3917	-1	0
12/13/2017	41	272268	230841	18519	22909	0	-12	0
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12/28/2017	56	361087	316127	21517	23443	0	-9	0
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12/30/2017	50	320024	277618	18476	23930	0	5	2
12/31/2017	58	361735	316837	19755	25143	0	-7	1
1/1/2018	56	366533	320211	20354	25968	0	-2	0
1/2/2018	48	333206	287666	20332	25208	0	9	0
1/3/2018	41	284428	243013	18884	22531	0	11	0
1/4/2018	42	300004	257887	18115	24002	0	3	0
1/5/2018	56	372864	324595	22144	26125	0	-15	1
1/6/2018	60	388576	341085	21190	26301	0	-11	2
1/7/2018	48	334867	290266	19425	25175	0	10	1
1/8/2018	32	249798	207308	17290	22542	2657	22	0
1/9/2018	33	244836	201332	16690	22335	4478	7	0
1/10/2018	32	224450	182941	15625	20980	4904	1	0
1/11/2018	18	159374	125347	12015	17957	4054	15	0
1/12/2018	6	104122	76571	9315	15176	3060	19	1
1/13/2018	39	233193	194682	14542	20747	3222	-27	2
1/14/2018	45	297149	256374	17345	23430	0	-23	1
1/15/2018	44	313661	269675	19361	24625	0	-2	0
1/16/2018	31	230033	190410	15646	21397	2580	14	0
1/17/2018	35	237962	196340	16120	21885	3617	3	0
1/18/2018	39	262546	218601	17207	22917	3820	-6	0
1/19/2018	31	230232	189594	14866	20948	4823	6	1
1/20/2018	25	181384	147469	11618	18270	4028	10	2
1/21/2018	26	178044	143219	12264	18486	4074	2	1
1/22/2018	26	193721	155617	14053	19868	4183	-1	0
1/23/2018	19	162586	128291	12624	17784	3886	7	0
1/24/2018	36	240008	197647	16341	21567	4454	-14	0

1/25/2018	40	279187	234951	17665	23494	3078	-13	0
1/26/2018	35	244955	202893	15535	21382	5145	3	1
1/27/2018	15	147056	116370	10385	16558	3743	23	2
1/28/2018	22	166753	132862	11825	18036	4031	3	1
1/29/2018	35	243059	199293	16228	22300	5238	-17	0
1/30/2018	40	276311	230479	17984	23581	4266	-12	0
1/31/2018	35	242100	200783	16121	22418	2779	3	0
2/1/2018	27	192727	154380	14279	20343	3725	11	0
2/2/2018	48	304013	261295	18470	24248	0	-17	1
2/3/2018	37	259087	217893	15356	21495	4343	1	2
2/4/2018	22	177988	143715	12239	18510	3524	21	1
2/5/2018	37	241170	197252	16431	22237	5250	-8	0
2/6/2018	36	257640	212959	17085	22421	5174	-7	0
2/7/2018	32	240658	197539	16250	21957	4913	5	0
2/8/2018	39	254562	209847	17134	23055	4526	-5	0
2/9/2018	32	226977	186551	15105	20612	4710	4	1
2/10/2018	16	136813	106970	10134	16242	3468	20	2
2/11/2018	15	139950	109194	10558	16684	3514	9	1
2/12/2018	31	213912	173532	14730	20892	4759	-16	0
2/13/2018	34	224569	182769	15599	21563	4638	-11	0
2/14/2018	23	173214	136834	13412	19097	3872	10	0
2/15/2018	18	146326	113342	11831	17426	3727	11	0
2/16/2018	24	174093	138562	12790	18544	4197	-4	1
2/17/2018	31	193433	157021	12657	19185	4570	-10	2
2/18/2018	30	197739	160575	12930	19708	4527	-3	1
2/19/2018	15	142067	109439	11533	17523	3572	16	0
2/20/2018	8	95556	67348	9692	15390	3126	15	0
2/21/2018	8	93840	65613	9634	15451	3142	4	0
2/22/2018	29	186786	149919	13754	19846	3267	-21	0
2/23/2018	24	175385	141119	12647	18715	2904	-6	1
2/24/2018	19	136981	107789	10277	16219	2696	8	2
2/25/2018	24	173688	140458	12283	17885	3063	-3	1
2/26/2018	23	173307	137994	13128	19005	3181	-2	0
2/27/2018	19	148200	116040	12252	17888	2020	5	0
2/28/2018	16	122644	92925	11153	16710	1857	5	0
3/1/2018	17	128018	98325	11298	16603	1792	1	0
3/2/2018	25	194513	158502	12938	18024	5049	-9	1
3/3/2018	24	190899	156745	11959	17620	4574	-3	2
3/4/2018	27	196833	160164	12873	19066	4731	-3	1
3/5/2018	27	204968	165911	14230	20062	4765	-2	0
3/6/2018	29	196056	157143	14165	19970	4778	-2	0
3/7/2018	30	220731	180194	14725	20855	4957	-2	0
3/8/2018	30	211494	171185	14828	20528	4953	-1	0
3/9/2018	30	206938	168410	13982	19802	4745	0	1
3/10/2018	29	194194	159130	12589	18002	4473	1	2

3/11/2018	27	180975	145594	12563	18397	4421	3	1
3/12/2018	27	193244	156374	13287	19505	4078	1	0
3/13/2018	35	239122	198120	14318	21624	5059	-8	0
3/14/2018	30	209015	168805	15177	20464	4568	1	0
3/15/2018	28	197238	158527	14708	20396	3607	5	0
3/16/2018	33	226546	186799	15307	20650	3790	-4	1
3/17/2018	35	222509	184632	14241	19739	3897	-5	2
3/18/2018	35	235702	196155	14976	20730	3841	-1	1
3/19/2018	33	222308	182101	15423	20856	3928	2	0
3/20/2018	28	202986	164394	14540	19899	4153	6	0
3/21/2018	30	224800	184019	15285	20663	4833	1	0
3/22/2018	26	192486	154206	13873	19912	4495	3	0
3/23/2018	23	161165	126729	12269	18056	4111	5	1
3/24/2018	25	163741	131116	11125	17488	4013	-1	2
3/25/2018	31	216655	177863	13715	20469	4607	-7	1
3/26/2018	29	203836	163524	14647	21023	4642	-1	0
3/27/2018	21	156185	121564	12734	18707	3180	9	0
3/28/2018	19	133259	101402	11711	17198	2947	6	0
3/29/2018	15	114519	85738	10489	15612	2680	5	0
3/30/2018	14	115326	86662	9562	14889	4214	3	1
3/31/2018	19	127857	99010	9358	15002	4487	-5	2
4/1/2018	20	141397	109769	10502	16832	4294	-4	1
4/2/2018	30	194445	156252	13793	19966	4434	-11	0
4/3/2018	25	178927	142392	12905	19348	4281	0	0
4/4/2018	20	161850	126272	12570	18462	4546	8	0
4/5/2018	30	202729	162684	14411	20454	5181	-8	0
4/6/2018	24	178809	144016	12369	18084	4340	1	1
4/7/2018	25	166623	133643	11484	17513	3983	2	2
4/8/2018	29	190044	153350	12917	19287	4490	-5	1
4/9/2018	24	163491	126936	12778	18990	4787	3	0
4/10/2018	29	186687	149250	13289	19102	5046	-3	0
4/11/2018	24	153916	118551	12327	18321	4716	3	0
4/12/2018	12	112297	82508	10229	15910	3650	15	0
4/13/2018	15	99011	71635	8756	14788	3832	3	1
4/14/2018	19	122642	93368	9463	15316	4495	-6	2
4/15/2018	28	194908	158718	12616	18726	4849	-11	1
4/16/2018	16	141590	108887	11415	17288	4001	8	0
4/17/2018	23	155250	119866	12273	18311	4800	-1	0
4/18/2018	19	140055	106081	11814	17579	4581	1	0
4/19/2018	25	173474	137500	12968	18353	4654	-4	0
4/20/2018	19	141822	109093	10740	17512	4477	3	1
4/21/2018	14	110681	82573	8547	15149	4413	8	2
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4/23/2018	15	100265	69677	9821	16485	4282	-1	0
4/24/2018	11	87052	58924	8954	15277	3897	4	0

4/25/2018	11	92970	64972	9097	15272	3630	2	0
4/26/2018	6	73730	47206	8367	13970	4188	5	0
4/27/2018	12	84973	58855	8125	13790	4203	-4	1
4/28/2018	9	69443	46492	6907	12208	3837	0	2
4/29/2018	16	101601	74363	8592	14458	4187	-6	1
4/30/2018	17	117459	86787	10069	15774	4830	-5	0
5/1/2018	3	71233	45269	8014	13585	4365	14	0
5/2/2018	-9	57184	33124	7146	13023	3892	19	0
5/3/2018	-9	54815	31107	6887	12770	4051	6	0
5/4/2018	-5	52080	30139	6353	11901	3688	-4	1
5/5/2018	0	49430	30427	5498	10926	2579	-7	2
5/6/2018	9	62043	39692	6606	12288	3457	-12	1
5/7/2018	6	62720	37669	7679	13437	3936	-2	0
5/8/2018	8	62231	37231	7663	13446	3891	-1	0
5/9/2018	5	59003	34476	6842	13305	4380	2	0
5/10/2018	4	58810	34802	7063	12729	4217	3	0
5/11/2018	7	58401	34899	6714	12612	4176	-3	1
5/12/2018	13	74117	50730	6762	12245	4380	-8	2
5/13/2018	11	71435	47904	6891	12563	4077	-1	1
5/14/2018	5	60036	36072	7176	12936	3852	7	0
5/15/2018	-1	55081	31117	7012	12716	4237	9	0
5/16/2018	6	58887	34629	7430	13062	3766	-4	0
5/17/2018	5	57904	34150	7208	12810	3737	-3	0
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5/20/2018	-3	54036	32119	5673	12132	4112	13	1
5/21/2018	2	55306	32238	6748	12672	3648	-1	0
5/22/2018	6	58135	34383	6863	12944	3945	-7	0
5/23/2018	-3	53529	30214	6521	12439	4355	7	0
5/24/2018	5	56250	32744	6722	12453	4331	-4	0
5/25/2018	-11	48183	27093	5754	11620	3716	12	1
5/26/2018	-9	44283	25811	4677	10251	3544	6	2
5/27/2018	13	56527	36079	5856	10725	3868	-23	1
5/28/2018	3	53524	32435	5932	11263	3895	-1	0
5/29/2018	-5	51277	28304	6776	12161	4036	13	0
5/30/2018	1	52040	28936	6887	12124	4094	-2	0
5/31/2018	-2	50249	27615	6667	11833	4134	0	0
6/1/2018	-5	46947	25751	6236	11706	3254	5	1
6/2/2018	-3	44385	26153	5126	10104	3002	-1	2
6/3/2018	10	53457	32780	6003	11697	2978	-14	1
6/4/2018	11	65027	41363	7419	13096	3149	-8	0
6/5/2018	5	56849	33186	7005	12979	3679	6	0
6/6/2018	7	57033	33308	7211	12700	3814	1	0
6/7/2018	5	54671	31224	7074	12480	3893	1	0
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6/9/2018	-5	44512	25523	4881	10550	3558	5	2
6/10/2018	3	49541	29050	5581	11465	3444	-8	1
6/11/2018	6	53192	30414	6833	12367	3578	-7	0
6/12/2018	0	51118	28676	6548	11833	4062	5	0
6/13/2018	-5	50199	27578	6541	12291	3790	8	0
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6/15/2018	3	50159	28039	6163	12157	3800	-8	1
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6/17/2018	-8	47030	25838	5262	11765	4164	6	1
6/18/2018	-11	51131	27202	6240	12853	4837	3	0
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6/21/2018	-3	49019	25656	6215	12679	4469	-6	0
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6/27/2018	-15	48269	25557	6149	12611	3953	13	0
6/28/2018	-6	49940	26199	6097	12688	4956	-3	0
6/29/2018	-7	47442	24865	5412	11844	5321	-4	1
6/30/2018	-15	43254	23161	4455	10662	4976	9	2
7/1/2018	-16	46408	25589	4498	11237	5084	5	1
7/2/2018	-12	49382	27713	5113	11347	5209	-4	0
7/3/2018	-16	41721	21928	4454	11031	4309	2	0
7/4/2018	-17	40960	21121	4210	11272	4357	3	0
7/5/2018	-17	44282	22617	4850	11692	5122	1	0
7/6/2018	-7	43695	23708	4823	10889	4275	-10	1
7/7/2018	-2	41638	23392	4398	10275	3573	-10	2
7/8/2018	-5	44462	24192	4893	11246	4131	1	1
7/9/2018	-10	46566	23913	5960	12652	4042	7	0
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7/14/2018	-7	41506	22506	4536	10765	3699	1	2
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7/22/2018	-9	44394	23839	5054	11626	3876	3	1
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7/24/2018	-12	47703	24086	5904	13138	4576	2	0
7/25/2018	-11	47628	23712	5989	13082	4846	-1	0
7/26/2018	-11	48249	24811	5684	12931	4823	-1	0
7/27/2018	-14	45224	23848	5040	12162	4174	3	1
7/28/2018	-11	40989	22270	4357	10486	3876	-2	2
7/29/2018	-10	43693	23807	4792	11434	3659	-3	1
7/30/2018	-9	46953	24420	5832	12763	3938	-2	0
7/31/2018	-11	46668	23970	5846	12612	4240	2	0
8/1/2018	-14	47577	24246	5891	12368	5072	4	0
8/2/2018	-18	46717	23656	5842	12090	5129	6	0
8/3/2018	-16	43926	22436	5546	11698	4246	0	1
8/4/2018	-8	41626	22444	4445	10742	3995	-9	2
8/5/2018	-15	43367	22982	4892	11435	4058	3	1
8/6/2018	-18	46551	23438	6000	12191	4922	7	0
8/7/2018	-16	49176	26256	5834	12224	4862	-1	0
8/8/2018	-16	46553	23470	5722	12548	4813	-1	0
8/9/2018	-14	46686	24617	5532	12242	4295	-2	0
8/10/2018	-13	43085	22248	5108	11796	3933	-2	1
8/11/2018	-8	40769	21787	4289	10546	4147	-6	2
8/12/2018	-7	41502	22283	4612	10956	3652	-4	1
8/13/2018	-8	45096	23864	5494	11889	3849	1	0
8/14/2018	-11	47554	23879	6176	12484	5016	4	0
8/15/2018	-15	48804	24649	5936	12519	5700	6	0
8/16/2018	-16	46947	23320	5936	12256	5435	3	0
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8/21/2018	-5	46806	24028	6215	12253	4310	1	0
8/22/2018	-9	47983	24443	6232	12404	4904	5	0
8/23/2018	-3	49348	25915	6130	12179	5125	-4	0
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8/28/2018	-20	54797	30801	6179	12097	5720	8	0
8/29/2018	-19	54187	30591	5838	11960	5799	2	0
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9/1/2018	-5	41872	22625	4830	10604	3813	-2	2
9/2/2018	-9	40316	21385	4354	10658	3920	6	1
9/3/2018	-17	44717	23382	4855	12170	4311	10	0
9/4/2018	-13	52564	29332	5992	12667	4574	0	0
9/5/2018	-12	53282	29229	6075	12537	5441	-3	0
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9/7/2018	-2	45167	23250	5954	11589	4375	-10	1
9/8/2018	3	43809	24862	5036	10472	3439	-10	2
9/9/2018	5	48787	28289	5659	11513	3326	-5	1
9/10/2018	2	49705	27531	6651	12112	3410	2	0
9/11/2018	-9	47282	24783	6406	11319	4774	13	0
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9/13/2018	-3	51194	26415	6505	12324	5950	-3	0
9/14/2018	-4	47147	24759	5811	11665	4912	2	1
9/15/2018	-2	43563	24077	4639	10622	4225	-2	2
9/16/2018	-6	46265	25461	4994	11401	4409	3	1
9/17/2018	-10	45683	24173	6126	11412	3973	6	0
9/18/2018	-4	46395	24813	6233	10452	4897	-4	0
9/19/2018	3	50142	27361	6738	11099	4944	-10	0
9/20/2018	2	49861	27593	6857	11148	4263	-3	0
9/21/2018	-4	45147	24810	6018	10516	3803	7	1
9/22/2018	4	44952	26163	5144	9745	3900	-5	2
9/23/2018	8	52057	31888	5838	10358	3974	-8	1
9/24/2018	11	61497	38626	7446	11335	4090	-5	0
9/25/2018	-3	52786	31134	6329	11492	3831	13	0
9/26/2018	-6	49536	26598	6215	12016	4707	10	0
9/27/2018	3	52124	28593	6831	12350	4350	-8	0
9/28/2018	9	59595	36446	6851	12381	3917	-11	1
9/29/2018	4	52859	32870	5469	10912	3609	2	2
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10/1/2018	5	54199	30897	7070	12808	3425	-1	0
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10/3/2018	3	55235	29990	7404	12645	5196	0	0
10/4/2018	-1	53576	29060	7259	12481	4776	3	0
10/5/2018	11	59371	35410	7413	12351	4197	-10	1
10/6/2018	2	48472	28717	5511	10620	3625	3	2
10/7/2018	0	46318	26202	5475	11182	3460	7	1
10/8/2018	5	55532	32881	6837	12206	3608	-4	0
10/9/2018	-6	55865	31839	6932	12457	4637	9	0
10/10/2018	-8	54675	30487	6882	12281	5024	8	0
10/11/2018	-2	50161	26626	7049	12342	4144	-5	0
10/12/2018	12	61165	36878	7486	12742	4059	-17	1
10/13/2018	19	82639	59351	7440	11784	4064	-14	2
10/14/2018	16	88557	63825	7750	12808	4174	-1	1
10/15/2018	6	79781	53171	8573	14010	4028	12	0
10/16/2018	17	98939	68262	10136	14873	5668	-6	0
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10/25/2018	26	158207	121127	12025	18286	6769	-7	0
10/26/2018	23	143695	109229	10907	17720	5839	1	1
10/27/2018	16	116337	87626	8567	15301	4844	9	2
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10/31/2018	9	98635	68026	9521	15792	5296	13	0
11/1/2018	4	66745	40685	8098	13908	4054	13	0
11/2/2018	1	59538	34800	7057	13697	3985	6	1
11/3/2018	15	102150	74656	8439	14168	4887	-13	2
11/4/2018	20	120972	90934	9462	15448	5128	-12	1
11/5/2018	15	116081	85777	10163	15464	4677	3	0
11/6/2018	9	90840	62875	9024	14061	4880	9	0
11/7/2018	11	94678	65450	9292	14121	5814	1	0
11/8/2018	22	137031	103325	11176	16101	6429	-12	0
11/9/2018	16	122633	91695	10275	15159	5505	1	1
11/10/2018	27	163904	132066	11303	15869	4665	-8	2
11/11/2018	29	172626	139875	11636	16651	4464	-8	1
11/12/2018	17	134386	103753	10609	15768	4256	11	0
11/13/2018	22	154029	119266	12063	17125	5575	1	0
11/14/2018	36	230591	187967	15462	20202	6961	-17	0
11/15/2018	32	222958	183110	14751	19731	5367	-3	0
11/16/2018	28	189799	153397	13262	18277	4863	6	1
11/17/2018	25	166108	134269	11224	16276	4339	5	2
11/18/2018	25	169533	135852	11501	17541	4638	2	1
11/19/2018	24	163732	127936	12404	18624	4767	1	0
11/20/2018	31	202440	162795	14099	20488	5057	-7	0
11/21/2018	36	231929	196308	14622	20526	473	-9	0
11/22/2018	48	290302	251524	16135	22267	376	-15	0
11/23/2018	37	237994	201930	14586	21136	342	5	1
11/24/2018	22	158429	126568	10646	17018	4198	21	2
11/25/2018	23	153560	120042	10996	18007	4515	7	1
11/26/2018	21	157808	121988	12018	19034	4767	2	0
11/27/2018	26	183491	144968	13323	19700	5499	-4	0
11/28/2018	26	194053	155192	13638	19772	5452	-3	0
11/29/2018	29	197017	157893	13663	20051	5410	-3	0
11/30/2018	29	194448	156369	13225	19608	5246	-2	1
12/1/2018	25	162372	129679	11014	17265	4414	4	2
12/2/2018	12	113875	85666	9064	15267	3878	15	1
12/3/2018	20	139564	105889	11692	17337	4646	-2	0
12/4/2018	35	220226	178955	15156	20686	5430	-19	0
12/5/2018	35	225163	183133	15406	21007	5617	-8	0



12/6/2018	30	206061	166343	14450	20103	5165	5	0
12/7/2018	38	239895	197807	15252	21247	5589	-6	1
12/8/2018	40	255640	215137	14626	20521	5357	-6	2
12/9/2018	36	240784	200018	14741	20829	5196	3	1
12/10/2018	37	243205	199753	16388	21390	5675	1	0
12/11/2018	33	222663	181033	15573	20592	5465	4	0
12/12/2018	37	243068	199395	16422	21487	5764	-2	0
12/13/2018	34	232056	190077	15885	20728	5365	1	0
12/14/2018	20	151535	118914	11385	17472	3765	16	1
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12/16/2018	26	181093	146137	12291	18375	4291	-6	1
12/17/2018	30	214919	174923	14837	20314	4845	-7	0
12/18/2018	39	262344	219487	16747	21615	4495	-11	0
12/19/2018	33	220531	181175	14890	20485	3980	2	0
12/20/2018	18	148818	116664	11257	17164	3733	18	0
12/21/2018	11	95817	69606	8826	14172	3213	15	1
12/22/2018	27	175271	142545	11512	16949	4265	-13	2
12/23/2018	31	191154	156927	12433	17479	4315	-12	1
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12/25/2018	35	214727	178740	12993	19479	3515	-4	0
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1/1/2019	26	172838	139915	11795	17974	3155	1	0
1/2/2019	32	209473	172564	14405	20174	2330	-10	0
1/3/2019	28	187959	151172	13583	18943	4262	1	0
1/4/2019	24	166764	132865	11928	18050	3922	6	1
1/5/2019	27	179938	146574	11711	17430	4223	-1	2
1/6/2019	34	233123	193612	14221	20371	4919	-9	1
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1/8/2019	23	178851	142579	12946	19220	4106	12	0
1/9/2019	28	205306	165971	14321	20451	4562	1	0
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1/11/2019	45	285597	245182	17346	23008	61	-13	1
1/12/2019	42	269066	232153	15345	21568	0	-1	2
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1/15/2019	37	248428	206873	15966	20359	5230	4	0
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1/20/2019	49	297832	256930	17213	23689	0	-17	1
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1/30/2019	49	300794	258179	18355	24260	0	-15	0
1/31/2019	53	346411	300410	20706	25296	0	-14	0
2/1/2019	49	324587	281499	19097	23991	0	2	1
2/2/2019	33	239755	205079	14522	20154	0	18	2
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2/5/2019	19	146469	113769	11807	17191	3702	8	0
2/6/2019	28	184138	147013	13788	18996	4341	-7	0
2/7/2019	26	187862	151270	13407	18867	4318	-3	0
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2/10/2019	34	230977	192970	14217	20252	3538	1	1
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2/23/2019	29	185095	152169	12084	17784	3058	-2	2
2/24/2019	24	181763	148413	12116	18213	3020	5	1
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3/1/2019	33	212953	175560	14336	20606	2451	9	1
3/2/2019	33	215304	178294	13035	20470	3505	4	2
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3/4/2019	37	240169	200955	15879	20670	2665	-6	0
3/5/2019	43	254173	215902	16885	21375	12	-10	0

3/6/2019	47	292274	251639	18276	22348	11	-7	0
3/7/2019	44	277146	237864	17592	21680	11	1	0
3/8/2019	36	237704	198270	15090	19386	4958	10	1
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3/14/2019	19	143794	112371	11191	16510	3723	10	0
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3/16/2019	26	164742	132896	10776	17126	3944	-11	2
3/17/2019	31	201524	164492	12927	19631	4474	-12	1
3/18/2019	30	200389	162079	13913	19775	4622	-2	0
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3/20/2019	25	168297	133316	12563	18258	4160	4	0
3/21/2019	22	159476	125550	12071	17765	4090	5	0
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4/25/2019	13	82701	55522	8598	13893	4688	-2	0
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4/30/2019	17	117836	88406	9902	15444	4084	0	0
5/1/2019	14	101955	73587	9167	15048	4152	2	0
5/2/2019	17	107566	78191	9508	15111	4756	-2	0
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7/4/2019	-12	41420	21432	4697	10435	4856	1	0
7/5/2019	-12	43707	22615	5172	10818	5102	0	1
7/6/2019	-13	41214	22222	4522	10008	4463	1	2
7/7/2019	-5	44692	24163	4956	10765	4808	-8	1
7/8/2019	-7	47682	24974	5978	11909	4822	-2	0
7/9/2019	-12	47656	24644	5793	11802	5417	6	0
7/10/2019	-12	47587	24218	6000	11436	5932	3	0
7/11/2019	-10	47088	24085	6170	11044	5790	-2	0
7/12/2019	-13	50321	28106	5518	11342	5354	2	1
7/13/2019	-12	41843	22542	4319	10276	4706	1	2
7/14/2019	-14	43901	23114	5031	10994	4763	2	1
7/15/2019	-10	48089	25864	6081	11447	4697	-3	0
7/16/2019	-15	47719	24013	6102	11676	5928	3	0
7/17/2019	-13	46688	23370	6033	11621	5664	1	0
7/18/2019	-2	48864	25542	6170	11600	5553	-12	0

7/19/2019	-16	49904	27813	5544	11243	5305	9	1
7/20/2019	-22	40168	20737	4729	10070	4633	13	2
7/21/2019	-21	43399	22157	5083	10943	5217	2	1
7/22/2019	-8	45045	23085	6193	11715	4052	-14	0
7/23/2019	-2	47588	25284	6426	11817	4062	-13	0
7/24/2019	-7	48700	25320	6518	11787	5076	2	0
7/25/2019	-7	48835	24621	6286	11768	6161	3	0
7/26/2019	-8	45643	23375	5325	11385	5558	1	1
7/27/2019	-7	42139	22564	4497	10709	4370	-1	2
7/28/2019	-15	43760	22799	4667	11828	4467	8	1
7/29/2019	-16	50621	26883	5780	12942	5016	5	0
7/30/2019	-16	48128	23766	5923	12658	5781	1	0
7/31/2019	-14	47424	23262	5866	12446	5850	-2	0
8/1/2019	-11	47964	24142	5928	11804	6090	-4	0
8/2/2019	-10	45662	23424	5334	11641	5263	-3	1
8/3/2019	-13	40925	21693	4217	10525	4491	3	2
8/4/2019	-10	43440	23206	4440	11063	4732	-2	1
8/5/2019	-7	46628	24148	5763	12202	4515	-5	0
8/6/2019	-7	46974	24244	5785	12186	4759	-2	0
8/7/2019	-11	47477	24046	5898	12151	5382	4	0
8/8/2019	-10	47352	24076	6230	11631	5414	1	0
8/9/2019	-8	44224	23095	5450	10914	4764	-3	1
8/10/2019	-4	41268	22778	4372	9656	4462	-5	2
8/11/2019	-6	41034	22520	4646	10152	3716	0	1
8/12/2019	-12	44907	23386	5433	11129	4959	7	0
8/13/2019	-6	47764	24020	6181	11656	5906	-3	0
8/14/2019	-6	48303	24406	6211	11456	6230	-3	0
8/15/2019	-6	47990	24416	6119	11241	6215	0	0
8/16/2019	-7	45325	23655	5492	10838	5341	1	1
8/17/2019	-9	41732	22505	4475	9967	4785	3	2
8/18/2019	-14	43501	22906	4820	10679	5095	6	1
8/19/2019	-12	50216	28793	5911	11491	4021	1	0
8/20/2019	-11	45405	23756	6097	11316	4236	-2	0
8/21/2019	-12	46815	24479	5933	11927	4477	1	0
8/22/2019	-13	46237	23501	6090	11524	5122	2	0
8/23/2019	-4	45289	24246	5602	11014	4427	-9	1
8/24/2019	-1	42320	23265	4664	9835	4556	-8	2
8/25/2019	3	46932	26318	5210	10702	4702	-6	1
8/26/2019	2	49485	27037	6170	11753	4525	-1	0
8/27/2019	-1	49370	26961	6164	11631	4614	4	0
8/28/2019	-6	48442	24520	6400	11774	5748	7	0
8/29/2019	-7	48454	26848	6259	10840	4508	4	0
8/30/2019	-9	45527	24038	5690	10879	4921	3	1
8/31/2019	-4	43025	23506	4847	9958	4715	-4	2
9/1/2019	-2	42223	22727	4673	9919	4904	-5	1

9/2/2019	-5	46615	25088	5190	11318	5019	2	0
9/3/2019	-5	49066	25376	6554	11883	5253	2	0
9/4/2019	-6	49633	25397	6502	11556	6179	1	0
9/5/2019	2	50388	26516	6696	11603	5573	-8	0
9/6/2019	3	48352	26376	6066	11073	4837	-5	1
9/7/2019	0	45110	25860	5033	9474	4744	3	2
9/8/2019	-2	47399	26844	5340	10266	4950	4	1
9/9/2019	-1	49844	26527	6527	11484	5306	0	0
9/10/2019	-5	50557	26393	6402	11780	5983	4	0
9/11/2019	-8	48883	25401	6263	11761	5459	5	0
9/12/2019	7	53091	29453	6716	11823	5100	-14	0
9/13/2019	6	51249	28698	6153	11195	5203	-7	1
9/14/2019	-4	44754	25098	5015	9781	4860	11	2
9/15/2019	-5	46664	26318	5249	10339	4758	6	1
9/16/2019	1	48979	27421	6538	10523	4497	-6	0
9/17/2019	3	50323	28349	6676	10533	4766	-5	0
9/18/2019	11	59526	34833	7286	11812	5595	-9	0
9/19/2019	7	57575	33481	7005	11372	5717	0	0
9/20/2019	-3	48910	26895	5773	11119	5124	12	1
9/21/2019	-3	44679	24866	4891	10023	4900	5	2
9/22/2019	-7	47008	25807	5217	10881	5103	4	1
9/23/2019	-8	49232	25584	6464	11902	5281	3	0
9/24/2019	0	50888	26899	6656	12022	5312	-8	0
9/25/2019	2	51598	27832	6487	11638	5641	-6	0
9/26/2019	1	51839	28072	6521	11795	5451	0	0
9/27/2019	3	49606	27477	5997	11179	4954	-2	1
9/28/2019	-6	44003	24409	4828	10098	4669	8	2
9/29/2019	1	48912	27948	5543	10832	4590	-3	1
9/30/2019	5	52637	29661	6572	11735	4670	-8	0
10/1/2019	-5	50645	27435	6085	12108	5016	8	0
10/2/2019	3	53677	29190	6711	12517	5259	-3	0
10/3/2019	13	64710	39453	7496	12514	5247	-14	0
10/4/2019	14	72967	47856	7304	12610	5198	-6	1
10/5/2019	16	76087	52999	6766	11102	5221	-3	2
10/6/2019	-2	56899	35035	5909	11307	4648	17	1
10/7/2019	-1	50296	26712	6482	12368	4735	8	0
10/8/2019	8	61748	36373	7346	12955	5074	-10	0
10/9/2019	12	78421	51833	8130	13356	5102	-9	0
10/10/2019	11	89087	61075	8582	14062	5369	-1	0
10/11/2019	12	84172	58427	7602	12983	5160	-1	1
10/12/2019	11	72396	49260	6538	11842	4757	1	2
10/13/2019	8	62106	39458	6224	11806	4617	4	1
10/14/2019	8	65951	41332	6956	13014	4648	2	0
10/15/2019	15	84388	56621	8416	14331	5020	-7	0
10/16/2019	8	77373	50415	8361	13761	4836	4	0

10/17/2019	13	94003	65337	8935	14217	5515	-2	0
10/18/2019	16	95829	67090	8561	14763	5415	-6	1
10/19/2019	17	95111	69402	7615	13229	4864	-3	2
10/20/2019	10	80100	54641	7189	13531	4739	7	1
10/21/2019	11	81204	53124	8443	14371	5266	3	0
10/22/2019	8	75061	48474	8172	13758	4657	3	0
10/23/2019	11	84230	55378	8782	14385	5686	-2	0
10/24/2019	10	80114	52779	7967	14330	5038	-1	0
10/25/2019	9	70641	45375	7241	13171	4854	2	1
10/26/2019	12	76273	51989	6808	12543	4934	-3	2
10/27/2019	13	95330	68150	7941	13970	5270	-3	1
10/28/2019	13	91528	62679	8830	15056	4962	-1	0
10/29/2019	10	82138	54069	8357	14443	5269	3	0
10/30/2019	4	64349	38149	7552	13563	5084	8	0
10/31/2019	0	59246	34131	7319	13088	4708	7	0
11/1/2019	20	106264	77020	8936	14945	5363	-18	1
11/2/2019	20	117065	90547	8602	13415	4501	-10	2
11/3/2019	22	126455	98213	8988	14049	5205	-2	1
11/4/2019	19	121560	91995	9359	14624	5582	2	0
11/5/2019	16	113811	85049	9309	14144	5308	5	0
11/6/2019	22	136130	104871	10739	14642	5878	-5	0
11/7/2019	20	134208	103053	10672	15075	5409	-1	0
11/8/2019	35	211447	173892	13292	18493	5770	-14	1
11/9/2019	33	191432	157950	11587	16923	4973	-6	2
11/10/2019	20	143782	114510	9666	15344	4263	14	1
11/11/2019	13	101518	74204	8666	14753	3895	14	0
11/12/2019	36	218914	180410	13970	19257	5277	-20	0
11/13/2019	40	248910	212722	15502	20501	184	-16	0
11/14/2019	29	200416	163366	13172	18432	5446	9	0
11/15/2019	24	168333	134828	11425	17251	4830	11	1
11/16/2019	35	220389	184158	12601	18429	5201	-9	2
11/17/2019	28	198349	163113	12059	18256	4921	2	1
11/18/2019	25	178794	143279	12336	18213	4967	7	0
11/19/2019	22	154684	120718	11716	17440	4811	5	0
11/20/2019	26	181893	145406	12513	18715	5259	-3	0
11/21/2019	20	149471	116266	11018	17331	4857	4	0
11/22/2019	25	171839	137289	11526	17754	5270	-2	1
11/23/2019	24	157339	126214	10207	16202	4716	-2	2
11/24/2019	23	170278	136883	10984	17399	5012	2	1
11/25/2019	21	147235	113981	10768	17482	5004	3	0
11/26/2019	18	131033	99761	10187	16417	4668	4	0
11/27/2019	16	127480	98821	9372	15175	4112	4	0
11/28/2019	27	180792	147667	10889	17202	5034	-10	0
11/29/2019	30	203728	168083	12313	18233	5100	-9	1
11/30/2019	36	226724	190628	12760	18492	4844	-8	2



12/1/2019	30	214134	177817	12801	18923	4592	3	1
12/2/2019	33	231434	191137	14504	20754	5038	0	0
12/3/2019	34	234241	193171	14988	20750	5331	-3	0
12/4/2019	30	208489	169850	13989	19738	4912	4	0
12/5/2019	31	216330	176839	14096	20051	5344	1	0
12/6/2019	29	210078	172725	13198	19202	4954	2	1
12/7/2019	39	235123	201290	13627	19667	540	-9	2
12/8/2019	30	204611	169606	12204	18405	4396	4	1
12/9/2019	9	117866	89248	9511	15603	3505	26	0
12/10/2019	20	139213	106124	11107	16976	5007	-1	0
12/11/2019	37	236281	195271	15140	20523	5348	-23	0
12/12/2019	38	248275	206351	15408	21046	5470	-10	0
12/13/2019	20	170767	138141	11253	17337	4037	18	1
12/14/2019	14	115142	88185	8557	14749	3652	15	2
12/15/2019	28	198378	162949	12289	18331	4810	-11	1
12/16/2019	34	234286	193302	14847	20745	5393	-13	0
12/17/2019	33	231765	191053	14941	20833	4938	-2	0
12/18/2019	41	257874	219200	16548	22127	0	-8	0
12/19/2019	47	313560	271583	18199	23779	0	-10	0
12/20/2019	41	271083	233363	15687	22034	0	3	1
12/21/2019	34	230883	194616	12923	18915	4430	10	2
12/22/2019	30	201523	166840	12040	18248	4395	8	1
12/23/2019	21	161817	130307	10637	16913	3961	11	0
12/24/2019	31	194794	161655	11439	17443	4258	-6	0
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12/26/2019	27	189931	155343	12103	18202	4283	3	0
12/27/2019	19	152326	122293	10144	16305	3584	9	1
12/28/2019	25	169038	137948	10629	16638	3823	-2	2
12/29/2019	26	172119	139572	11075	17486	3986	-4	1
12/30/2019	27	197056	161873	12302	18557	4323	-2	0
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1/3/2020	19	139988	109903	10024	16521	3541	7	1
1/4/2020	24	158270	127524	10489	16418	3839	-4	2
1/5/2020	33	217490	180651	13330	18801	4707	-12	1
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1/7/2020	30	201774	164221	13494	19427	4632	3	0
1/8/2020	36	249458	207568	15388	21155	5347	-5	0
1/9/2020	36	252546	211296	15311	20793	5146	-3	0
1/10/2020	15	149793	119804	10231	16215	3543	21	1
1/11/2020	4	80259	57223	7074	13193	2769	22	2
1/12/2020	16	121607	93002	9366	15819	3420	-7	1
1/13/2020	26	177028	142109	12297	18362	4260	-16	0
1/14/2020	25	174970	140297	12178	18161	4334	-4	0

1/15/2020	25	167121	132817	11882	18312	4110	1	0
1/16/2020	34	233159	193578	14575	20341	4665	-9	0
1/17/2020	47	302007	262190	17092	22724	0	-18	1
1/18/2020	36	250120	212820	14137	19562	3602	5	2
1/19/2020	36	233339	195378	14187	20102	3673	6	1
1/20/2020	44	283315	243059	17019	23237	0	-8	0
1/21/2020	44	288986	248192	17415	23379	0	-4	0
1/22/2020	38	247915	208263	15671	21519	2463	6	0
1/23/2020	29	207560	169694	13733	19644	4488	12	0
1/24/2020	25	174745	140885	11802	17945	4113	9	1
1/25/2020	19	150176	120562	9978	15988	3649	8	2
1/26/2020	25	171570	138541	11252	17870	3907	-3	1
1/27/2020	25	183922	148019	12578	19259	4066	-3	0
1/28/2020	29	205052	167011	13604	19755	4682	-4	0
1/29/2020	35	226862	186188	14663	20825	5186	-8	0
1/30/2020	36	232974	192031	14950	20853	5141	-4	0
1/31/2020	28	186456	151047	12467	18530	4412	8	1
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2/2/2020	28	190583	155783	12107	18378	4316	-1	1
2/3/2020	27	188227	150624	13236	19490	4876	1	0
2/4/2020	23	166759	131981	12001	18055	4722	5	0
2/5/2020	28	194691	157984	13300	19111	4296	-3	0
2/6/2020	27	191694	155667	13148	18544	4336	-2	0
2/7/2020	30	213848	176982	13522	18641	4703	-3	1
2/8/2020	36	232971	195610	13690	18715	4956	-8	2
2/9/2020	27	201075	166284	12294	18158	4339	6	1
2/10/2020	22	167648	133699	11926	18089	3934	10	0
2/11/2020	25	180877	145180	12714	18793	4191	-1	0
2/12/2020	26	177484	141738	12767	18620	4359	-3	0
2/13/2020	29	198027	161678	13390	18738	4221	-4	0
2/14/2020	46	274528	236330	16699	21499	0	-19	1
2/15/2020	38	248561	210942	14307	19508	3804	-1	2
2/16/2020	29	203158	168476	12621	18436	3627	13	1
2/17/2020	28	196321	159231	13164	19422	4505	6	0
2/18/2020	26	192797	156804	12822	18875	4296	3	0
2/19/2020	32	213830	175102	14221	19967	4540	-5	0
2/20/2020	39	251136	213775	16098	21264	0	-10	0
2/21/2020	37	241000	203610	14834	19914	2641	-2	1
2/22/2020	29	190852	157601	11821	17125	4305	9	2
2/23/2020	24	164676	132137	10913	17651	3975	9	1
2/24/2020	18	131230	100070	10566	17096	3498	9	0
2/25/2020	19	129525	98586	10447	17053	3439	2	0
2/26/2020	18	139821	108528	10806	16855	3632	1	0
2/27/2020	29	203434	165807	13841	19444	4343	-11	0
2/28/2020	33	215079	179317	13849	19478	2435	-10	1

3/1/2020	35	230341	191384	13696	20234	5028	1	1
3/2/2020	14	135307	103807	10621	17500	3380	23	0
3/3/2020	15	114618	84225	10018	16842	3534	10	0
3/4/2020	20	149526	116298	11444	17792	3992	-6	0
3/5/2020	24	153910	120725	11666	17476	4044	-7	0
3/6/2020	27	189018	154062	12330	18166	4460	-5	1
3/7/2020	27	185832	153285	11393	16952	4202	-2	2
3/8/2020	17	140962	110931	9698	16672	3662	10	1
3/9/2020	8	92098	64075	8461	15382	4181	14	0
3/10/2020	9	88986	62481	8391	14725	3389	4	0
3/11/2020	20	123946	93627	10085	16325	3909	-12	0
3/12/2020	20	137801	108116	10153	15549	3983	-6	0
3/13/2020	17	131906	102870	9536	15738	3761	3	1
3/14/2020	20	132910	104696	8985	15404	3826	-2	2
3/15/2020	27	161591	129313	10410	17694	4175	-9	1
3/16/2020	28	177830	142646	11416	19377	4392	-5	0
3/17/2020	22	161783	128899	10478	18289	4117	6	0
3/18/2020	20	133489	101544	9877	17291	4778	5	0
3/19/2020	21	145155	114558	9638	17278	3680	0	0
3/20/2020	9	95633	70928	7149	14387	3169	12	1
3/21/2020	26	150486	121440	9045	16146	3855	-11	2
3/22/2020	31	183628	143226	14445	20926	5031	-14	1
3/23/2020	27	192825	173652	5139	10159	3875	2	0
3/24/2020	22	147434	116269	10119	17481	3565	7	0
3/25/2020	26	175549	141853	11009	18460	4228	-2	0
3/26/2020	17	120666	91340	8763	16509	4054	7	0
3/27/2020	15	105789	78829	7540	15521	3899	7	1
3/28/2020	19	117300	90955	7252	14943	4150	-3	2
3/29/2020	22	148890	119056	8761	16579	4495	-5	1
3/30/2020	25	165176	131767	10498	17790	5121	-5	0
3/31/2020	26	158931	125538	10112	18080	5202	-3	0

The Narragansett Electric Company  
d/b/a National Grid  
RIPUC Docket No. 5066  
In Re: 2020 Annual Gas Cost Recovery Filing  
Responses to the Division's First Set of Data Requests  
Issued on August 19, 2020

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Division 1-8

Request:

Please provide monthly supply plans for each month of the winter of 2019/20.

Response:

Please see Attachment DIV 1-8.

Nov 1

<u>RHODE ISLAND MONTHLY PLAN</u>			
<b>November 2019</b>			
	<u>MIN DAY</u>	<u>AVG DAY</u>	<u>MAX DAY</u>
*4-Year Historical Sendout HDD	57,734 0	137,098 20	290,302 54
*All Sales and Transportation customers. No power plants.			
**Forecasted Sendout HDD	58,490 10	119,944 20	219,828 37
**Firm Sales and Transportation customers w/ NGRID Capacity.			
Forecasted Firm Transportation	16,965	28,795	47,472
Forecasted Sales Demand	41,525	91,149	172,356

<b>Baseload Election - November 2019</b>	
Volume per Day (MMBtu)	
Dawn	0
Longhaul	<u>14,000</u>
TGP Total	14,000
Longhaul	<u>24,000</u>
AGT Total	24,000
Grand Total	38,000

**Estimated Rhode Island Capacity Breakout for November 2019**

<b>ALGONQUIN</b>									
Path	Receipt Point	Receipt Volumes	M2	M3	Seasonal CG Loss	City Gate Capacity	Net CG Deliveries	Baseload	Available Swing
Transco Leidy->AGT	Transco	72		72	0	72	72	72	0
TETCO->AGT	M2	27,250	27,250	26,792	0	26,655	26,655	23,928	2,727
DTI->TETCO FTS->AGT	Dom SP	0		0	0	0	0	0	0
Millen->Ramapo->AGT	Millennium	9,069		9,000	0	8,831	8,831	0	8,831
AGT	M3	8,289		8,289	0	8,247	8,247	0	8,247
TCO->AGT	Maumee	27,903		27,487	(16,718)	10,629	10,629	0	10,629
TCO->AGT	Broad Run	10,151		10,000	0	9,949	9,949	0	9,949
TCO->AGT	Eagle	3,655		3,600	(3,582)	0	0	0	0
TCO->AGT	Pennsburg	3,403		3,352	(3,335)	0	0	0	0
RAMAPO->AGT	RAMAPO	9,345		9,345	0	9,169	9,169	0	9,169
Transco Leidy->AGT SCT	Transco	1,172		1,164	0	1,158	1,158	0	1,158
Remaining AGT (SCT)	M3 (SCT)	3,183		3,183	(276)	3,167	3,167	0	3,167
AGT Citygate	AGT CG	14,100			0	14,100	14,100	0	14,100
		117,592		Transport	(23,911)	91,977	91,977	24,000	67,977
<b>AGT Storage</b>									
Path	Receipt Point	In-Hole WDs	MDWQ	M3	Seasonal CG Loss	Storage Capacity			
GSS-TE 600045	DTI GSS-TE	5,644	5,644	5,549	(3,153)	2,368			
GSS 300169	DTI GSS	0	0	0	0	0			
GSS 300171	DTI GSS	2,617	2,617	2,586	(2,573)	0			
FSS 9630	TCO FSS	2,545	2,545	2,507	(2,494)	0			
FSS-1 400515	TETCO FSS1	950	944	930	(925)	0			
SS-1 400185	TETCO SS1	677	665	665	(662)	0			
SS-1 400221	TETCO SS1	14,390	14,137	14,137	0	14,065			
					Storage	(9,807)	16,433		
					Total	(33,718)	108,410	Available AGT Swing	67,977
<b>TENNESSEE</b>									
Path	Receipt Point	Receipt Volumes		At TGP Inct		City Gate Capacity	Net CG Deliveries	Baseload	Available Swing
TGP ConnXion 4 --> 6	Z4 CXN	11,759				11,600	11,600	11,600	0
TGP 4 --> 6	Z4	20,106				19,835	19,835	2,400	17,435
TGP 5 --> 6	Niagara	1,077				1,067	1,067	0	1,067
Union>TrCan>Port->TGP	Dawn	10,838	10,757	10,576		10,576	10,576	0	10,576
Union>TrCan>Port->TGP	Dawn	15,061	14,948	14,697		14,697	14,697	0	14,697
Union>TrCan>IGT->TGP	Dawn	1,024	1,016	1,010		1,000	1,000	0	1,000
TGP 6 --> 6	Everett	25,053				25,000	25,000	0	25,000
TGP 6 --> 6	Dracut	0				0	0	0	0
TGP 6 --> 6	Dracut	741				741	741	0	741
		85,659		Transport		84,516	84,516	14,000	70,516
<b>TGP Storage</b>									
Path	Receipt Point	In-Hole WDs	MDWQ			Storage Capacity			
GSS 300168	DTI GSS	1,401	1,401			1,382			
GSS 300170	DTI GSS	0	0			0			
FSMA 62918	TGP FSMA	10,249	10,249			10,111			
FSMA 501	TGP FSMA	10,920	10,920			10,773			
					Storage	10,836			
					Total	95,352	Available TGP Swing	70,516	

Spotlight AMA

Constellation Supply

Emera Energy AMA

DTE Energy AMA

EDF Trading AMA

Freepoint AMA

Nov 3

**November 2019**

Company	Field	Contract Number	Storage Capacity Quantity (Dth/Yr)	Current MDWQ (Dth/Day)	Current MDIQ (Dth/Day)	Balance as of October 23 2019	% Full	W/D via
Narragansett	Dominion GSS-TE	600045	1,376,324	14,337	6,431	1,312,635	95%	Tetco/AGT
Narragansett	Dominion GSS	300168	154,050	1,401	720	145,392	94%	TGP
Narragansett	Dominion GSS	300169	206,100	2,061	963	193,173	94%	DTI/Tetco/AGT
Narragansett	Dominion GSS	300170	490,340	5,324	2,291	461,276	94%	DTI/TGP
Narragansett	Dominion GSS	300171	188,814	2,617	882	175,301	93%	Tetco/AGT
Narragansett	Columbia FSS	9630	203,957	2,545	571	193,294	95%	TCO/AGT
Narragansett	Texas Eastern FSS-1	400515	56,640	944	291	52,765	93%	Tetco/AGT
Narragansett	Texas Eastern SS-1	400185	51,990	665	267	49,225	95%	AGT
Narragansett	Texas Eastern SS-1	400221	1,188,033	14,137	6,107	1,115,226	94%	AGT
Narragansett	Tennessee FS-MA	62918	210,000	10,249	1,400	187,381	89%	TGP
Narragansett	Tennessee FS-MA	501	605,343	10,920	4,036	513,010	85%	TGP

**Storage Totals 4,731,591 65,200 23,960 4,398,678 93%**

Dec 1

<u>RHODE ISLAND MONTHLY PLAN</u>			
<b>December 2019</b>			
	<u>MIN DAY</u>	<u>AVG DAY</u>	<u>MAX DAY</u>
*4-Year Historical Sendout HDD *All Sales and Transportation customers. No power plants.	65,460 6	188,198 29	361,735 58
**Forecasted Sendout HDD **Firm Sales and Transportation customers w/ NGRID Capacity.	102,557 16	171,521 29	252,283 43
Forecasted Firm Transportation Forecasted Sales Demand	24,321 78,236	36,107 135,414	48,569 203,714

<b>Baseload Election - December 2019</b>	
Volume per Day (MMBtu)	
Dawn	0
Longhaul	<u>27,000</u>
TGP Total	27,000
Longhaul	<u>43,000</u>
AGT Total	43,000
Grand Total	70,000



**Estimated Rhode Island Capacity Breakout for December 2019**

**ALGONQUIN**

Path	Receipt Point	Receipt Volumes	M2	M3	City Gate Capacity	Net CG Deliveries	Baseload	Available Swing
Transco Leidy->AGT	Transco	72		72	72	72	72	0
TETCO->AGT	M2	27,252	27,252	26,794	26,657	26,657	26,657	0
DTI->TETCO FTS->AGT	Dom SP	548	537	531	528	528	528	0
Millen->Ramapo->AGT	Millennium	9,069		9,000	8,831	8,831	8,831	0
Transco Leidy->AGT SCT	Transco	1,172		1,164	1,158	1,158	1,158	0
TCO->AGT	Maumee	27,903		27,487	27,347	27,347	5,754	21,593
TCO->AGT	Broad Run	10,151		10,000	9,949	9,949	0	9,949
AGT	M3	5,736		5,736	5,707	5,707	0	5,707
TCO->AGT	Eagle	3,655		3,600	3,582	3,582	0	3,582
TCO->AGT	Pennsburg	3,403		3,352	3,335	3,335	0	3,335
RAMAPO->AGT	RAMAPO	9,345		9,345	9,169	9,169	0	9,169
Remaining AGT (SCT)	M3 (SCT)	3,461		3,461	3,443	3,443	0	3,443
AGT Citygate	AGT CG	14,100			14,100	14,100	0	14,100
		115,867		Transport	113,878	113,878	43,000	70,878

Spotlight AMA

Constellation Supply

**AGT Storage**

Path	Receipt Point	In-Hole WDs	MDWQ	M3	Storage Capacity	
GSS-TE 600045	DTI GSS-TE	5,644	5,644	5,549	5,521	
GSS 300169	DTI GSS	2,061	2,061	1,987	1,977	
GSS 300171	DTI GSS	2,617	2,617	2,586	2,573	
FSS 9630	TCO FSS	2,545	2,545	2,507	2,494	
FSS-1 400515	TETCO FSS1	950	944	930	925	
SS-1 400185	TETCO SS1	677	665	665	662	
SS-1 400221	TETCO SS1	14,390	14,137	14,137	14,065	
Storage					28,217	
Total					142,095	
					Available AGT Swing	70,878

**TENNESSEE**

Path	Receipt Point	Receipt Volumes	At TGP Inct	City Gate Capacity	Net CG Deliveries	Baseload	Available Swing	
TGP ConnXion 4 --> 6	Z4 CXN	11,759		11,600	11,600	11,600	0	
TGP 4 --> 6	Z4	20,106		19,835	19,835	15,400	4,435	
TGP 5 --> 6	Niagara	1,077		1,067	1,067	0	1,067	
Union>TrCan>Port->TGP	Dawn	15,133	14,998	14,732	14,732	0	14,732	
Union>TrCan>Port->TGP	Dawn	10,854	10,757	10,566	10,566	0	10,566	
Union>TrCan>IGT->TGP	Dawn	1,026	1,017	1,010	1,000	0	1,000	
TGP 6 --> 6	Everett	20,000		20,000	19,958	0	19,958	
TGP 6 --> 6	Dracut	22,300		22,300	22,300	0	22,300	
TGP 6 --> 6	Everett	5,000		5,000	4,990	0	4,990	
TGP 6 --> 6	Everett	52		52	52	0	52	
TGP 6 --> 6	Dracut	588		588	588	0	588	
		107,895		Transport	106,688	106,688	27,000	79,688

DTE Energy AMA

Emera Energy AMA

EDF Trading AMA

Constellation Supply

Freepoint AMA

Constellation Supply

**TGP Storage**

Path	Receipt Point	In-Hole WDs	MDWQ	Storage Capacity	
GSS 300168	DTI GSS	1,401	1,401	1,382	
GSS 300170	DTI GSS	5,324	5,324	5,150	
FSMA 62918	TGP FSMA	10,249	10,249	10,111	
FSMA 501	TGP FSMA	10,920	10,920	10,773	
Storage				10,836	
Total				117,524	
				Available TGP Swing	79,688

Dec 3

**December 2019**

Company	Field	Contract Number	Storage Capacity Quantity (Dth/Yr)	Current MDWQ (Dth/Day)	Current MDIQ (Dth/Day)	Balance as of November 17 2019	% Full	W/D via
Narragansett	Dominion GSS-TE	600045	1,376,324	14,337	6,431	1,324,110	96%	Tetco/AGT
Narragansett	Dominion GSS	300168	154,050	1,401	720	145,597	95%	TGP
Narragansett	Dominion GSS	300169	206,100	2,061	963	193,915	94%	DTI/Tetco/AGT
Narragansett	Dominion GSS	300170	490,340	5,324	2,291	460,138	94%	DTI/TGP
Narragansett	Dominion GSS	300171	188,814	2,617	882	174,974	93%	Tetco/AGT
Narragansett	Columbia FSS	9630	203,957	2,545	340	195,298	96%	TCO/AGT
Narragansett	Texas Eastern FSS-1	400515	56,640	944	291	54,623	96%	Tetco/AGT
Narragansett	Texas Eastern SS-1	400185	51,990	665	267	50,422	97%	AGT
Narragansett	Texas Eastern SS-1	400221	1,188,033	14,137	6,107	1,111,881	94%	AGT
Narragansett	Tennessee FS-MA	62918	210,000	10,249	1,400	171,070	81%	TGP
Narragansett	Tennessee FS-MA	501	605,343	10,920	4,036	554,995	92%	TGP

**Storage Totals 4,731,591 65,200 23,729 4,437,023 94%**

Jan 1

<u>RHODE ISLAND MONTHLY PLAN</u>			
<b>January 2020</b>			
	<u>MIN DAY</u>	<u>AVG DAY</u>	<u>MAX DAY</u>
*4-Year Historical Sendout HDD *All Sales and Transportation customers. No power plants.	104,122 6	226,056 34	388,576 68
**Forecasted Sendout HDD **Firm Sales and Transportation customers w/ NGRID Capacity.	118,051 19	207,282 35	313,553 54
Forecasted Firm Transportation Forecasted Sales Demand	26,313 91,738	40,216 167,066	54,859 258,694

<b>Baseload Election - January 2020</b>	
Volume per Day (MMBtu)	
Dawn	0
Longhaul	<u>30,000</u>
TGP Total	30,000
Longhaul	<u>50,000</u>
AGT Total	50,000
Grand Total	80,000

Estimated Rhode Island Capacity Breakout for January 2020								
<b>ALGONQUIN</b>								
Path	Receipt Point	Receipt Volumes	M2	M3	City Gate Capacity	Net CG Deliveries	Baseload	Available Swing
Transco Leidy->AGT	Transco	73		73	72	72	72	0
TETCO->AGT	M2	27,379	27,379	26,708	26,454	26,454	26,454	0
Millen->Ramapo->AGT	Millennium	9,069		9,000	8,645	8,645	8,645	0
Transco Leidy->AGT SCT	Transco	1,175		1,167	1,156	1,156	1,156	0
TCO->AGT	Maumee	27,888		27,472	27,211	27,211	13,673	13,538
TCO->AGT	Broad Run	10,151		10,000	9,905	9,905	0	9,905
AGT	M3	6,828		6,828	6,763	6,763	0	6,763
TCO->AGT	Eagle	3,655		3,600	3,566	3,566	0	3,566
TCO->AGT	Pennsburg	3,406		3,355	3,323	3,323	0	3,323
RAMAPO->AGT	RAMAPO	9,739		9,739	9,355	9,355	0	9,355
Remaining AGT (SCT)	M3 (SCT)	3,478		3,478	3,445	3,445	0	3,445
AGT Citygate	AGT CG	14,100			13,976	13,976	0	13,976
		116,941		Transport	113,871	113,871	50,000	63,871
<b>AGT Storage</b>								
Path	Receipt Point	In-Hole WDs	MDWQ	M3	Storage Capacity			
GSS-TE 600045	DTI GSS-TE	5,688	5,688	5,549	5,496			
GSS 300169	DTI GSS	2,061	2,061	1,971	1,952			
GSS 300171	DTI GSS	2,617	2,617	2,574	2,550			
FSS 9630	TCO FSS	2,545	2,545	2,507	2,483			
FSS-1 400515	TETCO FSS1	949	944	924	915			
SS-1 400185	TETCO SS1	676	665	665	659			
SS-1 400221	TETCO SS1	14,367	14,137	14,137	14,003			
Storage					28,058			
Total					141,929	Available AGT Swing	63,871	
<b>TENNESSEE</b>								
Path	Receipt Point	Receipt Volumes		At TGP Inct	City Gate Capacity	Net CG Deliveries	Baseload	Available Swing
TGP ConnXion 4 --> 6	Z4 CXN	11,759			11,600	11,600	11,600	0
TGP 4 --> 6	Z4	19,803			19,536	19,536	18,400	1,136
TGP 5 --> 6	Niagara	1,077			1,067	1,067	0	1,067
Union>TrCan>Port->TGP	Dawn	15,151	14,998	14,695	14,695	14,695	0	14,695
Union>TrCan>Port->TGP	Dawn	10,867	10,757	10,539	10,539	10,539	0	10,539
Union>TrCan>IGT->TGP	Dawn	1,034	1,024	1,010	1,000	1,000	0	1,000
TGP 6 --> 6	Everett	20,000		20,000	19,958	19,958	0	19,958
TGP 6 --> 6	Dracut	22,300			22,300	22,300	0	22,300
TGP 6 --> 6	Everett	5,000		5,000	4,990	4,990	0	4,990
TGP 6 --> 6	Everett	52			52	52	0	52
TGP 6 --> 6	Dracut	488			488	488	0	488
		107,531		Transport	106,225	106,225	30,000	76,225
<b>TGP Storage</b>								
Path	Receipt Point	In-Hole WDs	MDWQ		Storage Capacity			
GSS 300168	DTI GSS	1,401	1,401		1,382			
GSS 300170	DTI GSS	5,324	5,324		5,150			
FSMA 62918	TGP FSMA	10,249	10,249		10,111			
FSMA 501	TGP FSMA	10,920	10,920		10,773			
Storage					10,836			
Total					117,061	Available TGP Swing	76,225	

Spotlight AMA

Constellation Supply

DTE Energy AMA

Emera Energy AMA

EDF Trading AMA

Constellation Supply

Freepoint AMA

Constellation Supply

Jan 3

January 2020

Company	Field	Contract Number	Storage Capacity Quantity (Dth/Yr)	Current MDWQ (Dth/Day)	Current MDIQ (Dth/Day)	Balance as of December 16 2019	% Full	W/D via
Narragansett	Dominion GSS-TE	600045	1,376,324	14,337	6,431	1,291,168	94%	Tetco/AGT
Narragansett	Dominion GSS	300168	154,050	1,401	720	131,974	86%	TGP
Narragansett	Dominion GSS	300169	206,100	2,061	963	182,874	89%	DTI/Tetco/AGT
Narragansett	Dominion GSS	300170	490,340	5,324	2,291	433,011	88%	DTI/TGP
Narragansett	Dominion GSS	300171	188,814	2,617	882	165,251	88%	Tetco/AGT
Narragansett	Columbia FSS	9630	203,957	2,545	680	182,573	90%	TCO/AGT
Narragansett	Texas Eastern FSS-1	400515	56,640	944	291	51,964	92%	Tetco/AGT
Narragansett	Texas Eastern SS-1	400185	51,990	665	267	48,756	94%	AGT
Narragansett	Texas Eastern SS-1	400221	1,188,033	14,137	6,107	1,060,214	89%	AGT
Narragansett	Tennessee FS-MA	62918	210,000	10,249	1,400	165,007	79%	TGP
Narragansett	Tennessee FS-MA	501	605,343	10,920	4,036	549,415	91%	TGP

**Storage Totals 4,731,591 65,200 24,069 4,262,207 90%**

Feb 1

<u>RHODE ISLAND MONTHLY PLAN</u>			
<b>February 2020</b>			
	<u>MIN DAY</u>	<u>AVG DAY</u>	<u>MAX DAY</u>
*4-Year Historical Sendout HDD	77,478 8	200,276 29	368,125 62
*All Sales and Transportation customers. No power plants.			
**Forecasted Sendout HDD	119,901 17	202,638 34	282,860 49
**Firm Sales and Transportation customers w/ NGRID Capacity.			
Forecasted Firm Transportation	26,856	39,939	51,041
Forecasted Sales Demand	93,045	162,699	231,819

<b>Baseload Election - February 2020</b>	
Volume per Day (MMBtu)	
Dawn	0
Longhaul	<u>26,000</u>
TGP Total	26,000
Longhaul	<u>44,000</u>
AGT Total	44,000
Grand Total	70,000

**Estimated Rhode Island Capacity Breakout for February 2020**

**ALGONQUIN**

Path	Receipt Point	Receipt Volumes	M2	M3	City Gate Capacity	Net CG Deliveries	Baseload	Available Swing
Transco Leidy->AGT	Transco	73		73	72	72	72	0
Millen->Ramapo->AGT	Millennium	9,069		9,000	8,645	8,645	8,645	0
DTI->TETCO FTS->AGT	Dom SP	548	537	528	523	523	523	0
TETCO->AGT	M2	27,378	27,378	26,707	26,453	26,453	26,453	0
Transco Leidy->AGT SCT	Transco	1,175		1,167	1,156	1,156	1,156	0
TETCO Leidy-Dominion	TET-Leidy	0		0	0	0	0	0
TCO->AGT	Maumee	27,892		27,476	27,215	27,215	7,151	20,064
TCO->AGT	Broad Run	10,151		10,000	9,905	9,905	0	9,905
AGT	M3	6,298		6,298	6,238	6,238	0	6,238
Ram/Mah -> AGT	M3	6,950		6,950	6,884	6,884	0	6,884
TCO->AGT	Eagle	0		0	0	0	0	0
TCO->AGT	Pennsburg	0		0	0	0	0	0
RAMAPO->AGT	RAMAPO	9,739		9,739	9,355	9,355	0	9,355
TETCO -> AGT SCT	M2	0	0	0	0	0	0	0
TETCO SCT -> AGT SCT	M2 (SCT)	0	0	0	0	0	0	0
Remaining AGT (SCT)	M3 (SCT)	3,478		3,478	3,445	3,445	0	3,445
AGT Citygate	AGT CG	14,100			13,976	13,976	0	13,976
		116,851		Transport	113,867	113,867	44,000	69,867

Spotlight AMA

Constellation Supply

**AGT Storage**

Path	Receipt Point	In-Hole WDs	MDWQ	M3	Storage Capacity	
GSS-TE 600045	DTI GSS-TE	5,688	5,688	5,549	5,496	
GSS 300169	DTI GSS	2,061	2,061	1,971	1,952	
GSS 300171	DTI GSS	2,617	2,617	2,574	2,550	
FSS 9630	TCO FSS	2,545	2,545	2,507	2,483	
FSS-1 400515	TETCO FSS1	949	944	924	915	
SS-1 400185	TETCO SS1	676	665	665	659	
SS-1 400221	TETCO SS1	14,367	14,137	14,137	14,003	
Storage					28,058	
Total					141,925	
					Available AGT Swing	69,867

**TENNESSEE**

Path	Receipt Point	Receipt Volumes	At TGP Inct	City Gate Capacity	Net CG Deliveries	Baseload	Available Swing	
TGP ConnXion 4 --> 6	Z4 CXN	11,759		11,600	11,600	11,600	0	
TGP 4 --> 6	Z4	19,802		19,535	19,535	14,400	5,135	
TGP 5 --> 6	Niagara	1,077		1,067	1,067	0	1,067	
Union>TrCan>Port->TGP	Dawn	15,176	14,999	14,721	14,721	0	14,721	
Union>TrCan>Port->TGP	Dawn	10,884	10,757	10,557	10,557	0	10,557	
Union>TrCan>IGT->TGP	Dawn	1,034	1,022	1,010	1,000	0	1,000	
TGP 6 --> 6	Everett	20,000		20,000	19,958	0	19,958	
TGP 6 --> 6	Dracut	22,300		22,300	22,300	0	22,300	
TGP 6 --> 6	Everett	5,000		5,000	4,990	0	4,990	
TGP 6 --> 6	Everett	52		52	52	0	52	
TGP 6 --> 6	Dracut	431		431	431	0	431	
		107,515		Transport	106,211	106,211	26,000	80,211

DTE Energy AMA

Emera Energy AMA

EDF Trading AMA

Constellation Supply

Freepoint AMA

Constellation Supply

**TGP Storage**

Path	Receipt Point	In-Hole WDs	MDWQ	Storage Capacity	
GSS 300168	DTI GSS	1,401	1,401	1,382	
GSS 300170	DTI GSS	5,324	5,324	5,150	
FSMA 62918	TGP FSMA	10,249	10,249	10,111	
FSMA 501	TGP FSMA	10,920	10,920	10,773	
Storage				10,836	
Total				117,047	
				Available TGP Swing	80,211

Feb 3

**February 2020**

Company	Field	Contract Number	Storage Capacity Quantity (Dth/Yr)	Current MDWQ (Dth/Day)	Current MDIQ (Dth/Day)	Balance as of January 19 2020	% Full	W/D via
Narragansett	Dominion GSS-TE	600045	1,376,324	14,337	6,431	1,224,799	89%	Tetco/AGT
Narragansett	Dominion GSS	300168	154,050	1,401	720	115,584	75%	TGP
Narragansett	Dominion GSS	300169	206,100	2,061	963	165,472	80%	DTI/Tetco/AGT
Narragansett	Dominion GSS	300170	490,340	5,324	2,291	379,622	77%	DTI/TGP
Narragansett	Dominion GSS	300171	188,814	2,617	882	144,308	76%	Tetco/AGT
Narragansett	Columbia FSS	9630	203,957	2,545	816	152,192	75%	TCO/AGT
Narragansett	Texas Eastern FSS-1	400515	56,640	944	291	48,210	85%	Tetco/AGT
Narragansett	Texas Eastern SS-1	400185	51,990	665	267	46,167	89%	AGT
Narragansett	Texas Eastern SS-1	400221	1,188,033	14,137	6,107	1,030,518	87%	AGT
Narragansett	Tennessee FS-MA	62918	210,000	10,249	1,400	182,435	87%	TGP
Narragansett	Tennessee FS-MA	501	605,343	10,920	4,036	531,533	88%	TGP

**Storage Totals 4,731,591 65,200 24,205 4,020,840 85%**



Mar 1

<u>RHODE ISLAND MONTHLY PLAN</u>			
<b>March 2020</b>			
	<u>MIN DAY</u>	<u>AVG DAY</u>	<u>MAX DAY</u>
*4-Year Historical Sendout HDD	72,422 2	180,254 26	304,852 48
*All Sales and Transportation customers. No power plants.			
**Forecasted Sendout HDD	94,634 14	153,272 26	230,080 39
**Firm Sales and Transportation customers w/ NGRID Capacity.			
Forecasted Firm Transportation	21,872	32,437	44,515
Forecasted Sales Demand	72,762	120,835	185,565

<b>Baseload Election - March 2020</b>	
Volume per Day (MMBtu)	
Dawn	0
Longhaul	<u>22,000</u>
TGP Total	22,000
Longhaul	<u>35,000</u>
AGT Total	35,000
Grand Total	57,000

Mar 2

**Estimated Rhode Island Capacity Breakout for March 2020**

**ALGONQUIN**

Path	Receipt Point	Receipt Volumes	M2	M3	City Gate Capacity	Net CG Deliveries	Baseload	Available Swing
Transco Leidy->AGT	Transco	73		73	72	72	72	0
DTI->TETCO FTS->AGT	Dom SP	548	537	528	523	523	523	0
TCO->AGT	Maumee	27,891		27,475	27,214	27,214	27,214	0
TETCO->AGT	M2	27,378	27,378	26,707	26,453	26,453	7,191	19,262
TCO->AGT	Broad Run	10,151		10,000	9,905	9,905	0	9,905
Millen->Ramapo->AGT	Millennium	9,069		9,000	8,645	8,645	0	8,645
AGT	M3	6,286		6,286	6,226	6,226	0	6,226
Ram/Mah -> AGT	M3	6,951		6,951	6,885	6,885	0	6,885
TCO->AGT	Eagle	0		0	0	0	0	0
TCO->AGT	Pennsburg	0		0	0	0	0	0
RAMAPO->AGT	RAMAPO	9,739		9,739	9,355	9,355	0	9,355
Transco Leidy->AGT SCT	Transco	1,175		1,167	1,156	1,156	0	1,156
Remaining AGT (SCT)	M3 (SCT)	3,478		3,478	3,445	3,445	0	3,445
AGT Citygate	AGT CG	14,100			13,976	13,976	0	13,976
		116,839		Transport	113,855	113,855	35,000	78,855

Spotlight AMA

Constellation Supply

**AGT Storage**

Path	Receipt Point	In-Hole WDs	MDWQ	M3	Storage Capacity	
GSS-TE 600045	DTI GSS-TE	5,684	5,684	5,549	5,496	
GSS 300169	DTI GSS	2,061	2,061	1,987	1,968	
GSS 300171	DTI GSS	2,617	2,617	2,574	2,550	
FSS 9630	TCO FSS	2,545	2,545	2,507	2,483	
FSS-1 400515	TETCO FSS1	949	944	924	915	
SS-1 400185	TETCO SS1	676	665	665	659	
SS-1 400221	TETCO SS1	14,367	14,137	14,137	14,003	
					Storage	28,074
					Total	141,929
					Available AGT Swing	78,855

**TENNESSEE**

Path	Receipt Point	Receipt Volumes		At TGP Inct	City Gate Capacity	Net CG Deliveries	Baseload	Available Swing
TGP ConnXion 4 --> 6	Z4 CXN	11,759			11,600	11,600	11,600	0
TGP 4 --> 6	Z4	19,702			19,436	19,436	10,400	9,036
TGP 5 --> 6	Niagara	1,077			1,067	1,067	0	1,067
Union>TrCan>Port->TGP	Dawn	15,171	14,999	14,768	14,768	14,768	0	14,768
Union>TrCan>Port->TGP	Dawn	10,880	10,757	10,591	10,591	10,591	0	10,591
Union>TrCan>IGT->TGP	Dawn	1,034	1,022	1,009	999	999	0	999
TGP 6 --> 6	Everett	20,000		20,000	19,958	19,958	0	19,958
TGP 6 --> 6	Dracut	22,300			22,300	22,300	0	22,300
TGP 6 --> 6	Everett	5,000		5,000	4,990	4,990	0	4,990
TGP 6 --> 6	Everett	52			52	52	0	52
TGP 6 --> 6	Dracut	354			354	354	0	354
		107,329		Transport	106,115	106,115	22,000	84,115

DTE Energy AMA

Emera Energy AMA

EDF Trading AMA

Constellation Supply

Freepoint AMA

Constellation Supply

**TGP Storage**

Path	Receipt Point	In-Hole WDs	MDWQ		Storage Capacity	
GSS 300168	DTI GSS	1,401	1,401		1,382	
GSS 300170	DTI GSS	5,324	5,324		5,150	
FSMA 62918	TGP FSMA	10,249	10,249		10,111	
FSMA 501	TGP FSMA	10,920	10,920		10,773	
					Storage	10,836
					Total	116,951
					Available TGP Swing	84,115

Mar 3

**March 2020**

Company	Field	Contract Number	Storage Capacity Quantity (Dth/Yr)	Current MDWQ (Dth/Day)	Current MDIQ (Dth/Day)	Balance as of February 16 2020	% Full	W/D via
Narragansett	Dominion GSS-TE	600045	1,376,324	14,337	6,431	1,119,025	81%	Tetco/AGT
Narragansett	Dominion GSS	300168	154,050	1,401	720	89,048	58%	TGP
Narragansett	Dominion GSS	300169	206,100	2,061	963	144,251	70%	DTI/Tetco/AGT
Narragansett	Dominion GSS	300170	490,340	5,324	2,291	325,971	66%	DTI/TGP
Narragansett	Dominion GSS	300171	188,814	2,617	882	121,619	64%	Tetco/AGT
Narragansett	Columbia FSS	9630	203,957	2,545	816	121,652	60%	TCO/AGT
Narragansett	Texas Eastern FSS-1	400515	56,640	944	291	43,661	77%	Tetco/AGT
Narragansett	Texas Eastern SS-1	400185	51,990	665	267	44,324	85%	AGT
Narragansett	Texas Eastern SS-1	400221	1,188,033	14,137	6,107	970,174	82%	AGT
Narragansett	Tennessee FS-MA	62918	210,000	10,249	1,400	165,207	79%	TGP
Narragansett	Tennessee FS-MA	501	605,343	10,920	4,036	538,093	89%	TGP

**Storage Totals 4,731,591 65,200 24,205 3,683,025 78%**

Division 1-9

Request:

Please identify the current Company fuel allowance percentage assessed to transportation customers for company-use and lost-and-unaccounted-for gas and explain how the charge is determined and when it is updated. Please explain whether any transportation customers receive a discount to the generally applicable Company fuel allowance.

Response:

The Company's current fuel allowance percentage is 3.02%, and is available on its external website.<sup>1</sup> This percentage is updated annually on November 1 by comparing the Company's aggregated wholesale throughput at its city gates to the aggregated retail throughput at its customers' meters for the 12-month period September through August. The Company then averages the most recent five years of fuel allowance percentages to calculate the fuel allowance to be applied in the upcoming GCR year (November – October).

The Company does not assess the Company fuel allowance to transportation customers directly but instead assesses the fuel allowance percentage on marketer nominations at the Company's citygate, with the 'net' volume delivered to transportation customers' service locations. There are no discounts to the generally applicable Company fuel allowance provided to marketers, and the Company is not aware of how marketers pass on the cost of the allowance to their customers.

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<sup>1</sup> [https://www.nationalgridus.com/media/pdfs/billing-payments/rigas\\_firm\\_rates.pdf](https://www.nationalgridus.com/media/pdfs/billing-payments/rigas_firm_rates.pdf)

The Narragansett Electric Company  
d/b/a National Grid  
RIPUC Docket No. 5066  
In Re: 2020 Annual Gas Cost Recovery Filing  
Responses to the Division's First Set of Data Requests  
Issued on August 19, 2020

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Division 1-10

Request:

Please update the response to DIV 1-15 in Docket No. 4963 as applicable.

Response:

Please see Attachment DIV 1-10.

Contract	Pipeline	Primary Point	Platts Index - Primary Location	Additional Index
9001	ALGONQUIN	Hanover-TCO	Texas Eastern - M3	
90106	ALGONQUIN	Hanover-TCO	Texas Eastern - M3	
90106	ALGONQUIN	Lambertville	Texas Eastern - M3	
90106	ALGONQUIN	Centerville	Texas Eastern - M3	
90107	ALGONQUIN	Hanover-TCO	Texas Eastern - M3	
933005	ALGONQUIN	Lambertville	Texas Eastern - M3	
93001ESC	ALGONQUIN	Lambertville	Texas Eastern - M3	
93001ESC	ALGONQUIN	Hanover-Tetco	Texas Eastern - M3	
93011E	ALGONQUIN	Lambertville	Texas Eastern - M3	
93011E	ALGONQUIN	Hanover-Tetco	Texas Eastern - M3	
93401S	ALGONQUIN	Lambertville	Texas Eastern - M3	
96004SC	ALGONQUIN	Centerville	Texas Eastern - M3	
96004SC	ALGONQUIN	Lambertville	Texas Eastern - M3	
9B105	ALGONQUIN	Lambertville	Texas Eastern - M3	
9S100S	ALGONQUIN	Lambertville	Texas Eastern - M3	
9W009E	ALGONQUIN	Lambertville	Texas Eastern - M3	
9W009E	ALGONQUIN	Hanover-Tetco	Texas Eastern - M3	
510801	ALGONQUIN	Ramapo	Texas Eastern - M3	
510985	ALGONQUIN	G-12 System	No Index	
31520	COLUMBIA	Pennsburg	Columbia Gas, Appalachia	ICE Columbia Gas, A04 Pool
31522	COLUMBIA	Eagle	Columbia Gas, Appalachia	ICE Columbia Gas, A04 Pool
31523	COLUMBIA	Broad Run	Columbia Gas, Appalachia	ICE Columbia Gas, A04 Pool
31524	COLUMBIA	Maumee	Columbia Gas, Appalachia	ICE Columbia Gas, A04 Pool, ICE Columbia Gas, A06 Pool
9631	COLUMBIA	TCO Storage Point	No Index	
100118	DOMINION	Tetco - Oakford	Texas Eastern - M2, receipts	
100118	DOMINION	Title Transfer Point - South	Dominion, South Point	
100118	DOMINION	DETI STRG Point	No Index	
700086	DOMINION	DETI STRG Point	No Index	
700087	DOMINION	DETI STRG Point	No Index	
700087	DOMINION	Title Transfer Point - South	Dominion, South Point	
700087	DOMINION	Title Transfer Point - North	Dominion, North Point	
50001	IROQUOIS	Waddington	Iroquois, receipts	
210165	MILLENNIUM	Corning	No Index	Millennium, East receipts
210203	PORTLAND	Pittsburg (East Hereford)	No Platts Index	ICE PNGTS
225805	PORTLAND	Pittsburg (East Hereford)	No Platts Index	ICE PNGTS
10807	TENNESSEE	Ellisburg	No Index	Tennessee, zone 4 - 313 Pool
10807	TENNESSEE	Northern Storage	No Index	Tennessee, zone 4 - 313 Pool

Contract	Pipeline	Primary Point	Platts Index - Primary Location	Additional Index
39173	TENNESSEE	TC - Niagara	Niagara	
1597	TENNESSEE	Zone 0 South	Tennessee, Zone 0	Tennessee, zone 4 - 200 Leg
1597	TENNESSEE	Zone 0 North	Tennessee, Zone 0	Tennessee, zone 4 - 200 Leg
1597	TENNESSEE	Zone 1 100 Leg	Tennessee, Zone 1	Tennessee, zone 4 - 200 Leg
1597	TENNESSEE	Zone L 500L	Tennessee, Louisiana, 500 Leg	Tennessee, zone 4 - 200 Leg
1597	TENNESSEE	Zone L 800L	Tennessee, Louisiana, 800 Leg	Tennessee, zone 4 - 200 Leg
62930	TENNESSEE	Dracut	Dracut, Mass.	Tennessee, Zone 6, delivered North
64025	TENNESSEE	Zone 0 South	Tennessee, Zone 0	Tennessee, zone 4 - 200 Leg
64026	TENNESSEE	Zone 0 South	Tennessee, Zone 0	Tennessee, zone 4 - 200 Leg
95345	TENNESSEE	IGT - Wright	Iroquois, zone 1	
330580	TENNESSEE	Distrigas	No Index	Tennessee, Zone 6, delivered North
330580	TENNESSEE	Dracut	Dracut, Mass.	Tennessee, Zone 6, delivered North
330581	TENNESSEE	Distrigas	No Index	Tennessee, Zone 6, delivered North
349449	TENNESSEE	Dracut	Dracut, Mass.	Tennessee, Zone 6, delivered North
2943	TENNESSEE	LMS-MA	No Index	
330844	TETCO	DTI - Leidy	Texas Eastern - M3	
330845	TETCO	DTI - Leidy	Texas Eastern - M3	
330867	TETCO	Chambersburg	Texas Eastern - M3	
330867	TETCO	Lambertville	Texas Eastern - M3	
330870	TETCO	Chambersburg	Texas Eastern - M3	
330870	TETCO	Lambertville	Texas Eastern - M3	
330907	TETCO	Chambersburg	Texas Eastern - M3	
330907	TETCO	Lambertville	Texas Eastern - M3	
331722	TETCO	Hanover-Tetco	Texas Eastern - M3	
331722	TETCO	Lambertville	Texas Eastern - M3	
331722	TETCO	DTI - Oakford	Texas Eastern - M2, receipts	
331801	TETCO	Hanover-Tetco	Texas Eastern - M3	
331801	TETCO	Lambertville	Texas Eastern - M3	
331801	TETCO	DTI - Waynesburg	Texas Eastern - M2, receipts	
331801	TETCO	DTI - Somerset	Texas Eastern - M2, receipts	
331801	TETCO	DTI - Oakford	Texas Eastern - M2, receipts	
331801	TETCO	DTI - Leidy	Texas Eastern - M3	
331802	TETCO	Hanover-Tetco	Texas Eastern - M3	
331802	TETCO	Lambertville	Texas Eastern - M3	
331802	TETCO	DTI - Waynesburg	Texas Eastern - M2, receipts	
331802	TETCO	DTI - Somerset	Texas Eastern - M2, receipts	
331802	TETCO	DTI - Oakford	Texas Eastern - M2, receipts	

<b>Contract</b>	<b>Pipeline</b>	<b>Primary Point</b>	<b>Platts Index - Primary Location</b>	<b>Additional Index</b>
331802	TETCO	DTI - Leidy	Texas Eastern - M3	
331819	TETCO	DTI - Oakford	Texas Eastern - M2, receipts	
331819	TETCO	Lambertville	Texas Eastern - M3	
331819	TETCO	Hanover-Tetco	Texas Eastern - M3	
800156	TETCO	No location		Texas Eastern - M2, receipts, STX, ELA, ETX, WLA, M1 30 in.
800303	TETCO	No location		Texas Eastern - M2, receipts, STX, ELA, ETX, WLA, M1 30 in.
800440	TETCO	No Location		
42386	TRANSCANADA	Union Parkway		
58577	TRANSCANADA	Union Parkway		
9081767	TRANSCO	Wharton - National Fuel	Transco, Leidy Line receipt	
M12164	UNION	Parkway		
M12274	UNION	Dawn - TCPL	Dawn, Ontario	



The Narragansett Electric Company  
d/b/a National Grid  
RIPUC Docket No. 5066  
In Re: 2020 Annual Gas Cost Recovery Filing  
Responses to the Division's First Set of Data Requests  
Issued on August 19, 2020

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Division 1-11

Request:

Please provide a first-of-the month index price for the period April 2019 through July 2020 for each pipeline point location the Company purchased gas at any time during the period April 2019 through July 2020.

Response:

Please see the Excel spreadsheet attached as Attachment Division 1-11 for the requested first-of-the-month index prices.

	Pipeline	Location	Price
Apr-19	Transco	Leidy	\$ 2.420
	Tetco	M2	\$ 2.400
	MPL	East Pool	\$ 2.380
	Tennessee	Sta 219	\$ 2.530
May-19	Transco	Leidy	\$ 2.040
	Tetco	M2	\$ 2.110
	MPL	East Pool	\$ 1.970
	Tennessee	Sta 219	\$ 2.300
Jun-19	Transco	Leidy	\$ 2.170
	Tetco	M2	\$ 2.150
	MPL	East Pool	\$ 2.130
	Tennessee	Sta 219	\$ 2.320
Jul-19	Transco	Leidy	\$ 1.910
	Tetco	M2	\$ 1.900
	MPL	East Pool	\$ 1.860
	Tennessee	Sta 219	\$ 2.000
Aug-19	Transco	Leidy	\$ 1.720
	Tetco	M2	\$ 1.790
	MPL	East Pool	\$ 1.650
	Tennessee	Sta 219	\$ 1.870
Sep-19	Transco	Leidy	\$ 1.610
	Tetco	M2	\$ 1.560
	MPL	East Pool	\$ 1.520
	Tennessee	Sta 219	\$ 1.840
Oct-19	Transco	Leidy	\$ 1.330
	Tetco	M2	\$ 1.330
	Tennessee	Sta 219	\$ 1.890
Nov-19	Transco	Leidy	\$ 2.030
	Tetco	M2	\$ 1.900
	Tennessee	Sta 219	\$ 2.350
Dec-19	Tetco	M2	\$ 2.040
	MPL	East Pool	\$ 2.050
	TCO	Pool	\$ 2.130
	Tennessee	Sta 219	\$ 2.320
Jan-20	Transco	Leidy	\$ 1.750
	Tetco	M2	\$ 1.740
	MPL	East Pool	\$ 1.760
	TCO	Pool	\$ 1.820
	Tennessee	Sta 219	\$ 1.990
	Tetco	M3	\$ 3.350
	Algonquin	Ramapo	\$ 3.350
	Transco	Leidy	\$ 1.490
	Dominion	South Point	\$ 1.460

Feb-20	Tetco	M2	\$ 1.460
	TCO	Pool	\$ 1.530
	Tennessee	Sta 219	\$ 1.670
Mar-20	Transco	Leidy	\$ 1.460
	Dominion	South Point	\$ 1.460
	Tetco	M2	\$ 1.450
	TCO	Pool	\$ 1.550
	Tennessee	Sta 219	\$ 1.620
Apr-20	Transco	Leidy	\$ 1.180
	Tetco	M2	\$ 1.170
	Tennessee	Sta 219	\$ 1.390
May-20	Transco	Leidy	\$ 1.410
	Tetco	M2	\$ 1.420
	Tennessee	Sta 219	\$ 1.610
Jun-20	Transco	Leidy	\$ 1.200
	Tetco	M2	\$ 1.240
	Tennessee	Sta 219	\$ 1.430
Jul-20	Transco	Leidy	\$ 1.150
	Tetco	M2	\$ 1.120
	Tennessee	Sta 219	\$ 1.270

The Narragansett Electric Company  
d/b/a National Grid  
RIPUC Docket No. 5066  
In Re: 2020 Annual Gas Cost Recovery Filing  
Responses to the Division's First Set of Data Requests  
Issued on August 19, 2020

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Division 1-12

Request:

For the 12-month period April 2019 through July 2020, please provide:

- a. A monthly history of storage injections and withdrawals for each of the Company's LNG facilities (including temporary/portable facilities);
- b. Applicable injection and withdrawal prices; and
- c. End-of-month storage inventory balances.

Response:

Please see the Excel sheet attached as Attachment DIV 1-12 for the requested information.

The Narragansett Electric Company  
 d/b/a National Grid  
 RIPUC Docket No. 5066  
 Attachment DIV 1-12  
 Page 1 of 2

Date	Inject price		Withdraw price	LNG Storage										Summary									
	Storage Field	Storage Category		Opening balance	Adjustments NET	Injection Trucking	Withdrawal Boiloff	Withdrawal Vapor	Field Transfer	Fuel Usage	Ending balance	Opening Balance	Adjustments	Injections	Trucking Charges	Withdrawal Boiloff	Withdrawal Vapor	Ending Balance					
Apr-19	\$ -	\$ -	\$ -	CUMBERLAND	Market	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00	\$0.00				
	\$ 6.639	\$ 5.106	\$ -	EXETER	Market	184,109	189	6,757	3,307	0	0	0	0	0	0	0	\$2,746,938.38	\$16,863.77	\$21,081.84				
	\$ (83.515)	\$ 5.106	\$ -	PROVIDENCE	Market	550,465	204	0	12,707	1,039	0	0	0	0	0	0	(\$3,747.30)	\$0.00	(\$394.15)				
	\$ 4.067	\$ 5.106	\$ -	<b>Total LNG</b>		<b>734,574</b>	<b>393.0</b>	<b>6,757.0</b>	<b>16,014.0</b>	<b>1,039.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>\$3,758,484.71</b>	<b>\$21,081.84</b>	<b>\$5,986.49</b>				
May-19	#DIV/0!	#DIV/0!	#DIV/0!	CUMBERLAND	Market	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00	\$0.00				
	\$ (6.687)	\$ 5.027	\$ -	EXETER	Market	187,748	(439)	0	3,200	0	0	0	0	0	0	0	\$2,746,938.38	\$2,935.38	\$0.00				
	\$ 3.711	\$ 5.027	\$ -	PROVIDENCE	Market	536,923	280	47,379	16,274	0	0	0	0	0	0	0	(\$3,747.30)	\$139,815.43	\$40,784.75				
	\$ 3.807	\$ 5.027	\$ -	<b>Total LNG</b>		<b>724,671</b>	<b>(159.0)</b>	<b>47,379.0</b>	<b>19,474.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>\$3,700,483.84</b>	<b>\$611.92</b>	<b>\$139,815.43</b>				
Jun-19	#DIV/0!	#DIV/0!	#DIV/0!	CUMBERLAND	Market	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00	\$0.00			
	\$ 2.419	\$ 5.013	\$ -	EXETER	Market	184,109	104	9,406	3,445	0	0	0	0	0	0	0	(\$940,394.54)	\$28,481.37	\$8,882.09				
	\$ 483.284	\$ 5.013	\$ -	PROVIDENCE	Market	568,308	30	0	12,341	0	0	0	0	0	0	0	(\$536.61)	\$0.00	\$0.00				
	\$ 3.931	\$ 5.013	\$ -	<b>Total LNG</b>		<b>752,417</b>	<b>134.0</b>	<b>9,406.0</b>	<b>15,786.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>\$3,782,376.91</b>	<b>\$673.81</b>	<b>\$28,481.37</b>				
Jul-19	#DIV/0!	#DIV/0!	#DIV/0!	CUMBERLAND	Market	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00	\$0.00			
	\$ 5.168	\$ 4.999	\$ -	EXETER	Market	190,174	(63)	4,578	3,545	0	0	0	0	0	0	0	\$2,746,938.38	\$6,947.22	\$12,063.03				
	\$ 0.213	\$ 4.999	\$ -	PROVIDENCE	Market	555,997	(272)	2,657	11,907	0	0	0	0	0	0	0	(\$8,626.66)	\$7,001.20	\$2,132.67				
	\$ 3.455	\$ 4.999	\$ -	<b>Total LNG</b>		<b>746,171</b>	<b>(335.0)</b>	<b>7,235.0</b>	<b>15,452.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>\$3,740,738.28</b>	<b>\$1,679.44</b>	<b>\$19,064.23</b>				
Aug-19	\$ 3.061	\$ 4.910	\$ -	CUMBERLAND	Market	0	(61)	894	0	833	0	0	0	0	0	0	0	\$0.00	\$0.00	\$0.00			
	\$ 4.508	\$ 4.910	\$ -	EXETER	Market	191,144	37	3,451	3,488	0	0	0	0	0	0	0	0	\$2,746,938.38	\$3,970.16	\$8,496.36			
	\$ 3.240	\$ 4.910	\$ -	PROVIDENCE	Market	546,675	898	36,626	12,935	0	0	0	0	0	0	0	0	(\$553.89)	\$80,173.21	\$3,712.30			
	\$ 3.342	\$ 4.910	\$ -	<b>Total LNG</b>		<b>737,819</b>	<b>864.0</b>	<b>40,971.0</b>	<b>16,423.0</b>	<b>833.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>\$3,687,334.67</b>	<b>\$4,319.11</b>	<b>\$100,870.90</b>				
Sep-19	#DIV/0!	#DIV/0!	#DIV/0!	CUMBERLAND	Market	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00	\$0.00			
	\$ 1.687	\$ 4.898	\$ -	EXETER	Market	191,144	(264)	8,857	3,882	0	0	0	0	0	0	0	0	(\$1,540.01)	\$1,540.01	\$0.00			
	\$ 61.396	\$ 4.898	\$ -	PROVIDENCE	Market	571,054	183	0	9,920	0	0	0	0	0	0	0	0	\$0.00	\$0.00	\$0.00			
	\$ 3.526	\$ 4.898	\$ -	<b>Total LNG</b>		<b>762,198</b>	<b>(81.0)</b>	<b>6,857.0</b>	<b>13,602.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>\$3,742,421.79</b>	<b>(\$397.71)</b>	<b>\$17,752.77</b>			
Oct-19	#DIV/0!	#DIV/0!	#DIV/0!	CUMBERLAND	Market	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00	\$0.00		
	\$ (14.848)	\$ 4.874	\$ -	EXETER	Market	194,055	(356)	0	3,283	0	0	0	0	0	0	0	0	(\$943,422.18)	\$5,285.75	\$0.00			
	\$ 3.423	\$ 4.874	\$ -	PROVIDENCE	Market	561,317	2,443	14,909	11,926	0	0	0	0	0	0	0	0	\$4,936.05	\$41,625.93	\$12,835.05			
	\$ 3.806	\$ 4.874	\$ -	<b>Total LNG</b>		<b>755,372</b>	<b>2,087.0</b>	<b>14,909.0</b>	<b>15,209.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>\$3,695,695.98</b>	<b>\$10,221.81</b>	<b>\$41,625.93</b>			
Nov-19	\$ 3.278	\$ 4.825	\$ -	ALL PORTABLE CUMBERLAND	Market	0	0	4,338	0	2,971	0	0	0	0	0	0	0	0	\$0.00	\$0.00	\$0.00		
	\$ 3.357	\$ 4.825	\$ -	EXETER	Market	190,416	(252)	8,777	3,808	2,291	0	0	0	0	0	0	0	(\$932,707.20)	\$26,216.90	\$8,288.12			
	\$ 3.945	\$ 4.825	\$ -	PROVIDENCE	Market	566,743	(806)	21,187	10,350	22,276	0	0	0	0	0	0	0	\$7,226.55	\$63,285.57	\$16,393.49			
	\$ 3.707	\$ 4.825	\$ -	<b>Total LNG</b>		<b>757,159</b>	<b>(1,058.0)</b>	<b>34,302.0</b>	<b>14,158.0</b>	<b>27,536.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>\$3,690,252.91</b>	<b>(\$5,156.50)</b>	<b>\$102,460.07</b>			
Dec-19	#DIV/0!	#DIV/0!	PORTABLE	CUMBERLAND	Market	1,367	(4,366)	4,366	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00		
	\$ 2.644	\$ 4.783	\$ -	EXETER	Market	192,842	(553)	1,724	5,643	137	0	0	0	0	0	0	0	0	(\$911,417.77)	(\$14,355.27)	\$0.00		
	\$ 4.217	\$ 4.783	\$ -	PROVIDENCE	Market	554,498	(1,597)	27,671	10,780	21,074	0	0	0	0	0	0	0	0	\$4,911,903.00	(\$4,155.72)	\$5,624.37		
	\$ 3.622	\$ 4.783	\$ -	<b>Total LNG</b>		<b>748,707</b>	<b>(6,516.0)</b>	<b>33,761.0</b>	<b>16,423.0</b>	<b>21,211.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>\$2,680,538.87</b>	<b>(\$12,927.11)</b>	<b>\$90,273.75</b>			
Jan-20	\$ 10.584	#DIV/0!	\$ 4.732	portable/seasonal CUMBERLAND & Portsmouth	Market	1,367	3,621	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00		
	\$ 34.356	\$ 4.732	\$ -	EXETER	Market	188,233	(241)	0	5,338	0	0	0	0	0	0	0	0	0	0	(\$873,819.28)	(\$32,324.69)	\$0.00	
	\$ 3.167	\$ 4.732	\$ -	PROVIDENCE	Market	548,718	(1,669)	34,648	11,116	27,651	0	0	0	0	0	0	0	0	0	(\$907,356.61)	(\$8,279.75)	\$0.00	
	\$ 3.699	\$ 4.732	\$ -	<b>Total LNG</b>		<b>738,318</b>	<b>1,711.0</b>	<b>34,648.0</b>	<b>16,454.0</b>	<b>27,651.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>\$2,638,138.76</b>	<b>(\$2,862.03)</b>	<b>\$85,985.94</b>			
Feb-20	\$ 5.675	#DIV/0!	\$ 4.608	portable/seasonal CUMBERLAND	Market	4,988	(269)	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00		
	\$ 2.590	\$ 4.608	\$ -	EXETER	Market	182,654	259	17,562	6,445	703	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00	
	\$ 3.120	\$ 4.608	\$ -	PROVIDENCE	Market	542,930	(287)	36,796	12,040	18	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00
	\$ 2.932	\$ 4.608	\$ -	<b>Total LNG</b>		<b>730,572</b>	<b>(297.0)</b>	<b>54,358.0</b>	<b>18,485.0</b>	<b>721.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>\$3,456,815.82</b>	<b>(\$1,465.30)</b>	<b>\$117,337.18</b>			
Mar-20	\$ 4.848	\$ 4.580	\$ -	portable/seasonal CUMBERLAND	Market	4,719	(2,433)	0	0	1,664	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00	

Date	Inject price	Withdraw price		VOLUME	INJECTIONS		WITHDRAWALS		VOLUME		\$ AMOUNT	INJECTIONS		WITHDRAWALS		\$ AMOUNT	
	\$ 4.040	\$ 4.580		193,327	(473)	3,476	6,273	126	189,931	-	\$887,038.90	\$1,571.69	\$7,279.44	\$ 3,282.39	\$28,729.73	\$577.07	\$869,865.61
	\$ 3.019	\$ 4.580	EXETER	567,381	(172)	12,343	10,385	0	569,167	-	\$2,617,479.32	(\$3,958.63)	\$25,848.71	\$ 14,859.38	\$47,562.30	\$0.00	\$2,606,666.49
	\$ 2.911	\$ 4.580	PROVIDENCE	765,427	(3,078.0)	15,819.0	16,658.0	1,790.0	759,720.0	(0)	\$3,526,846.91	(\$14,182.46)	\$33,128.15	\$18,141.77	\$76,292.03	\$8,198.03	\$3,479,444.31
			<b>Total LNG</b>	0.0					0.0		\$0.00						\$0.00
Apr-20																	
	\$ 4.682	#DIV/0!		622	(622)	0	0	0	0	-	\$2,912.21	(\$2,912.21)	\$0.00	\$ -	\$0.00	\$0.00	\$0.00
	\$ 4.580	\$ 4.580	portable/seasonal	189,931	(422)	0	3,217	0	186,292	-	\$869,865.61	(\$1,932.67)	\$0.00	\$ -	\$14,733.55	\$0.00	\$853,199.39
	\$ 5.638	\$ 4.580	CUMBERLAND	569,167	60	0	9,402	0	559,825	-	\$2,606,666.49	\$338.25	\$0.00	\$ -	\$43,060.25	\$0.00	\$2,563,944.49
	\$ 4.580	\$ 4.580	EXETER	759,720	(984.0)	0.0	12,619.0	0.0	746,117.0	(0)	\$3,479,444.31	(\$4,506.63)	\$0.00	\$0.00	\$57,793.80	\$0.00	\$3,417,143.88
			PROVIDENCE	0.0					0.0		\$0.00						\$0.00
			<b>Total LNG</b>	0.0					0.0		\$0.00						\$0.00
May-20																	
	#DIV/0!	#DIV/0!		0		0	0	0	0	-	\$0.00	(\$0.00)	\$0.00	\$ -	\$0.00	\$0.00	\$0.00
	\$ 4.580	\$ 4.580	CUMBERLAND	186,292	(97)	0	3,056	0	183,139	-	\$853,199.39	(\$444.25)	\$0.00	\$ -	\$13,996.19	\$0.00	\$838,758.95
	\$ 4.580	\$ 4.580	EXETER	559,825	(70)	0	8,533	0	551,222	-	\$2,563,944.49	(\$300.59)	\$0.00	\$ -	\$39,080.32	\$0.00	\$2,524,543.58
	\$ 4.580	\$ 4.580	PROVIDENCE	746,117	(167.0)	0.0	11,589.0	0.0	734,361.0	(0)	\$3,417,143.88	(\$764.54)	\$0.00	\$0.00	\$53,076.50	\$0.00	\$3,363,302.54
			<b>Total LNG</b>	0.0					0.0		\$0.00						\$0.00
Jun-20																	
	#DIV/0!	#DIV/0!		0		0	0	0	0	-	\$0.00	\$0.00	\$0.00	\$ -	\$0.00	\$0.00	\$0.00
	\$ 4.580	\$ 4.580	CUMBERLAND	183,139	(637)	0	3,001	0	179,501	-	\$838,758.95	(\$2,917.40)	\$0.00	\$ -	\$13,744.29	\$0.00	\$822,097.26
	\$ 4.580	\$ 4.580	EXETER	551,222	(487)	0	8,962	0	541,773	-	\$2,524,543.58	(\$2,230.41)	\$0.00	\$ -	\$41,045.10	\$0.00	\$2,481,268.08
	\$ 4.580	\$ 4.580	PROVIDENCE	734,361	(1,124.0)	0.0	11,963.0	0.0	721,274.0	(0)	\$3,363,302.54	(\$5,147.81)	\$0.00	\$0.00	\$54,789.39	\$0.00	\$3,303,365.34
			<b>Total LNG</b>	0.0					0.0		\$0.00						\$0.00
Jul-20																	
	#DIV/0!	#DIV/0!		0		0	0	0	0	-	\$0.00	\$0.00	\$0.00	\$ -	\$0.00	\$0.00	\$0.00
	\$ 4.580	4.483	CUMBERLAND	179,501	(90)	0	3,306	0	176,105	-	\$822,097.26	(\$412.19)	\$0.00	\$ -	\$14,819.74	\$0.00	\$806,865.33
	\$ 2.787	4.483	EXETER	541,773	899	40,449	13,243	0	569,878	-	\$2,481,268.08	\$4,117.33	\$69,543.97	\$ 41,573.31	\$59,364.15	\$0.00	\$2,537,138.54
	\$ 2.783	4.483	PROVIDENCE	721,274	809.0	40,449.0	16,549.0	0.0	745,983.0	(0)	\$3,303,365.34	\$3,705.14	\$69,543.97	\$41,573.31	\$74,183.89	\$0.00	\$3,344,003.86
			<b>Total LNG</b>	0.0					0.0		\$0.00						\$0.00

The Narragansett Electric Company  
d/b/a National Grid  
RIPUC Docket No. 5066  
In Re: 2020 Annual Gas Cost Recovery Filing  
Responses to the Division's First Set of Data Requests  
Issued on August 19, 2020

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Division 1-13

Request:

Please identify all occasion since 2019 which the Company has invoked the curtailment provisions of its tariff. Identify the reason for the curtailment, volumes, and number of customers.

Response:

The Company invoked the curtailment provisions of its tariff twelve times since January 2019. A total of eleven accounts were curtailed. Since these customers are curtailed on peak days, the Company does not have a history of historical peak day usage. The total estimated peak day load associated with these eleven accounts is approximately totals with a connected CHF of 1,369,680. Curtailments were issued due to forecasted LNG use.

The gas days when curtailments were invoked are provided in the table below:

<b>RI NON-FIRM CUSTOMERS</b>		
<b>Effective Date</b>	<b>End Date</b>	<b># of Gas Days</b>
1/11/2019	1/14/2019	3
1/20/2019	1/23/2019	3
1/30/2019	2/3/2019	4
2/26/2019	3/1/2019	3
3/5/2019	3/8/2019	3
11/13/2019	11/14/2019	1
12/7/2019	12/8/2019	1
12/18/2019	12/20/2019	2
1/17/2020	1/18/2020	1
1/20/2020	1/22/2020	2
2/14/2020	2/15/2020	1
2/20/2020	2/21/2020	1

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Division 1-14

Request:

Please provide a complete monthly history of the Company's capacity release activity for the period April 2019 through July 2020. Provide a copy of the requested information in Excel format. The history should identify capacity released for on-system FT-1 and FT-2 transportation customers and releases to others separately, as well as any capacity acquired. Include the following:

- a. Amount of capacity available for release by pipeline and rate schedule;
- b. The applicable pipeline, acquiring party, quantity by zone, rate, duration, and revenues;
- c. The otherwise applicable maximum interstate pipeline rate; and
- d. Whether any conditions were placed on the release, and whether the capacity was recalled prior to the expiration of the initial term and the release.

Response:

Please see the Excel spreadsheets attached as Attachments DIV 1-14(a) through 1-14(p) for the requested information.



Division 1-15

Request:

Please provide a complete monthly history of the Company's off-system sales activities period April 2019 through July 2020. Provide a copy of the requested information in Excel format. Include the following:

- a. Buyer;
- b. Date arrangement was agreed upon;
- c. Date(s) sold;
- d. Quantity sold each day;
- e. Pipeline receipt point and zone;
- f. Pipeline delivery point and zone;
- g. Date(s) gas supplies were purchased to accommodate each off-system sale;
- h. Quantity purchased each day;
- i. Cost associated with gas purchased, including acquisition source, price, and transportation arrangement;
- j. Avoided costs;
- k. Sales price; and
- l. Net revenues.

Response:

Please see the Excel spreadsheet attached as Attachment Division 1-15, for the requested information concerning the Company's off-system sales activities for the period of April 2019 through July 2020.

Attachment Division 1-15 contains commercially sensitive and confidential information; therefore, the Company is providing confidential and redacted versions of Attachment DIV 1-15, subject to a Motion for Protective Treatment.

The Narragansett Electric Company  
d/b/a National Grid  
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Attachment DIV 1-15

**CONFIDENTIAL**

The Narragansett Electric Company  
d/b/a National Grid  
RIPUC Docket No. 5066  
In Re: 2020 Annual Gas Cost Recovery Filing  
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Division 1-16

Request:

Please provide the same information requested in the prior question for all exchange or park and loan activities wherein, for a fee, the Company accepts the delivery of gas from a counter-party at one pipeline location and delivers it to another location, accepts the delivery of gas from a counter-party and agrees to return it at a later date, or delivers gas to a counter-party at a point in time and accepts the return of that gas at a later point in time.

Response:

National Grid did not engage in any exchanges or park and loan activities for the specified period of April 2019 through July 2020.

The Narragansett Electric Company  
d/b/a National Grid  
RIPUC Docket No. 5066  
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Division 1-17

Request:

Please provide, on an aggregate basis (as opposed to an individual supplier basis), a monthly tabulation of FT-1 and FT-2 transportation customer imbalances for the period April 2019 through July 2020. That is, provide receipts of customer-owned gas adjusted for distribution system fuel retention and on-system storage activity versus consumption. Show how the imbalances were resolved, including those cashed-out, cashed-in, those carried forward, or resolved through other means. Include quantities and rates applicable to resolving imbalances (e.g., cash-out) as appropriate.

Response:

Please see the table below for FT-1 and FT-2 imbalances for the period April 2019 through July 2020, as well as the cash out index rate by month.

Month	Imbalances in Dekatherms.		Total Imbalance Dekatherms.	Index Rate
	FT-1*	FT-2**		
Apr-2019	7,101.90	(21914.1)	(14,812.22)	\$2.59
May-2019	11,919.10	(29416.6)	(17,497.46)	\$2.35
Jun-2019	(6,588.10)	(8393.7)	(14,981.79)	\$2.13
Jul-2019	15,700.80	702.0	16,402.75	\$2.27
Aug-2019	46,541.60	(3284.2)	43,257.39	\$2.01
Sep-2019	55,184.10	11520.0	66,704.12	\$2.05
Oct-2019	57,017.70	(22622.3)	34,395.41	\$1.76
Nov-2019	85,435.80	(36585.0)	48,850.80	\$3.35
Dec-2019	104,493.10	(7720.9)	96,772.20	\$4.75
Jan-2020	78,515.30	9641.5	88,156.80	\$2.91
Feb-2020	38,579.40	11396.1	49,975.50	\$2.31
Mar-2020	16,268.20	(2490.8)	13,777.40	\$1.68
Apr-2020	(37,562.30)	(43670.4)	(81,232.70)	\$1.70
May-2020	(46,344.10)	(86882.2)	(133,226.30)	\$1.46
Jun-2020	(48,790.70)	(22252.3)	(71,043.00)	\$1.51
Jul-2020	20,381.20	(15152.8)	5,228.40	\$1.69
	397,853.00	(267125.7)	130,727.30	

\*The FT-1 imbalances are cashed out using the tier rates as listed in question Division 1-17. Imbalances in Dekatherms.

\*\*The FT-2 imbalance isre separated into appropriate months using degree days, then multiplied by the average of the daily indices for the relevant month.

Division 1-17, page 2

FT-1 and FT-2 transportation customer imbalances are resolved as described in the Company's gas tariff, RIPUC, NG-GAS no. 101, Section 6, Transportation Terms and Conditions, Schedule C (Gas Tariff).

The relevant excerpts from the Gas Tariff are reproduced below:

**2.01 FT-1 Transportation Service:**

**2.03.2 Monthly Imbalances:**

For each Aggregation Pool, the Marketer must maintain total Actual Transportation Quantities within a reasonable tolerance of total monthly Gas Usage. Any differences between total Monthly Transportation Quantities for an Aggregation Pool and the aggregated Gas Usage of Customers in the Aggregation Pool, expressed as a percentage of total Monthly Transportation Quantities will be cashed out according to the following schedule:

Imbalance Tier	Over-deliveries	Under-deliveries
0% - 5%	The average of the Daily Indices for the relevant Month	The highest average of seven consecutive Daily Indices for the relevant Month
> 5% - 10%	0.85 times the above stated rate	1.15 times the above stated rate
> 10% - 15%	0.60 times the above stated rate	1.4 times the above stated rate
> 15%	0.25 times the above stated rate	1.75 times the above stated rate

Division 1-17, page 3

**1.04.3 Marketer Responsibility:**

For Critical Days or Operational Flow Orders (OFO) aggravated by under-delivery, the Marketer will be charged a penalty of 5 times the Daily Index for the aggregated Gas Usage of Customers in the Aggregation Pool that exceed 102% of the Marketer's aggregate actual receipts on the Transporting Pipeline at the Point of Receipt. The Marketer will be charged a penalty of 0.1 times the Daily Index for the differences between said receipts and said usage that exceed 20% of said receipts  $[(\text{Receipts} - \text{Usage}) > (20\% \times \text{Receipts})]$ .

For Critical Days or OFO's aggravated by over-delivery, the Marketer will be charged a penalty of 0.1 times the Daily Index for the aggregated Gas Usage of Customers in the Aggregation Pool that exceed 120% of the Marketer's aggregate actual receipts on the Transporting Pipeline at the Point of Receipt. The Marketer will be charged a penalty of 5 times the Daily Index for the differences between said receipts and said usage that exceed 2% of said receipts  $[(\text{Receipts} - \text{Usage}) > (2\% \times \text{Receipts})]$ .

**3.0 FT-2 Transportation Service:**

**3.04.0 Billing Imbalances:**

Division 1-17, page 4

The forecasted daily use (FDU) will be calculated each day. Imbalances between customer Gas Usage and the Forecasted Daily Usage (FDU), adjusted for actual weather, will be cashed out at the average of the Algonquin and Tennessee city gate delivered monthly indexes. The Company will prorate the imbalance amount between the months billed based on the customer's base load and heating use factors and apply the average monthly index to the corresponding month's imbalance quantity. Customer imbalances get split into individual months using degree days. That imbalance is then multiplied by that month's daily index.

The imbalance amount will be a credit if deliveries exceed the customer's use and a debit if deliveries are less than the customer's use. The billed imbalance amount for any billing will be the sum of the imbalance charges or credits attributable to each individual month.

**3.03.1 Critical Days:**

To satisfy the FDU (Forecasted Daily Use) nomination requirement on Critical Days, the Marketer is required to fully utilize upstream capacity that it received from Company through Capacity Release so as to help avoid restricting the Company's ability to provide efficient and reliable firm transportation and sales service. Notice of Critical Days will be posted on the EBB no later than concurrent with the posting of the FDU nomination requirement.

**3.03.2 Over and Under-deliveries:**

Under-deliveries at times when an OFO or critical day have not been declared will be cashed out at 120% of daily index. If the Company declares an OFO or critical day condition reducing the tolerance for over-deliveries, any over-deliveries of the aggregation pool's gas requirements, above the FDU, will be cashed out at 40% of the daily index. In addition, the Company reserves the right to reject such a nomination. Over-deliveries at other times will be cashed out at 80% of Daily Index.

**1.06.0 Shipper and Transporting Pipeline Requirements:**

Marketers must deliver a minimum of forty percent (40%) of total daily pipeline receipts (including all of the Marketer's Aggregation Pools serving both FT-1 and FT-2 customers) on each of the upstream pipelines: Algonquin Gas Transmission ("Algonquin") and Tennessee Gas Pipeline ("Tennessee"). The remaining twenty percent (20%) of total daily pipeline receipts (including all of the Marketer's

Division 1-17, page 5

Aggregation Pools serving both FT-1 and FT-2 customers) may be delivered on either or both Algonquin or Tennessee.

If the Marketer does not deliver gas on the transporting pipelines as required above, the Company may charge the Marketer a penalty of 0.5 times the Daily Index for all differences less than the forty (40) percent minimum requirement on each transporting pipeline.



Division 1-18

Request:

Please identify the daily and monthly balancing requirements imposed on FT-1 and FT-2 transportation customers and explain how the balancing requirements of transportation customers affects the amount and type of capacity reserved by the Company. Identify any currently applicable balancing charges assessed to transportation customers.

Response:

Please see the Company's response to Division 1-17 for the daily and monthly balancing requirements imposed on FT-1 and FT-2 transportation customers and the applicable balancing charges assessed to transportation customers.

As the delivery point operator, the Company must balance total load, including transportation customer load and sales customer load, with both Algonquin and Tennessee pipelines. While the Company provides access to its storage and LNG assets to Marketers serving FT-2 customers via its managed service tiers, the Company retains physical control of these assets in its gas supply portfolio to balance total load to the level imposed by the respective pipeline (i.e. daily, hourly, etc.).

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Division 1-19

Request:

Please identify the extent to which the Company was unable to use its long-haul Tennessee capacity with Gulf Coast production area primary receipt points to purchase Tennessee Zone 4 gas supplies during the period April 2019 through July 2020. That is, the Company purchased Gulf Coast supplies.

Response:

The Company was not restricted from buying Tennessee Zone 4 gas any day during the period April 2019 through July 2020.

Division 1-20

Request:

Please identify the extent to which the Company was unable to use its long-haul Texas Eastern capacity with Gulf Coast production area primary receipt points to purchase Texas Eastern M-2 gas supplies during the period April 2019 through July 2020. That is, the Company purchased Gulf Coast Supplies.

Response:

The Company recently became unable to use its long-haul Texas Eastern capacity to purchase Texas Eastern M-2 gas. Starting on July 15, 2020 the Company stopped purchasing Texas Eastern M-2 gas due to restrictions enacted at the Uniontown Compressor Station.

Due to the continued increases in natural gas supplies within Market Zone M2-30 (Meter No. 79508), Texas Eastern moved the M2-30 TAB pool that is currently at the far east end of the Market Zone M2-30 at mile post 305.812. The M2-30 TAB was relocated to a point just west of the Uniontown Compressor station at mile post 339.943 to more accurately reflect where the current supply sources in the Market Zone M2-30 are being received into the Texas Eastern system.

Prior to the change in location, M2 gas supplies did not flow through Uniontown and were not subject to any curtailment.

Prior to July 15, 2020 the Company had not been restricted from buying Texas Eastern M-2 gas.

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**Redacted**  
Division 1-21

Request:

Please provide a schedule identifying for the winter of 2019/20 and 2020/21:

- a. The MDQ of each gas supply contract and the applicable daily and monthly nomination/purchase requirements;
- b. The demand charges associated with each gas supply contract (applicable rate and amount); and
- c. Commodity pricing provisions.

Response:

Please see the chart below which provides the following information for those transactions that have been executed for the winter of 2019/20 and 2020/21: (i) the MDQ of each gas supply contract and the applicable daily and monthly nomination/purchase requirements; (ii) the demand charges associated with each gas supply contract (applicable rate and amount); and (iii) commodity pricing provisions. The Company is currently negotiating transactions for winter 2020/21 and will supplement this response once these transactions have been fully executed.

Gas Supplier	Path/Receipt Point	Gas Supply Purchase/AMA	Term	Maximum Daily Quantity (dt)	Maximum Monthly Quantity (dt)	Total AMA Fee	Total Demand Charge	Gas Supply Requirements	Commodity Price
Constellation LNG, LLC	Winter Vapor Purchase at Everett, MA	Gas Supply Purchase	12/01/2019-04/01/2020	20,000	632,000	N/A	████████	Daily Call	██████

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Constellation LNG, LLC	Winter Vapor Purchase at Everett, MA	Gas Supply Purchase	12/01/2020-04/01/2021	20,000	651,000	N/A	██████	Daily Call	██████
Emera Energy Services, Inc.	Dawn to East Hereford (Union, TCPL)	AMA	11/01/2019-04/30/2020	10,757	Daily Call	██████	N/A	Baseload Election + Daily Call	██████
DTE Energy Trading, Inc.	Dawn to East Hereford (Union, TCPL)	AMA	11/01/2019-04/30/2020	14,999	Daily Call	██████	N/A	Baseload Election + Daily Call	██████
EDF Trading North America, LLC	Dawn to TGP Z6 (Union, TCPL, IGTS, TGP)	AMA	11/01/2019-03/31/2020	1,000	Daily Call	██████	N/A	Baseload Election + Daily Call	██████
Freepoint Commodities LLC	Dracut to TGP Z6	AMA	12/1/2019-04/30/2020	22,300	Daily Call	██████	N/A	Daily Call	██████
Spotlight Energy, LLC	Tco Broadrun to AGT Hanover	AMA	11/01/2019-04/15/2020	10,000	Daily Call	██████	N/A	Daily Call	██████

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Constellation LNG, LLC	Winter Vapor Purchase at AGT	Gas Supply Purchase	11/01/2019-03/31/2020	14,100	507,600	N/A	[REDACTED]	Daily Call	[REDACTED]
Constellation LNG, LLC	Winter Vapor Purchase at AGT	Gas Supply Purchase	11/01/2020-03/31/2021	14,100	507,600	N/A	[REDACTED]	Daily Call	[REDACTED]
Constellation LNG, LLC	LNG Purchase	Gas Supply Purchase	12/01/2019-03/31/2020	21,000	192,450	N/A	[REDACTED]	Daily Call	[REDACTED]
Constellation LNG, LLC	Winter Vapor Purchase at Everett, MA	Gas Supply Purchase	12/01/2019-03/31/2020	5,000	25,000	N/A	[REDACTED]	Daily Call	[REDACTED]

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Division 1-22

Request:

For the five coldest non-weekend/holiday days during the winter of 2019/2020, please provide an analysis that demonstrates that the design day forecast models relied upon and developed by the Company for the winter of 2019/20 produced a reasonable estimate of planning load on these five days.

Response:

The table below lists the five coldest non-weekend/holiday days during the winter of 2019/20, the actual throughput, the predicted throughput given the actual weather of the winter of 2019/20, the volumetric difference, and the percent error difference. Weekend days are defined as Saturdays and Sundays; holidays excluded are Thanksgiving Day, Christmas Day, New Year's Day, Martin Luther King, Jr. Day, and Presidents Day.

<u>Date</u>	<u>HDD</u>	<u>Actual Dth</u>	<u>Predicted Dth</u>	<u>Error Dth</u>	<u>Error Pct</u>
12/19/2019	47	313,560	301,046	12,514	4.0 %
1/17/2020	47	302,007	297,583	4,424	1.5 %
2/14/2020	46	274,528	290,225	-15,697	-5.7 %
1/21/2020	44	288,986	294,947	-5,961	-2.1 %
12/18/2019	41	257,874	268,702	-10,828	-4.2 %

The mean absolute percentage error (MAPE) is 3.5 percent.

For the five coldest non-weekend/holiday days during the winter of 2018/19, the MAPE was 4.4 percent. For the five coldest non-weekend/holiday days during the winter of 2017/18, the MAPE was 3.8 percent. For the five coldest non-weekend/holiday days during the winter of 2016/17, the MAPE was 3.3 percent.

The Company generally aims for a MAPE in the three percent range in its comparison of actual versus predicted daily wholesale total throughput as it monitors throughput throughout the heating season.

Division 1-23

Request:

With respect to the capacity assigned to FT-1 transportation customers for the period April 2019 through July 2020:

- a. Please identify the monthly quantity of capacity assigned by pipeline contract and rate schedule;
- b. Explain how the quantity assigned is determined;
- c. Identify the applicable monthly pipeline rates and costs of each capacity assignment; and
- d. Please identify any monthly charges assessed to FT-1 customers (or their supplies) for the assigned capacity beyond the charges paid directly to the pipeline by the customer or their supplier. Explain how the additional charges are determined.

Response:

- a. Please see Attachment DIV 1-23 for the monthly quantity of capacity assigned by pipeline contract and rate schedule for FT1.
- b. The Company determines the quantity to be released based on the customer's calculated Peak Day Use and load factor rate class. The Company separately calculates assignment percentages for high load factor and low load factor rate classes eligible for transportation. It then multiplies the percentage applicable to the Customer's rate class by the Customer's Peak Day Use to determine the amount of capacity to be assigned to the Marketer (as per section 1.07.0 of the Company's tariff).
- c. Please see Attachment DIV 1-23 for the applicable monthly pipeline rates and costs of each capacity assignment.
- d. The Company assesses a surcharge/credit to Marketers based on the difference between the charges of the upstream pipeline transportation capacity and the weighted average of the Company's upstream pipeline transportation capacity charges as calculated by the Company. To the extent that the charges of such released pipeline capacity are greater than the weighted average charges, the Marketer receives credit for such difference in charges based on the total quantity



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of capacity released by the Company to the Marketer. The per Dth charge is calculated by subtracting the charge per Dth for the released pipeline capacity from the Company's weighted average Upstream Transportation charges as identified in the Company's annual Gas Cost Recovery Filing. To the extent that the cost of such released pipeline capacity is less than the weighted average cost, the Marketer is surcharged for such difference (as per section 1.07.0 of the Company's tariff).

Prepared by or under the supervision of:  
Elizabeth D. Arangio



Division 1-24

Request:

With respect to the capacity assigned to FT-2 transportation customers for the period April 2019 through July 2020:

- a. Please identify the monthly quantity of capacity assigned by pipeline contract and rate schedule;
- b. Explain how the quantity assigned is determined;
- c. Identify the applicable monthly pipeline rates and costs of each capacity assignment; and
- d. Please identify any monthly charges assessed to FT-2 customers (or their supplies) for the assigned capacity beyond the charges paid directly to the pipeline by the customer or their supplies. Explain how the additional charges are determined.

Response:

- a. Please see Attachment DIV 1-24 for monthly quantity of capacity assigned by pipeline contract and rate schedule for FT-2 transportation customers.
- b. The Company determines the quantity to be released based on the customer's calculated Peak Day Use and load factor rate class. The Company separately calculates assignment percentages for high load factor and low load factor rate classes eligible for transportation. It then multiplies the percentage applicable to the Customer's rate class times the Customer's Peak Day Use to determine the amount of capacity to be assigned to the Marketer (as per section 1.07.0 of the Company's tariff).
- c. Please see Attachment DIV 1-24 for the applicable monthly pipeline rates and costs of each capacity assignment.
- d. The Company assesses a surcharge/credit to Marketers based on the difference between the charges of the upstream pipeline transportation capacity and the weighted average of the Company's upstream pipeline transportation capacity charges as calculated by the Company. To the extent that the charges of such

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released pipeline capacity are greater than the weighted average charges, the Marketer receives credit for such difference in charges based on the total quantity of capacity released by the Company to the Marketer. The per Dth charge is calculated by subtracting the charge per Dth for the released pipeline capacity from the Company's weighted average Upstream Transportation charges as identified in the Company's annual Gas Cost Recovery Filing. To the extent that the cost of such released pipeline capacity is less than the weighted average cost, the Marketer is surcharged for such difference (as per section 1.07.0 of the Company's tariff).



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Division 1-25

Request:

Please provide the projected design day, design winter, and design annual volumes of high and low load factor sales customers for the period November 2020 through October 2021.

Response:

Please see the chart below. While the Company does not have daily metered retail data to precisely forecast a retail design day for sales customers, it has estimated these values (in Dth).

	<i>Design Day (Est.)</i>	<i>Design Winter</i>	<i>Design Year</i>
<i>Low Load Factor Sales</i>	<i>312,015</i>	<i>20,887,109</i>	<i>29,129,442</i>
<i>High Load Factor Sales</i>	<i>5,323</i>	<i>387,225</i>	<i>677,115</i>
<i>Total</i>	<i>317,338</i>	<i>21,264,334</i>	<i>29,806,556</i>

Division 1-26

Request:

For the periods November 2019 through October 2020 and November 2020 through October 2021, please provide the following projected design day demand quantities:

- a. Total for which the Company performs capacity planning;
- b. FT-2 customer demands met by pipeline FT capacity;
- c. FT-2 customer demands met by pipeline and LNG storage (separately);
- d. FT-1 capacity exempt customer demands met by pipeline FT capacity;
- e. FT-1 capacity exempt customer demands met by pipeline and LNG storage (separately);
- f. FT-1 capacity assigned customer demands met by pipeline FT capacity;
- g. FT-1 capacity assigned customer demands met by pipeline and LNG storage (separately);
- h. Sales customer demands met by pipeline FT capacity; and
- i. Sales customer demands meet by pipeline and LNG storage (separately).

Response:

Data for 2019-20 forecasted design day are based on capacity releases for January 2020. Data for 2020-21 forecasted design day are based on capacity releases for September 2020.

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	<u>Nov 2019 – Oct 2020</u>	<u>Nov 2020 - Oct 2021</u>
a. Total for which the Company performs capacity planning;	387,467 Dth	383,384 Dth
b. FT-2 customer demands met by pipeline FT capacity;	Pipeline: 21,932 Dth	Pipeline: 24,436 Dth
c. FT-2 customer demands met by pipeline and LNG storage (separately);	Storage :4,742 Dth Peaking: 18,274 Dth	Storage : 4,583 Dth Peaking: 15,136 Dth
d. FT-1 capacity exempt customer demands met by pipeline FT capacity;	28,496 Dth (Note: the Company does not perform capacity planning for the capacity-exempt customers)	26,574 Dth (Note: the Company does not perform capacity planning for the capacity-exempt customers)
e. FT-1 capacity exempt customer demands met by pipeline and LNG storage (separately);	The Company is unaware of the supplies delivered to FT-1 capacity-exempt customers. Their total forecasted sendout is presented in (d) above.	The Company is unaware of the supplies delivered to FT-1 capacity-exempt customers. Their total forecasted sendout is presented in (d) above.
f. FT-1 capacity assigned customer demands met by pipeline FT capacity;	Pipeline: 13,615 Dth	Pipeline: 15,432 Dth



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g. FT-1 capacity assigned customer demands met by pipeline and LNG storage (separately);	Storage and peaking: 10,114 Dth (based on the Company's forecast of their total peak less (f) )	Storage and peaking: 7,555 Dth (based on the Company's forecast of their total peak less (f) )
h. Sales customer demands met by pipeline FT capacity; and	Pipeline: 202,275 Dth	Pipeline: 197,954 Dth
i. Sales customer demands meet by pipeline and LNG storage (separately).	Storage: 12,979 Dth Peaking: 114,934 Dth	Storage: 13,138 Dth Peaking: 115,828 Dth

**Redacted**  
Division 1-27

Request:

For the period April 2019 through July 2020:

- a. Please separately identify monthly citygate storage and citygate peaking quantities sold to FT-2 marketers and the applicable price;
- b. Explain how the price for citygate storage and peaking service supplies is determined; and
- c. Explain whether the Company made citygate purchases during the period and whether the costs associated with these purchases were assigned to FT-2 marketers. If such purchases were made, identify the date of each purchase and the applicable quantities and prices.

Response:

- a. Please see Attachment DIV 1-27 for quantities sold to FT-2 marketers and the applicable prices for the period April 2019 through July 2020.
- b. The variable price for storage is equal to the Company's underground storage weighted average cost of gas ("WACOG"). The fixed price is determined based on the weighted-average fixed costs of the underground storage assets. The variable and fixed pricing for peaking supplies are weighted averages determined by the Company's LNG WACOG and the fixed costs for any liquid refill contracts, as well as any variable or fixed costs for supply deals that the Company considers to be peaking assets.
- c. The following citygate purchases were made under the Company's agreement with Constellation LNG, LLC for delivery of up to 14,100 Dth per day to the Company's citygates. The supply call option for these volumes was entered into in advance of the heating season, so a portion of the costs associated with these purchases were assigned to FT-2 marketers in both the FT-2 Peaking Demand Rate as well as the variable rates.

<u>Date</u>	<u>Quantity (Dth)</u>	<u>Price (per Dth)</u>
11/8/2019	7,000	
11/13/2019	1,000	

**Redacted**  
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12/7/2019	14,100	
12/19/2019	9,000	
1/17/2020	14,100	
1/20/2020	14,100	
1/21/2020	14,100	
2/14/2020	14,100	

The following citygate purchases were made in the spot market and were not specifically planned for in advance of the heating season, so these costs were not assigned to FT-2 marketers. There were no fixed costs associated with these purchases.

<u>Date</u>	<u>Quantity (Dth)</u>	<u>Price (per Dth)</u>
11/12/2019	3,000	\$ 7.000
3/7/2020	5,000	\$ 1.820
3/7/2020	4,000	\$ 1.860
4/22/2020	5,000	\$ 2.000

Subpart (c) of this responses contains commercially sensitive and confidential information; therefore, the Company is providing confidential and redacted versions of this response, subject to a Motion for Protective Treatment

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Division 1-28

Request:

Please provide a copy of all contracts governing the acquisition of LNG supplies, services, and tank lease payments in effect during the period April 2019 through July 2020. Indicate how the costs associated with each contract have been or will be recovered.

Response:

Please see Attachment DIV 1-28 for all executed transaction confirmations governing the acquisition of LNG supplies, services, and tank lease payments in effect during the period April 2019 through July 2020. The Company will supplement its response to this data request if additional transaction confirmation(s) within the scope of this request are executed.

Attachment DIV 1-28 contains commercially sensitive and confidential information; therefore, the Company is providing confidential and redacted versions of Attachment DIV 1-28, subject to a Motion for Protective Treatment. The costs associated with each contract have or are proposed to be recovered through the Gas Cost Recovery factor.

LNG rny  
ALLEGED CONTRACT  
# 103331



1310 Point Street  
8<sup>th</sup> Floor  
Baltimore, MD 21231  
410.470.3500 Telephone  
www.constellation.com

**CONFIRMATION AGREEMENT**

This will confirm the agreement reached on **November 5, 2019** between **CONSTELLATION LNG, LLC** ("Seller") and **THE NARRAGANSETT ELECTRIC COMPANY D/B/A NATIONAL GRID** ("Buyer") (each individually a "Party" and collectively the "Parties") regarding the sale and purchase of liquified natural gas ("LNG") on the following terms and conditions:

1. **Commercial Terms.** The "Commercial Terms" of this transaction are as set forth below:

<b>Transaction Confirmation:</b>	NSB19-042-20
<b>Seller:</b>	CONSTELLATION LNG, LLC ✓ 1310 POINT STREET 8TH FLR BALTIMORE, MD 21231
<b>Buyer:</b>	<b>The Narragansett Electric Company d/b/a National Grid</b> ✓ c/o National Grid 100 East Old County Road Hicksville, New York 11801 Attn: Contract Administration Phone: (516) 545-6068 Fax: (516) 806-4442
<b>Delivery Period:</b>	December 1, 2019 through and inclusive of March 31, 2020. ✓
<b>Type of Transaction:</b>	Firm (Variable) LNG Service ✓
<b>Performance Obligation and Contract Quantity:</b>	On any Day during the Delivery Period, Buyer shall have the right, but not the obligation, to purchase on a Firm basis a "Maximum Daily Quantity" or "MDQ" of LNG not to exceed an MDQ of 21,000 MMBtus (plus any additional quantities required to fill the final LNG Truck to capacity) per Day and a total Contract Quantity of LNG during the Delivery period not to exceed 192,450 MMBtus (plus any additional quantities required to fill the final LNG Truck to capacity). ✓
<b>Delivery Point(s):</b>	For Firm delivery service of LNG at the truck loading flange of the Distrigas of Massachusetts LLC marine LNG terminal located in Everett, Massachusetts ("LNG Terminal") for redelivery by Buyer only at its National Grid LNG facilities. ✓
<b>Contract Price:</b>	Buyer shall pay to Seller a Contract Price of LNG equal to the following two components:  <b>Commodity Rate:</b> For each MMBtu of LNG delivered to Buyer during the Delivery Period, Buyer will pay Seller a rate per MMBtu equal to [REDACTED] and  <b>Call Payment:</b> Buyer shall make a non-refundable call payment to

REDACTED

	<p>Seller in the amount of [REDACTED]</p> <p>for Firm delivery of LNG during the Delivery Period as set forth herein [REDACTED] ("Call Payment). The Call Payment shall be paid to Seller in four (4) equal, consecutive monthly installments of [REDACTED] each, commencing in December 2019 and continuing through and including March 2020 during the Delivery Period.</p> <p>(The Commodity Rate and the Call Payment components (each, as stated on a per MMBtu basis) are hereinafter collectively referred to as the "Contract Price" (per MMBtu)).</p> <p>[REDACTED]</p>
<p><b>Special Conditions:</b> ✓</p>	<ol style="list-style-type: none"><li>1. <b>Nominations:</b> All nominations for delivery of LNG to LNG Trucks shall be made by Buyer by providing notice to Seller not less than 48 hours prior to the Gas Day on which delivery of the LNG is requested.</li><li>2. <b>Dodd-Frank Compliance:</b> Each party represents and warrants that:<ol style="list-style-type: none"><li>(i) As of the date hereof, the party that is the offeree of this option represents that it is: (i) a producer, processor, commercial user of, or a merchant handling, the commodity that is the subject of this option, or the products or byproducts thereof; and (ii) entering into this option solely for purposes related to its business as such.</li><li>(ii) As of the date hereof, the party that is the offeror of this option represents that it is an Eligible Contract Participant (as that term is defined in section 1a(18) of the Commodity Exchange Act, as amended, and Commodity Futures Trading Commission Regulation 1.3(m)), or (i) a producer, processor, commercial user of, or a merchant handling, the commodity that is the subject of this option, or the products or byproducts thereof; and (ii) offering or entering into this option solely for purposes related to its business as such.</li><li>(iii) As of the date hereof, each party represents to the other that this option, if exercised, contains a binding obligation that results in the sale of a non-financial commodity for immediate or deferred shipment or delivery.</li></ol></li><li>3. <b>Transportation of LNG:</b> Transportation of LNG from the LNG Terminal shall be scheduled solely by Buyer. All costs associated with such transportation, including any surcharges, shall be the responsibility of Buyer.</li><li>4. <b>Document Conflict:</b> In the event of a conflict between the terms and conditions of the (i) Transaction Confirmation, (ii) LNG Annex, (iii) Special Provisions, and (iv) Base Contract, the terms and conditions of the documents shall govern in the priority listed in this provision.</li><li>5. <b>Capitalized Terms:</b> Capitalized terms used herein and not</li></ol>

REDACTED

otherwise defined shall have the meaning set forth in the Base Contract, as amended by any Special Provisions and the LNG Annex.

All provisions contained or incorporated by reference in the NAESB-BASE CONTRACT FOR SALE AND PURCHASE OF NATURAL GAS dated as of December 19, 2011 between CONSTELLATION LNG, LLC (as assignee from ENGIE Gas & LNG LLC) and THE NARRAGANSETT ELECTRIC COMPANY D/B/A NATIONAL GRID, as amended, will govern this confirmation except as expressly modified herein. Any capitalized terms used herein and not defined shall have the meaning set forth in the Base Contract.

Please confirm that the foregoing correctly sets forth the terms and conditions of our agreement by returning via facsimile to the number 410-468-3540 to the attention of Operations Contract Administration.

We are pleased to have concluded this Transaction with you and look forward to your confirmation of this Transaction.

Regards,

CONSTELLATION LNG, LLC



By: *Jason Miller*  
Title: *SVP - Wholesale Trading*

*PM*

ACKNOWLEDGED AND AGREED:

THE NARRAGANSETT ELECTRIC COMPANY D/B/A NATIONAL GRID

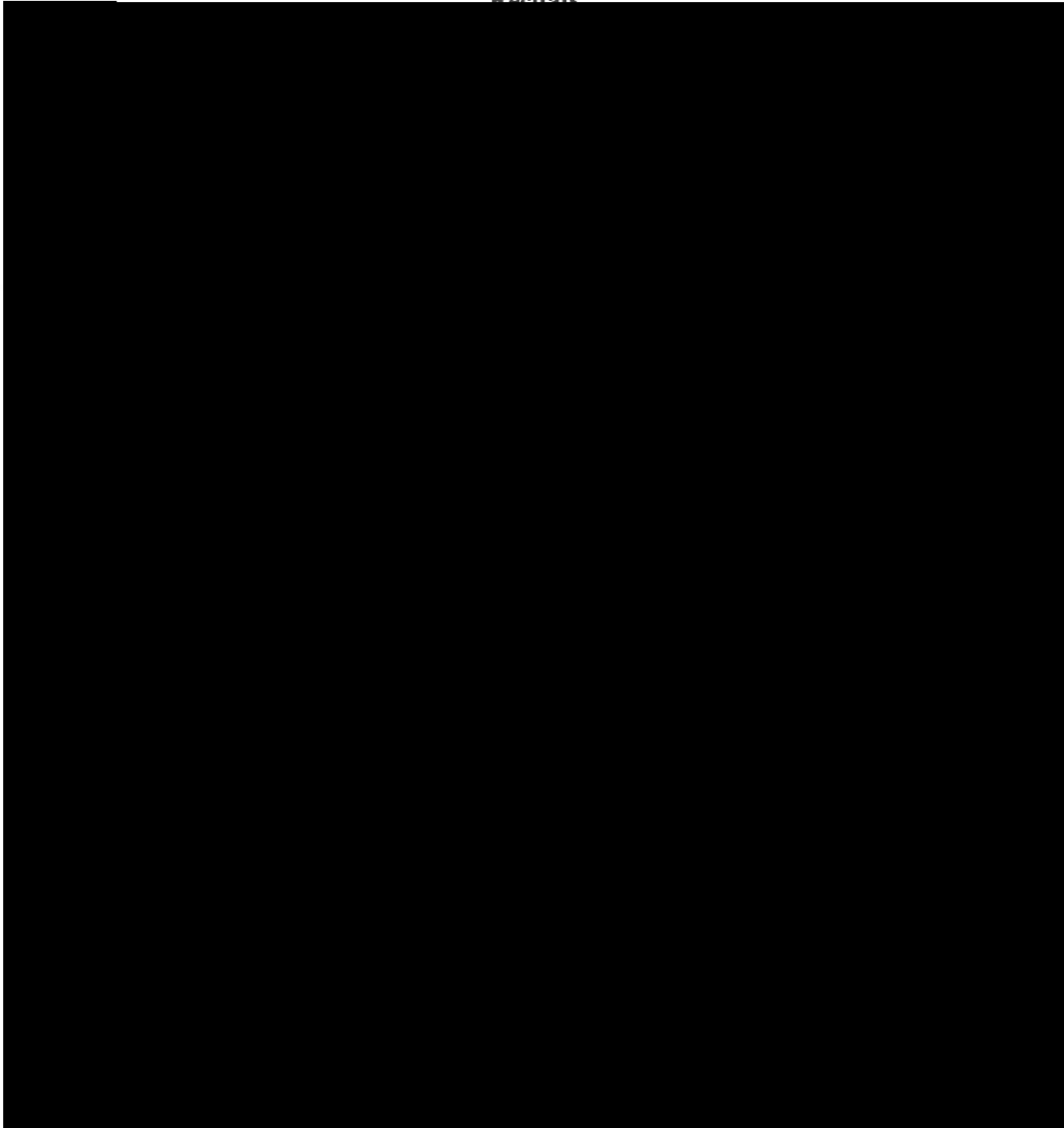


By: **Tatiana Gamarra**  
Title: **Authorized Signatory**

**Equipment Rental and Support Services Agreement**

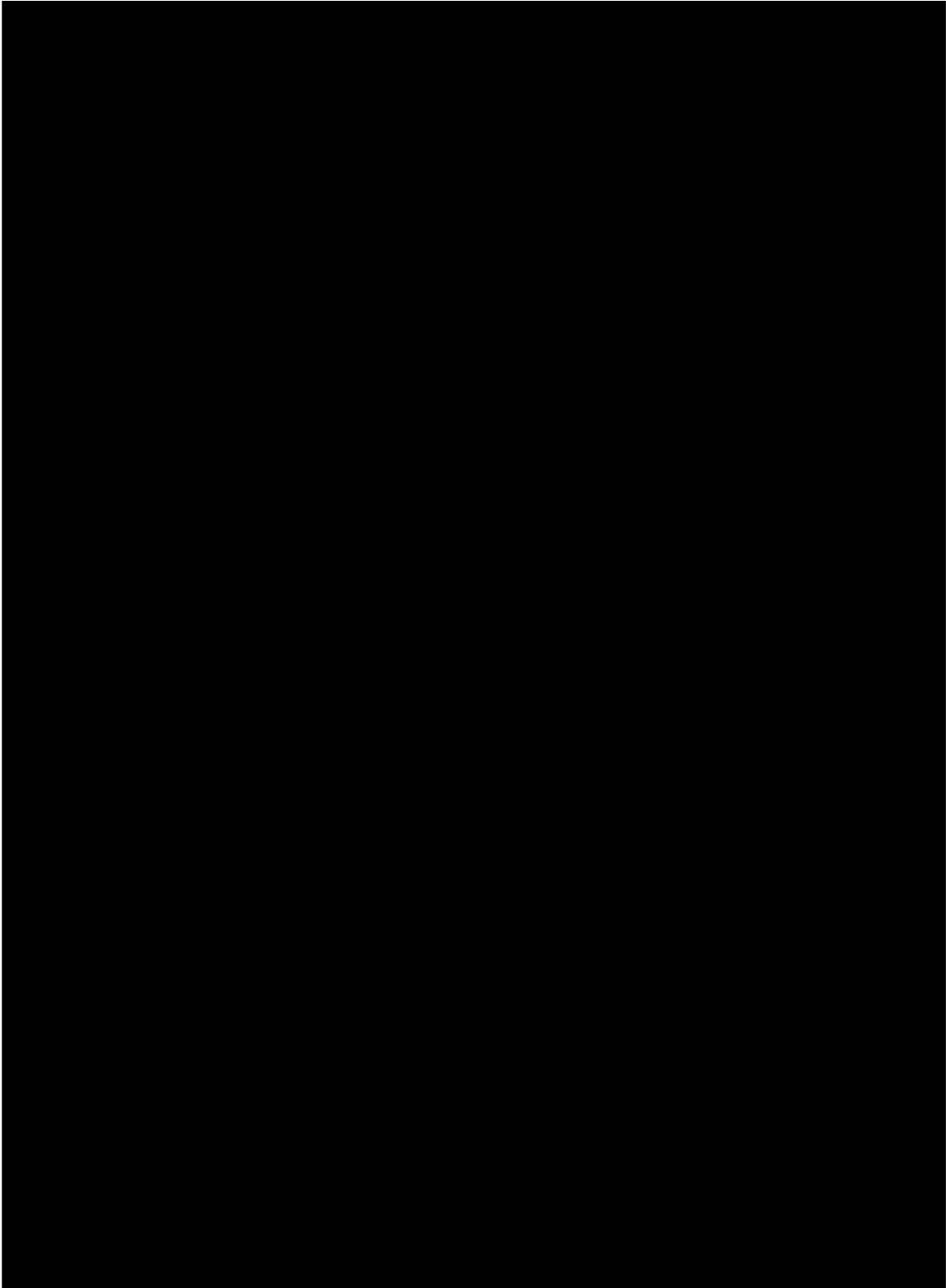
This Equipment Rental and Support Services Agreement (this “Agreement”) is entered into this 14<sup>th</sup> day of August 2019 (the “Effective Date”) by and between Prometheus Energy Group Inc., a Delaware corporation (“Prometheus”) and its affiliates, and The Narragansett Electric Company d/b/a National Grid (“Customer”). Prometheus and Customer are sometimes hereinafter referred to individually as “Party” and collectively as the “Parties”.

**Recitals**

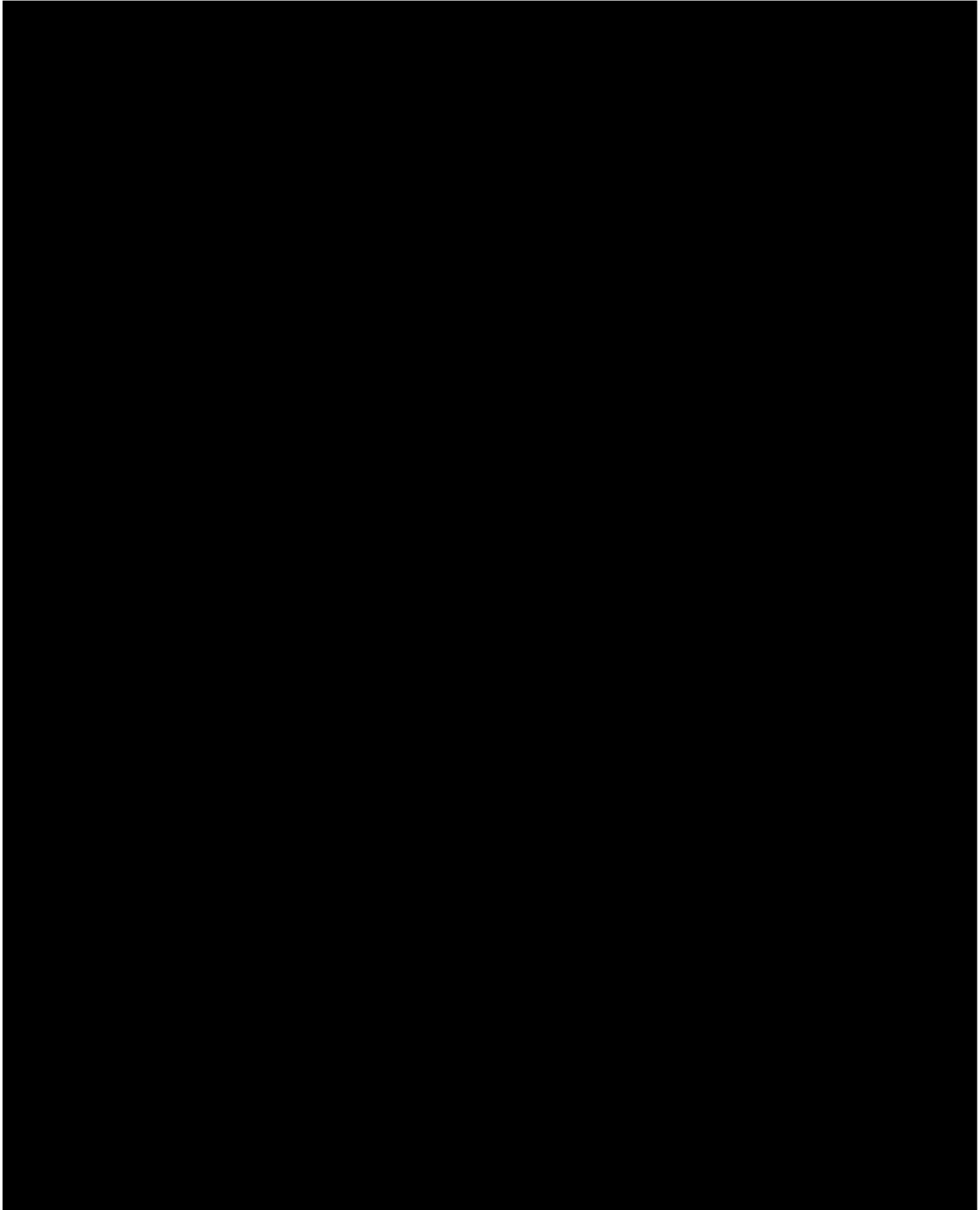




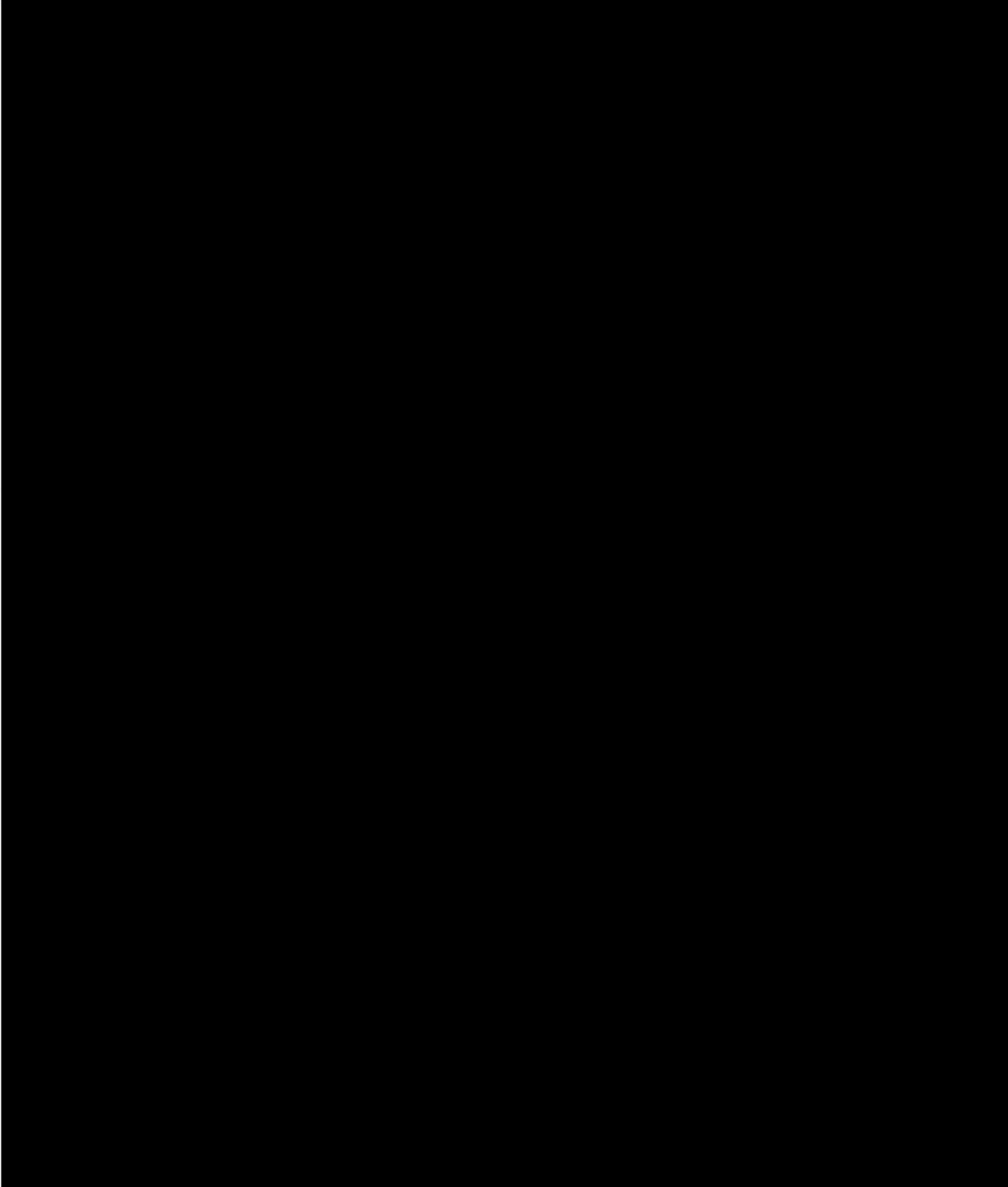
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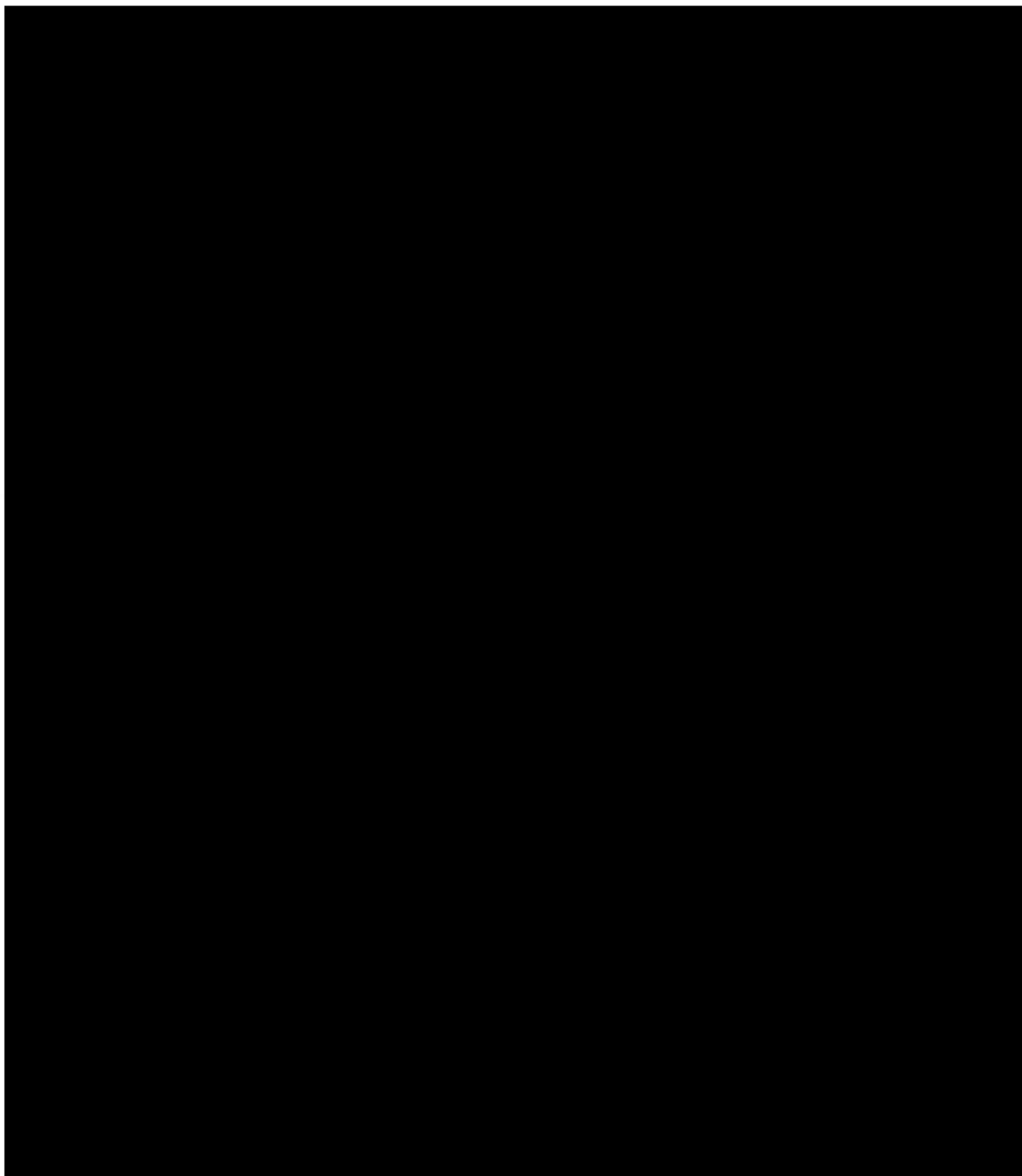
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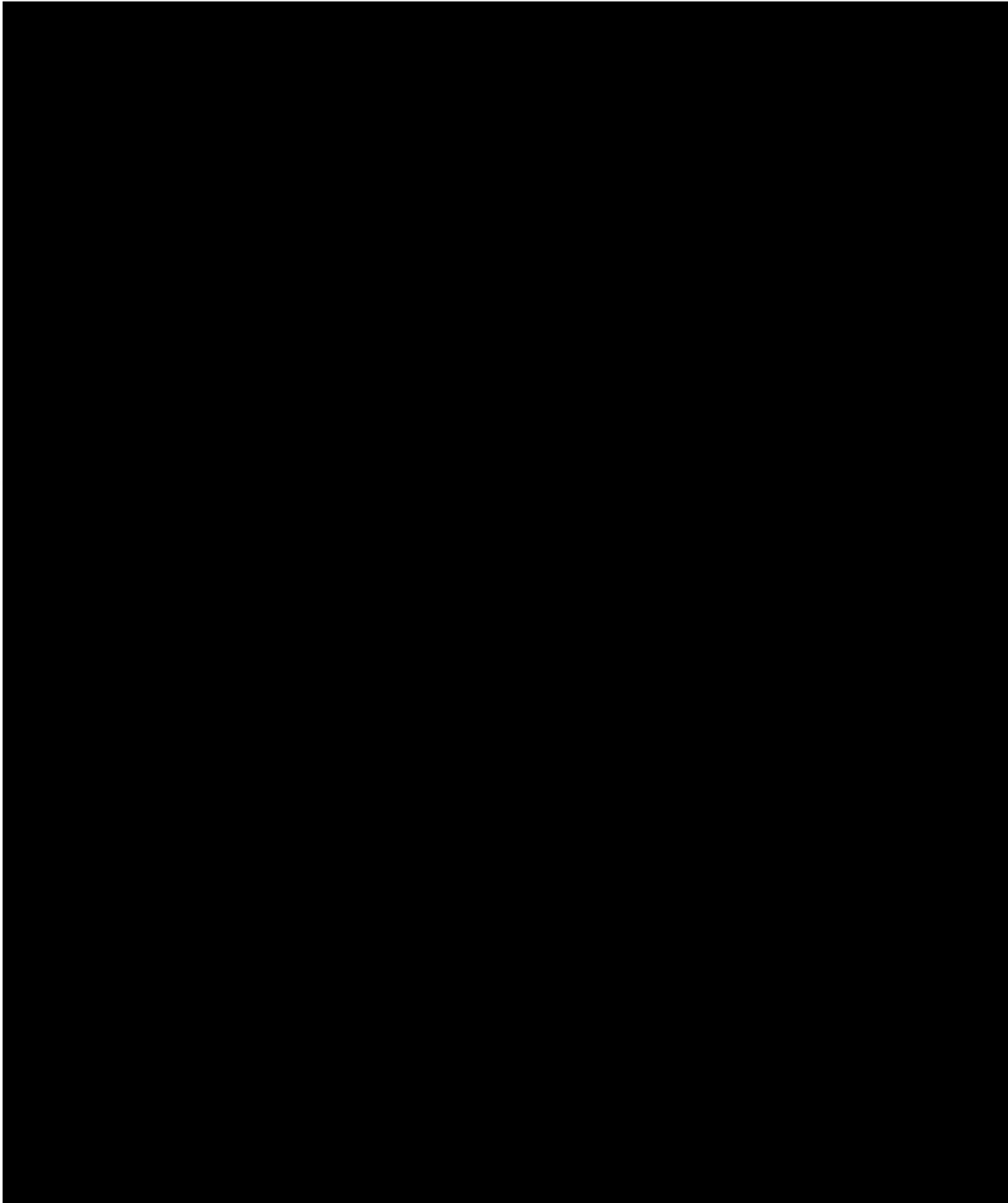
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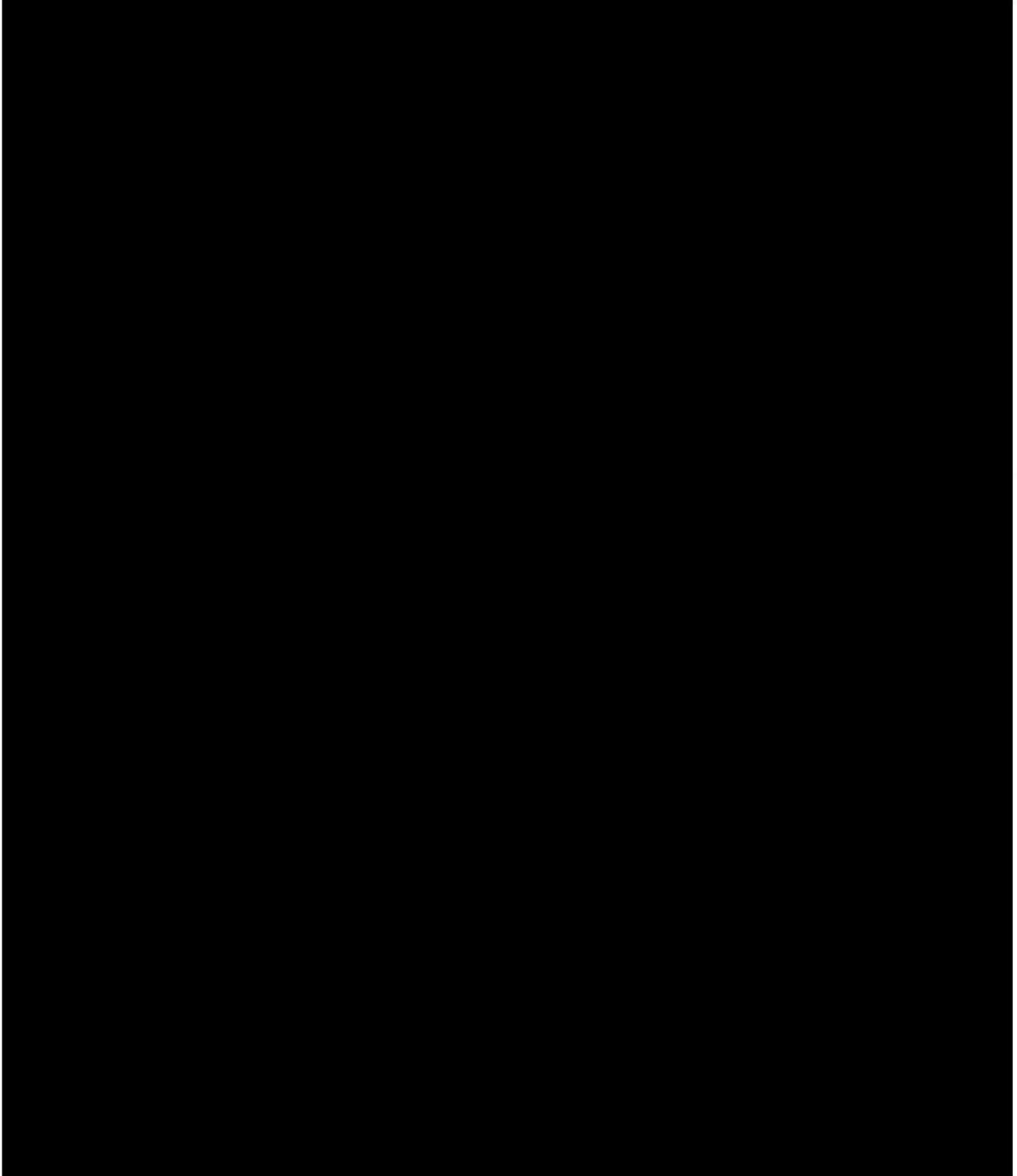
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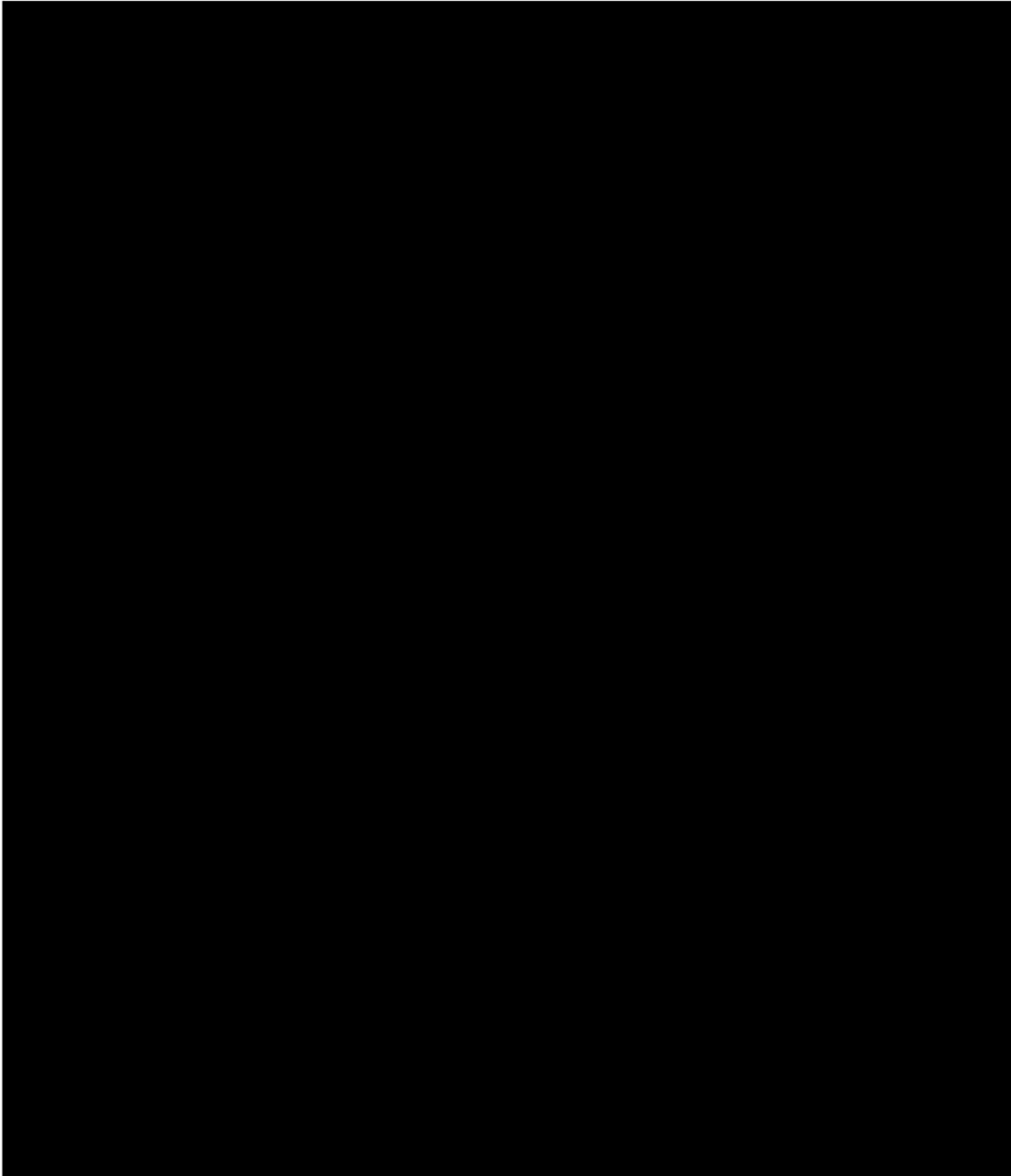
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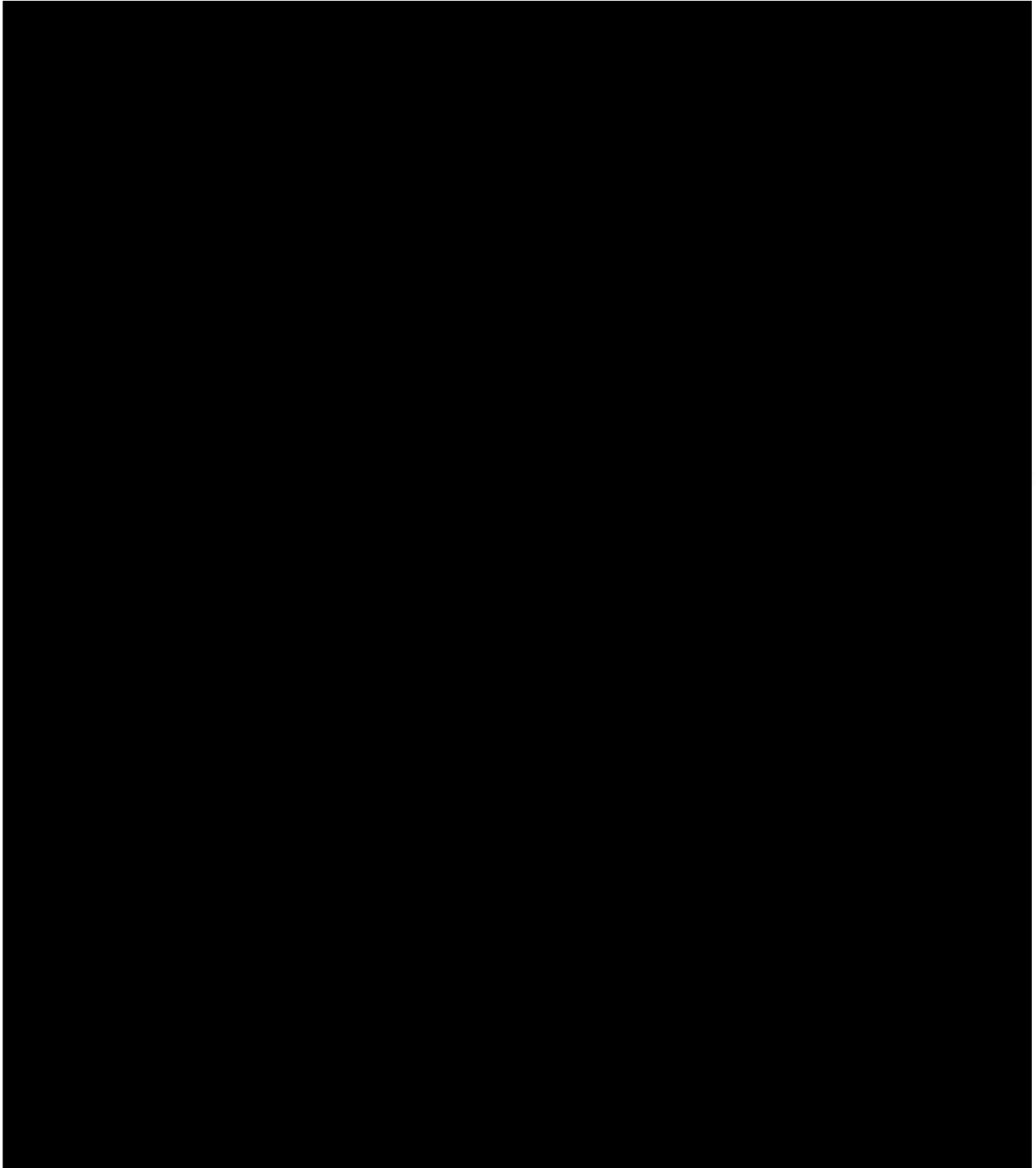
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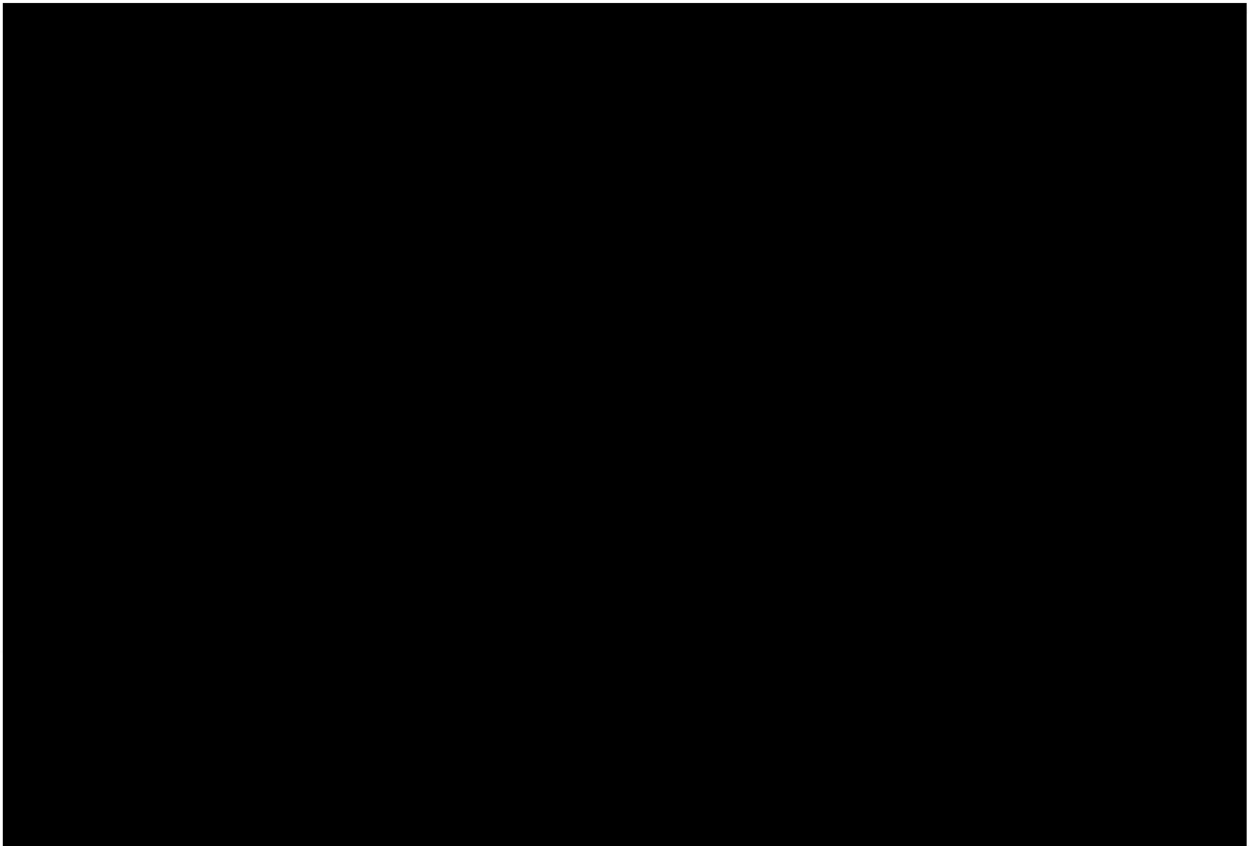


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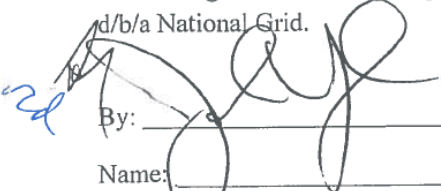


REDACTED



IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed on the date set forth above.

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

By:   
Name: John V. Vaughn  
Title: Authorized Signatory

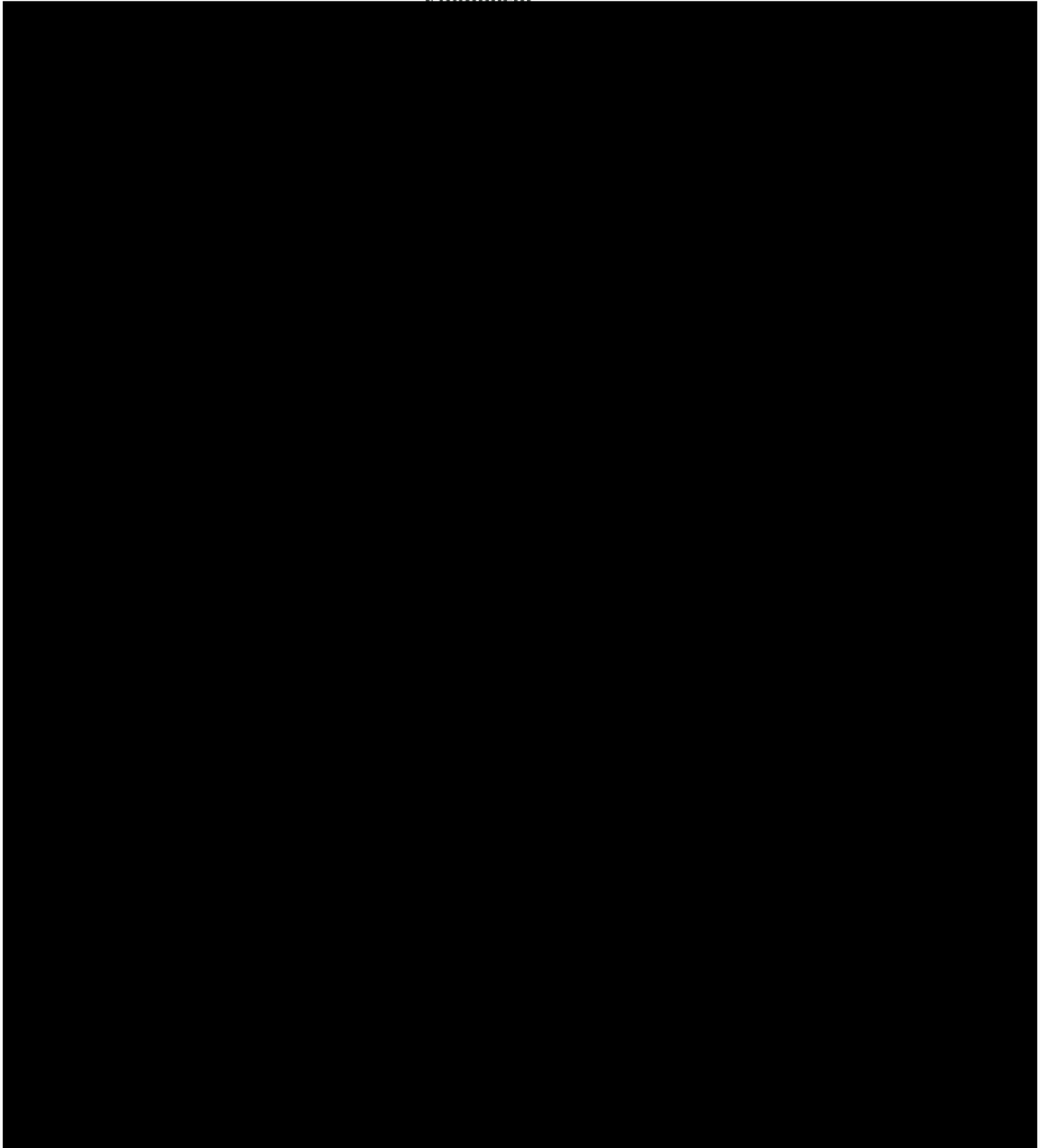
Prometheus Energy Group, Inc. & affiliates

By:   
Name: Jim Aivalis  
Title: COO

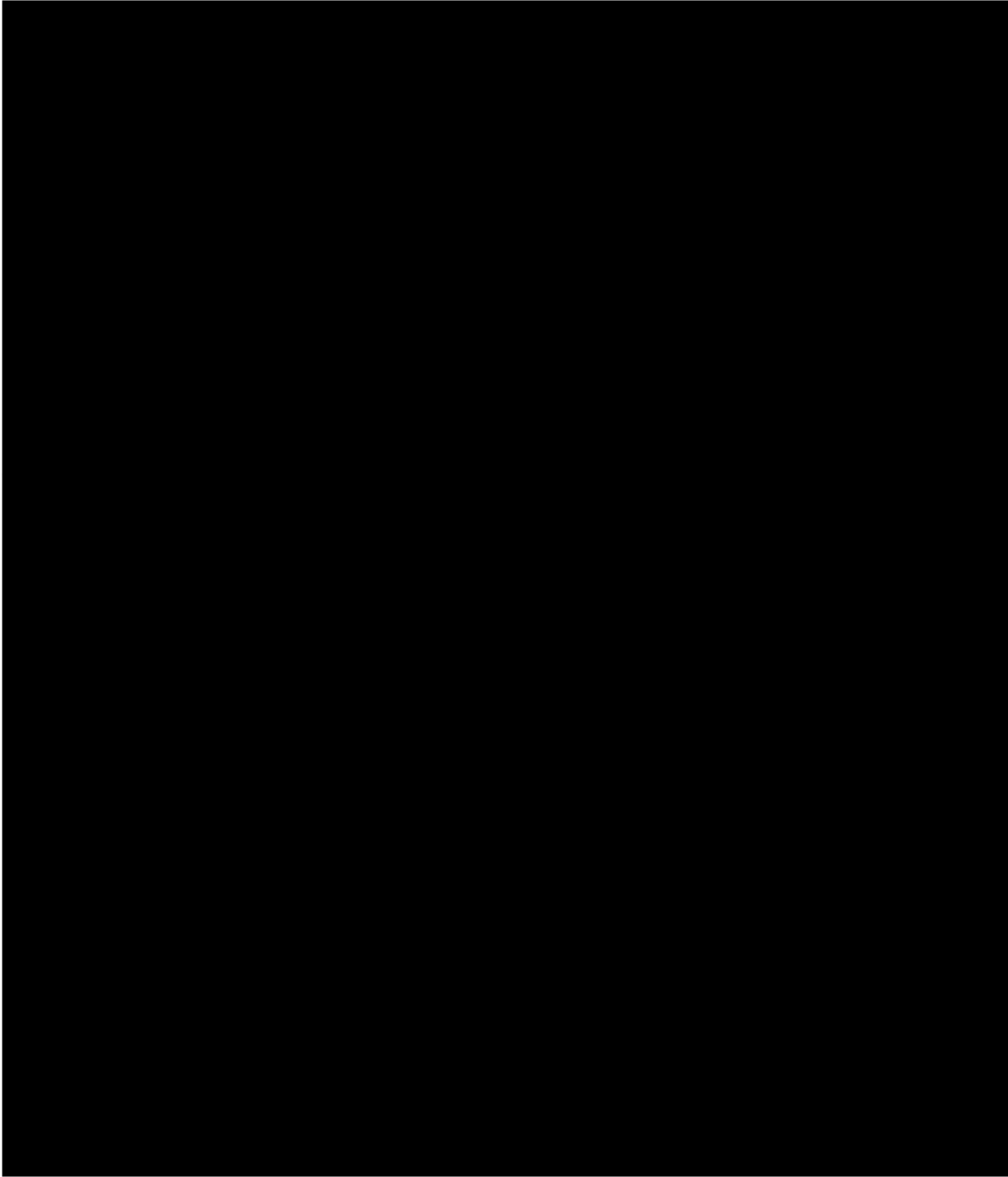
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Exhibit A

Equipment



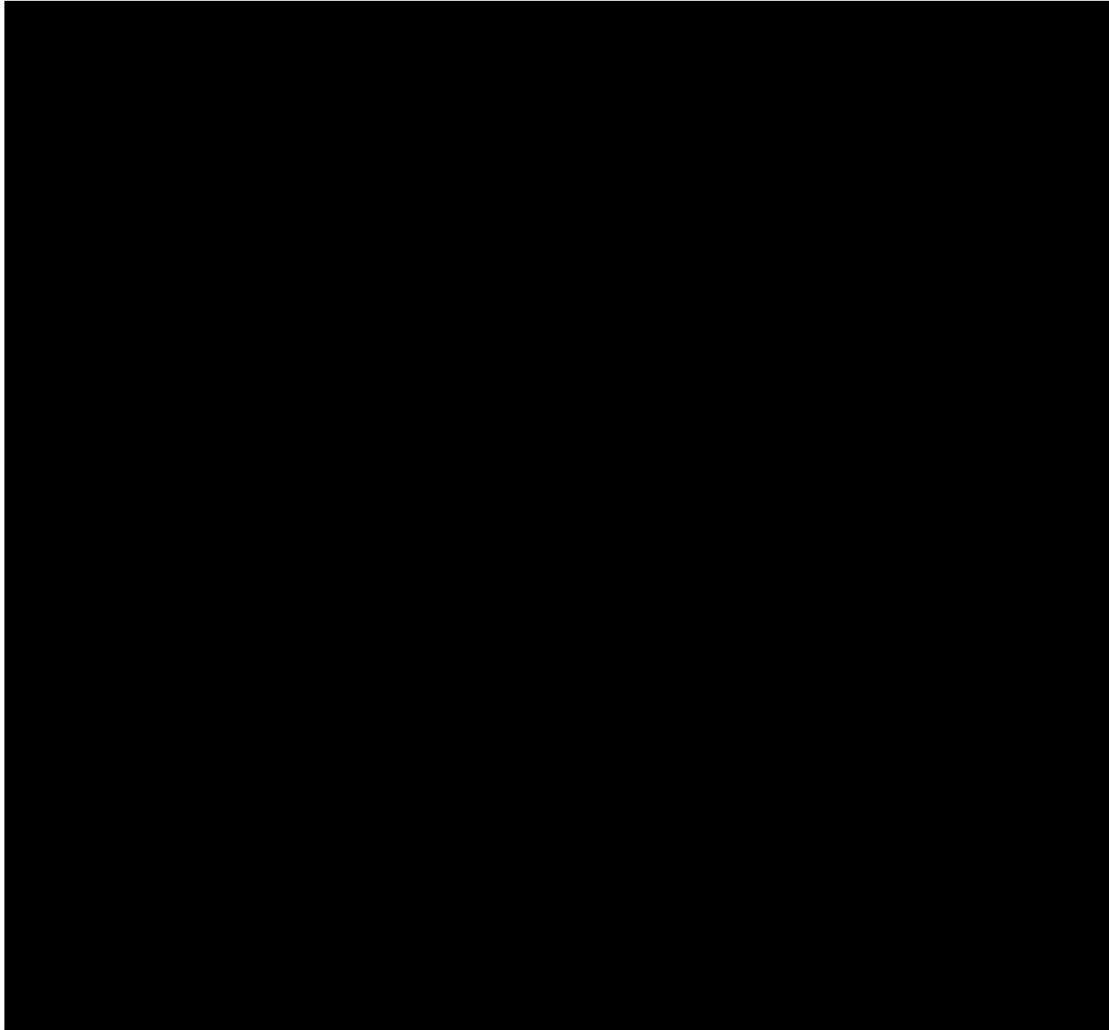
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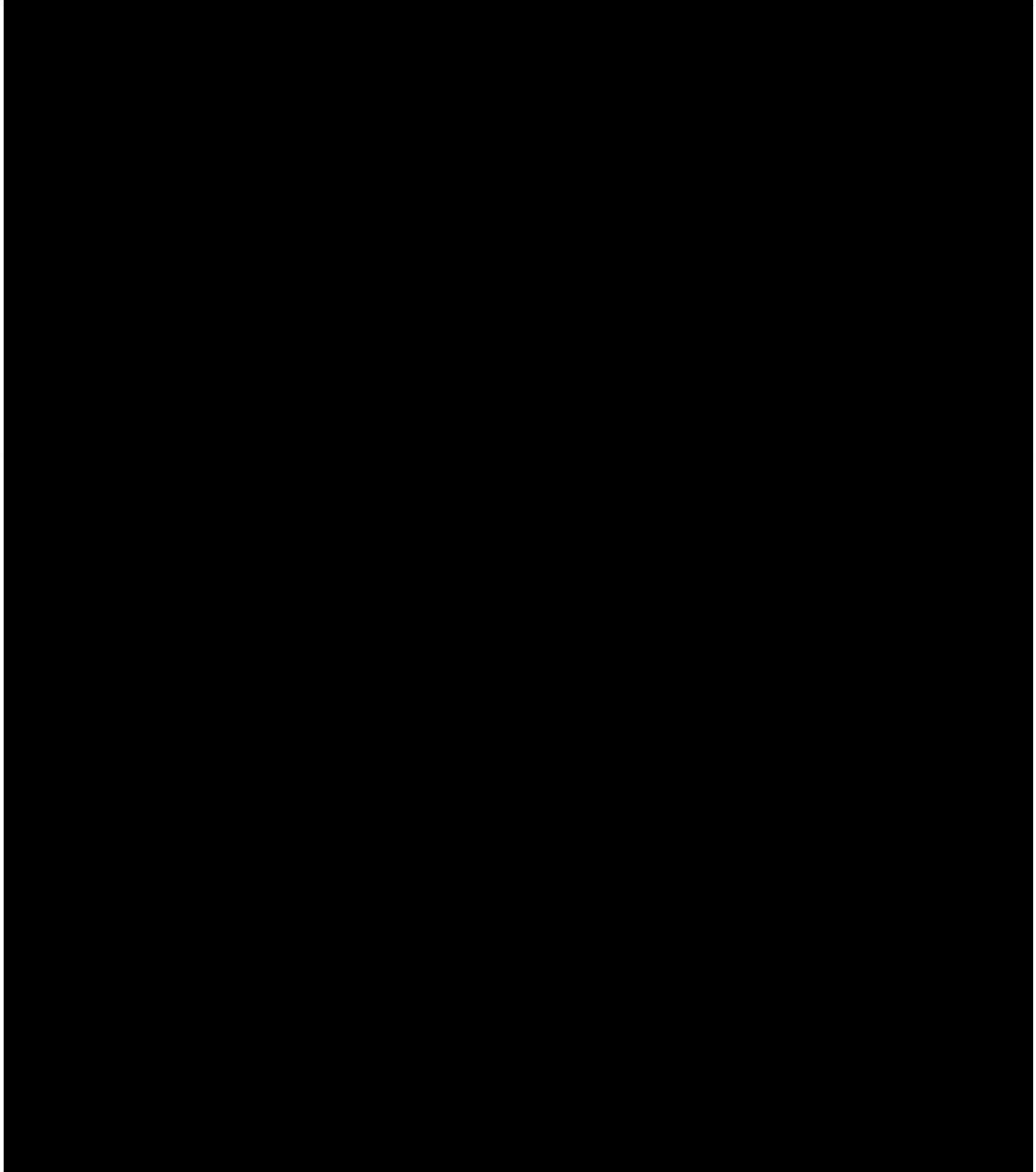
Exhibit B

Pricing



REDACTED

Exhibit C



REDACTED

EXHIBIT A

Transaction Confirmation  
For Immediate Delivery

GDF SUEZ GAS NA LLC	Date: April 1, 2015 Transaction Confirmation: NSB042-8
<p>This Transaction Confirmation is subject to the Base Contract between Seller and Buyer dated December 19, 2011. The terms of this Transaction Confirmation are binding unless disputed in writing within two (2) Business Days of receipt unless otherwise specified in the Base Contract.</p>	
<p><b>Seller or Party A:</b>  GDF SUEZ Gas NA LLC  20 City Square, Suite 3  Charlestown, MA 02129  Attn: Contract Administration  Telephone: (617) 886-8705  Facsimile: (617) 381-8605  Base Contract No.: NSB042</p>	<p><b>Buyer or Party B:</b>  The Narragansett Electric Company d/b/a National Grid  c/o National Grid  40 Sylvan Road, E3/606  Waltham, MA 02451  Attn: Director Gas Supply Planning  Telephone: (781) 907-1639  Electronic Mail: john.alloca@NationalGrid.com</p>
<p><b>Contract Price:</b> Buyer shall pay to Seller a Contract Price per MMBtu of LNG equal to the following two components:</p> <p>I. <b>Commodity Rate:</b> For each MMBtu of LNG delivered to Buyer during the Delivery Period, Buyer will pay to Seller a rate per MMBtu equal to [REDACTED]</p> <p>II. <b>Call Payment:</b> Additionally, for each Contract Season (as defined below) occurring during the Delivery Period, Buyer shall make a non-refundable call payment to Seller in the amount of [REDACTED] or Firm delivery of LNG as set forth herein ("Call Payment"). The Call Payment due and payable during each Contract Season shall be paid to Seller in eight (8) equal, consecutive, monthly installments of [REDACTED] each, commencing in April and continuing through and including November of each Contract Season.</p> <p>(The Commodity Rate and the Call Payment components (each, as stated on a per MMBtu basis) are hereinafter collectively referred to as the "Contract Price" (per MMBtu)).</p> <p>Notwithstanding the foregoing, if in the event of Force Majeure (as such event is defined in Section 5.7 of the LNG Annex) occurring on any Day during the Delivery Period Seller is unable to deliver the quantity of LNG nominated by Buyer, and as to which Buyer has made a Call Payment, then for each such Day of the period of Force Majeure (and Seller's failure to deliver), Seller shall refund to Buyer a pro rata portion of the Call Payment which shall be determined by multiplying the quantity of LNG nominated by Buyer but not delivered on each such Day by an amount equal to [REDACTED]</p> <p>III. <b>Quantity Reduction Credit:</b> In the event Buyer elects to decrease the total Contract Quantity in any each Contract Season (as set forth below), Seller shall pay to Buyer a monthly "Quantity Reduction Credit" equal to the following:</p> <p style="padding-left: 40px;">If positive, (Seventy-Five percent (75%) * Reduction Quantity) * (AGT Rate – Commodity Rate) / 8, where:</p> <p style="padding-left: 40px;">AGT Rate = the arithmetic average of the Midpoint price posted for Algonquin, city-gates, as published in the daily issue of <u>Platts Gas Daily</u> under the "Citygates" section of the "Daily Price Survey", for each Day of the Month.</p> <p style="padding-left: 40px;">The Quantity Reduction Credit shall be due to Buyer in accordance with Section 7 of the Base Contract, commencing in April and continuing through and including November of each such Contract Season where Buyer has elected to reduce such Contract Quantity.</p> <p>The term "Contract Season" shall mean each eight (8) month period occurring during the term of the Delivery Period under this Transaction Confirmation which commences on each April 1<sup>st</sup> of one calendar year and runs through and including each November 30th of the same calendar year, as follows:</p> <p>Contract Season 1: April 1, 2016, through and including November 30, 2016;  Contract Season 2: April 1, 2017, through and including November 30, 2017;  Contract Season 3: April 1, 2018, through and including November 30, 2018;</p>	

REDACTED

<p>Contract Season 4: April 1, 2019, through and including November 30, 2019; Contract Season 5: April 1, 2020, through and including November 30, 2020; Contract Season 6: April 1, 2021, through and including November 30, 2021; Contract Season 7: April 1, 2022, through and including November 30, 2022; Contract Season 8: April 1, 2023, through and including November 30, 2023; Contract Season 9: April 1, 2024, through and including November 30, 2024.</p>
<p><b>Delivery Period:</b> April 1, 2016, at 10:00 a.m. Eastern Time (ET) through and including December 1, 2024, at 9:59 a.m. ET.</p>
<p><b>Performance Obligation and Contract Quantity: Firm Liquid Service</b></p> <p><b>Firm (Variable) Quantity:</b> During each Contract Season, Seller agrees to sell and deliver and Buyer agrees to purchase and receive a quantity of LNG up to but not to exceed: (i) 4,000 MMBtu (up to 4LNG Trucks) of LNG per Day ("Maximum Daily Quantity" or "MDQ"); (ii) 73,000 MMBtu of LNG in any Month ("Monthly Maximum Quantity" or "MMQ"); and (iii) a total Contract Quantity for each Contract Season during the Delivery Period of 508,000 MMBtu of LNG, plus any additional quantities required to fill the final LNG Truck to capacity, subject to the following:</p> <p>[REDACTED]</p>
<p><b>Delivery Point(s):</b></p> <p>For Firm delivery service of LNG, at the truck loading flange of the Distrigas of Massachusetts LLC marine LNG terminal located in Everett, Massachusetts ("Facility"). Notwithstanding the foregoing, Seller hereby reserves its right to make deliveries to Buyer at Buyer's facilities.</p>
<p><b>Special Conditions:</b></p> <ol style="list-style-type: none"><li>1) The following is added as a new Section 2.41: "2.41. "Contract Week" shall mean a period of seven (7) days commencing on Monday at 10:00 a.m. ET and running through and including the following Monday, at 9:59 a.m. ET.</li><li>2) The following sections contained in the Special Provisions shall not apply to service under this Transaction Confirmation: Paragraph 3, Section 2.34; Paragraph 9, Section 3.4, and Paragraph 12, Section 10.2(x).</li><li>3) Section 4.1 of the LNG Annex is amended as follows: (i) Requests for delivery(ies) of LNG, including dispatch instructions, or variations in rate of delivery; and (ii) requests for delivery of LNG to LNG Trucks, shall be made by Buyer upon providing Notice to Seller not less than ten (10) Business Days prior to the commencement of such Month of delivery. Seller shall confirm Buyer's request(s) and provide to Buyer a schedule of deliveries, including quantities and dates of delivery within three (3) Business Days of receipt. Upon such confirmation, a "Nomination(s)" for LNG shall have occurred which shall also constitute a Firm obligation under the Base Contract. The schedule shall be mutually agreed to by the parties and may be adjusted by either party, upon providing Notice to the other party not later than Wednesday of each Contract Week in such Month of delivery.</li><li>4) Estimated Schedule of LNG Delivery(ies). Notwithstanding anything contained in Paragraph 3 herein, not less than thirty (30) Days prior to the commencement of each Contract Season during the Delivery Period, Buyer shall provide to Seller a schedule showing the estimated quantities of LNG to be taken in each Month of the current Contract Season during the Delivery Period. The schedule to be provided to Seller pursuant to this section shall not be binding on Buyer but rather shall serve as a guide to aid Seller in planning deliveries of LNG.</li><li>5) Option to defer a Firm Obligation: [REDACTED]</li></ol>

REDACTED

6) Transportation/Transportation Costs: The Parties shall use reasonable efforts to schedule deliveries during mutually agreeable times during Business Days. All costs associated with deliveries of LNG at the Facility shall be the responsibility of Buyer unless as otherwise provided for below.

I. Seller shall have the right to require Buyer to receive deliveries of LNG on at least four (4) Weekend Days during the Month (unless otherwise agreed to by the Parties). Such Weekend Day deliveries may be scheduled by either Party provided that (i) receipt of such Weekend Day deliveries of LNG will not operationally impact or constrain Buyer and (ii) either (a) Seller agrees to compensate Buyer for any agreed to incremental costs incurred by Buyer if transportation is scheduled by Buyer, or, (b) Buyer agrees to compensate Seller for costs as set forth in (III) below if transportation is scheduled by Seller. For purposes herein, a "Weekend Day" shall be any Saturday or Sunday of each Month (and which does not also constitute a Holiday).

II. Seller shall notify Buyer within forty-eight (48) hours of a scheduled delivery in the event Seller elects to make deliveries to Buyer at the facility(ies) so designated by Buyer at the time of scheduling. Any transporter retained by Seller to make deliveries of LNG to Buyer at Buyer's facilities must (i) be approved by Buyer, and (ii) abide by Buyer's safety requirements relating to LNG transportation services.

III. Transportation costs incurred by Seller in the event Seller arranges for transportation and makes deliveries of LNG to Buyer at Buyer's facilities on any Business or Weekend Day shall be paid for by Seller provided that Seller shall receive a credit equal to the lesser of: (i) \$0.55 per MMBtu, or (ii) the unit price that would have otherwise been paid by Buyer under its current trucking agreements for deliveries of LNG to its facility(ies). Upon request, Buyer shall provide documentation satisfactory to Seller to support Buyer's trucking costs.

7) Any reimbursement(s) due to Buyer and any credit(s) due to Seller, if any, incurred under this Transaction Confirmation shall be netted against Seller's invoice to Buyer in accordance with Section 7 of the Base Contract.

8) PUC Consent: The LNG service contemplated under this Transaction Confirmation is contingent upon receipt by Buyer of an indication of support from the Rhode Island Public Utilities Commission ("PUC"). Buyer shall use reasonable efforts to determine whether the PUC is supportive of this transaction on or before March 1, 2016. In the event that Buyer determines, in its sole discretion, the PUC is not supportive of this transaction, Buyer shall provide prompt notification to Seller. Upon such notification, this Transaction Confirmation shall be immediately cancelled and rendered null and void. Each Party shall be released and discharged from any further rights, liabilities and obligations to the other Party with respect to this Transaction Confirmation as of such date of termination. In the event this Transaction Confirmation is cancelled and rendered null and void as a result of lack of support from the PUC, the Parties agree to use good faith efforts to timely negotiate a replacement Transaction Confirmation for the LNG services contemplated herein.

9) Dodd-Frank Reporting: The parties agree that service under this Transaction Confirmation represents a Commodity Trade Option, meaning a "commodity option" as defined in CFTC Regulation 1.3(hh) entered into pursuant to CFTC Regulation 32.3 (a), and as of the Trade Date:

(i) Seller is: (1) a producer, processor, commercial user of, or a merchant handling, the commodity that is the subject of the Commodity Trade Option, and (2) entering into the Commodity Trade Option solely for purposes related to its business as such;

(ii) Buyer is: (1) a producer, processor, commercial user of, or a merchant handling, the commodity that is the subject of the Commodity Trade Option, and (2) entering into the Commodity Trade Option solely for purposes related to its business as such; and

(iii) Each party represents to the other party the Commodity Trade Option, if exercised, contains a binding obligation that results in the sale of an "exempt commodity" as defined in Section 1a(20) of the CEA for immediate or deferred shipment or delivery.

Seller shall report this Commodity Trade Option pursuant to the Form TO under the CFTC Regulations and Buyer will report



REDACTED

everything that is required to be reported by it under CFTC Regulation Part 32.

Each party agrees to promptly provide the other party with any information reasonably requested by the other party to enable such other party to comply with Title VII of the Dodd-Frank Wall Street Reform and Consumer Protection Act and CFTC Regulation in connection with this Commodity Trade Option.

10) This Transaction Confirmation No. NSB042-8 shall be executed simultaneously with that certain related Transaction Confirmation No. NSB042-7. Service hereunder is contingent upon the simultaneous execution of both Transaction Confirmation Nos. NSB042-7 and NSB042-8 by both Parties. In the event that both such Transaction Confirmations are not signed simultaneously by the Parties, this Transaction Confirmation No. NSB042-8 shall be immediately cancelled and rendered null and void without ever having been effected. Each Party shall be immediately released and discharged from any further rights, liabilities and obligations to each other with respect to this Transaction Confirmation as of such date of cancellation

11) Seller and Buyer acknowledge and agree that for purposes of LNG sales described in this Transaction Confirmation, the terms and conditions of the Base Contract, as modified and supplemented by the terms and conditions of the Special Provisions and the LNG Annex, shall govern all sales of LNG; provided however, that in the event of a conflict between the terms and conditions of (i) the Transaction Confirmation, (ii) the LNG Annex, (iii) the Special Provisions, and (iv) the Base Contract, the terms and conditions of the documents shall govern in the priority listed in this provision.

12) Capitalized terms used herein and not otherwise defined shall have the meaning set forth in the Base Contract, as amended by any Special Provisions, and the LNG Annex.

<b>Seller or Party A:</b>  GDF SUEZ Gas NA LLC By: <u>Francis J. Katulak</u> Name: Francis J. Katulak Title: President & CEO Date: April 8, 2015	<b>Buyer or Party B:</b>  The Narragansett Electric Company d/b/a National Grid By: <u>John V. Vaughn</u> Name: John V. Vaughn Title: Authorized Signator Date: 4/8/15
--	--

*cc SA*

*kw*      *Jaw-ERM*

REDACTED

Amendment ID # 3766  
(LTD CONTRACT ID # 4164)

1000006214

**AMENDMENT No. 1 To**

**TRANSACTION CONFIRMATION NSB042-8**

This Amendment No. 1 ("Amendment No. 1"), dated as of January 25, 2016, is made to that certain Transaction Confirmation NSB042-8, entered into by and between ENGIE Gas & LNG LLC, formerly known as GDF SUEZ Gas NA LLC ("Seller" or "Party A") and The Narragansett Electric Company d/b/a National Grid ("Buyer" or "Party B") and dated April 1, 2015 ("TC NSB042-8"). Seller and Buyer are collectively referred to herein as the "Parties."

**WHEREAS**, Seller and Buyer now wish to amend TC NSB042-8 as set forth herein.

**NOW, THEREFORE**, in consideration of the mutual covenants and agreements contained herein, Buyer and Seller agree to amend TC NSB042-8 as follows:

Effective as of the date hereof, Paragraph 8 contained in the Special Conditions section of TC NSB042-8 is hereby changed and amended by deleting the second and third sentences thereof in their entirety and replacing them with the following:

"Buyer shall use due diligence to obtain and provide satisfactory evidence of such regulatory approval for this Transaction Confirmation to Seller within two (2) Business Days of its receipt and not later than April 1, 2016. Notwithstanding the Delivery Period set forth herein, and subject to Buyer's nomination procedures set forth herein, services for deliveries of LNG hereunder shall not commence until such approval is received by Seller. In the event the DPU rejects Buyer's request and does not grant regulatory approval for the LNG services herein (and such satisfactory evidence of the DPU's rejection is provided to Seller within two (2) Business Days of issuance), or such regulatory approval by the DPU has not been granted by April 1, 2016, this Transaction Confirmation shall be immediately cancelled and rendered null and void."

**IN WITNESS WHEREOF**, the Parties have caused this Amendment No. 1 to be executed by their duly authorized representatives as of the date hereinabove written.

**ENGIE Gas & LNG LLC**

Signature: [Handwritten Signature]  
Name: Rudolph R. Adamiak  
Title: Senior Vice President

Digitally signed by  
Jane Willits  
DN: cn=Jane  
Willits, o=Engie,  
ou,  
email=jane.willits@gdfseznac.com,  
c=US  
Date: 2016.01.25  
12:36:37 -0600

**The Narragansett Electric Company d/b/a National Grid**

Signature: [Handwritten Signature]  
Name: John V. Vaughn  
Title: Authorized Signatory



REDACTED

Amendment ID# 3824 1000006546  
(LTD CONTRACT ID # 4164)

**Amendment No. 2  
to  
Transaction Confirmation No. NSB042-8**

This Amendment No. 2 ("Amendment No. 2"), dated as of March 24, 2016, is made to that certain Transaction Confirmation NSB040-5 dated as of April 1, 2015 ("TC-NSB042-8"), entered into by and between ENGIE Gas & LNG LLC, formerly known as GDF SUEZ Gas NA LLC ("Seller" or "Party A") and The Narragansett Electric Company d/b/a National Grid ("Buyer" or "Party B"). Seller and Buyer are collectively referred to herein as the "Parties."

**WHEREAS**, the Parties entered into that certain 2006 North American Energy Standards Board, Inc. ("NAESB") Base Contract for Sale and Purchase of Natural Gas effective as of December 19, 2011, as supplemented and modified by the Special Provisions dated as of December 19, 2011, the Liquefied Natural Gas Annex dated as of December 19, 2011, and this Transaction Confirmation No. NSB042-8 dated as of April 1, 2015, (together, the "NAESB Base Contract").

**WHEREAS**, Seller and Buyer have amended certain provisions contained TC NSB042-8 under that certain Amendment No. 1 dated as of January 25, 2016 (the NAESB Base Contract, and this Amendment No. 1, collectively hereinafter referred to as the "Base Contract"), and

**WHEREAS**, Seller and Buyer wish to further amend certain provisions contained in TC NSB042-8 as set forth herein.

**NOW, THEREFORE**, in consideration of the mutual covenants and agreements contained herein, Buyer and Seller agree to amend TC NSB042-8 as follows:

1. The first paragraph of Section II. Call Payment contained in the Contract Price section of TC NSB042-8 is hereby deleted in its entirety and replaced with the following language:

"II. Call Payment: Additionally, for Contract Seasons 2 through 5 (as defined below) occurring during the Delivery Period, Buyer shall make a non-refundable call payment to Seller in the amount of [REDACTED]

[REDACTED] for Firm delivery of LNG in each such Contract Season ("Call Payment"). The Call Payment due and payable during each of these Contract Seasons 2 through 5 shall be paid to Seller in eight (8) equal, consecutive, monthly installments of [REDACTED] each, commencing in April and continuing through and including November for each such Contract Season (2 through 5); provided, however, that for only Contract Season 1, Buyer shall pay to Seller a nonrefundable Call Payment in the amount of [REDACTED]

[REDACTED] The Call Payment due in Contract Season 1 shall be paid to Seller in six (6) equal, consecutive, monthly installments of [REDACTED] each and one (1) final payment of [REDACTED] commencing in May 2016 through and including November 2016 of Contract Season 1."



3824

REDACTED

2. The term "Contract Season" as it is contained in the Contract Price section of TC NSB042-8, is hereby deleted in its entirety and replaced with the following amended and modified definition:

"The term "Contract Season" shall mean each eight (8) month period occurring during the term of the Delivery Period under this Transaction Confirmation which commences on each April 1<sup>st</sup> of one calendar year and continues through and including each November 30<sup>th</sup> of the same calendar year; provided, however that Contract Year 1 shall commence on May 15, 2016, and continue through and including November 30<sup>th</sup> of the same contract year, as follows:

"Contract Season 1: May 15, 2016, through and including November 30, 2016;  
Contract Season 2: April 1, 2017, through and including November 30, 2017;  
Contract Season 3: April 1, 2018, through and including November 30, 2018;  
Contract Season 4: April 1, 2019, through and including November 30, 2019;  
Contract Season 5: April 1, 2020, through and including November 30, 2020."

"For the avoidance of doubt, Contract Seasons 6 through 9 as contained in the original Transaction Confirmation are hereby deleted in their entirety."

3. The Delivery Period contained in TC NSB042-8 is hereby deleted in its entirety and replaced with the following amended and modified period:

"May 15, 2016, at 10:00 a.m. Eastern Time (ET) through and including December 1, 2020, at 9:59 a.m. ET."

4. The first paragraph contained under the Performance Obligation and Contract Quantity section of TC NSB042-8 is hereby amended and modified as follows:

"For only Contract Season 1, the total Contract Quantity of LNG available to Buyer is reduced and restated from 508,000 MMBtu to 412,750 MMBtu, plus any additional quantities required to fill the final LNG Truck to capacity. For the avoidance of doubt, the MDQ and MMQ shall remain the same for Contract Season 1."

5. Paragraph 8 contained in the Special Conditions section of TC NSB042-8 is hereby further amended and modified by deleting the second and third sentences thereof in their entirety and replacing them with the following:

"Buyer shall use due diligence to obtain and provide satisfactory evidence of such regulatory approval for this Transaction Confirmation to Seller within two (2) Business Days of its receipt and not later than May 15, 2016. Notwithstanding the Delivery Period set forth herein, and subject to Buyer's nomination procedures set forth herein, services for deliveries of LNG hereunder shall not commence until such approval is received by Seller. In the event the DPU rejects Buyer's request and does not grant regulatory approval for the LNG services herein (and such satisfactory evidence of the DPU's rejection is provided to Seller within two (2) Business Days of issuance), or such

REDACTED

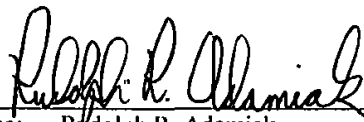


regulatory approval by the DPU has not been granted by May 15, 2016, this Transaction Confirmation shall be immediately cancelled and rendered null and void.”

6. Capitalized terms used herein but not otherwise defined in this Amendment No. 2 shall have the meaning ascribed to them in the Base Contract and TC NSB042-8, as amended.
7. Except as expressly amended, modified and supplemented herein, all of the terms and conditions of the Base Contract shall remain in full force and effect. In the event of a conflict between the terms and conditions of the Base Contract, and this Amendment No. 2, the terms and conditions of this Amendment No. 2 shall govern.

**IN WITNESS WHEREOF**, the Parties have caused this Amendment No. 2 to be executed by their duly authorized representatives as of the date hereinabove written.

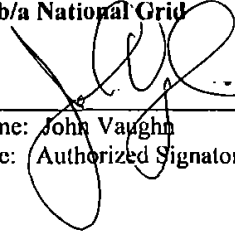
**ENGIE Gas & LNG LLC**

By:   
Name: Rudolph R. Adamiak  
Title: Senior Vice President

JSA

JAW-CRM

**The Narragansett Electric Company  
d/b/a National Grid**

By:   
Name: John Vaughn  
Title: Authorized Signatory

cc  
ja

REDACTED

**THIRD AMENDMENT TO TRANSACTION CONFIRMATION: NSB042-8**

This Third Amendment to Transaction Confirmation NSB042-8 ("Third Amendment") is made and entered into this 6th day of December, 2019, by and between The Narragansett Electric Company d/b/a National Grid ("Buyer") and Constellation LNG LLC ("Seller"). Buyer and Seller are sometimes collectively referred to herein as the "Parties" or individually as a "Party."

**WITNESSETH:**

WHEREAS, Buyer and ENGIE Gas & LNG LLC (f.k.a. GDF Suez Gas NA LLC) were parties to that certain Transaction Confirmation NSB042-8 dated as of April 1, 2015 as amended from time to time (the "Transaction Confirmation"), which was assigned by ENGIE Gas & LNG LLC to Seller effective October 1, 2018; and

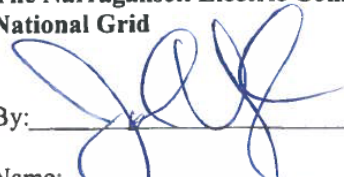
WHEREAS, the Parties desire to further amend the Transaction Confirmation as set forth below.

NOW, THEREFORE, in consideration of the mutual covenants and agreements herein contained and intending to be legally bound, Buyer and Seller agree as follows:

1. The "Contract Season" for Contract Season 4 is hereby extended from November 30, 2019 to and including December 6, 2019.
2. This Third Amendment may be executed in multiple counterparts, each of which shall be deemed an original, and all of which taken together shall constitute one and the same agreement. This Third Amendment may be executed and delivered by facsimile, electronic communication in portable document format (.pdf), or similar transmission. Any such facsimile or electronic signature shall have the same legal effect as manual signatures.
3. Except as amended herein, the Transaction Confirmation shall continue in full force and effect according to its original terms and conditions.

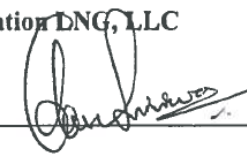
IN WITNESS WHEREOF, the Parties have caused their duly authorized representatives to execute this Third Amendment to Transaction Confirmation on the date first set forth above.

**The Narragansett Electric Company d/b/a  
National Grid**

By:   
Name: John V. Vaughn  
Title: Authorized Signatory



**Constellation LNG, LLC**

By:   
Name: Ravi Ganti  
Title: Vice President



REDACTED

Amendment ID # 4221  
LTD CONTRACT ID # 4164

Narragansett

**Prag, Janet A. (Marketing)**

**From:** Cahill, Edward <Edward.Cahill@na.engie.com>  
**Sent:** Tuesday, February 28, 2017 2:48 PM  
**To:** Jaffe, Samara A. (Marketing)  
**Cc:** Arangio, Elizabeth C. (Marketing); Allocca, John E. (Marketing); Papetti, Dino C. (Marketing); Spencer, Brian D. (Marketing); Prag, Janet A. (Marketing); Culliford, Nancy G. (Marketing); Guadagno, Sandra; Taake, Steven  
**Subject:** EXT || RE: Reduction Quantity Election Under each of NSB039-11, NSB040-5 and NSB042-8

TO00007155

Hi Samara

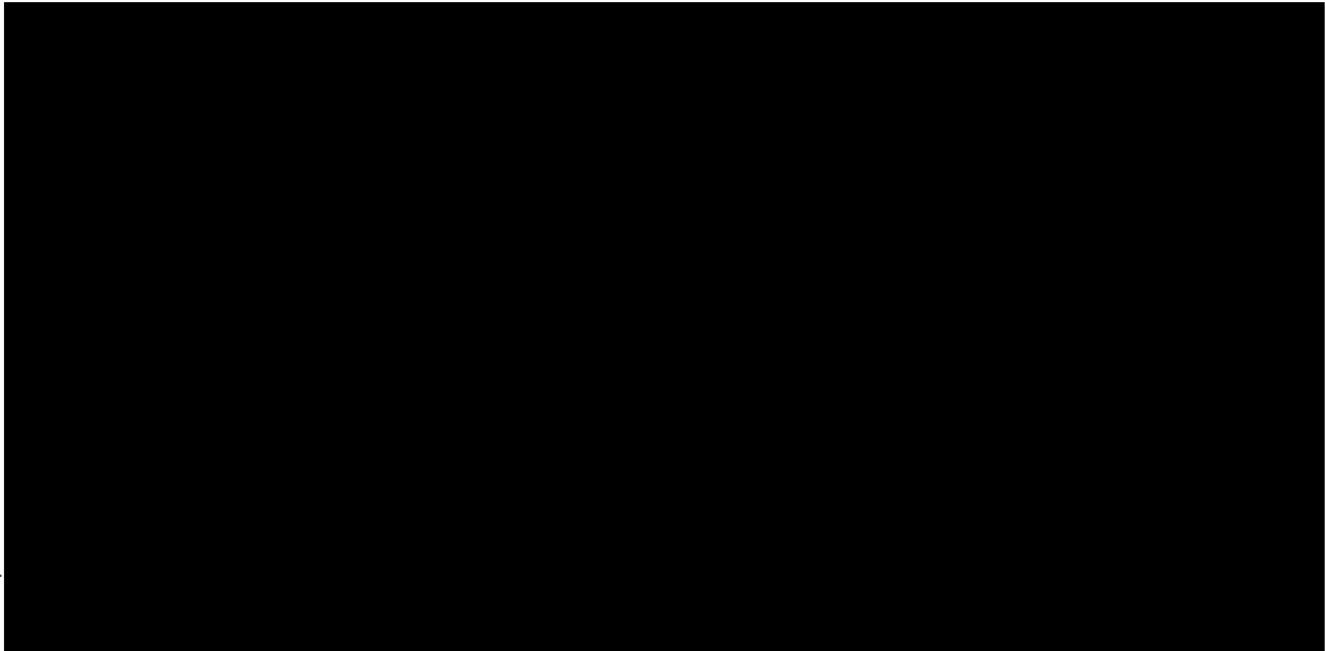
I have received your email regarding the Firm Liquid Service Reduction Quantity Election and will check the resulting MMQ's and MDQ's and revert shortly.

Thanks  
Ed

---

**From:** Jaffe, Samara A. (Marketing) [<mailto:Samara.Jaffe@nationalgrid.com>]  
**Sent:** Tuesday, February 28, 2017 2:40 PM  
**To:** Cahill, Edward  
**Cc:** Arangio, Elizabeth C. (Marketing); Allocca, John E. (Marketing); Papetti, Dino C. (Marketing); Spencer, Brian D. (Marketing); Prag, Janet A. (Marketing); Culliford, Nancy G. (Marketing); Guadagno, Sandra; Taake, Steven  
**Subject:** Reduction Quantity Election Under each of NSB039-11, NSB040-5 and NSB042-8  
**Importance:** High

Good afternoon Ed!



\*



Please confirm you are in agreement with the resulting MMQs and MDQs and contact me if you have any questions.

Thank you!

***Samara Jaffe***

**nationalgrid**

Program Manager- FERC Compliance & Contracting

100 E. Old Country Road

Hicksville, NY 11801

T: (516) 545-5408

C: (516) 418-9906

AIM: SamaraKeySpan

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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>



REDACTED

Contract ID # 1810

LNG003

SERVICE AGREEMENT  
(Applicable to Service Under Rate Schedule FST-LG)

T000000381

This Agreement, is made and entered into this 11<sup>th</sup> day of December, 1998, by and between Algonquin LNG, Inc., a Delaware corporation (hereinafter referred to as "ALNG") and Providence Gas Company a (hereinafter referred to as "Customer" whether one or more persons).

WHEREAS, Customer desires to obtain from ALNG firm storage service pursuant to the terms and conditions of ALNG's Rate Schedule FST-LG; and

WHEREAS, in order for ALNG to provide the firm service Customer desires ALNG must install certain additional facilities and in connection therewith Customer and ALNG have entered into a precedent agreement dated December 11, 1998 ("Precedent Agreement") to provide for certain terms and conditions related to the firm service to be provided pursuant to this Agreement; and

WHEREAS, pursuant to the terms and conditions of the Precedent Agreement and this Agreement ALNG desires to provide firm service to customer;

In consideration of the premises and of the mutual covenants herein contained, the parties do agree as follows:

ARTICLE I  
QUANTITY OF LNG TO BE STORED

Subject to the terms, conditions and limitations hereof and of ALNG's Rate Schedule FST-LG, ALNG agrees to:

- receive for Customer's account and inject into its storage facility liquefied natural gas ("LNG") in liquid form;
- store up to a maximum quantity at any one time of 600,000 Dth, to constitute Customer's Contract Storage Quantity ("CSQ"); and
- withdraw up to a Maximum Daily Withdrawal Quantity ("MDWQ") of 95,000 Dth/d of stored gas as requested by Customer and deliver it to Customer or for Customer's account.

REDACTED

**SERVICE AGREEMENT**  
**(Applicable to Service Under Rate Schedule FST-LG)**  
**(continued)**

**ARTICLE II**  
**TERM OF AGREEMENT**

2.1 This Agreement shall be effective as of the date first above written. Service under this Agreement shall commence on the date specified by ALNG in ALNG's written notification to Customer that all conditions precedent set forth in the Precedent Agreement have been satisfied or waived and that all necessary facilities are completed and available for service, which date will not be prior to November 1, 1999. After service commences under this Agreement, this Agreement shall continue in effect until and including May 1, 2009 ("Primary Term") and shall remain in force from year-to-year thereafter unless terminated by either party pursuant to Section 12 of the General Terms and Conditions; provided, however, that subject to twelve months prior written notice, Customer shall have the right to extend the term of this Agreement through and including May 1, 2019. In the event that the Precedent Agreement is terminated for any reason other than commencement of service pursuant to this Agreement, then service under this Agreement shall not commence and this Agreement shall be null and void.

**ARTICLE III**  
**RATE SCHEDULE AND ADJUSTMENTS**

3.1 Customer shall pay for all services rendered hereunder and for the availability of such service under ALNG's Rate Schedule FST-LG, as filed with the Federal Energy Regulatory Commission, and as the same may be hereafter revised or changed. The rate to be charged Customer for storage hereunder shall not be more than the maximum rate under Rate Schedule FST-LG, nor less than the minimum rate under Rate Schedule FST-LG.

Customer agrees that ALNG shall have the unilateral right to file with the appropriate regulatory authority and make changes effective in (a) the rates and charges applicable to service pursuant to ALNG's Rate Schedule FST-LG, (b) ALNG's Rate Schedule FST-LG, pursuant to which service hereunder is rendered or (c) any provision of the General Terms and Conditions applicable to Rate Schedule FST-LG. ALNG agrees that Customer may protest or contest the aforementioned filings, or may seek authorization from duly constituted regulatory authorities for such adjustment of ALNG's existing FERC Gas Tariff as may be found necessary to assure that the provisions in (a), (b), or (c) above are just and reasonable.

REDACTED

**SERVICE AGREEMENT**  
**(Applicable to Service Under Rate Schedule FST-IG)**  
**(continued)**

ARTICLE IV  
ADDRESSES

Except as herein otherwise provided, or as provided in the General Terms and Conditions of ALNG's FERC Gas Tariff, any notice, request, demand, statement, bill or payment provided for in this Agreement, or any notice which any party may desire to give to the other, shall be in writing and shall be considered as duly delivered when mailed by registered, certified, or first class mail to the post office address of the parties hereto, as the case may be, as follows:

- (a) Pipeline: Algonquin LNG, Inc.  
5400 Westheimer Ct.  
Houston, Tx 77056
  
- (b) Customer: Providence Gas Company  
100 Weybosset Street  
Providence, RI 02903

or such other address as either party shall designate by formal written notice.

ARTICLE V  
RATE SCHEDULES AND GENERAL TERMS AND CONDITIONS

This Agreement and all terms and provisions contained or incorporated herein are subject to the provisions of ALNG's applicable rate schedules and of ALNG's General Terms and Conditions on file with the Federal Energy Regulatory Commission, or other duly constituted authorities having jurisdiction, and as the same may be legally amended or superseded, which rate schedules and General Terms and Conditions are by this reference made a part hereof.

ARTICLE VI  
INTERPRETATION

The interpretation and performance of this Agreement shall be in accordance with the laws of the state of Rhode Island, excluding conflicts of law principles that would require the application of the laws of a different jurisdiction.

SERVICE AGREEMENT  
(Applicable to Service Under Rate Schedule FST-LG)  
(continued)

ARTICLE VII  
AGREEMENTS BEING SUPERSEDED

This Agreement shall supersede (as of the date of commencement of service hereunder as specified in ARTICLE II of this Agreement) the following agreements between the parties hereto for the storage of natural gas by ALNG for Customer:

Rate Schedule X-4, dated October 1, 1971, included in ALNG's FERC Gas Tariff, Fourth Revised Volume No. 2; and Rate Schedule FST-LG service agreement dated November 1, 1993.

REDACTED

SERVICE AGREEMENT  
(Applicable to Service Under Rate Schedule FST-LG)  
(continued)

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be signed by their respective agents thereunto duly authorized, the day and year first above written.

ALGONQUIN LNG, INC.

By: *J. J. McEllaney* *pmr*

Title: *VICE PRESIDENT*

PROVIDENCE GAS COMPANY

By: *James [unclear]* *[initials]*

Title: *Sr. V.P.*

REDACTED

Amendment ID # 597  
(LTD CONTRACT ID # 1810)



Gregory J. Rizzo  
Sr. Vice President  
Marketing & Capacity Management

Duke Energy Gas  
Transmission Corporation  
5400 Westheimer Ct. (6J70)  
Houston, TX 77056-5310

Mailing Address  
P.O. Box 1642  
Houston, TX 77251-1642  
(713) 627-4707 OFFICE  
(713) 627-4727 FAX  
gjrizzo@duke-energy.com

November 22, 2002

T000000395

New England Gas Company,  
Successor to Providence Gas Company  
100 Weybosset Street  
Providence, RI 02903  
Attn: Gary Beland, Director, Gas Supply

**Re: Amendment to discount agreement dated November 11, 1999**

Dear Gary:

Algonquin LNG, LP ("ALNG"), formerly Algonquin LNG, Inc., and New England Gas Company, successor to Providence Gas Company ("NEGCo"), are parties to that certain agreement (the "Discount Agreement") dated November 11, 1999, whereby ALNG agreed to charge NEGCo and NEGCo agreed to pay ALNG a discounted rate for service under Contract No. LNG003. ALNG and NEGCo desire to extend the Discount Term of the Discount Agreement as set forth herein. In consideration of the mutual covenants and agreements herein contained and other good and valuable consideration, ALNG and NEGCo hereby agree as follows:

1. The first sentence of the second paragraph of the Discount Agreement shall be revised as follows: "This Agreement shall become effective on the date upon which service under the Service Agreement commences and shall remain in effect through and including November 09, 2005."
2. Except as set forth in Paragraph 1 above, all other terms and conditions of the Discount Agreement shall remain unchanged.

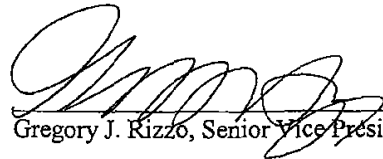
If the terms and conditions set forth herein are in accordance with your understanding of our agreement, please have a duly authorized officer execute both copies of this

Amendment to November 11, 1999 Discount Agreement  
November 22, 2002  
Page 2

Amendment to the Discount Agreement in the space provided below and return one fully executed original to ALNG.

Very truly yours,

ALGONQUIN LNG, LP  
By its General Partner  
Algonquin Energy, Inc.

  
\_\_\_\_\_  
Gregory J. Rizzo, Senior Vice President

ACCEPTED AND AGREED TO  
THIS \_\_\_\_ DAY OF NOVEMBER, 2002

**NEW ENGLAND GAS COMPANY,  
successor to PROVIDENCE GAS COMPANY**

By:  \_\_\_\_\_

Name: Sharon Partridge

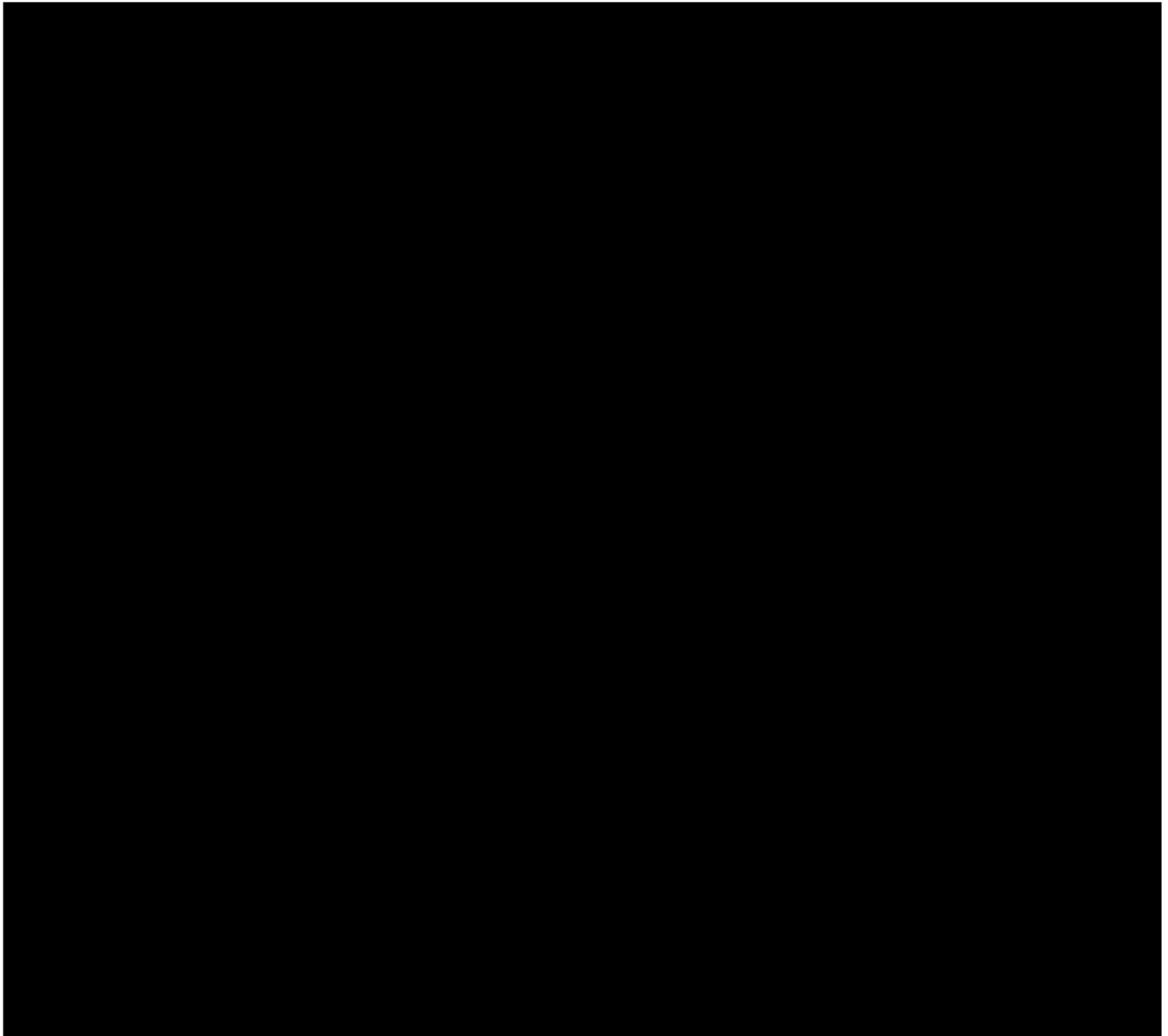
Title: Vice President Finance

LEGAL APPROVED AS TO FORM 

REDACTED

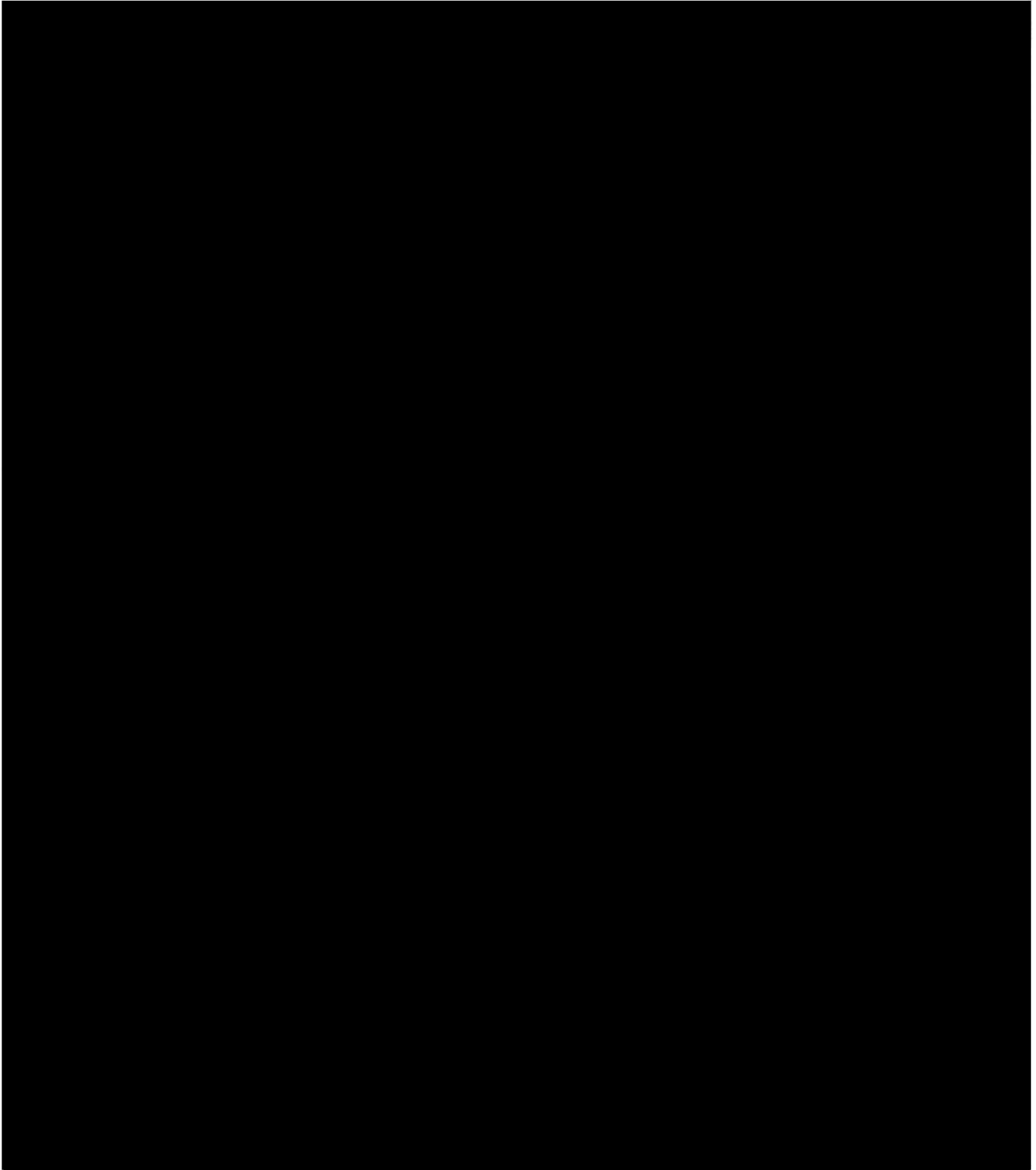
### **Equipment Rental and Support Services Agreement**

This Equipment Rental and Support Services Agreement (this “Agreement”) is entered into this 12<sup>th</sup> day of September, 2018 (the “Effective Date”) by and between Prometheus Energy Group Inc., a Delaware corporation (“Prometheus”), and The Narragansett Electric Company d/b/a National Grid (“Customer”). Prometheus and Customer are sometimes hereinafter referred to individually as “Party” and collectively as the “Parties”.

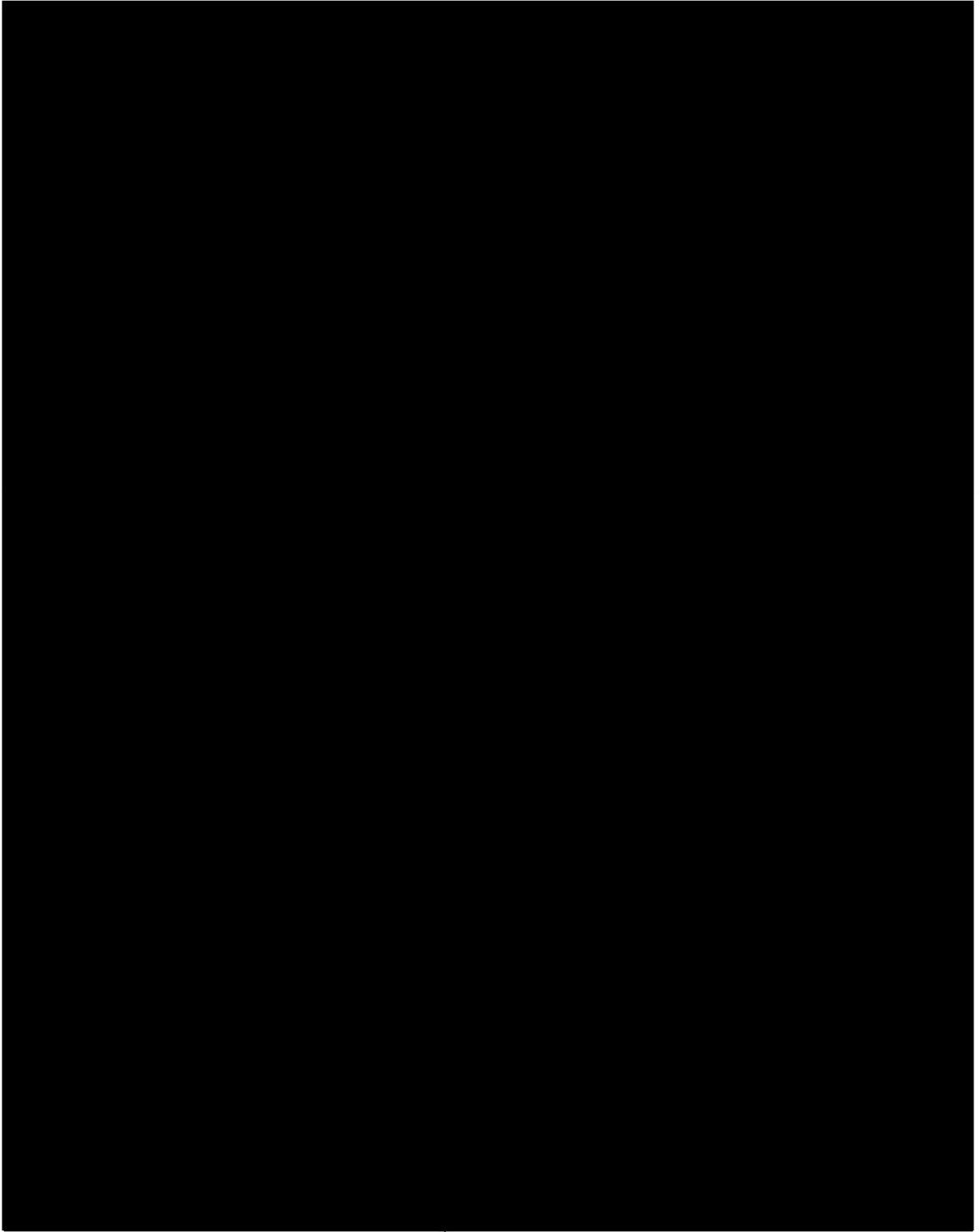




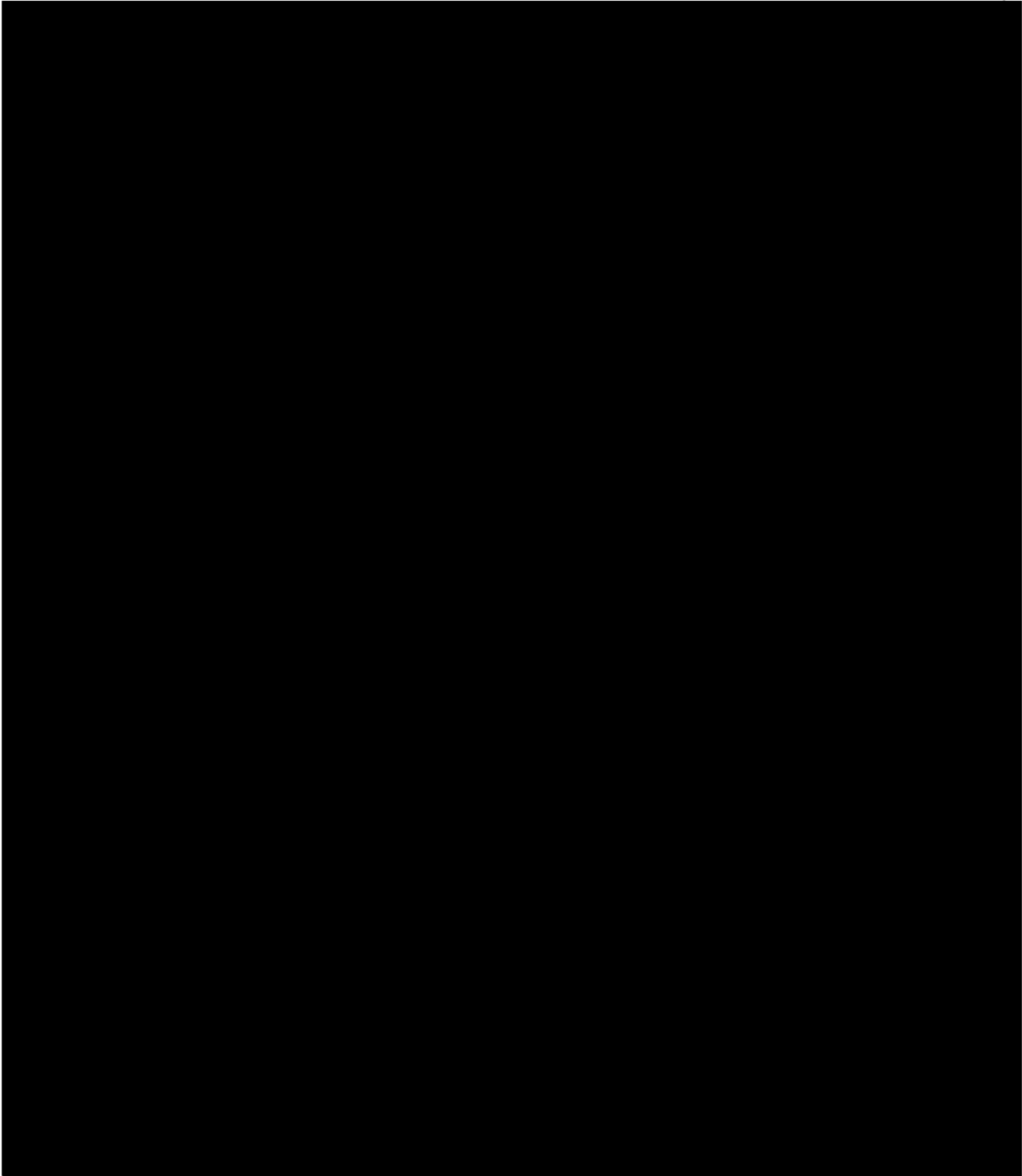
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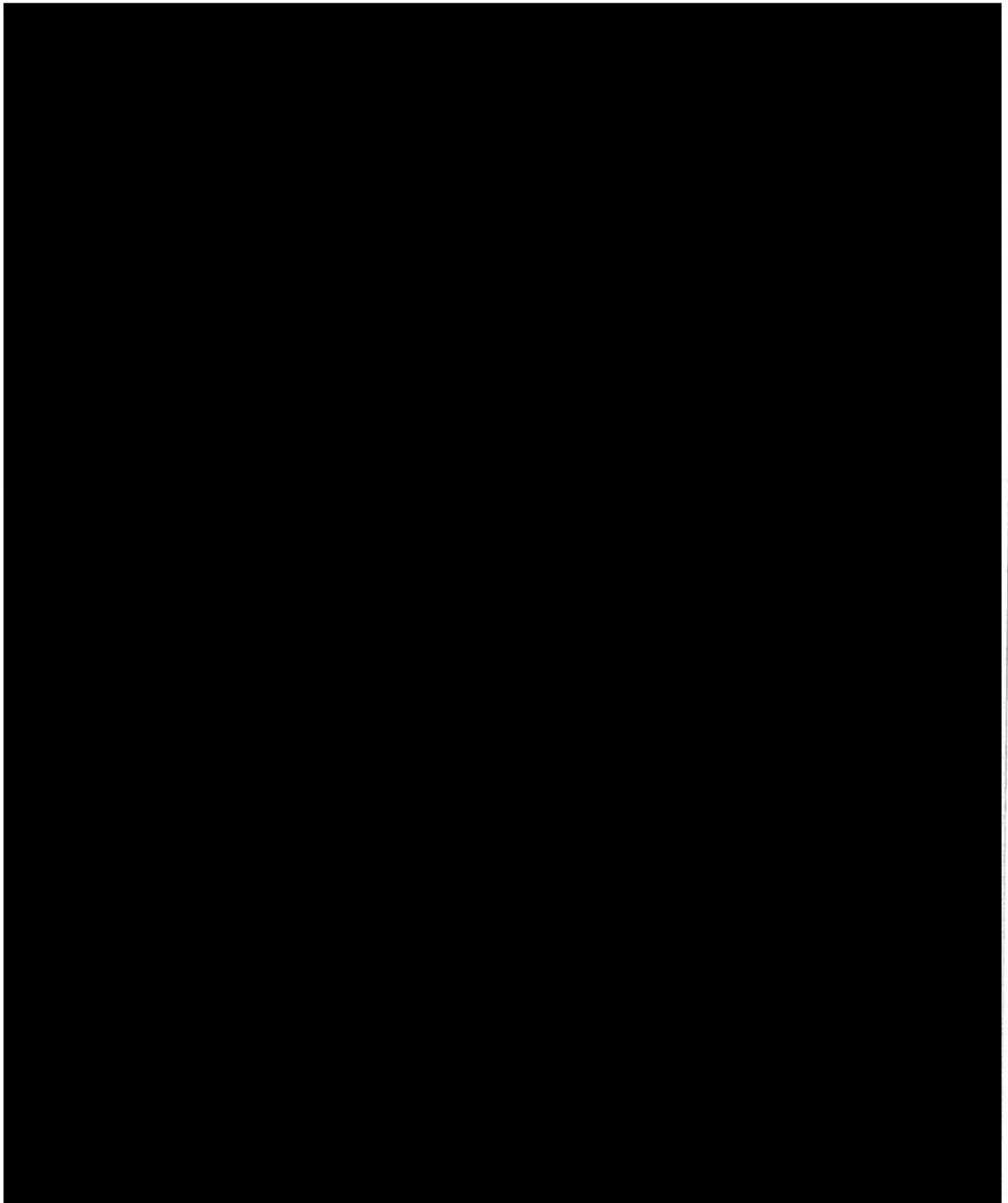
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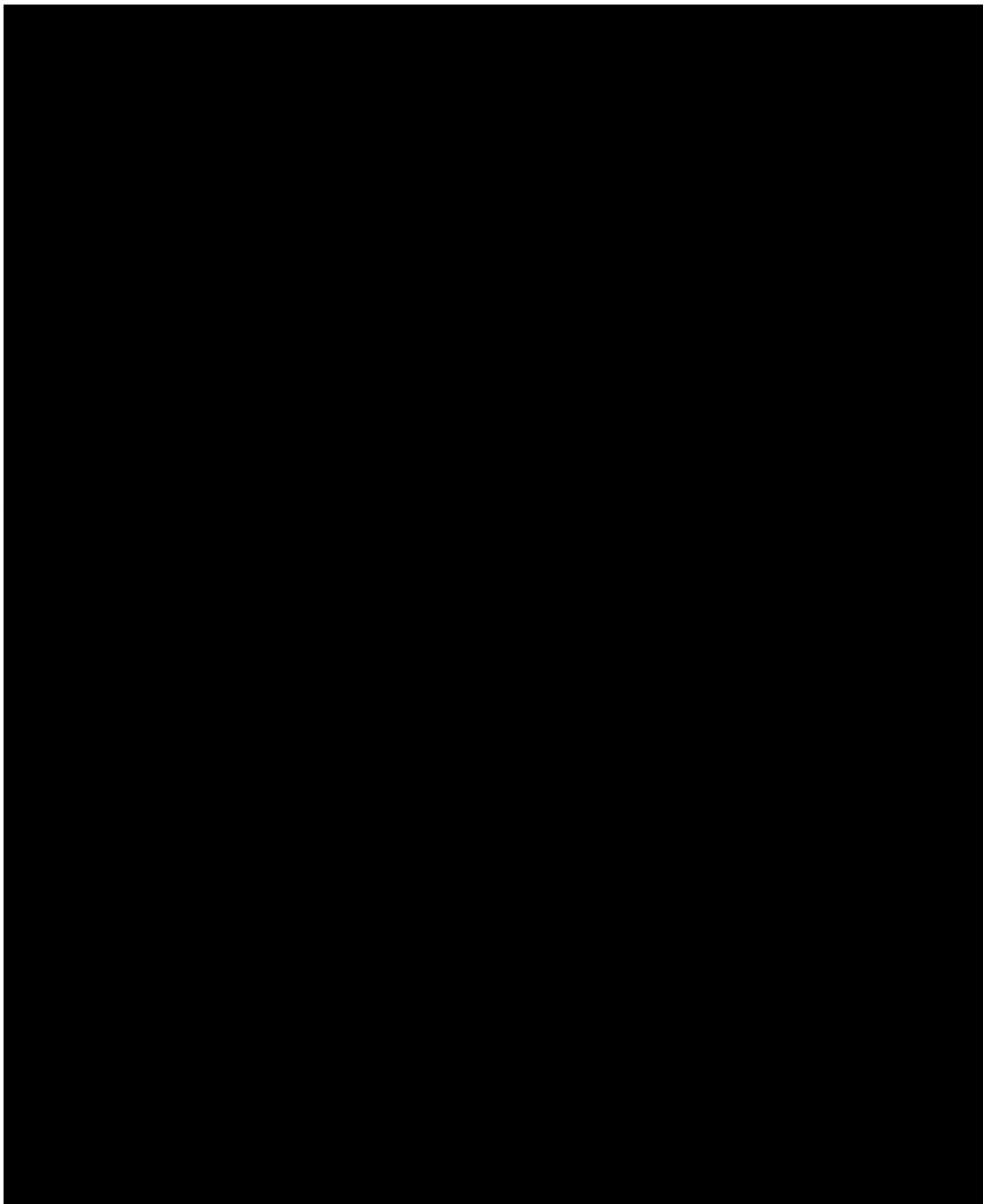
REDACTED



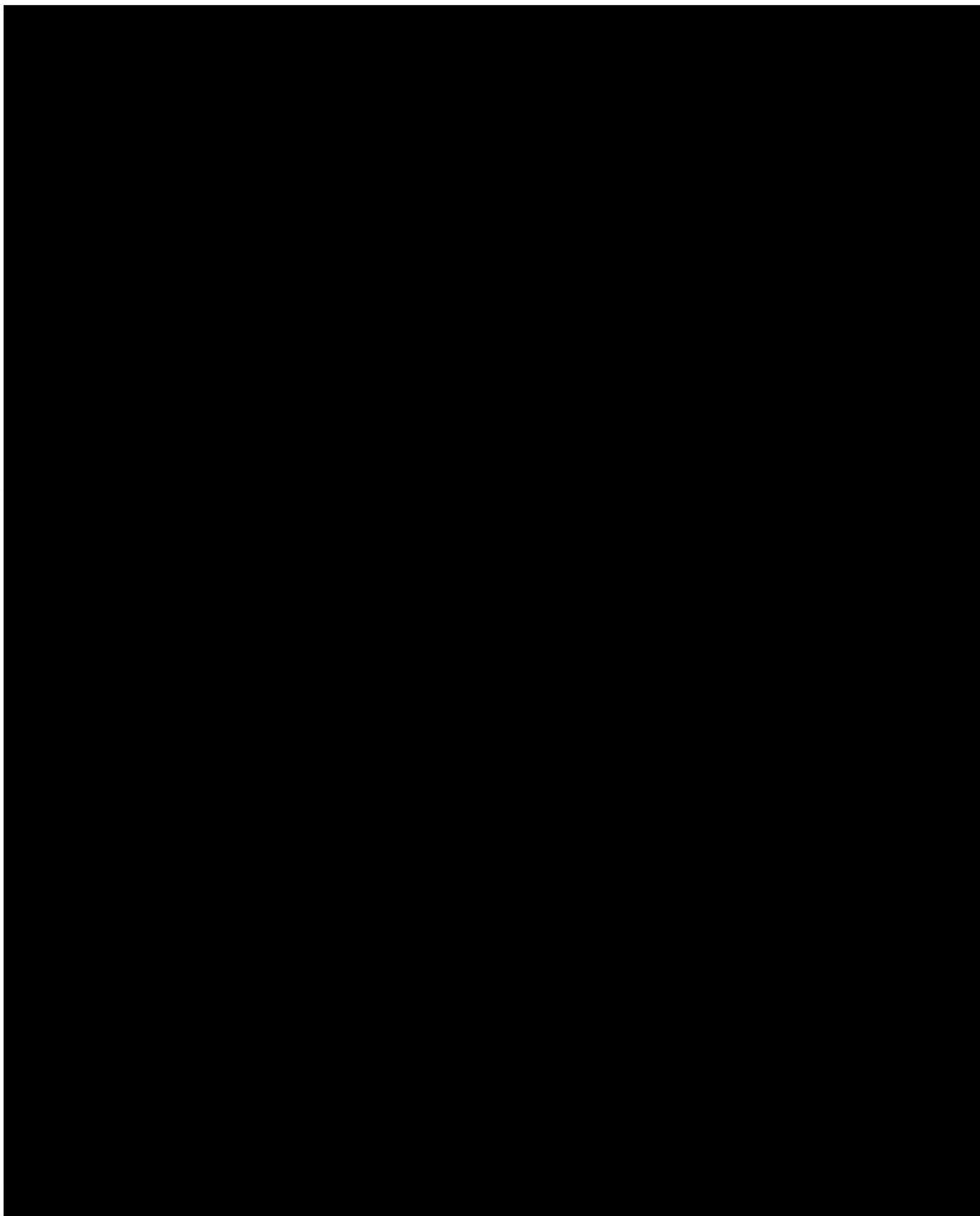
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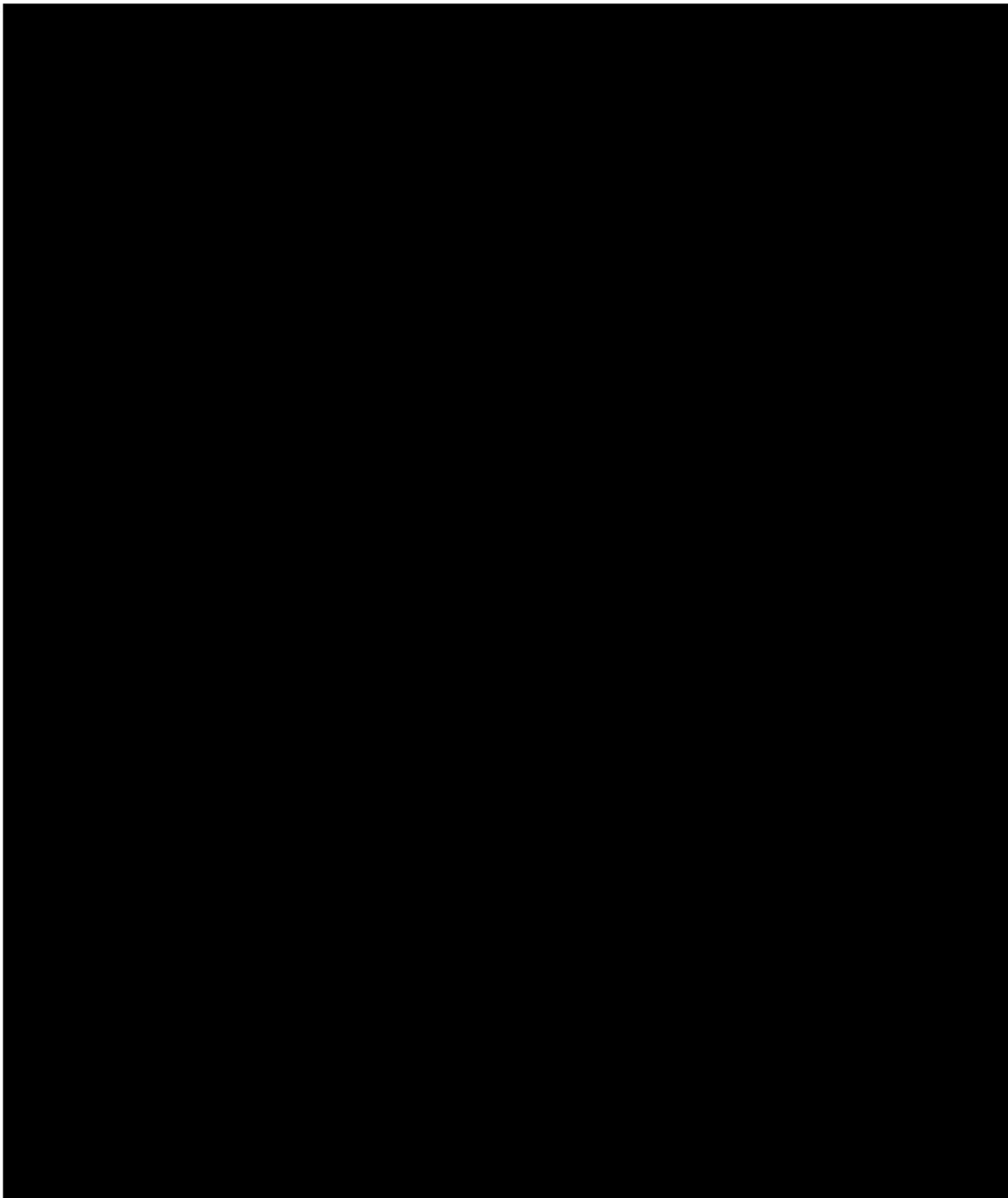
REDACTED



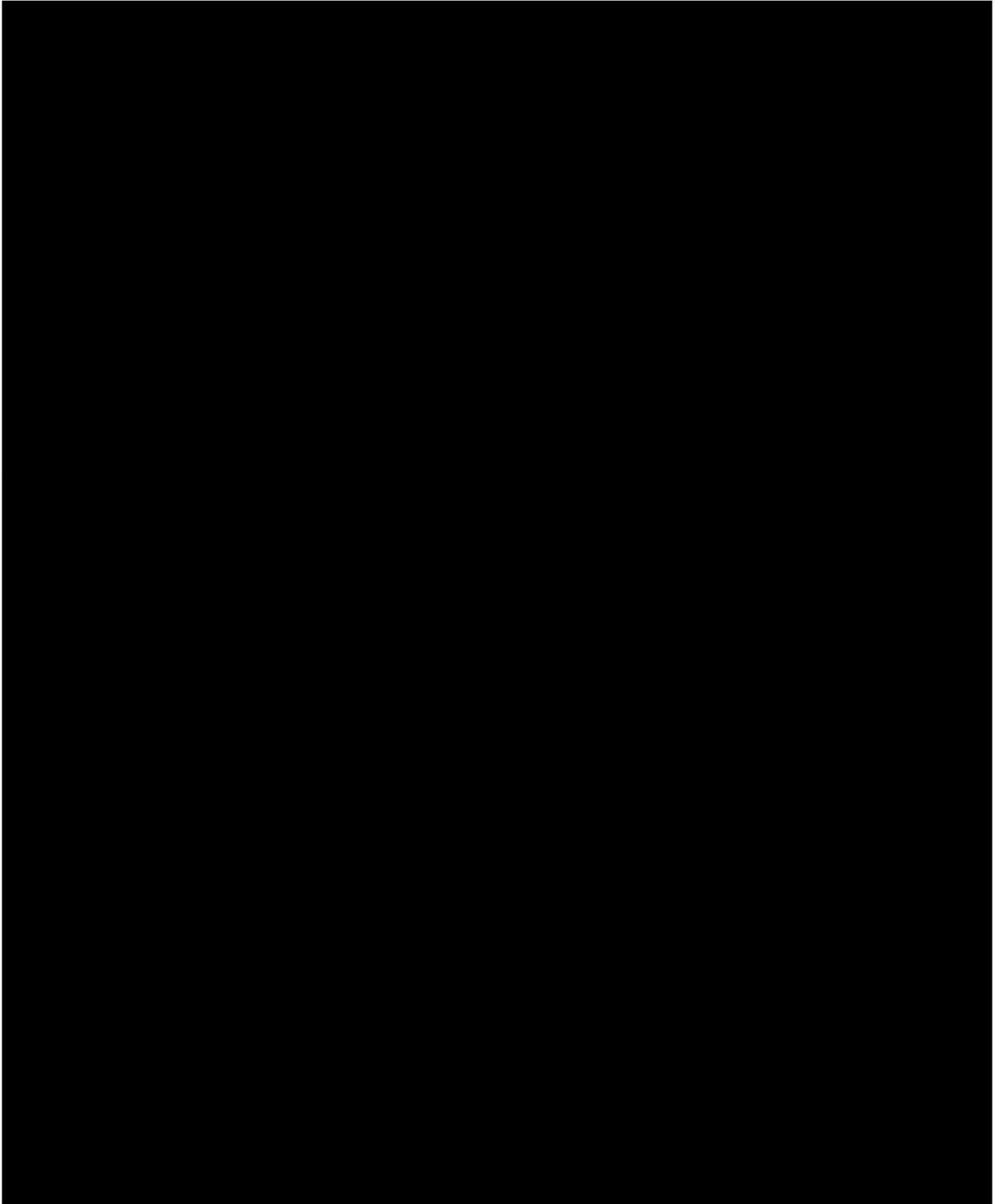
REDACTED



REDACTED

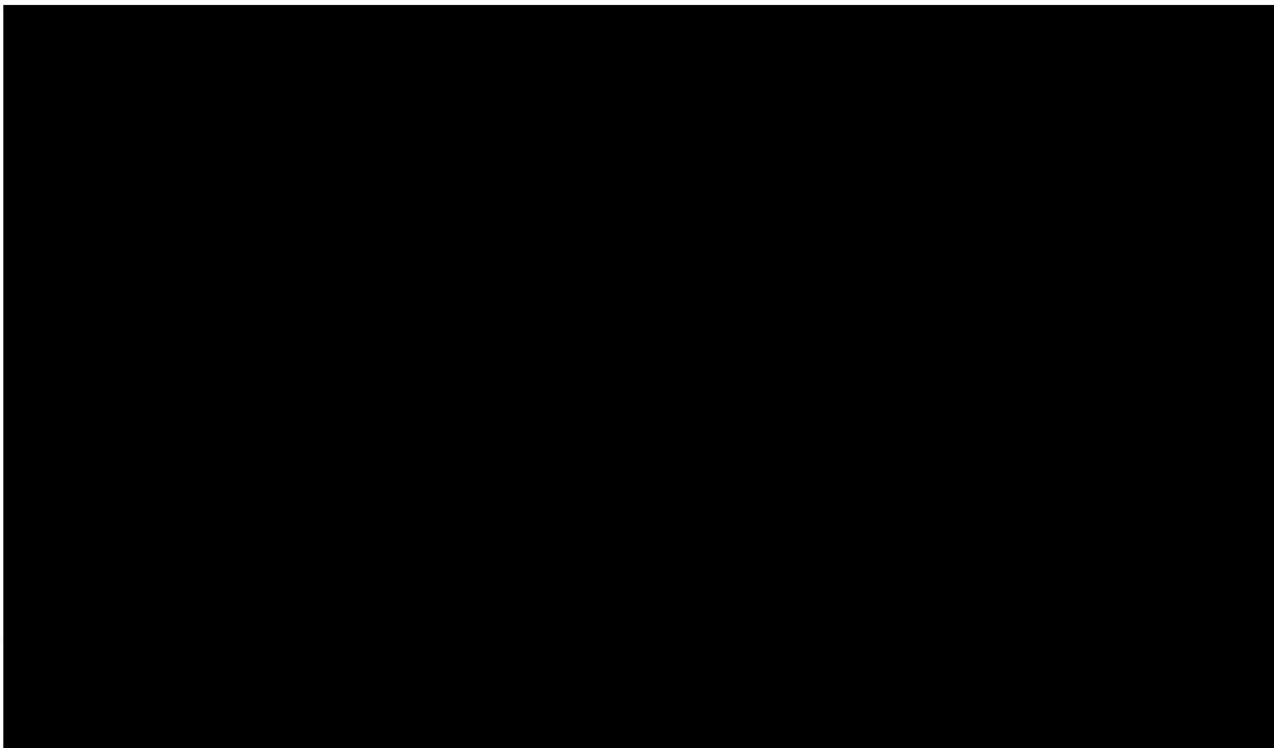


REDACTED





REDACTED



IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed on the date set forth above.

The Narragansett Electric Company  
d/b/a National Grid

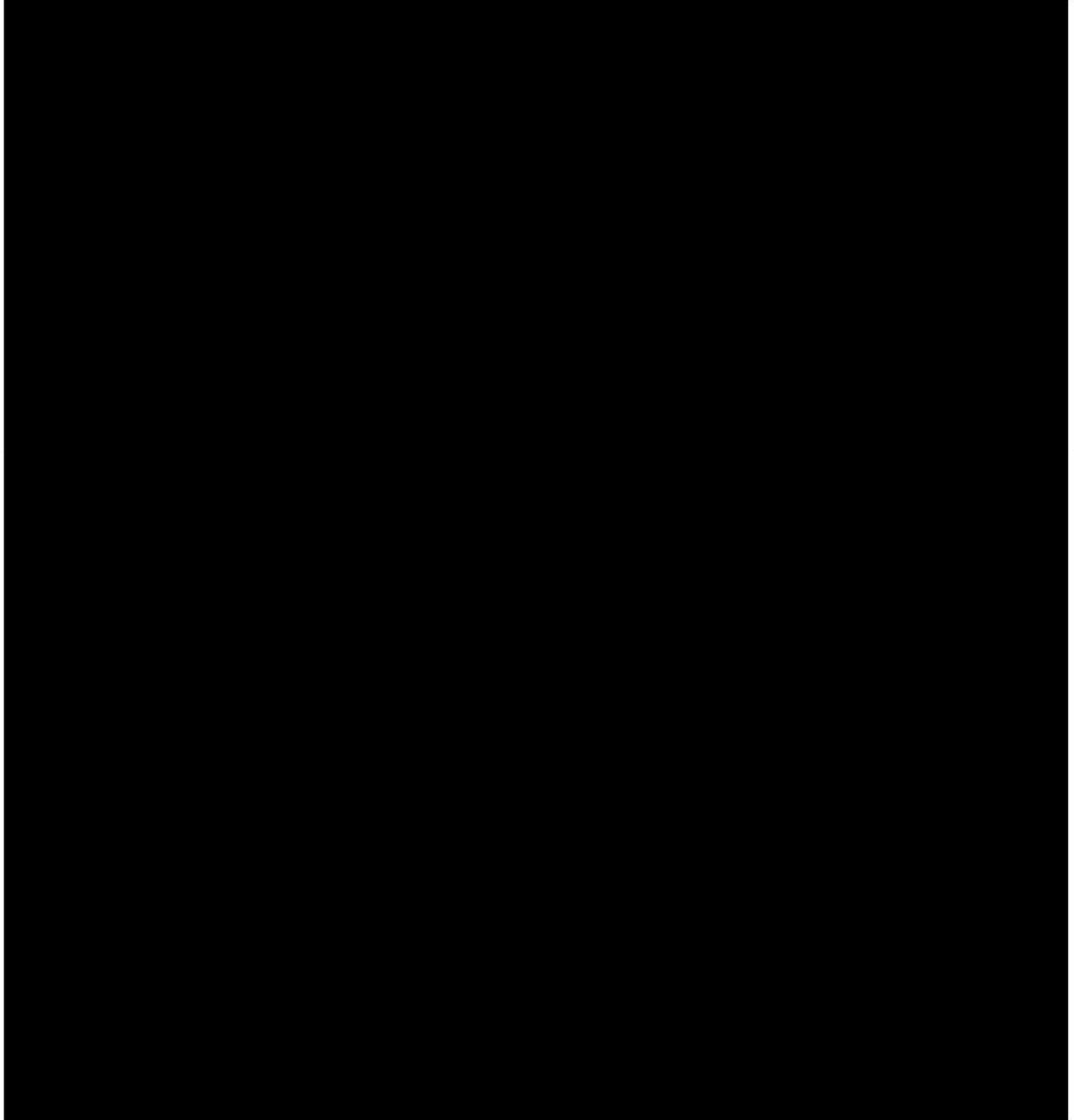
Prometheus Energy Group, Inc.

By: [Signature] *all*  
Name: John V. Vaughn *07*  
Title: Authorized Signatory

By: [Signature]  
Name: Jim Aivalis  
Title: CEO & President

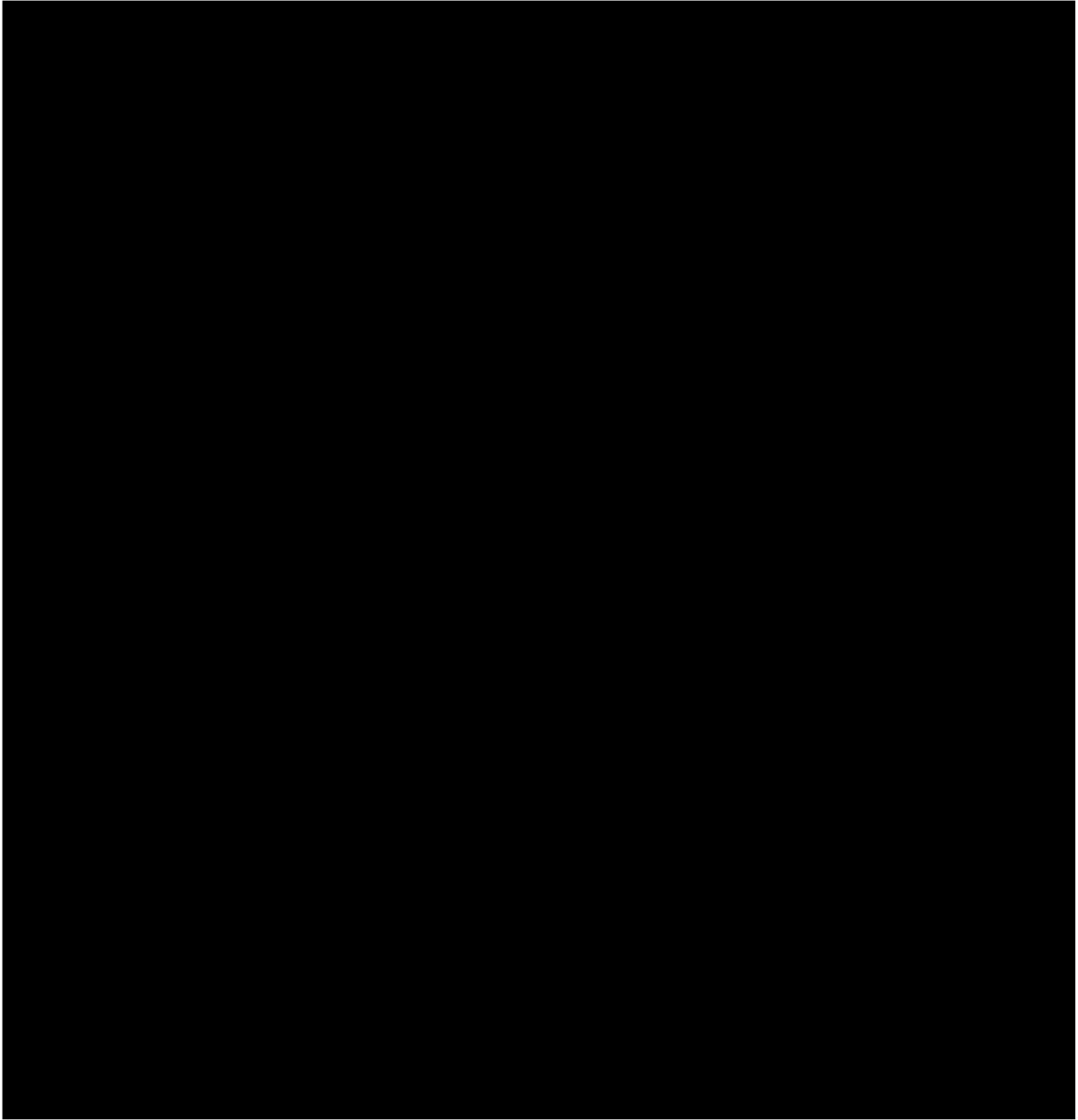
REDACTED

Exhibit A



A small, hand-drawn blue circular mark or stamp is located in the bottom right corner of the page. It appears to be a stylized signature or a specific type of official mark.

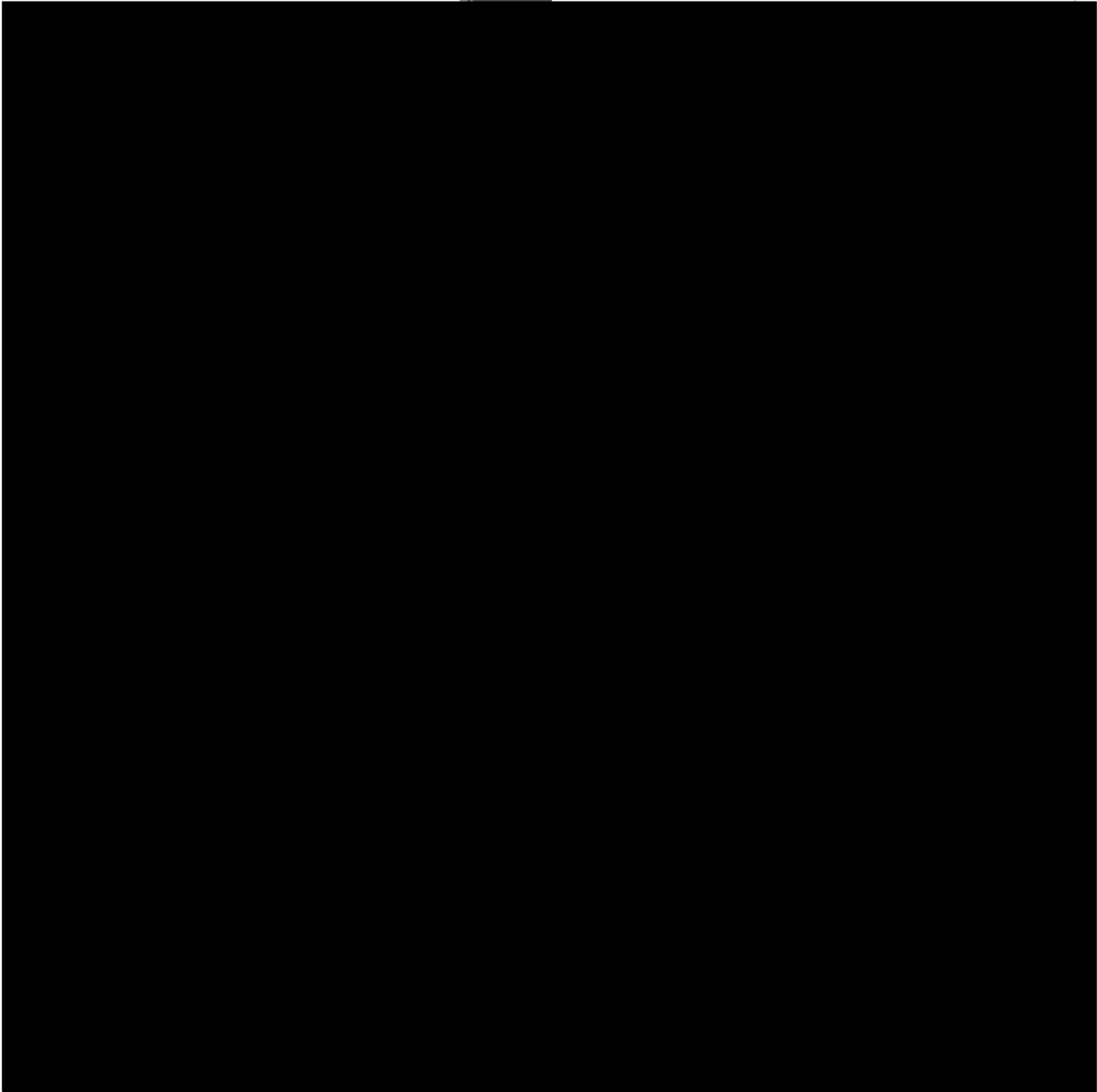
REDACTED



79

REDACTED

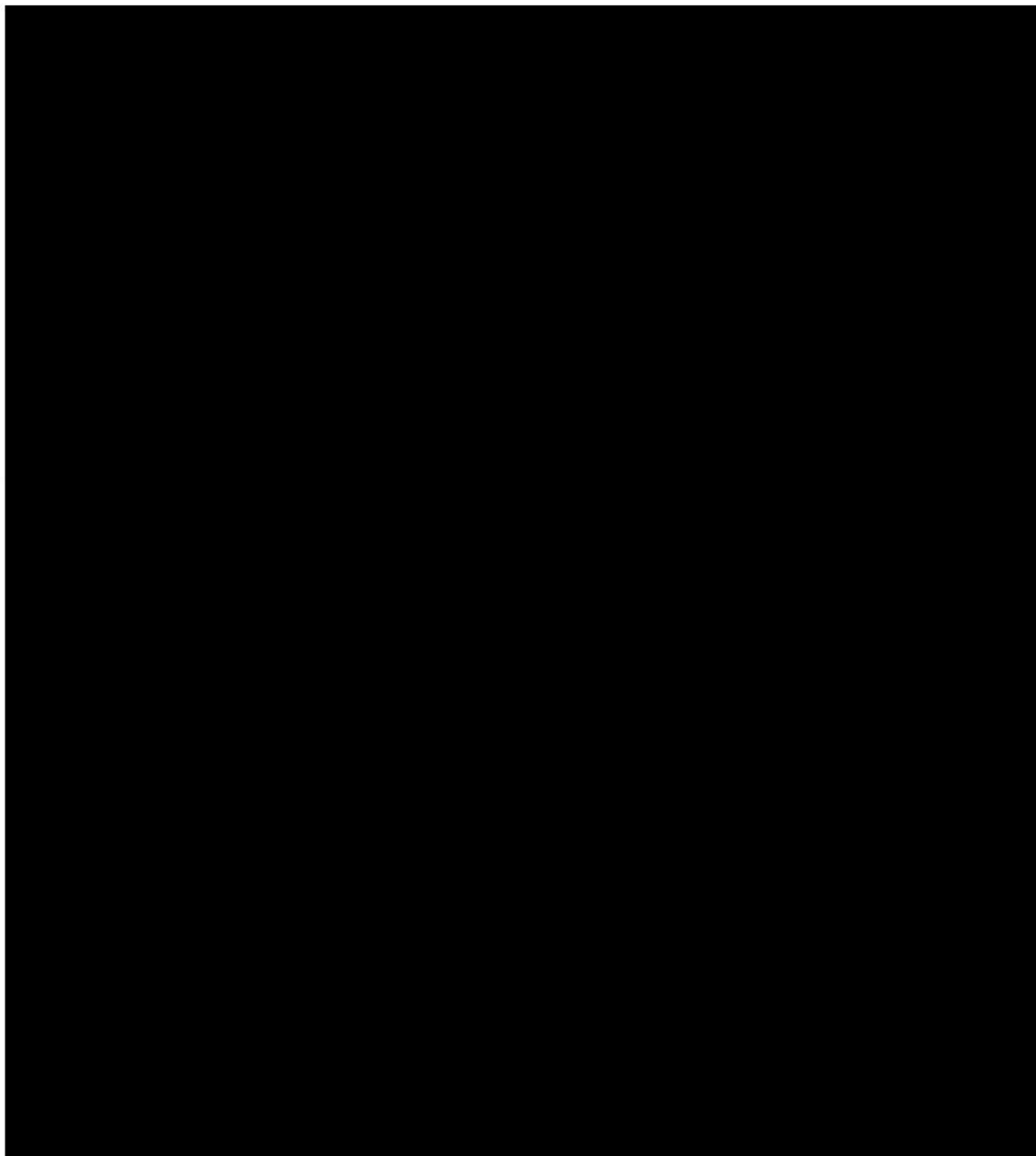
Exhibit B



0

REDACTED

Exhibit C



0

REDACTED

### Transaction Confirmation

Date: 08/23/2019

This Transaction Confirmation is subject to the LNG Transportation Services Agreement between National Grid and LP Transportation, Inc. ("Transporter"), dated April 1, 2013 ("Agreement").

All capitalized terms used in this Transaction Confirmation and not otherwise defined shall have the meanings assigned to them in the Agreement.

The tables included as Attachment A set forth the Delivery Points, Cost per lb., and Estimated Cost per Load for Receipts from Constellation LNG, LLC ("Constellation")'s facility at 18 Rover Street, Everett, MA 02149.

**Delivery Period:** On any Day during the term(s) April 1, 2019 through and including December 1, 2019 and April 1, 2020 through and including December 1, 2020. National Grid shall have the right, but not the obligation, to call on Transporter to deliver to the Delivery Point(s) in order to serve National Grid. For each of the 2019 and 2020 Delivery Periods, Transporter shall make available to National Grid the resources necessary to move [REDACTED] of National Grid's contracted for supply from Constellation to the Delivery Point(s) [REDACTED]

[REDACTED] No later than March 2, 2020, National Grid shall communicate to Transporter the estimated volume needed to meet the refill requirements at the Delivery Point(s) for the 2020 refill season.

**Loads in Excess of Transporter's Resources:** If on any day during the Delivery Period National Grid requires loads in excess of Transporter's obligations pursuant to this Transaction Confirmation at those Delivery Point(s) other than Dorchester, MA or So. Yarmouth, MA, National Grid shall look first to Transporter to fulfill this requirement. If Transporter is unable to meet the request for a given day, National Grid may utilize a third-party carrier for such deliveries to these Delivery Point(s).

**Pricing:** For Loads transported hereunder, National Grid shall pay Transporter the Cost in Attachment A to this Transaction Confirmation.

#### Special Conditions:

1. This Transaction Confirmation was awarded pursuant to National Grid's Request for Proposals for LNG Transportation dated February 14, 2019 and the exhibits attached thereto, which are incorporated into and made a part hereof.

REDACTED

LP Transportation, Inc.

National Grid USA Service  
Company, Inc.

By: Todd Eldred

By: [Signature]

Name: Todd Eldred

Name: John V. Vaughn

Title: CHIEF OPERATING OFFICER

Title: Authorized Signatory

*sd*  
*4/1/08*

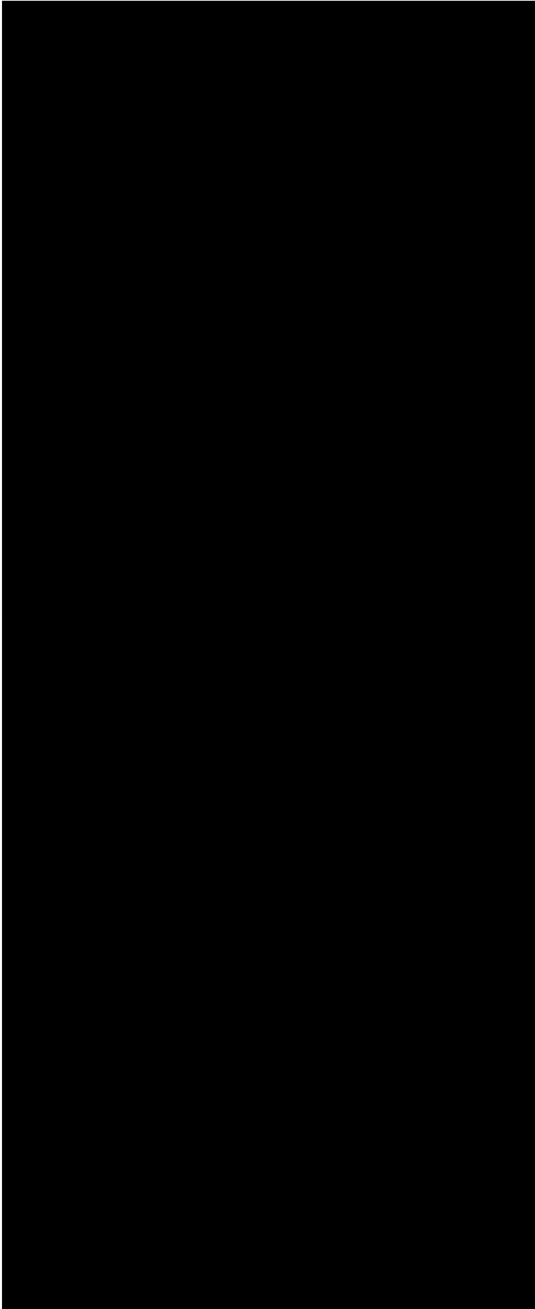
REDACTED

Attachment A (Page 1 of 4)  
2019 Refill Season [REDACTED]  
For LNG Transportation from Constellation  
To National Grid Massachusetts and Rhode Island  
LNG Facilities

A	B	C	D	E	F	G
Peak National Grid Destinations	Transportation Rate (\$ per lb)	Estimated Fuel Surcharge (%) if applicable	Estimated Fuel Surcharge (\$ per lb) "B" times "C"	Total Rate "B" plus "D"	Assumed Payloads (lbs.)	Estimated Cost Per "E" Load times "F"

[REDACTED]						
------------	--	--	--	--	--	--

The physical address of the Constellation F 18 Rover Street





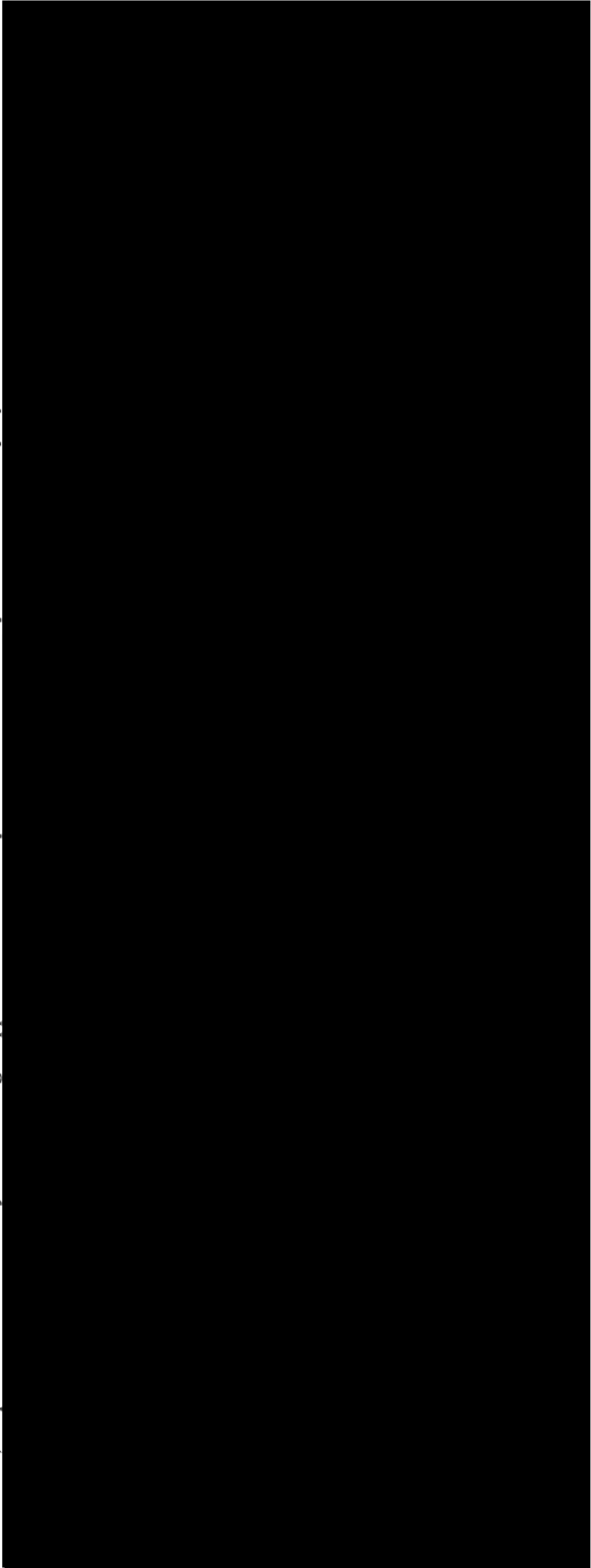
REDACTED

Attachment A (Page 2 of 4)

2019 Refill Season -  
For LNG Transportation from Constellation  
To National Grid Massachusetts and Rhode Island  
LNG Facilities

A	B	C	D	E	F	G
Peak National Grid Destinations	Transportation Rate (\$ per lb)	Estimated Fuel Surcharge (%) if applicable	Estimated Fuel Surcharge (\$ per lb) "B" times "C"	Total Rate "B" plus "D"	Assumed Pay/loads (lbs.)	Estimated Cost Per Load "E" times "F"

The physical address of the Constellation Facility: 18 Rover Street, Everett MA 02149  
In addition, Proposals must include any and all charges applicable for the transportation service of the product to the Company's LNG facilities.

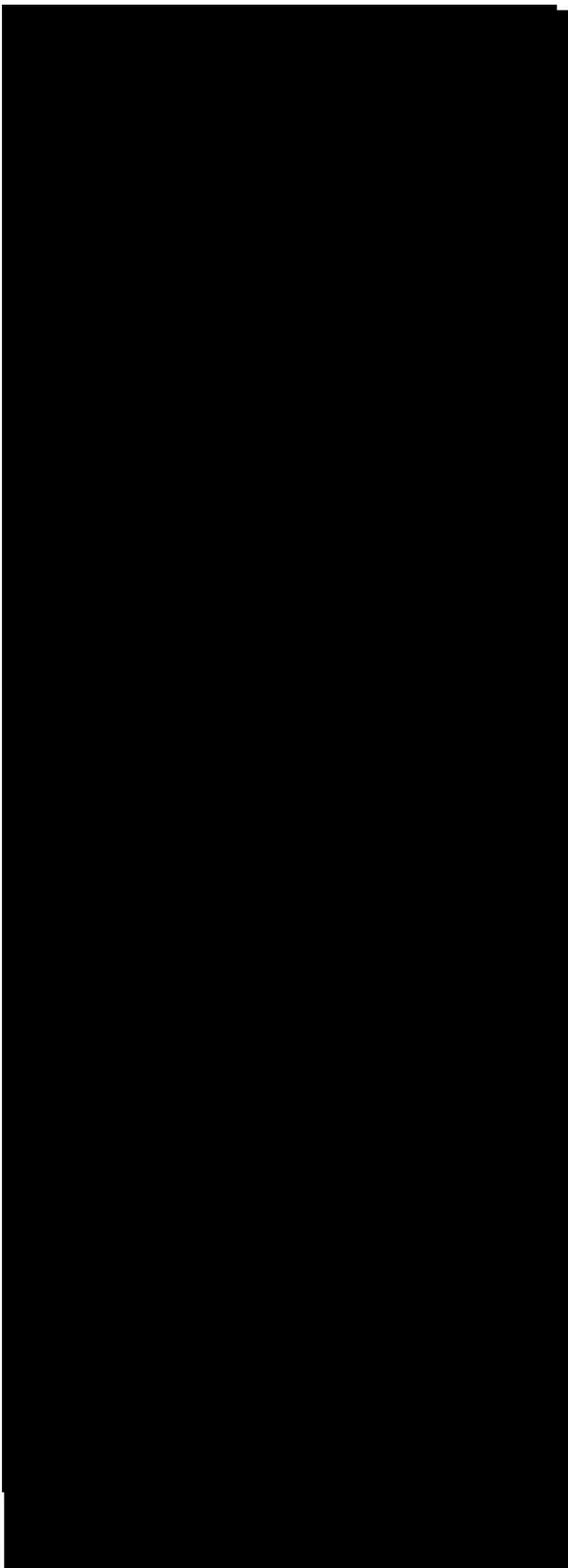


REDACTED

Attachment A (Page 3 of 4)  
2020 Refill Season - [REDACTED]  
For LNG Transportation from Constellation  
To National Grid Massachusetts and Rhode Island  
LNG Facilities

A	B	C	D	E	F	G
Peak National Grid Destinations	Transportation Rate (\$ per lb)	Estimated Fuel Surcharge (%) if applicable	Estimated Fuel Surcharge (\$ per lb) "B" times "C"	Total Rate "B" plus "D"	Assumed Payloads (lbs.)	Estimated Cost Per Load times "F"

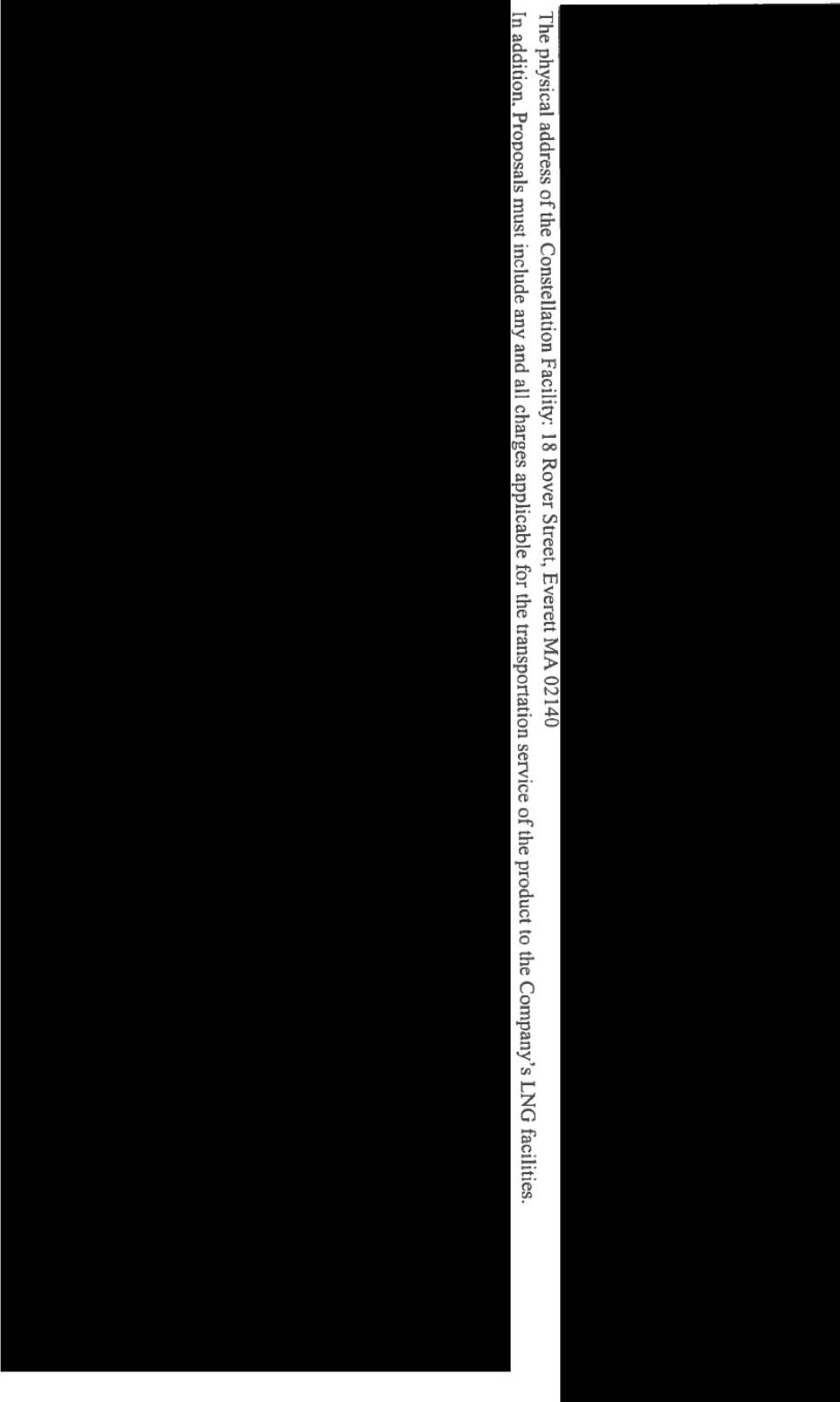
The physical address of the Constellation Facility: 18 Rover Street, Everett MA 02149  
In addition, Proposals must include any and all charges applicable for the transportation service of the product to the Company's LNG facilities.



REDACTED

**Attachment A (Page 4 of 4)**  
**2020 Refill Season - 75% or More of Total Volume**  
**For LNG Transportation from Constellation**  
**To National Grid Massachusetts and Rhode Island**  
**LNG Facilities**

A	B	C	D	E	F	G
Peak National Grid Destinations	Transportation Rate (\$ per lb)	Estimated Fuel Surcharge (%) if applicable	Estimated Fuel Surcharge (\$ per lb) "B" times "C"	Total Rate "B" plus "D"	Assumed Payloads (lbs.)	Estimated Cost Per Load "E" times "F"



The physical address of the Constellation Facility: 18 Rover Street, Everett MA 02140  
In addition, Proposals must include any and all charges applicable for the transportation service of the product to the Company's LNG facilities.

REDACTED

### Transaction Confirmation

Date: March 20, 2019

This Transaction Confirmation is subject to the LNG Transportation Services Agreement between National Grid and Transgas Inc. ("Transporter"), dated April 1, 2013 ("Agreement").

All capitalized terms used in this Transaction Confirmation and not otherwise defined shall have the meanings assigned to them in the Agreement.

The table below sets forth the Delivery Points, Cost per lb., and Estimated Cost per Load for Receipts from Constellation LNG, LLC ("Constellation") 's facility at 18 Rover Street, Everett, MA 02149.

Delivery Point (Nat. Grid Facility)	Estimated Billing Transportation Rate (per cwt) before Diesel Fuel Surcharge
Dorchester, MA (5:01am-6:59pm)	
Dorchester, MA (7:00pm-5:00am)	
So. Yarmouth, MA	

Delivery Period: On any Day during the term(s) April 1, 2019 through and including December 1, 2019 and April 1, 2020 through and including December 1, 2020. National Grid shall have the right, but not the obligation, to call on Transporter to deliver to the Delivery Point(s) in order to serve National Grid. Notwithstanding the foregoing, National Grid shall make all reasonable efforts to levelize Transporter's resources and deliveries between the Delivery Point(s). For the 2019 refill season, Transporter shall make available to National Grid the resources necessary to deliver from Constellation's facility to the National Grid Delivery Point(s) [REDACTED]. No later than March 2, 2020, National Grid shall communicate to Transporter the estimated volume needed to meet the refill requirements at the Delivery Point(s) for the 2020 refill season; for the 2020 refill season Transporter shall make available to National Grid the resources necessary to deliver such quantity from Constellation's facility by calculating such total volume divided by delivery days during the season.

Loads in Excess of Transporter's Resources:



Pricing: For Loads transported hereunder, National Grid shall pay Transporter the Cost identified above plus such additional charges agreed to by the Parties and set forth in Attachment A to this Transaction Confirmation ("Transgas Standard Terms and Conditions").

Special Conditions:

1. This Transaction Confirmation was awarded pursuant to National Grid's Request for Proposals for LNG Transportation dated February 14, 2019 and the exhibits attached thereto, which are incorporated into and made a part hereof.
2. For avoidance of doubt, if, during the Delivery Period, for volumes transported from Constellation to the Delivery Point(s), Transporter is unable to satisfy its obligations to National Grid pursuant to this Transaction Confirmation, National Grid shall have the right to seek alternative arrangements to deliver LNG to the Delivery Point(s).

Transgas Inc.

By: John K. Flint

Name: John K. Flint

Title: President

National Grid USA Service Company, Inc.

By: [Signature]

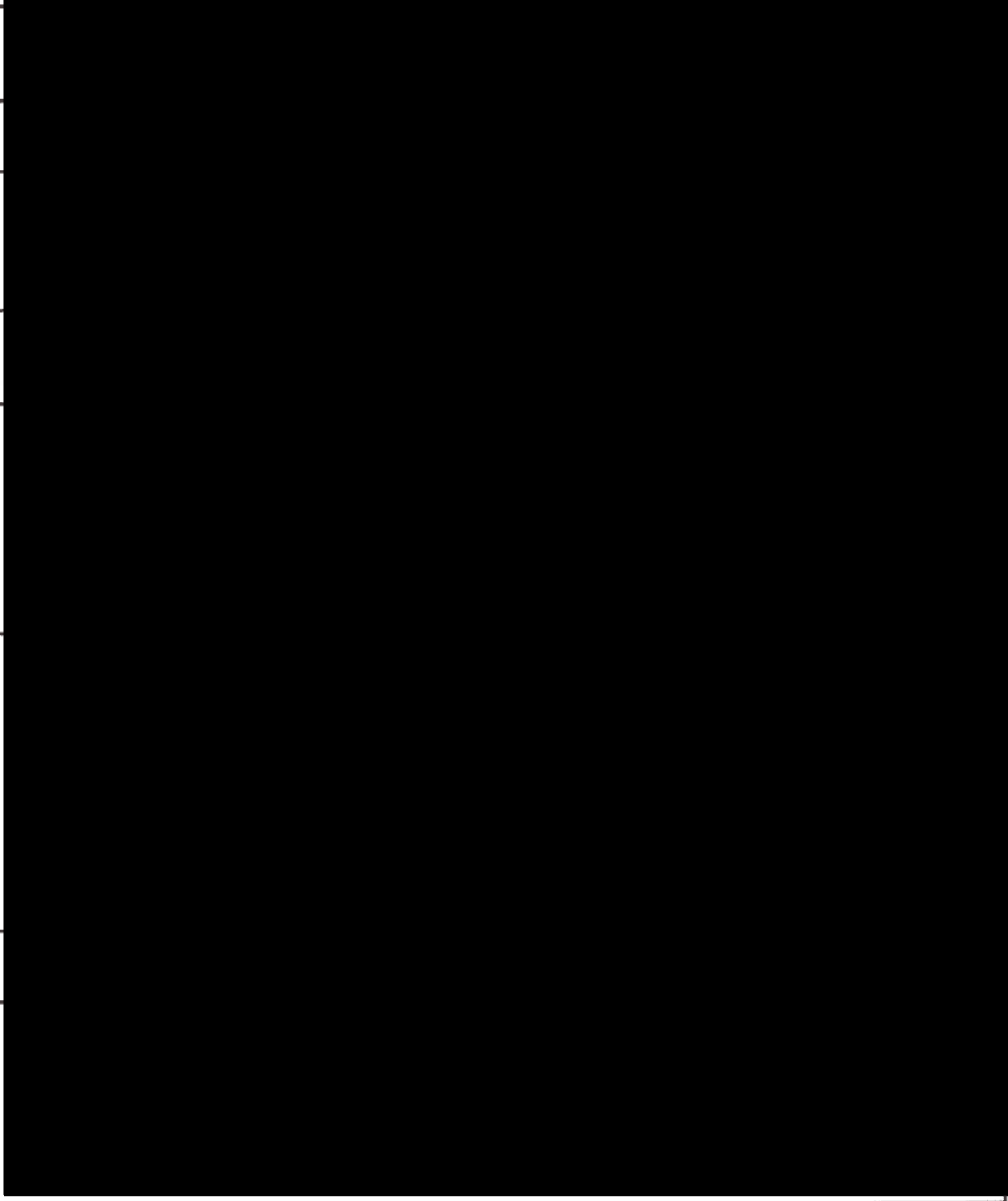
Name: \_\_\_\_\_

Title: John V. Vaughn


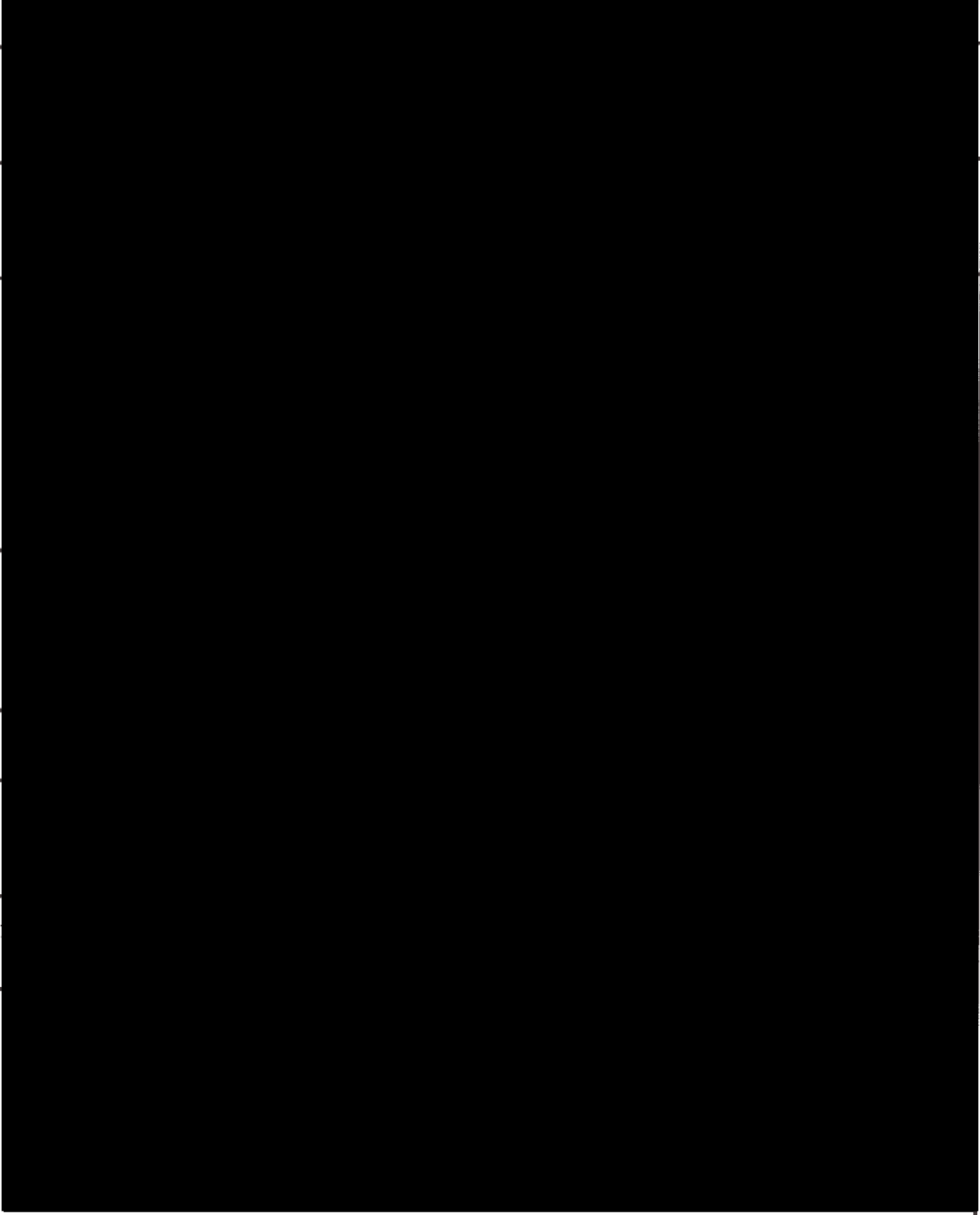
Authorized Signatory

*cc  
ja*

REDACTED

ITEM	<p style="text-align: right;">Page 1 of 4</p> <p style="text-align: center;"><b>TRANSGAS</b> Standard Terms and Conditions National Grid</p> <p style="text-align: right;">Attachment A</p> <p style="text-align: center;">CONFIDENTIAL</p>
	

REDACTED

ITEM	 Standard Terms and Conditions National Grid
	

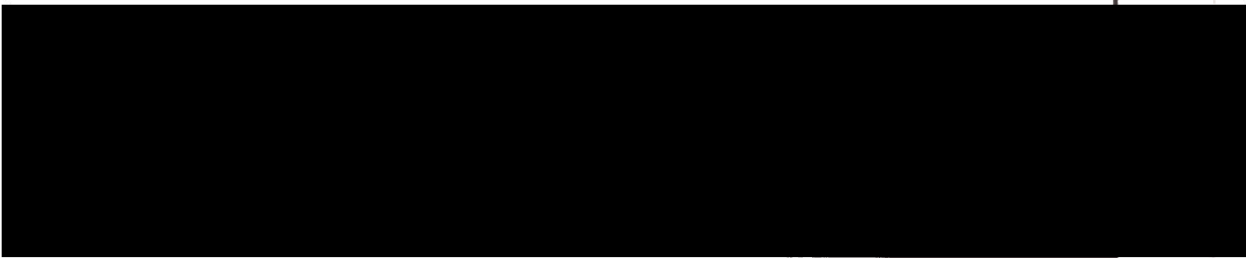
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Page 3 of 4



Standard Terms and Conditions  
National Grid

CONFIDENTIAL





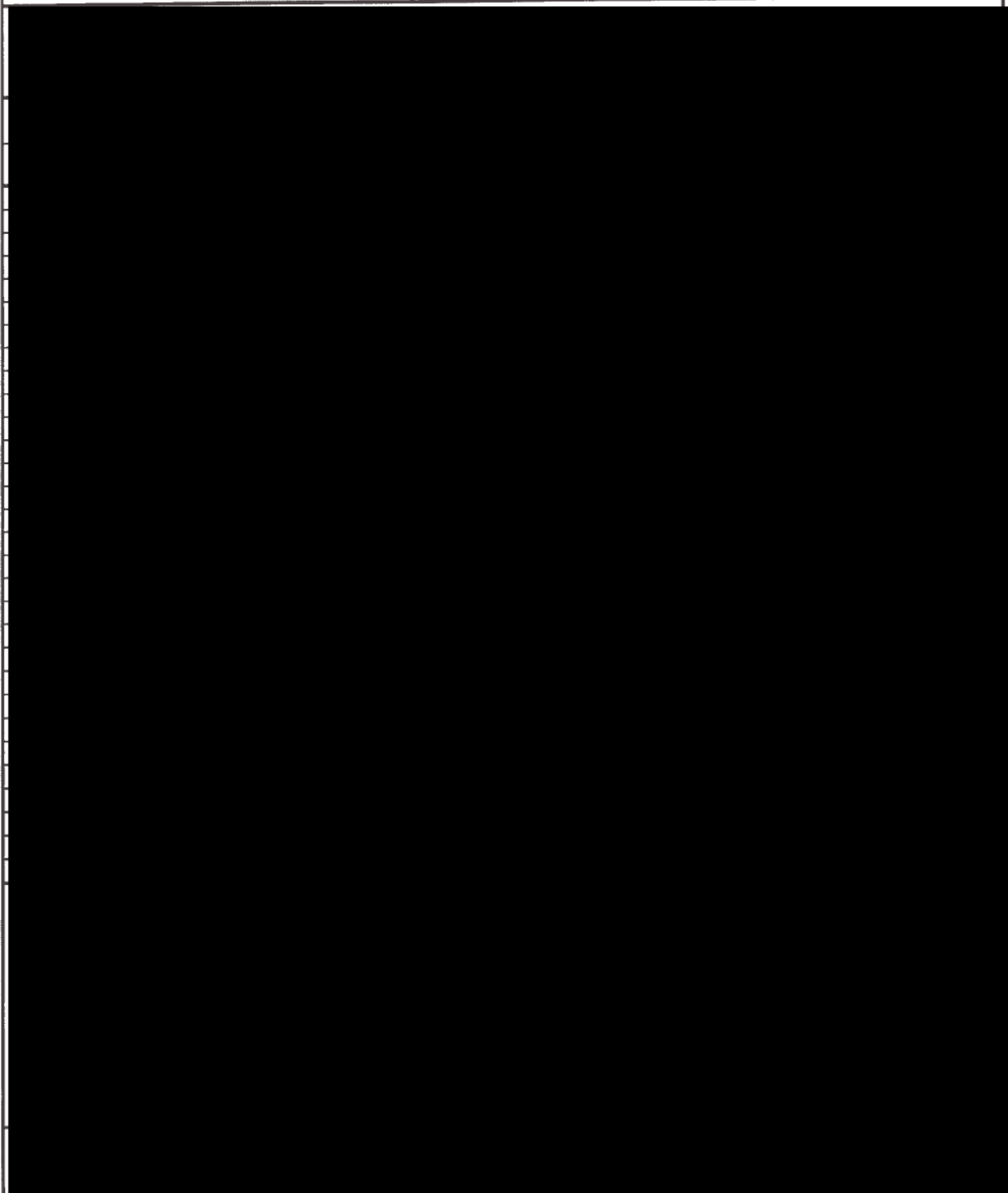
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Page 4 of 4



Standard Terms and Conditions  
National Grid

CONFIDENTIAL




### Transaction Confirmation

Date: November 20, 2019

This Transaction Confirmation is subject to the LNG Transportation Services Agreement between National Grid and Transgas Inc. ("Transporter"), dated April 1, 2013 ("Agreement").

All capitalized terms used in this Transaction Confirmation and not otherwise defined shall have the meanings assigned to them in the Agreement.

The table below sets forth the Delivery Points, Cost per hundredweight for Receipts from Constellation LNG, LLC's ("Constellation") facility at 18 Rover Street, Everett, MA 02149.

Delivery Point (Nat. Grid Facility)	Estimated Billing Transportation Rate (per cwt) before Diesel Fuel Surcharge
Providence, RI NGRID-RI	
Dorchester, MA (5:01am-6:59pm)	
Dorchester, MA (7:00pm-5:00am)	
Exeter, RI	
Lynn, MA	
So. Yarmouth, MA	
Salem, MA	
Haverhill, MA	
Wareham, MA	
Tewksbury, MA	
Portable Vaporization Sites at National Grid's request	

Delivery Period: On any Day during the term December 1, 2019 through and including April 1, 2020 National Grid shall have the right, but not the obligation, to call on Transporter to deliver to the Delivery Point(s) in order to serve National Grid.

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Such obligation shall be commensurate with National Grid's supply agreements with Constellation during the Delivery Period, summarized as follows:

- a) For firm gas customers in the state of Massachusetts, National Grid has the right, but not the obligation, to purchase up to six (6) trucks per day from Constellation for a total seasonal quantity up to 254,250 MMBtu.
- b) For firm gas customers in the state of Rhode Island, National Grid has the right, but not the obligation, to purchase up to eight (21) trucks per day from Constellation for a total seasonal quantity up to 192,450 MMBtu.


**Pricing:** For Loads transported hereunder, National Grid shall pay Transporter the Cost identified above plus such additional charges agreed to by the Parties as part of Transporter's bid proposal ("Exhibit A") attached to this Transaction Confirmation and set forth in Attachment A of Exhibit A ("Transgas Standard Terms and Conditions National Grid). For all LNG Transportation from Constellation's facility at 18 Rover Street, Everett, MA 02149 to the Portable Vaporizer facilities listed above, National Grid shall pay Transporter charges agreed to by the Parties as part of Exhibit A and set forth in Attachment B of Exhibit A ("Transgas LNG Portable Pipeline Price Schedule").

**Special Conditions:**

- 1. This Transaction Confirmation was awarded pursuant to National Grid's Request for Proposals for LNG Transportation and Portable Vaporization Services dated October 7, 2019 the exhibits attached thereto, which are incorporated into and made a part hereof.

2. 

Transgas Inc.

By:   
Name: John K. Flint  
Title: President

National Grid USA Service Company, Inc.


By:   
Name: John V. Vaughn  
Title: Authorized Signatory





EXHIBIT A

TRANSGAS Inc. • 87 Industrial Avenue East • Lowell, MA 01852-5193 • Phone: 978-856-2900

Heidi L. Bond  
 Vice President, Administration & Finance  
 978-856-2903  
 Heidi.Bond@TransgasLNG.com

October 22, 2019

Ms. Samara Jaffe  
 Lead Program Manager- Gas Contracting, Compliance & Hedging  
 National Grid  
 100 E. Old Country Road  
 Hicksville, NY 11801

RE: LNG Transportation and Portable Pipeline Services

Dear Ms. Jaffe:

Transgas is pleased to submit this Proposal, in response to your RFP dated October 7, 2019, for LNG Transportation and Portable Vaporization Requirements from December 1, 2019 – April 1, 2020 from the Constellation LNG Everett, MA facility to the LNG storage facilities of National Grid’s gas distribution affiliates in Massachusetts and in Rhode Island.

For the certainty of supply for anticipated critical periods during the contract term, Transgas has elected to provide pricing from the Constellation LNG Everett, MA facility only. It is our professional opinion that the risk is far too great to transport LNG from Susquehanna County, PA and Montreal, QC and meet the critical demands anticipated this winter.

Transgas is pleased to offer National Grid our services subject to the following:

1. Transgas is pleased and able to meet and provide 100% of the LNG Transportation Services requirements outlined in the RFP, in Massachusetts providing up to six (6) loads per day, as available, Monday thru Friday or up to approximately 254,250 MMBtu and in Rhode Island providing up to twenty (21) loads per day, as available, Monday thru Friday or up to approximately 192,450 MMBtu exclusively to the LNG facilities outlined in Exhibit 24, Attachment A and B during the delivery period.
2. Transgas has included and is able to meet and provide 100% of the Portable Vaporization Services requirements outlined in the RFP, which may require deliveries 24 hours per day, 7 days per week and may be on less the 24 hours’ notice as outlined in Exhibit 24, Attachment A and C. Transgas has been a long standing provider of these services with the equipment and experienced personnel to perform these services.
3. It is Transgas’ desire to provide National Grid with exceptional transportation services during the requested delivery period. To maximize our trucking capacity and in turn, to maximize the number of deliveries to National Grid facilities, Transgas is requesting that trucking for LNG tank refill (non-critical) purposes be leveled during each of the delivery periods. Additionally, it is expected that LNG tank refill or non-critical deliveries will not occur during critical demand periods when transportation will be directed to meet the requirements for the Portable Pipeline sites.

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S. Jaffe, National Grid, 10/22/19, Page 2 of 3

4. During the Delivery Period, unless Transgas is unable to satisfy its obligations to National Grid, Transgas shall serve as National Grid's sole carrier of LNG out of the Constellation LNG Everett, MA facility. In the event Transgas is unable to satisfy its obligations to National Grid with respect to the Transportation of LNG during the Delivery Period, National Grid shall have the right to seek alternative arrangements to deliver LNG to its facilities and portable vaporizer sites.
5. Based on the award of services, if 100% of the supply does not originate from the Constellation LNG Everett, MA facility, Transgas will expect that the required loads per day will also be proportionally recalculated.

Transgas is in full compliance with all of the requirements outlined in Exhibits 1-24 below and in your RFP. With few exceptions (Attachments A-E), all information remains unchanged from Transgas' most recent proposal or with current information on file with National Grid.

1. LNG Delivery Locations
2. National Grid Process Safety Requirements
3. National Grid Safety Procedure: Contractor Safety Requirements
4. National Grid Contractor Environmental Requirements
5. NGSP 6 – Background Check Requirements for Contracted Service Providers
6. Global Procurement – Our Sustainability Policy
7. Drug and Alcohol Prevention Plan
8. Supplier Ethics Certification – **Certification letter attached as Attachment D**
9. Equal Employment Compliance
10. National Grid PLC Anti-Fraud and Bribery Policy
11. PS-00-02 Facility Siting Procedure
12. PS-00-01 Process Hazard Analysis (PHA) Procedure
13. PS-00-03 Layer of Protection Analysis (LOPA) Procedure
14. PS-02-02 Management of Change Procedure
15. PS-02-01 Pre Start Up Safety Review (PSSR) Procedure
16. Safe Motor Vehicle Operations – **Compliance letter attached as Attachment E**
17. Supplier Code of Conduct
18. Safety Critical Activities Procedure Categorization Risk Ranking Tool
19. Human Factors Implementation Plan for Safety in Design
20. Safety in Design Specification for Incorporating Human Factors
21. Contractor Insurance Schedule
22. LNG Truck Transfer Requirements
23. Transaction Confirmation – **To be completed following acceptance of proposal**

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S. Jaffe, National Grid, 10/22/19, Page 3 of 3

24. Pricing Options Format, Attachment A-C

- **LNG Transportation Services:** The distance Commodity Delivery Rates are indicated in Attachment A (Exhibit 24). Any additional applicable charges, including but not limited to cancellation rates, waiting time rates, fuel rates, Saturday, Sunday, or holiday shipment rates, short notice ordering, short notice cancellations, detention of equipment, tolls, and layover charges are contained in Transgas' Standard Terms and Conditions included as Attachment B. All rates are contingent upon the ongoing endorsement of currently defined carrier routes by federal, state and local authorities.
- **Portable Vaporization Services:** For loads delivered to Portable Vaporization Sites for the Delivery Period, the Delivery Rates for each location are indicated in Attachment A (Exhibit 24) as referenced and charged in accordance with Transgas' LNG Portable Pipeline Price Schedule included as Attachment C. All rates are contingent upon the ongoing endorsement of currently defined carrier routes by federal, state and local authorities.

This Bid Proposal is valid through **October 28, 2019**. The information contained in this Proposal is proprietary and confidential and is requested to be treated as such, and not be disclosed without a seven day advance written notice to Transgas.

Transgas sincerely hopes that its record of *over 50 years* of safe and dependable service, including many years of exclusive service to National Grid will be taken into consideration and assist you in selecting Transgas as the successful bidder for your LNG trucking requirements.

While we consider this proposal to be our best and complete offer, Transgas would be happy to answer any questions or concerns you may have. I can be reached by phone at 978-856-2903 or by email at [Heidi.Bond@TransgasLNG.com](mailto:Heidi.Bond@TransgasLNG.com).

As always, Transgas appreciates your business and we look forward to continuing to provide National Grid with our safe, dependable, and locally headquartered LNG transportation service.

Sincerely,

A handwritten signature in black ink that reads "Heidi L. Bond". The signature is written in a cursive style with a long horizontal line extending to the right.

cc: John E. Allocca  
Elizabeth D. Arangio  
MaryBeth Carroll  
Dino C. Papetti  
Janet A. Prag

Attachments

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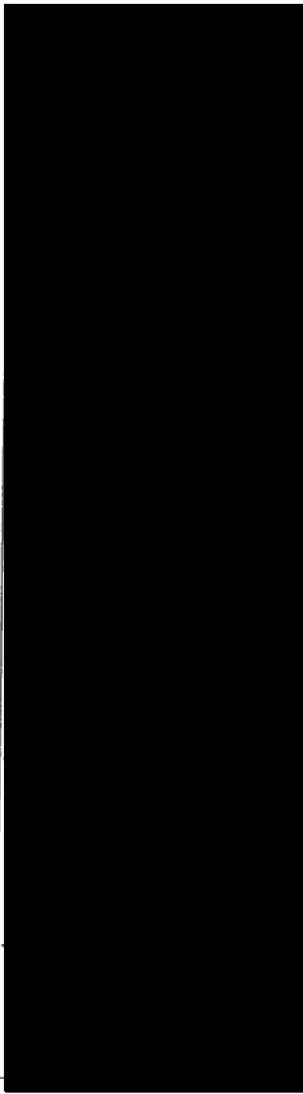


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Attachment A (Page 1 of 2)

Exhibit 24

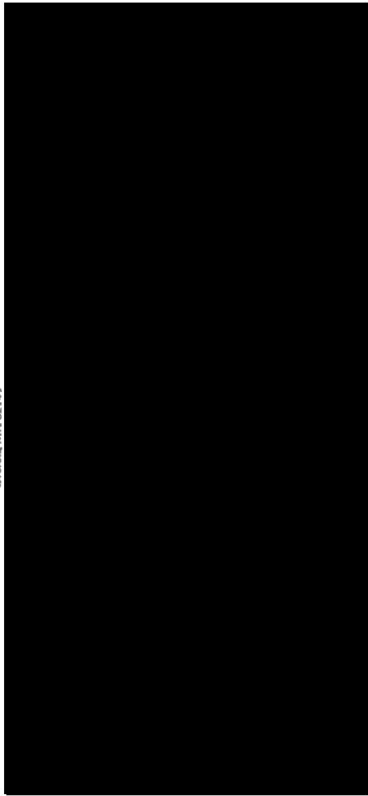
Frank Szaizon

For LNG Transportation from the Constellation LNG Everett, MA Facility  
To National Grid Massachusetts and Rhode Island  
LNG Permanent Tank Facilities  
December 1, 2019 - April 1, 2020



\*\* All pricing subject to Transgas' Standard Terms and Conditions, Attachment B  
\*\* Limited up to 87,000 Bbl.

The physical address of the Constellation Everett,  
MA Facility  
18 Rover Street  
Everett, MA 02149



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**Attachment A (Page 2 of 2)**

**Exhibit 24**  
**Peak Season**

For LNG Transportation and/or Portable Vaporization Services from the Constellation LNG Everett, MA Facility  
To National Grid Massachusetts and Rhode Island  
LNG Portable Vaporization Sites  
December 1, 2019 - April 1, 2020

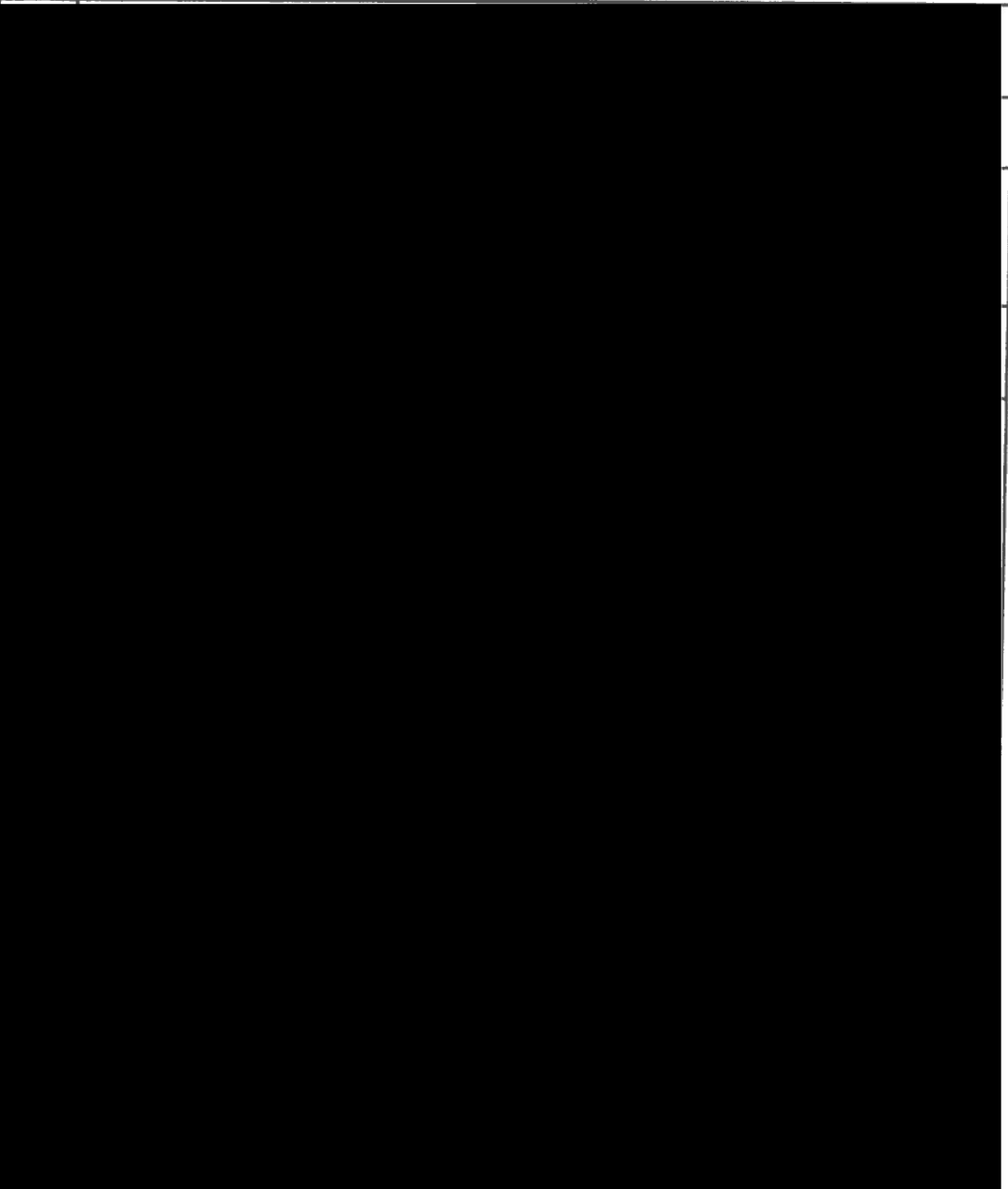


\*\*\* The Transgas' Portable Pipeline Price Schedule, Attachment C will apply to all LNG Transportation from the Constellation LNG Everett, MA facility to the Portable Vaporizer facility sites listed above.

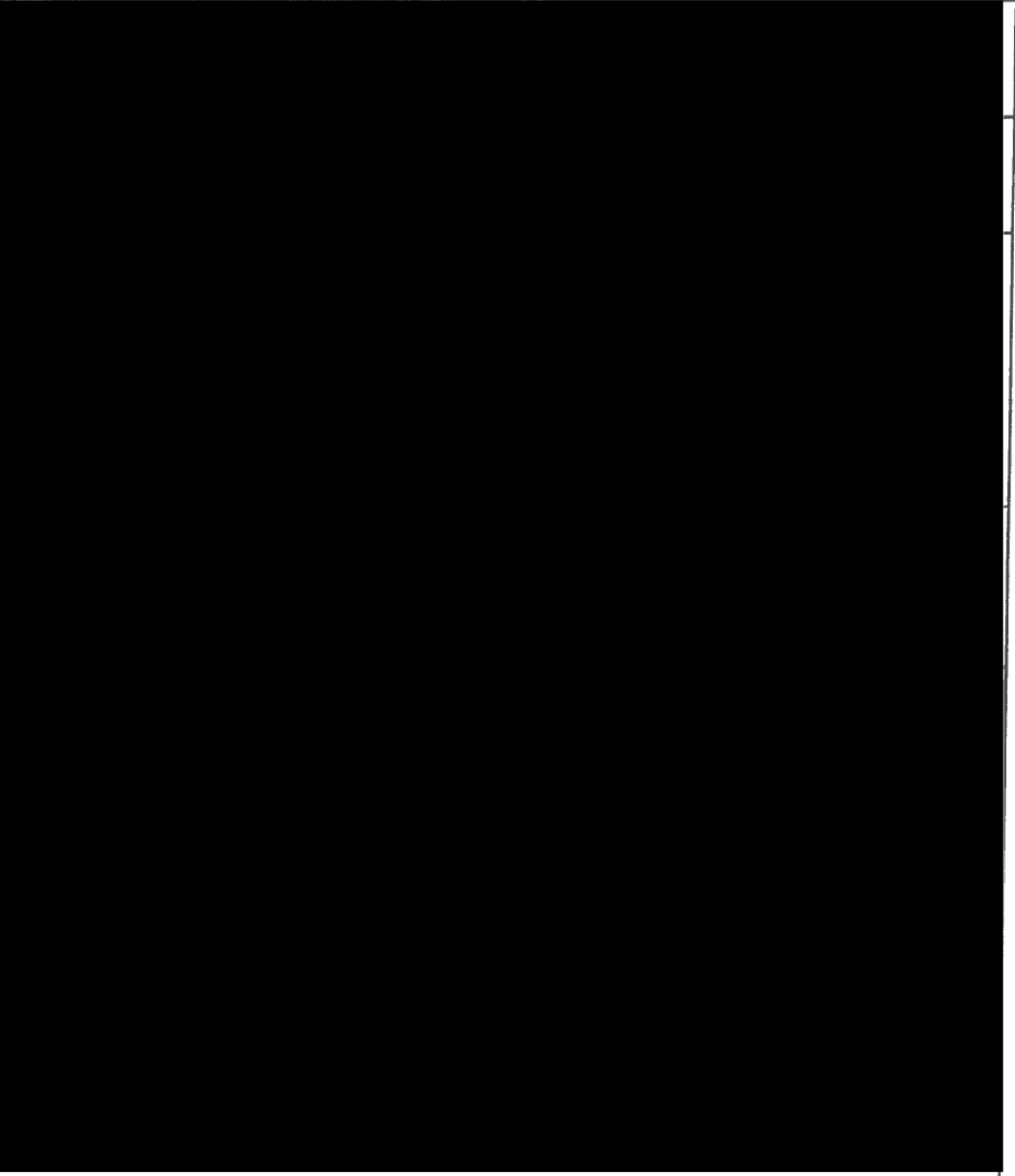




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ITEM	<p style="text-align: right;">Page 1 of 4</p> <p style="text-align: center;"><b>TRANSGAS</b> Standard Terms and Conditions National Grid</p> <p style="text-align: right;">Attachment B</p> <p style="text-align: center;">CONFIDENTIAL</p>
	

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ITEM	<p style="text-align: right;">Page 2 of 4</p> <p style="text-align: center;"><b>TRANSGAS</b> Standard Terms and Conditions National Grid</p> <p style="text-align: center;">Attachment B</p> <p style="text-align: center;">CONFIDENTIAL</p>
	

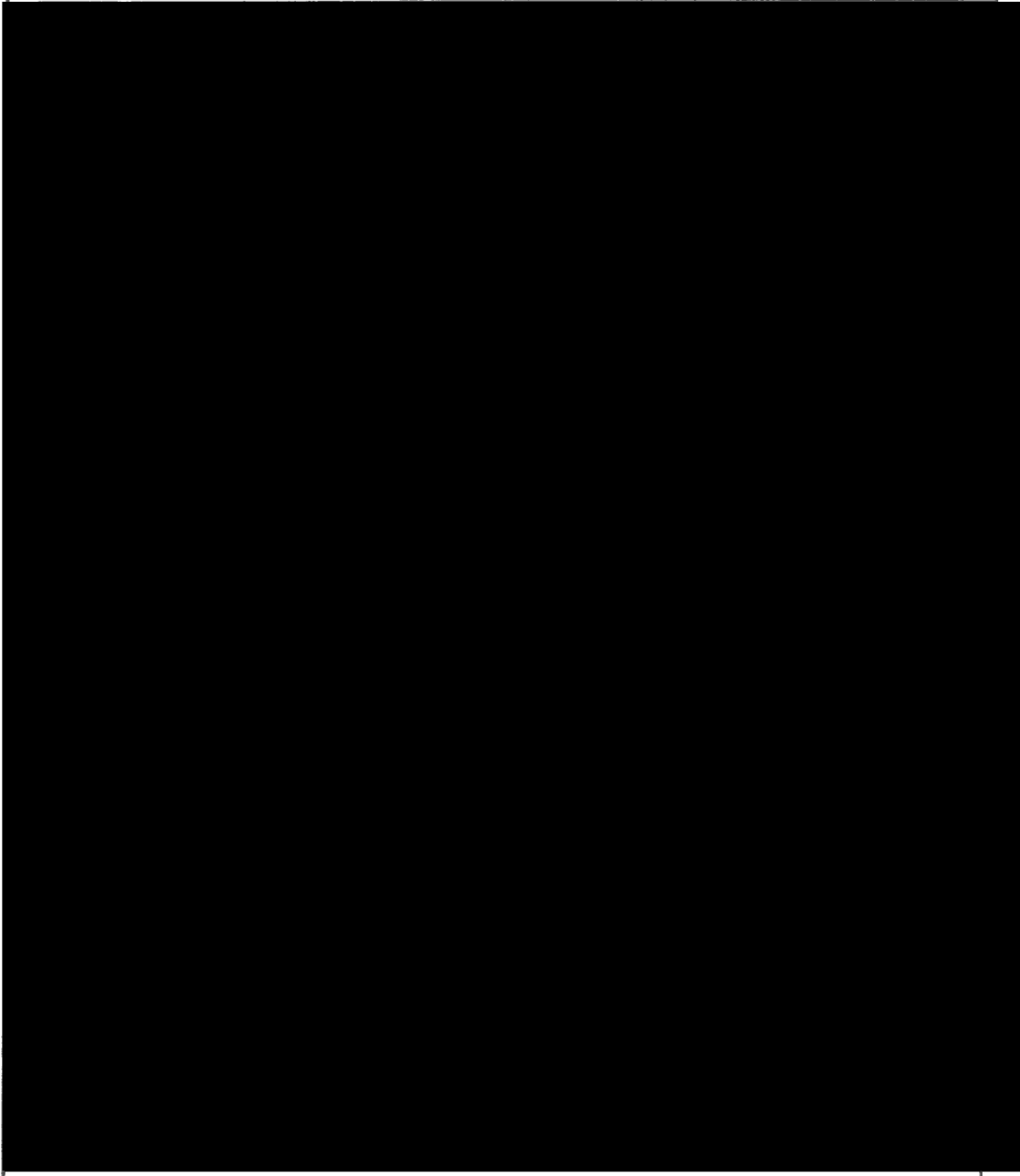
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Standard Terms and Conditions  
National Grid

Attachment B

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Page 4 of 4	
 <b>Standard Terms and Conditions</b> <b>National Grid</b>	<b>Attachment B</b>
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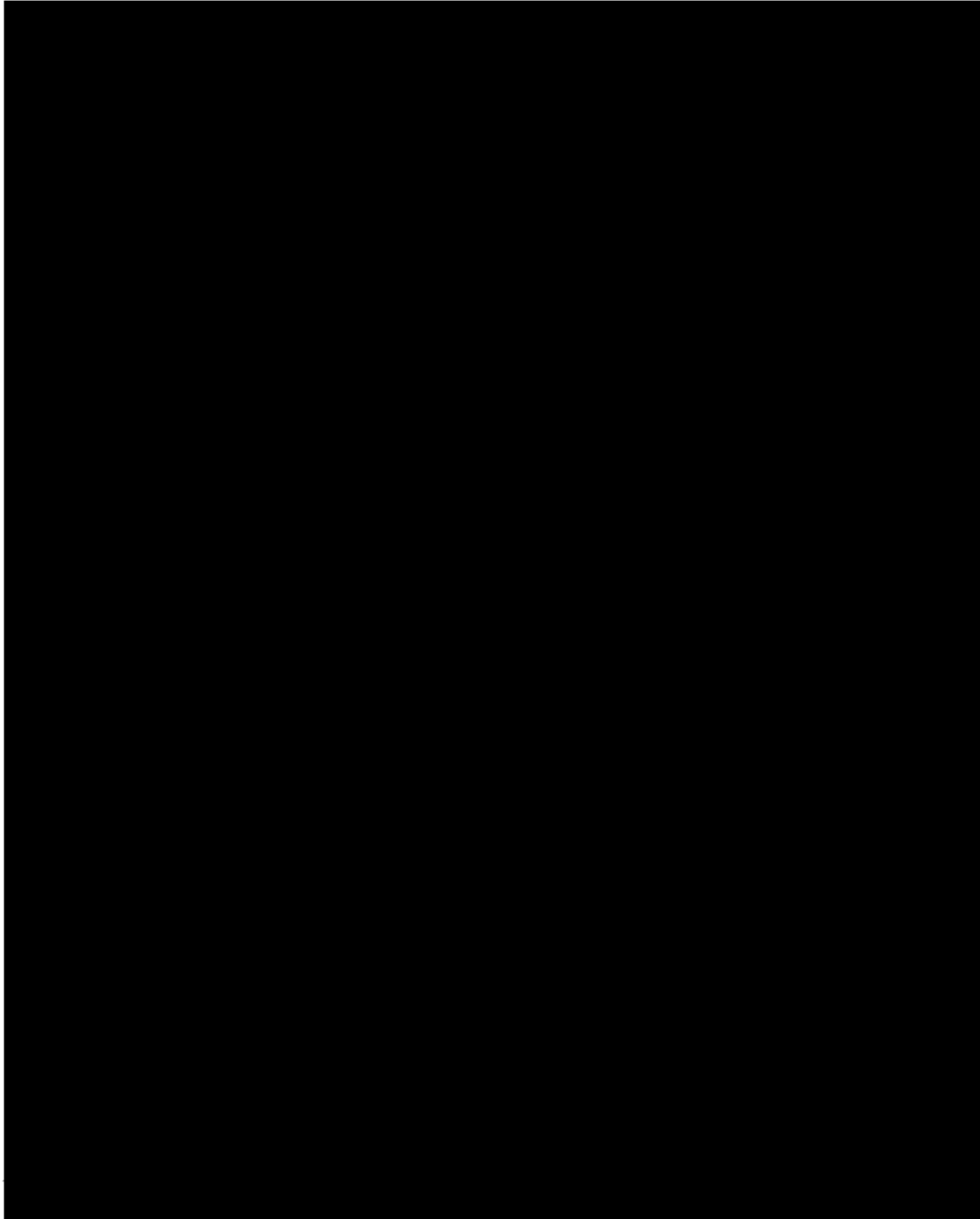
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**LNG PORTABLE PIPELINE PRICE SCHEDULE**  
(Effective 06/01/18)

Attachment C

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**LNG PORTABLE PIPELINE PRICE SCHEDULE**  
**(Effective 06/01/18)**

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This Price Schedule is not a public document, is not on file with any federal or state authorities and contains privileged and confidential information.

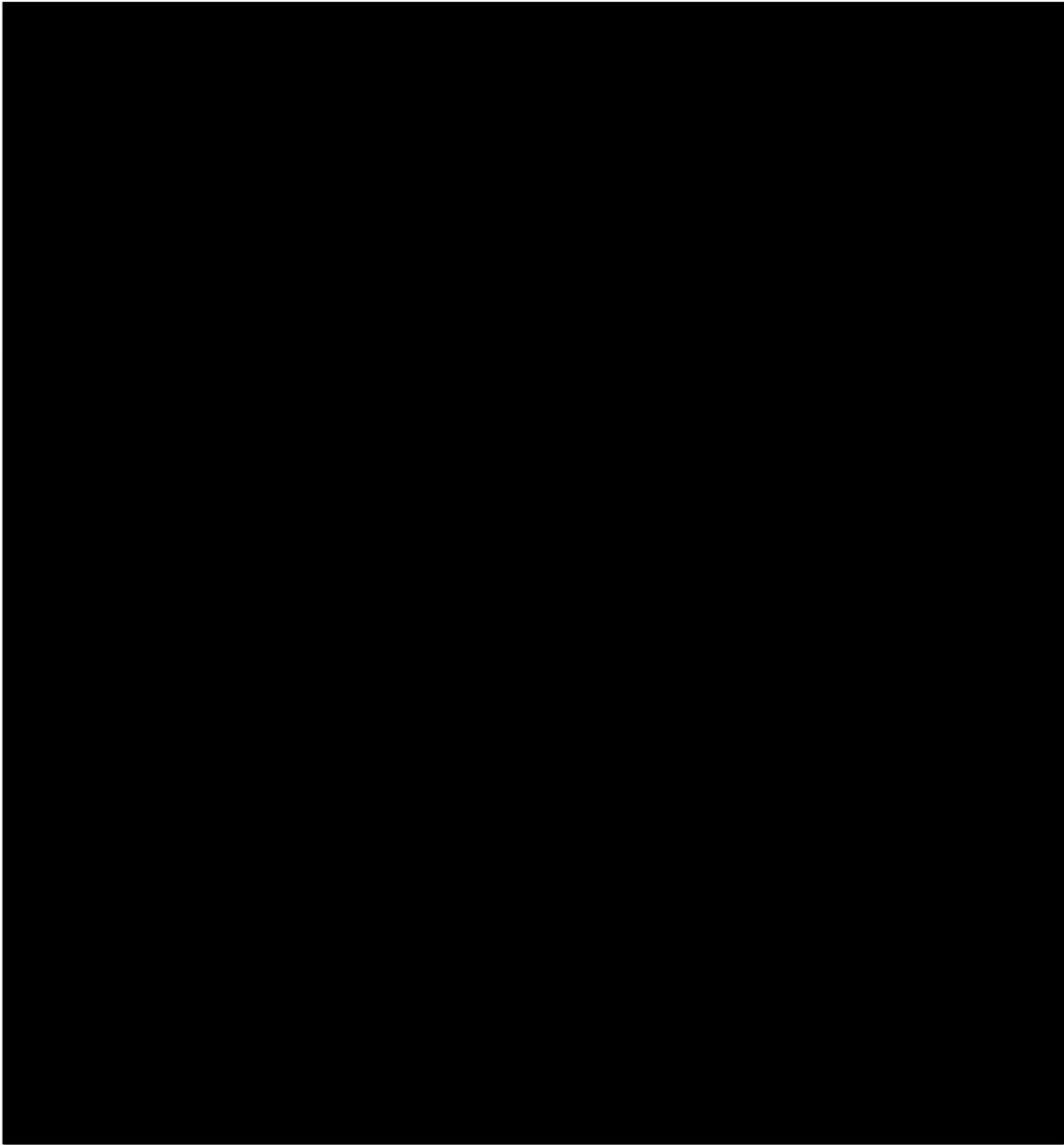
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LNG PORTABLE PIPELINE PRICE SCHEDULE  
(Effective 06/01/18)

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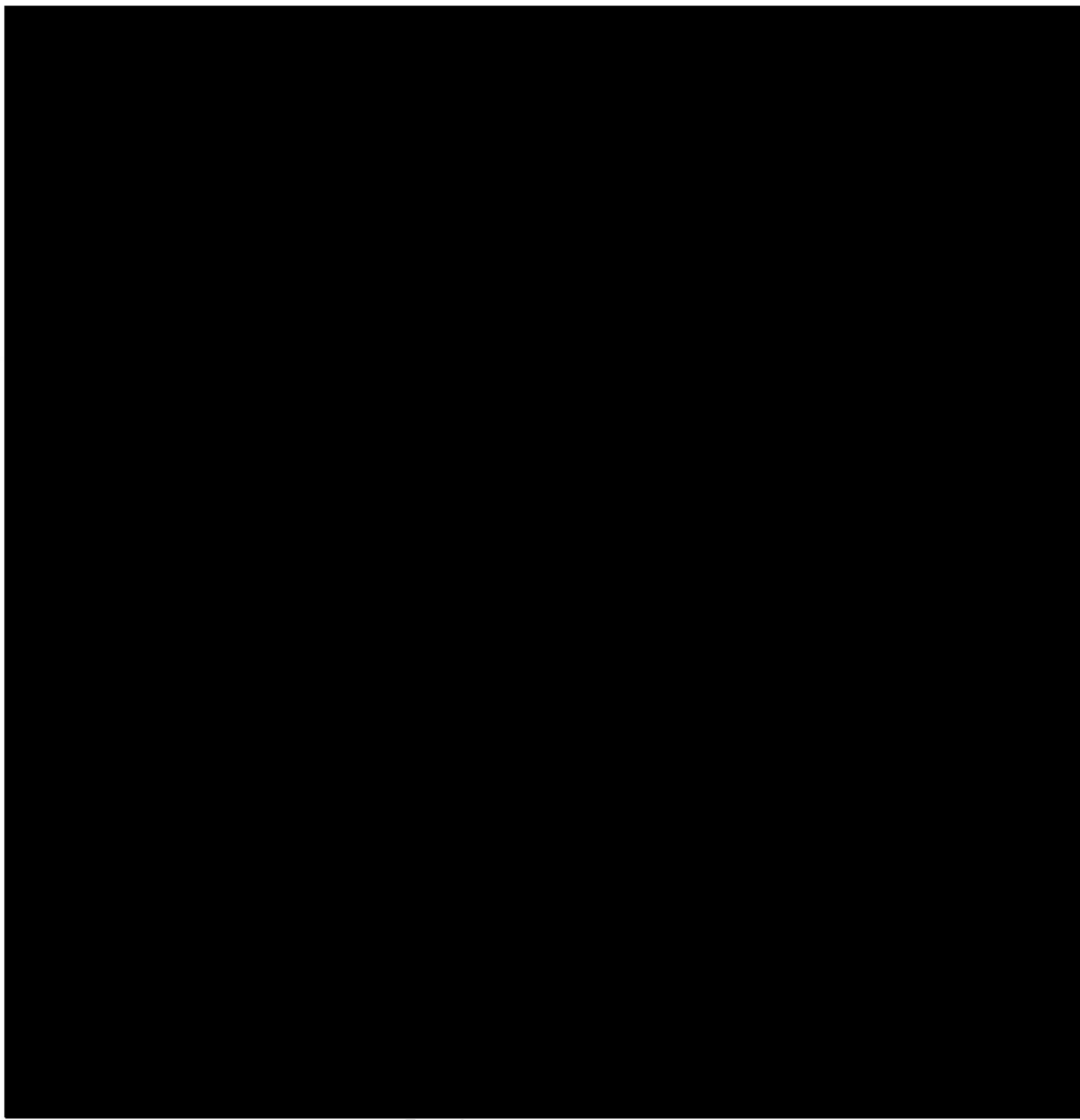
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**LNG PORTABLE PIPELINE PRICE SCHEDULE**  
(Effective 06/01/18)

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Attachment D

SUPPLIER ETHICS CERTIFICATION

Name of supplier: Transgas Inc

I hereby certify on behalf of Transgas Inc (name of supplier) that I have read and understand the terms of the National Grid Global Supplier Code of Conduct. I affirm that I will distribute the National Grid Global Supplier Code of Conduct to all employees and subcontractors we utilize to work for/on behalf of National Grid.

John H. Stink  
Name

President  
Title

10/21/19  
Date

Once completed, please email to the following address:  
DoingtheRightThing@nationalgrid.com (or) mail to:

US Ethics and Compliance Office  
National Grid  
300 Erie Boulevard West, Syracuse, New York 13219

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ATTACHMENT E



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TRANSGAS Inc. • 87 Industrial Avenue East • Lowell, Massachusetts 01852-5193  
978-856-2900 • www.TransgasLNG.com • email: info@transgasLNG.com

October 22, 2019

To Whom It May Concern:

I have read and agree to abide by the content of the National Grid safety policy *Safe Motor Vehicle Operations (SMVO)* and National Grid safety procedure *Contractor Safety Requirements (N-1402)* to the extent that these sections apply to volumes delivered from a transaction resulting from the RFP.

A handwritten signature in black ink, appearing to read "Tom Brady", written in a cursive style.

Thomas E. Brady  
Director, Safety

The Narragansett Electric Company  
d/b/a National Grid  
RIPUC Docket No. 5066  
In Re: 2020 Annual Gas Cost Recovery Filing  
Responses to the Division's First Set of Data Requests  
Issued on August 19, 2020

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Division 1-29

Request:

Please provide a copy of all contracts providing the purchase of supplies at Dracut in effect during the period April 2019 through July 2021.

Response:

For the period April 2019 through July 2021, the Company did not purchase any supplies at Dracut. As the Company explained in its 2020 Gas Cost Recovery Filing at page 25, line 2, beginning with the 2019/20 heating season, the Company filled its Dracut exposure through an asset management arrangement (“AMA”), which involved the release to an asset manager of the Company’s Tennessee firm transportation capacity having primary receipts at Dracut and primary delivery entitlements to the Company’s city-gate. Under the AMA, the Company has the right, but not the obligation, to call on the asset manager to deliver supply directly at the city-gate. Subject to satisfying the Company’s gas supply requirements, the asset manager has the right to utilize the capacity for its own account. In exchange, the Company will receive an asset management fee, which is then fully credited to customers. Based on the result of request for proposals for the 2020/21 heating season, the Company again plans to fill its exposure at Dracut through a similar AMA.