

EXHIBIT JAR-1

Petitioner's Response to Data Request Staff 2-2¹

¹ The Attachment Staff 2-2(c) referenced in the response to data request forming this exhibit is voluminous and is provided separately electronically on a CD accompanying this filing, and may be made part of the public record.

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities

DG 14-380

Petition for Approval of a Firm Transportation Agreement with the Tennessee Gas Pipeline Company, LLC

Staff Data Requests - Set 2

Date Request Received: 2/7/15
Request No. Staff 2-2

Date of Response: 2/17/15
Respondent: Francisco C. DaFonte

REQUEST:

Please provide electronic copies of the forecast models used in the EnergyNorth IRP (DG 13-313) and to support the petition filed in DG-14-380 (the “petition”), with all cells enabled and formulas intact, include in your response EnergyNorth’s current, approved demand forecasts for the following Weather/Growth demand scenarios:

- a. Normal Year Base Case;
- b. Design Year Base Case;
- c. Design Day Base Case;
- d. Cold Snap Base Case;
- e. Design Year High Growth;
- f. Design Day High Growth; and
- g. Cold Snap High Growth.

RESPONSE:

The forecast models used in the EnergyNorth LCIRP (DG 13-313) are provided in the attachments below in the format requested. In addition, see Attachment Staff 2-2(d).xlsx for the source file for each of these LCIRP forecast scenarios.

- a. Attachment Staff 2-2(a).xlsx in tabs “Normal-ENGI-NovOct-BC” and “ComparisonOfForecasts.”
- b. Attachment Staff 2-2(a).xlsx in tabs “Design-ENGI-NovOct-BC” and “ComparisonOfForecasts.”
- c. Attachment Staff 2-2(a).xlsx in tabs “Design-ENGI-NovOct-BC” and “ComparisonOfForecasts.”
- d. Attachment Staff 2-2(a).xlsx in tab “11-7DayReqment.”
- e. Attachment Staff 2-2(b).xlsx in tabs “Design-ENGI-NovOct-HC” and “ComparisonOfForecasts-HC.”
- f. Attachment Staff 2-2(b).xlsx in tabs “Design-ENGI-NovOct-HC” and “ComparisonOfForecasts-HC.”

- g. Attachment Staff 2-2(b).xlsx in tab "11-7DayReqment-HC."

The forecast models used to support the petition filed in DG-14-380 are provided below for Normal Year Base Case, Design Year Base Case and Design Day Base Case. The Company did not run any high case forecast scenarios or a base case Cold Snap scenario.

- a. Attachment Staff 2-2(c).xlsx in tab "Normal_Year_Base."
- b. Attachment Staff 2-2(c).xlsx in tab "Design_Year_Base."
- c. Attachment Staff 2-2(c).xlsx in tab "Design_Day_Base."

EXHIBIT JAR-2

Petitioner's Responses to Data Requests PLAN 2-2, 2-3 and 2-4

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities

DG 14-380

Petition for Approval of a Firm Transportation Agreement with the Tennessee Gas Pipeline Company, LLC

Pipeline Awareness Network of the Northeast ("PLAN") Data Requests – Set 2

Date Request Received: 4/1/15
Request No. PLAN 2-2

Date of Response: 4/13/15
Respondent: Francisco C. DaFonte

REQUEST:

Please describe the baseload supply contract(s) for Dracut or citygate firm peaking supply that EnergyNorth entered into for the 2014-15 winter season.

- a) Please provide the daily contract quantity (maximum and minimum, if applicable) and the seasonal quantity (maximum and minimum, if applicable).
- b) Please provide the total quantity purchased under this contract at citygate points under this contract each month from November 2014 through March 2015.
- c) Please provide the total quantity purchased under this contract at Dracut each month from November 2014 through March 2015.
- d) Did this contract give EnergyNorth the option to require citygate delivery?
- e) If EnergyNorth had more than one such contract, please provide the details for each.

RESPONSE:

- a) The Company entered into a Dec-Feb firm baseload supply contract whereby the supplier had the option to deliver to Dracut or to the Company's citygate. MDQs for each month are as follows: Dec = 12,000/d, Jan = 20,000/d, Feb = 15,000/d
- b) The total quantities purchased at the citygate each month were as follows: Dec = 372,000 Dth, Jan = 620,000 Dth, Feb = 420,000 Dth.
- c) The Company did not purchase any supplies under this contract at Dracut
- d) No. The supplier opted to deliver to the citygate instead of Dracut.
- e) The Company did not have any additional delivered citygate/Dracut baseload contracts.

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities

DG 14-380

Petition for Approval of a Firm Transportation Agreement with the Tennessee Gas Pipeline Company, LLC

Pipeline Awareness Network of the Northeast ("PLAN") Data Requests – Set 2

Date Request Received: 4/1/15
Request No. PLAN 2-3

Date of Response: 4/13/15
Respondent: Francisco C. DaFonte

REQUEST:

Please describe the swing supply contract(s) for Dracut or citygate firm peaking supply that EnergyNorth entered into for the 2014-15 winter season.

- a) Please provide the daily contract quantity (maximum and minimum, if applicable) and the seasonal quantity (maximum and minimum, if applicable).
- b) Please provide the total quantity purchased under this contract at citygate points under this contract each month from November 2014 through March 2015.
- c) Please provide the total quantity purchased under this contract at Dracut each month from November 2014 through March 2015.
- d) Did this contract give EnergyNorth the option to require citygate delivery?
- e) If EnergyNorth had more than one such contract, please provide the details for each.

RESPONSE:

- a) The Company contracted for a citygate call option whereby it released its Dracut capacity to the supplier and the supplier provided a delivered citygate supply to the Company when requested. There were no daily or seasonal minimums. The daily and seasonal maximums along with the actual purchases under the contract are provided in Table PLAN 2-3 below.

Table PLAN 2-3

Month	Max Qty	Max Seasonal Qty	Quantity Purchased
Nov-14	30,000	900,000	0
Dec-14	20,000	620,000	0
Jan-15	20,000	620,000	42,000
Feb-15	20,000	560,000	149,000
Mar-15	30,000	930,000	0
Apr-15	20,000	600,000	0

- b) See Table PLAN 2-3 above.

- c) All volumes were contracted for a on a delivered citygate basis and not purchased at Dracut.
- d) No. Please see the Company's response to part (a) above.
- e) The Company had no other such contract.

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities

DG 14-380

Petition for Approval of a Firm Transportation Agreement with the Tennessee Gas Pipeline Company, LLC

Pipeline Awareness Network of the Northeast ("PLAN") Data Requests – Set 2

Date Request Received: 4/1/15
Request No. PLAN 2-4

Date of Response: 4/13/15
Respondent: Francisco C. DaFonte

REQUEST:

Please provide the total quantity of spot purchases that EnergyNorth made each month from November 2014 through March 2015 at (a) EnergyNorth citygates, and (b) Dracut or other Tennessee Zone 6 points.

RESPONSE:

In lieu of exercising its call option entitlement as described in the Company's response to PLAN request PLAN 2-3, it purchased spot supplies when the spot price was lower than the call option price. Table PLAN 2-4 below provides the spot volumes purchased either at the citygate or at Dracut during the 2014-15 winter period.

Table PLAN 2-4

Month	Citygate (Dth)	Dracut (Dth)
Nov-14	0	0
Dec-14	41,000	0
Jan-15	181,316	18,000
Feb-15	328,251	5,000
Mar-15	275,465	8,700

EXHIBIT JAR-3

Petitioner's Response to Data Request PLAN 1-8

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities

DG 14-380

Petition for Approval of a Firm Transportation Agreement with the Tennessee Gas Pipeline Company, LLC

Pipeline Awareness Network of the Northeast ("PLAN") Data Requests – Set 1

Date Request Received: 3/11/15
Request No. PLAN 1-8

Date of Response: 3/16/15
Respondent: Francisco C. DaFonte

REQUEST:

Reference: DaFonte Testimony, Bates p. 25, lines 16-18. "Dracut...has proven to be one of the highest priced purchase points in the country over the past few years due to a lack of supply at that point."

- a. What amount of pipeline capacity on PNGTS, Maritimes, and Tennessee is currently deliverable to Dracut?
- b. Please describe what EnergyNorth means by "a lack of supply" at Dracut. Does this refer to firm winter season supply or daily spot purchases? Has EnergyNorth been unable to acquire gas at Dracut to meet its firm requirements?
- c. What does EnergyNorth understand to be the relationship between the Dracut price and the Algonquin Citygate and Tennessee Zone 6 prices?
- d. Please explain how the Atlantic Bridge project would affect the availability and pricing of gas at Dracut.

RESPONSE:

- a. The Company is not privy to the exact amount of deliverable capacity to Dracut but does know that Tennessee gas does not deliver gas to Dracut as it operates at a much lower pressure than the Joint Facilities of Maritimes and PNGTS. In addition, the larger concern at Dracut is the lack of supply due to the continued decline in Sable Island and Deep Panuke supplies and the growing demand in the Maritimes provinces for those supplies. In fact, often times gas actually flows into Canada from the U.S. on the Maritimes pipeline due to the growing demand in eastern Canada. Further, it is unpredictable as to how much volume of LNG will be brought into the Cannaport LNG terminal on a year-to-year basis as LNG is traded on a global basis and will go to the highest priced market.
- b. The lack of supply is described in response to (a) above. With regard to trading of supplies at Dracut, the lack of supply liquidity has prompted Platts, the industry

recognized provider of index pricing, to cease publishing a monthly price index for Dracut. Platts continues to publish a daily Dracut index.

While some supply trades on a spot basis at Dracut, most supplies are priced off of the Tennessee Zone 6-200 leg market index and there are occasions when a Dracut daily index is not published due to a lack of purchases at that point. EnergyNorth has purchased gas at Dracut in the past but has not received any bids during its RFP process for winter supply priced off of the Dracut index over the last two winter periods due to lack of liquidity.

- c. As discussed in the Company's response to (b) above, Dracut supply is typically priced off of the Tennessee Zone 6-200 leg index price. With respect to the pricing relationship with the Algonquin city-gates index, the Algonquin index typically trades at a slight premium to Tennessee Zone 6-200 leg and Dracut, when published.
- d. The Company's understanding is that the Atlantic Bridge project is being backed by gas LDCs that are primarily served directly off of the Algonquin system and not at Dracut. Even if there are other shippers on the project, the capacity that they contract for would be used to serve their needs and not to specifically sell gas at Dracut. In addition, no pipeline would build capacity on speculation to a delivery point unless it is so requested by a contracting shipper. Thus, it is highly likely that there will be little to no impact on price at Dracut from the Atlantic Bridge project or for that matter the NED project or the C2C project unless a shipper is specifically contracting for long-term capacity to sell their supply at Dracut. The Company is not aware of any such shipper on any of the proposed projects.

EXHIBIT JAR-4

Petitioner's Response to Data Request PLAN 3-2

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities

DG 14-380

Petition for Approval of a Firm Transportation Agreement with the Tennessee Gas Pipeline Company, LLC

Pipeline Awareness Network of the Northeast (“PLAN”) Data Requests – Set 3

Date Request Received: 4/20/15
Request No. PLAN 3-2

Date of Response: 4/22/15
Respondent: Francisco C. DaFonte

REQUEST:

Reference: PLAN 2-18. The data request asks for a detailed description of the market area gas pricing assumptions. In its response EnergyNorth states: “The Dracut supply price was assumed to be the top 10 highest average prices over the past 3 winters given that it is assumed that no new projects are built.” Additional information is needed to understand how EnergyNorth performed its analysis.

- a) Is EnergyNorth’s analysis is based on the assumption that the Spectra AIM project, the Spectra Atlantic Bridge project, and the Kinder Morgan Northeast Energy Direct project will all fail to be completed before November 2019? Please explain.
- b) Please provide the actual Dracut prices that EnergyNorth used in its modeling analysis for each day of the 2018-19 gas year. Please show the market-area price, the assumed Henry Hub price and the assumed basis.
- c) Please identify the historical prices used to develop the projected Dracut prices. Please provide the actual historical prices, if this information has not already been provided.

RESPONSE:

The request specifically asks for a scenario which “excludes all of the additional long-term supply options.” Thus, the analysis provided in response to PLAN 2-18 does not factor in these projects. The Company ran the SENDOUT model as requested. All pricing assumptions are provided in the SENDOUT model report provided as Attachment PLAN 2-18.

EXHIBIT JAR-5

Petitioner's Response to Data Request PLAN 1-3¹

¹ The Attachment PLAN 1-3 referenced in the response to data request forming this exhibit is voluminous and has been marked **CONFIDENTIAL** by the Petitioner. Both **CONFIDENTIAL** and **REDACTED** versions are being provided separately electronically on a CD accompanying this filing.

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities

DG 14-380

Petition for Approval of a Firm Transportation Agreement with the Tennessee Gas Pipeline Company, LLC

Pipeline Awareness Newtork of the Northeast ("PLAN") Data Requests – Set 1

Date Request Received: 3/11/15
Request No. PLAN 1-3

Date of Response: 3/23/15
Respondent: Francisco C. DaFonte

REQUEST:

Reference: Staff 2-1. EnergyNorth states that the basis numbers were "derived through analysis performed by the LDC consortium."

- a. Please provide all workpapers and other documentation supporting the basis numbers contained in Staff 2-1, including data showing the "historical and forward looking basis relationships" referred to in the response, and an explanation of the "assumptions on various projects" referred to in the response.
- b. Who was responsible for the price basis analysis performed by the LDC consortium?
- c. Did EnergyNorth make any changes to consortium numbers to "derive" the basis numbers shown in Staff 2-1? If so, please explain the modifications.
- d. Is it correct to assume that the "NED" and "C2C" basis numbers correspond to Wright and the "Atl Bridge" numbers correspond to Ramapo?
- e. Did the LDC consortium analysis consider the price basis at any other locations, such as Algonquin citygates, Tennessee Zone 6, Waddington, Dracut, Mahwah or TETCO M3? If not, please explain why only Wright and Ramapo were considered. If other locations were analyzed, please provide the results of the analysis, including all workpapers and assumptions.
- f. Did EnergyNorth consider price basis forecasts from any other sources? If so, describe the other price basis forecasts and provide the basis numbers.

RESPONSE:

- a. Confidential Attachment PLAN-1-3.xlsx is the LDC Consortium Working Group analysis to determine reasonable basis differentials at various purchase points including those for the NED, C2C and Atlantic Bridge projects. Pursuant to Puc 203.08, the Company has a good faith basis for seeking confidential treatment of information in this response. The Company will submit a motion for confidential treatment regarding this information at or before the commencement of the hearing in such proceedings. Since all

of the information in Attachment PLAN 1-3.xlsx is confidential, a redacted version is not being provided.

- b. A working group of approximately 10 individuals from the various member of the LDC Consortium.
- c. The Company adjusted the basis numbers for Wright and Ramapo in the winter period based on the proportional sendout for each of the winter months so as not to use a straight average for each winter month given that the highest basis differentials typically occur during the coldest months.
- d. Yes.
- e. The LDC Consortium analyzed basis numbers at various locations and those are provided in Confidential Attachment PLAN-1-3.xlsx.
- f. The Company relied on the very thorough analysis compiled by the LDC Consortium and did not consider, nor does it have access to, any additional publications beyond those contained in the analysis.

EXHIBIT JAR-6

Petitioner's Response to Data Request PLAN 2-13

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities

DG 14-380

Petition for Approval of a Firm Transportation Agreement with the Tennessee Gas Pipeline
Company, LLC

Pipeline Awareness Network of the Northeast ("PLAN") Data Requests – Set 2

Date Request Received: 4/1/15
Request No. PLAN 2-13

Date of Response: 4/13/15
Respondent: Francisco C. DaFonte

REQUEST:

Reference: Attachment PLAN 1-3, "Tables" tab [CONFIDENTIAL]

The footnote for the Wright pricing says that it was "based upon a range of values provided in various presentations to the companies". Please provide the presentations that are referred to in the footnote.

RESPONSE:

The Company does not have any such presentations referenced in the footnote. The pricing analysis was conducted by a subgroup of the LDC Consortium and the referenced presentations may have been provided to that group.

EXHIBIT JAR-7

Petitioner's Response to Data Request OCA 1-9

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities

DG 14-380

Petition for Approval of a Firm Transportation Agreement with the Tennessee Gas Pipeline Company, LLC

OCA Data Requests - Set 1

Date Request Received: 3/2/15
Request No. OCA 1-9

Date of Response: 3/16/15
Respondent: Francisco C. DaFonte

REQUEST

Ref. DaFonte Testimony, Page 24 of 38, lines 15-18. Did Liberty Utilities conduct any study projecting the supply cost at Dracut with and without the NED in place? If so, please provide supporting documents.

RESPONSE:

The Company did not conduct a formal study projecting the supply cost at Dracut with and without NED. However, with the NED project in place and with the approval by the Commission of the Company's Precedent Agreement in this docket, there would be no need for the Company to purchase supplies at Dracut. Without the NED project in place, it can be assumed based on substantial empirical pricing data over the past three years that supply prices at Dracut would remain very high in the winter. Further, without any new pipeline capacity and continued growth from all market segments, it is reasonable to assume that Dracut prices would increase over time.

Attachment OCA-1-9 provides index pricing data for the past three winter periods for Tennessee Zone 6, which is the pricing proxy for Dracut, and the Henry Hub along with the basis differential between the two pricing points.

Market Area Pricing Compared to Henry Hub Pricing

	Tennessee			
	Z6	Henry Hub	Basis	
11/1/12	\$ 4.410	\$ 3.500	\$ 0.91	
11/2/12	\$ 4.450	\$ 3.500	\$ 0.95	
11/3/12	\$ 5.130	\$ 3.395	\$ 1.74	
11/4/12	\$ 5.130	\$ 3.395	\$ 1.74	
11/5/12	\$ 5.130	\$ 3.395	\$ 1.74	
11/6/12	\$ 6.695	\$ 3.340	\$ 3.36	
11/7/12	\$ 7.835	\$ 3.410	\$ 4.43	
11/8/12	\$ 8.505	\$ 3.470	\$ 5.04	
11/9/12	\$ 6.330	\$ 3.450	\$ 2.88	
11/10/12	\$ 4.530	\$ 3.325	\$ 1.21	
11/11/12	\$ 4.530	\$ 3.325	\$ 1.21	
11/12/12	\$ 4.530	\$ 3.325	\$ 1.21	
11/13/12	\$ 4.575	\$ 3.405	\$ 1.17	
11/14/12	\$ 7.800	\$ 3.575	\$ 4.23	
11/15/12	\$ 7.105	\$ 3.660	\$ 3.45	
11/16/12	\$ 6.165	\$ 3.630	\$ 2.54	
11/17/12	\$ 5.410	\$ 3.455	\$ 1.96	
11/18/12	\$ 5.410	\$ 3.455	\$ 1.96	
11/19/12	\$ 5.410	\$ 3.455	\$ 1.96	
11/20/12	\$ 7.005	\$ 3.630	\$ 3.38	
11/21/12	\$ 7.220	\$ 3.615	\$ 3.61	
11/22/12	\$ 7.595	\$ 3.595	\$ 4.00	
11/23/12	\$ 7.595	\$ 3.595	\$ 4.00	
11/24/12	\$ 7.595	\$ 3.595	\$ 4.00	
11/25/12	\$ 7.595	\$ 3.595	\$ 4.00	
11/26/12	\$ 7.595	\$ 3.595	\$ 4.00	
11/27/12	\$ 12.085	\$ 3.750	\$ 8.34	
11/28/12	\$ 11.600	\$ 3.770	\$ 7.83	
11/29/12	\$ 9.045	\$ 3.705	\$ 5.34	
11/30/12	\$ 9.660	\$ 3.615	\$ 6.05	

	Tennessee			
	Z6	Henry Hub	Basis	
11/1/13	\$ 3.710	\$ 3.565	\$ 0.15	
11/2/13	\$ 4.645	\$ 3.455	\$ 1.19	
11/3/13	\$ 4.645	\$ 3.455	\$ 1.19	
11/4/13	\$ 4.645	\$ 3.455	\$ 1.19	
11/5/13	\$ 4.605	\$ 3.380	\$ 1.23	
11/6/13	\$ 3.850	\$ 3.360	\$ 0.49	
11/7/13	\$ 3.730	\$ 3.460	\$ 0.27	
11/8/13	\$ 4.425	\$ 3.570	\$ 0.86	
11/9/13	\$ 3.910	\$ 3.540	\$ 0.37	
11/10/13	\$ 3.910	\$ 3.540	\$ 0.37	
11/11/13	\$ 3.910	\$ 3.540	\$ 0.37	
11/12/13	\$ 8.220	\$ 3.625	\$ 4.60	
11/13/13	\$ 8.550	\$ 3.695	\$ 4.86	
11/14/13	\$ 4.630	\$ 3.675	\$ 0.96	
11/15/13	\$ 3.810	\$ 3.520	\$ 0.29	
11/16/13	\$ 3.540	\$ 3.560	\$ (0.02)	
11/17/13	\$ 3.540	\$ 3.560	\$ (0.02)	
11/18/13	\$ 3.540	\$ 3.560	\$ (0.02)	
11/19/13	\$ 5.275	\$ 3.705	\$ 1.57	
11/20/13	\$ 6.200	\$ 3.625	\$ 2.58	
11/21/13	\$ 4.655	\$ 3.625	\$ 1.03	
11/22/13	\$ 4.340	\$ 3.680	\$ 0.66	
11/23/13	\$ 12.095	\$ 3.775	\$ 8.32	
11/24/13	\$ 12.095	\$ 3.775	\$ 8.32	
11/25/13	\$ 12.095	\$ 3.775	\$ 8.32	
11/26/13	\$ 5.850	\$ 3.850	\$ 2.00	
11/27/13	\$ 8.465	\$ 3.865	\$ 4.60	
11/28/13	\$ 8.465	\$ 3.865	\$ 4.60	
11/29/13	\$ 8.465	\$ 3.865	\$ 4.60	
11/30/13	\$ 8.465	\$ 3.865	\$ 4.60	

	Tennessee			
	Z6	Henry Hub	Basis	
11/1/14	\$ 6.500	\$ 3.840	\$ 2.66	
11/2/14	\$ 6.500	\$ 3.840	\$ 2.66	
11/3/14	\$ 6.500	\$ 3.840	\$ 2.66	
11/4/14	\$ 4.375	\$ 3.705	\$ 0.67	
11/5/14	\$ 3.305	\$ 3.675	\$ (0.37)	
11/6/14	\$ 4.090	\$ 3.805	\$ 0.29	
11/7/14	\$ 7.045	\$ 3.900	\$ 3.15	
11/8/14	\$ 5.675	\$ 4.010	\$ 1.67	
11/9/14	\$ 5.675	\$ 4.010	\$ 1.67	
11/10/14	\$ 5.675	\$ 4.010	\$ 1.67	
11/11/14	\$ 4.875	\$ 4.135	\$ 0.74	
11/12/14	\$ 5.330	\$ 4.070	\$ 1.26	
11/13/14	\$ 7.640	\$ 4.205	\$ 3.44	
11/14/14	\$ 9.785	\$ 4.175	\$ 5.61	
11/15/14	\$ 5.990	\$ 4.040	\$ 1.95	
11/16/14	\$ 5.990	\$ 4.040	\$ 1.95	
11/17/14	\$ 5.990	\$ 4.040	\$ 1.95	
11/18/14	\$ 10.545	\$ 4.220	\$ 6.33	
11/19/14	\$ 8.115	\$ 4.320	\$ 3.80	
11/20/14	\$ 5.720	\$ 4.395	\$ 1.33	
11/21/14	\$ 5.880	\$ 4.410	\$ 1.47	
11/22/14	\$ 3.710	\$ 4.315	\$ (0.61)	
11/23/14	\$ 3.710	\$ 4.315	\$ (0.61)	
11/24/14	\$ 3.710	\$ 4.315	\$ (0.61)	
11/25/14	\$ 3.775	\$ 4.065	\$ (0.29)	
11/26/14	\$ 6.485	\$ 4.130	\$ 2.36	
11/27/14	\$ 6.485	\$ 4.130	\$ 2.36	
11/28/14	\$ 6.485	\$ 4.130	\$ 2.36	
11/29/14	\$ 6.485	\$ 4.130	\$ 2.36	
11/30/14	\$ 6.485	\$ 4.130	\$ 2.36	

Market Area Pricing Compared to Henry Hub Pricing

Tennessee					Tennessee					Tennessee				
	Z6	Henry Hub	Basis		Z6	Henry Hub	Basis			Z6	Henry Hub	Basis		
12/1/12	\$ 5.870	\$ 3.470	\$ 2.40	12/1/13	\$ 5.065	\$ 3.785	\$ 1.28	12/1/14	\$ 5.440	\$ 4.235	\$ 1.21			
12/2/12	\$ 5.870	\$ 3.470	\$ 2.40	12/2/13	\$ 5.065	\$ 3.785	\$ 1.28	12/2/14	\$ 4.765	\$ 3.890	\$ 0.88			
12/3/12	\$ 5.870	\$ 3.470	\$ 2.40	12/3/13	\$ 6.230	\$ 3.840	\$ 2.39	12/3/14	\$ 3.800	\$ 3.740	\$ 0.06			
12/4/12	\$ 5.100	\$ 3.435	\$ 1.67	12/4/13	\$ 4.725	\$ 3.830	\$ 0.90	12/4/14	\$ 5.840	\$ 3.630	\$ 2.21			
12/5/12	\$ 6.460	\$ 3.380	\$ 3.08	12/5/13	\$ 4.225	\$ 3.870	\$ 0.36	12/5/14	\$ 4.690	\$ 3.545	\$ 1.15			
12/6/12	\$ 9.595	\$ 3.415	\$ 6.18	12/6/13	\$ 4.805	\$ 3.975	\$ 0.83	12/6/14	\$ 11.630	\$ 3.425	\$ 8.21			
12/7/12	\$ 5.080	\$ 3.480	\$ 1.60	12/7/13	\$ 6.775	\$ 4.145	\$ 2.63	12/7/14	\$ 11.630	\$ 3.425	\$ 8.21			
12/8/12	\$ 4.670	\$ 3.335	\$ 1.34	12/8/13	\$ 6.775	\$ 4.145	\$ 2.63	12/8/14	\$ 11.630	\$ 3.425	\$ 8.21			
12/9/12	\$ 4.670	\$ 3.335	\$ 1.34	12/9/13	\$ 6.775	\$ 4.145	\$ 2.63	12/9/14	\$ 4.700	\$ 3.500	\$ 1.20			
12/10/12	\$ 4.670	\$ 3.335	\$ 1.34	12/10/13	\$ 14.625	\$ 4.210	\$ 10.42	12/10/14	\$ 6.885	\$ 3.615	\$ 3.27			
12/11/12	\$ 5.250	\$ 3.355	\$ 1.90	12/11/13	\$ 21.025	\$ 4.320	\$ 16.71	12/11/14	\$ 9.535	\$ 3.610	\$ 5.93			
12/12/12	\$ 6.990	\$ 3.385	\$ 3.61	12/12/13	\$ 21.115	\$ 4.235	\$ 16.88	12/12/14	\$ 7.590	\$ 3.670	\$ 3.92			
12/13/12	\$ 5.400	\$ 3.335	\$ 2.07	12/13/13	\$ 24.875	\$ 4.395	\$ 20.48	12/13/14	\$ 5.015	\$ 3.580	\$ 1.44			
12/14/12	\$ 4.085	\$ 3.270	\$ 0.82	12/14/13	\$ 32.220	\$ 4.355	\$ 27.87	12/14/14	\$ 5.015	\$ 3.580	\$ 1.44			
12/15/12	\$ 4.665	\$ 3.145	\$ 1.52	12/15/13	\$ 32.220	\$ 4.355	\$ 27.87	12/15/14	\$ 5.015	\$ 3.580	\$ 1.44			
12/16/12	\$ 4.665	\$ 3.145	\$ 1.52	12/16/13	\$ 32.220	\$ 4.355	\$ 27.87	12/16/14	\$ 4.305	\$ 3.665	\$ 0.64			
12/17/12	\$ 4.665	\$ 3.145	\$ 1.52	12/17/13	\$ 22.425	\$ 4.220	\$ 18.21	12/17/14	\$ 4.245	\$ 3.570	\$ 0.68			
12/18/12	\$ 4.465	\$ 3.200	\$ 1.27	12/18/13	\$ 20.355	\$ 4.210	\$ 16.15	12/18/14	\$ 4.795	\$ 3.655	\$ 1.14			
12/19/12	\$ 4.550	\$ 3.290	\$ 1.26	12/19/13	\$ 10.990	\$ 4.260	\$ 6.73	12/19/14	\$ 6.315	\$ 3.685	\$ 2.63			
12/20/12	\$ 4.200	\$ 3.245	\$ 0.96	12/20/13	\$ 8.200	\$ 4.260	\$ 3.94	12/20/14	\$ 4.755	\$ 3.425	\$ 1.33			
12/21/12	\$ 4.145	\$ 3.345	\$ 0.80	12/21/13	\$ 5.710	\$ 4.350	\$ 1.36	12/21/14	\$ 4.755	\$ 3.425	\$ 1.33			
12/22/12	\$ 5.180	\$ 3.420	\$ 1.76	12/22/13	\$ 5.710	\$ 4.350	\$ 1.36	12/22/14	\$ 4.755	\$ 3.425	\$ 1.33			
12/23/12	\$ 5.180	\$ 3.420	\$ 1.76	12/23/13	\$ 5.710	\$ 4.350	\$ 1.36	12/23/14	\$ 3.255	\$ 3.040	\$ 0.22			
12/24/12	\$ 5.180	\$ 3.420	\$ 1.76	12/24/13	\$ 13.995	\$ 4.520	\$ 9.48	12/24/14	\$ 2.440	\$ 2.965	\$ (0.53)			
12/25/12	\$ 4.670	\$ 3.295	\$ 1.38	12/25/13	\$ 8.225	\$ 4.455	\$ 3.77	12/25/14	\$ 3.740	\$ 2.745	\$ 1.00			
12/26/12	\$ 4.670	\$ 3.295	\$ 1.38	12/26/13	\$ 8.225	\$ 4.455	\$ 3.77	12/26/14	\$ 3.740	\$ 2.745	\$ 1.00			
12/27/12	\$ 4.890	\$ 3.345	\$ 1.55	12/27/13	\$ 9.090	\$ 4.395	\$ 4.70	12/27/14	\$ 3.740	\$ 2.745	\$ 1.00			
12/28/12	\$ 7.490	\$ 3.310	\$ 4.18	12/28/13	\$ 21.800	\$ 4.320	\$ 17.48	12/28/14	\$ 3.740	\$ 2.745	\$ 1.00			
12/29/12	\$ 10.725	\$ 3.405	\$ 7.32	12/29/13	\$ 21.800	\$ 4.320	\$ 17.48	12/29/14	\$ 3.740	\$ 2.745	\$ 1.00			
12/30/12	\$ 10.725	\$ 3.405	\$ 7.32	12/30/13	\$ 21.800	\$ 4.320	\$ 17.48	12/30/14	\$ 11.015	\$ 3.000	\$ 8.02			

Market Area Pricing Compared to Henry Hub Pricing

	Tennessee			
	Z6	Henry Hub	Basis	
12/31/12	\$ 10.725	\$ 3.405	\$	7.32
1/1/13	\$ 11.515	\$ 3.425	\$	8.09
1/2/13	\$ 11.515	\$ 3.425	\$	8.09
1/3/13	\$ 9.375	\$ 3.300	\$	6.08
1/4/13	\$ 6.895	\$ 3.195	\$	3.70
1/5/13	\$ 6.190	\$ 3.205	\$	2.99
1/6/13	\$ 6.190	\$ 3.205	\$	2.99
1/7/13	\$ 6.190	\$ 3.205	\$	2.99
1/8/13	\$ 4.740	\$ 3.290	\$	1.45
1/9/13	\$ 4.535	\$ 3.215	\$	1.32
1/10/13	\$ 4.315	\$ 3.135	\$	1.18
1/11/13	\$ 4.065	\$ 3.080	\$	0.99
1/12/13	\$ 3.650	\$ 3.180	\$	0.47
1/13/13	\$ 3.650	\$ 3.180	\$	0.47
1/14/13	\$ 3.650	\$ 3.180	\$	0.47
1/15/13	\$ 5.390	\$ 3.385	\$	2.01
1/16/13	\$ 7.250	\$ 3.400	\$	3.85
1/17/13	\$ 8.930	\$ 3.435	\$	5.50
1/18/13	\$ 10.910	\$ 3.440	\$	7.47
1/19/13	\$ 11.875	\$ 3.525	\$	8.35
1/20/13	\$ 11.875	\$ 3.525	\$	8.35
1/21/13	\$ 11.875	\$ 3.525	\$	8.35
1/22/13	\$ 11.875	\$ 3.525	\$	8.35
1/23/13	\$ 20.930	\$ 3.625	\$	17.31
1/24/13	\$ 31.740	\$ 3.535	\$	28.21
1/25/13	\$ 31.780	\$ 3.565	\$	28.22
1/26/13	\$ 14.990	\$ 3.420	\$	11.57
1/27/13	\$ 14.990	\$ 3.420	\$	11.57
1/28/13	\$ 14.990	\$ 3.420	\$	11.57
1/29/13	\$ 6.675	\$ 3.250	\$	3.43

	Tennessee			
	Z6	Henry Hub	Basis	
12/31/13	\$ 21.800	\$ 4.415	\$	17.39
1/1/14	\$ 19.795	\$ 4.340	\$	15.46
1/2/14	\$ 19.795	\$ 4.340	\$	15.46
1/3/14	\$ 32.145	\$ 4.325	\$	27.82
1/4/14	\$ 16.455	\$ 4.340	\$	12.12
1/5/14	\$ 16.455	\$ 4.340	\$	12.12
1/6/14	\$ 16.455	\$ 4.340	\$	12.12
1/7/14	\$ 34.670	\$ 4.505	\$	30.17
1/8/14	\$ 25.510	\$ 4.540	\$	20.97
1/9/14	\$ 19.490	\$ 4.350	\$	15.14
1/10/14	\$ 9.380	\$ 4.140	\$	5.24
1/11/14	\$ 4.700	\$ 3.955	\$	0.75
1/12/14	\$ 4.700	\$ 3.955	\$	0.75
1/13/14	\$ 4.700	\$ 3.955	\$	0.75
1/14/14	\$ 6.030	\$ 4.195	\$	1.84
1/15/14	\$ 7.965	\$ 4.355	\$	3.61
1/16/14	\$ 7.565	\$ 4.440	\$	3.13
1/17/14	\$ 6.925	\$ 4.535	\$	2.39
1/18/14	\$ 22.455	\$ 4.395	\$	18.06
1/19/14	\$ 22.455	\$ 4.395	\$	18.06
1/20/14	\$ 22.455	\$ 4.395	\$	18.06
1/21/14	\$ 22.455	\$ 4.395	\$	18.06
1/22/14	\$ 54.175	\$ 4.590	\$	49.59
1/23/14	\$ 65.700	\$ 4.910	\$	60.79
1/24/14	\$ 37.070	\$ 5.550	\$	31.52
1/25/14	\$ 42.265	\$ 5.180	\$	37.09
1/26/14	\$ 42.265	\$ 5.180	\$	37.09
1/27/14	\$ 42.265	\$ 5.180	\$	37.09
1/28/14	\$ 70.080	\$ 5.685	\$	64.40
1/29/14	\$ 33.270	\$ 5.240	\$	28.03

	Tennessee			
	Z6	Henry Hub	Basis	
12/31/14	\$ 8.325	\$ 3.135	\$	5.19
1/1/15	\$ 5.575	\$ 2.995	\$	2.58
1/2/15	\$ 5.575	\$ 2.995	\$	2.58
1/3/15	\$ 5.500	\$ 2.985	\$	2.52
1/4/15	\$ 5.500	\$ 2.985	\$	2.52
1/5/15	\$ 5.500	\$ 2.985	\$	2.52
1/6/15	\$ 9.805	\$ 3.205	\$	6.60
1/7/15	\$ 12.015	\$ 2.965	\$	9.05
1/8/15	\$ 12.070	\$ 3.070	\$	9.00
1/9/15	\$ 7.215	\$ 2.915	\$	4.30
1/10/15	\$ 9.700	\$ 2.950	\$	6.75
1/11/15	\$ 9.700	\$ 2.950	\$	6.75
1/12/15	\$ 9.700	\$ 2.950	\$	6.75
1/13/15	\$ 11.525	\$ 2.895	\$	8.63
1/14/15	\$ 10.965	\$ 2.890	\$	8.08
1/15/15	\$ 10.240	\$ 3.130	\$	7.11
1/16/15	\$ 13.315	\$ 3.295	\$	10.02
1/17/15	\$ 9.100	\$ 3.095	\$	6.01
1/18/15	\$ 9.100	\$ 3.095	\$	6.01
1/19/15	\$ 9.100	\$ 3.095	\$	6.01
1/20/15	\$ 9.100	\$ 3.095	\$	6.01
1/21/15	\$ 8.930	\$ 2.920	\$	6.01
1/22/15	\$ 7.500	\$ 2.945	\$	4.56
1/23/15	\$ 6.535	\$ 2.925	\$	3.61
1/24/15	\$ 8.665	\$ 2.960	\$	5.71
1/25/15	\$ 8.665	\$ 2.960	\$	5.71
1/26/15	\$ 8.665	\$ 2.960	\$	5.71
1/27/15	\$ 10.300	\$ 2.925	\$	7.38
1/28/15	\$ 9.005	\$ 2.950	\$	6.06
1/29/15	\$ 9.050	\$ 2.895	\$	6.16

Market Area Pricing Compared to Henry Hub Pricing

	Tennessee		
	Z6	Henry Hub	Basis
1/30/13	\$ 4.440	\$ 3.130	\$ 1.31
1/31/13	\$ 6.880	\$ 3.235	\$ 3.65
2/1/13	\$ 20.920	\$ 3.330	\$ 17.59
2/2/13	\$ 24.320	\$ 3.335	\$ 20.99
2/3/13	\$ 24.320	\$ 3.335	\$ 20.99
2/4/13	\$ 24.320	\$ 3.335	\$ 20.99
2/5/13	\$ 16.295	\$ 3.275	\$ 13.02
2/6/13	\$ 15.850	\$ 3.340	\$ 12.51
2/7/13	\$ 21.635	\$ 3.410	\$ 18.23
2/8/13	\$ 17.460	\$ 3.385	\$ 14.08
2/9/13	\$ 26.555	\$ 3.255	\$ 23.30
2/10/13	\$ 26.555	\$ 3.255	\$ 23.30
2/11/13	\$ 26.555	\$ 3.255	\$ 23.30
2/12/13	\$ 24.950	\$ 3.195	\$ 21.76
2/13/13	\$ 22.915	\$ 3.305	\$ 19.61
2/14/13	\$ 17.815	\$ 3.280	\$ 14.54
2/15/13	\$ 10.190	\$ 3.295	\$ 6.90
2/16/13	\$ 13.840	\$ 3.190	\$ 10.65
2/17/13	\$ 13.840	\$ 3.190	\$ 10.65
2/18/13	\$ 13.840	\$ 3.190	\$ 10.65
2/19/13	\$ 13.840	\$ 3.190	\$ 10.65
2/20/13	\$ 14.045	\$ 3.225	\$ 10.82
2/21/13	\$ 16.390	\$ 3.340	\$ 13.05
2/22/13	\$ 9.480	\$ 3.290	\$ 6.19
2/23/13	\$ 6.160	\$ 3.265	\$ 2.90
2/24/13	\$ 6.160	\$ 3.265	\$ 2.90
2/25/13	\$ 6.160	\$ 3.265	\$ 2.90
2/26/13	\$ 6.165	\$ 3.420	\$ 2.75
2/27/13	\$ 6.900	\$ 3.455	\$ 3.45
2/28/13	\$ 7.610	\$ 3.495	\$ 4.12

	Tennessee		
	Z6	Henry Hub	Basis
1/30/14	\$ 14.820	\$ 5.205	\$ 9.62
1/31/14	\$ 10.490	\$ 5.290	\$ 5.20
2/1/14	\$ 34.874	\$ 5.020	\$ 29.85
2/2/14	\$ 34.874	\$ 5.020	\$ 29.85
2/3/14	\$ 34.874	\$ 5.020	\$ 29.85
2/4/14	\$ 12.530	\$ 5.040	\$ 7.49
2/5/14	\$ 19.380	\$ 5.760	\$ 13.62
2/6/14	\$ 28.245	\$ 7.840	\$ 20.41
2/7/14	\$ 23.620	\$ 6.830	\$ 16.79
2/8/14	\$ 20.545	\$ 5.885	\$ 14.66
2/9/14	\$ 20.545	\$ 5.885	\$ 14.66
2/10/14	\$ 20.545	\$ 5.885	\$ 14.66
2/11/14	\$ 27.400	\$ 7.760	\$ 19.64
2/12/14	\$ 21.850	\$ 7.755	\$ 14.10
2/13/14	\$ 15.300	\$ 6.060	\$ 9.24
2/14/14	\$ 17.525	\$ 5.290	\$ 12.24
2/15/14	\$ 21.515	\$ 5.530	\$ 15.99
2/16/14	\$ 21.515	\$ 5.530	\$ 15.99
2/17/14	\$ 21.515	\$ 5.530	\$ 15.99
2/18/14	\$ 21.515	\$ 5.530	\$ 15.99
2/19/14	\$ 13.250	\$ 5.720	\$ 7.53
2/20/14	\$ 13.720	\$ 5.955	\$ 7.77
2/21/14	\$ 14.545	\$ 5.930	\$ 8.62
2/22/14	\$ 22.105	\$ 6.215	\$ 15.89
2/23/14	\$ 22.105	\$ 6.215	\$ 15.89
2/24/14	\$ 22.105	\$ 6.215	\$ 15.89
2/25/14	\$ 29.295	\$ 6.030	\$ 23.27
2/26/14	\$ 27.530	\$ 5.210	\$ 22.32
2/27/14	\$ 28.440	\$ 4.825	\$ 23.62
2/28/14	\$ 28.910	\$ 4.530	\$ 24.38

	Tennessee		
	Z6	Henry Hub	Basis
1/30/15	\$ 11.080	\$ 2.870	\$ 8.21
1/31/15	\$ 11.080	\$ 2.870	\$ 8.21
2/1/15	\$ 12.160	\$ 2.675	\$ 9.49
2/2/15	\$ 12.160	\$ 2.675	\$ 9.49
2/3/15	\$ 10.610	\$ 2.625	\$ 7.99
2/4/15	\$ 8.180	\$ 2.670	\$ 5.51
2/5/15	\$ 12.495	\$ 2.725	\$ 9.77
2/6/15	\$ 11.050	\$ 2.630	\$ 8.42
2/7/15	\$ 8.300	\$ 2.555	\$ 5.75
2/8/15	\$ 8.300	\$ 2.555	\$ 5.75
2/9/15	\$ 8.300	\$ 2.555	\$ 5.75
2/10/15	\$ 12.460	\$ 2.600	\$ 9.86
2/11/15	\$ 15.730	\$ 2.635	\$ 13.10
2/12/15	\$ 18.785	\$ 2.845	\$ 15.94
2/13/15	\$ 17.125	\$ 2.865	\$ 14.26
2/14/15	\$ 24.130	\$ 2.730	\$ 21.40
2/15/15	\$ 24.130	\$ 2.730	\$ 21.40
2/16/15	\$ 24.130	\$ 2.730	\$ 21.40
2/17/15	\$ 24.130	\$ 2.730	\$ 21.40
2/18/15	\$ 18.995	\$ 2.950	\$ 16.05
2/19/15	\$ 19.915	\$ 2.930	\$ 16.99
2/20/15	\$ 15.365	\$ 2.965	\$ 12.40
2/21/15	\$ 10.845	\$ 2.985	\$ 7.86
2/22/15	\$ 10.845	\$ 2.985	\$ 7.86
2/23/15	\$ 10.845	\$ 2.985	\$ 7.86
2/24/15	\$ 29.310	\$ 3.190	\$ 26.12
2/25/15	\$ 27.250	\$ 3.120	\$ 24.13
2/26/15	\$ 25.110	\$ 3.200	\$ 21.91
2/27/15	\$ 20.005	\$ 3.105	\$ 16.90
2/28/15	\$ 20.005	\$ 3.105	\$ 16.90

Market Area Pricing Compared to Henry Hub Pricing

	Tennessee			
	Z6	Henry Hub	Basis	
3/1/13	\$ 6.230	\$ 3.485	\$ 2.75	
3/2/13	\$ 4.985	\$ 3.540	\$ 1.45	
3/3/13	\$ 4.985	\$ 3.540	\$ 1.45	
3/4/13	\$ 4.985	\$ 3.540	\$ 1.45	
3/5/13	\$ 6.380	\$ 3.535	\$ 2.85	
3/6/13	\$ 7.330	\$ 3.630	\$ 3.70	
3/7/13	\$ 7.395	\$ 3.575	\$ 3.82	
3/8/13	\$ 7.403	\$ 3.535	\$ 3.87	
3/9/13	\$ 6.135	\$ 3.574	\$ 2.56	
3/10/13	\$ 6.135	\$ 3.574	\$ 2.56	
3/11/13	\$ 6.135	\$ 3.574	\$ 2.56	
3/12/13	\$ 4.921	\$ 3.636	\$ 1.28	
3/13/13	\$ 5.848	\$ 3.706	\$ 2.14	
3/14/13	\$ 8.717	\$ 3.717	\$ 5.00	
3/15/13	\$ 8.477	\$ 3.744	\$ 4.73	
3/16/13	\$ 7.944	\$ 3.889	\$ 4.05	
3/17/13	\$ 7.944	\$ 3.889	\$ 4.05	
3/18/13	\$ 7.944	\$ 3.889	\$ 4.05	
3/19/13	\$ 8.718	\$ 3.982	\$ 4.74	
3/20/13	\$ 10.685	\$ 3.959	\$ 6.73	
3/21/13	\$ 11.440	\$ 3.965	\$ 7.47	
3/22/13	\$ 8.619	\$ 4.010	\$ 4.61	
3/23/13	\$ 6.438	\$ 4.010	\$ 2.43	
3/24/13	\$ 6.438	\$ 4.010	\$ 2.43	
3/25/13	\$ 6.438	\$ 4.010	\$ 2.43	
3/26/13	\$ 6.529	\$ 4.078	\$ 2.45	
3/27/13	\$ 5.445	\$ 3.994	\$ 1.45	
3/28/13	\$ 4.525	\$ 4.083	\$ 0.44	
3/29/13	\$ 4.525	\$ 4.083	\$ 0.44	
3/30/13	\$ 4.525	\$ 4.083	\$ 0.44	

	Tennessee			
	Z6	Henry Hub	Basis	
3/1/14	\$ 28.345	\$ 4.700	\$ 23.65	
3/2/14	\$ 28.345	\$ 4.700	\$ 23.65	
3/3/14	\$ 28.345	\$ 4.700	\$ 23.65	
3/4/14	\$ 37.415	\$ 6.935	\$ 30.48	
3/5/14	\$ 28.610	\$ 7.940	\$ 20.67	
3/6/14	\$ 30.080	\$ 6.415	\$ 23.67	
3/7/14	\$ 14.655	\$ 4.840	\$ 9.82	
3/8/14	\$ 15.215	\$ 4.770	\$ 10.45	
3/9/14	\$ 15.215	\$ 4.770	\$ 10.45	
3/10/14	\$ 15.215	\$ 4.770	\$ 10.45	
3/11/14	\$ 7.600	\$ 4.640	\$ 2.96	
3/12/14	\$ 8.380	\$ 4.660	\$ 3.72	
3/13/14	\$ 24.275	\$ 4.675	\$ 19.60	
3/14/14	\$ 9.175	\$ 4.385	\$ 4.79	
3/15/14	\$ 19.745	\$ 4.390	\$ 15.36	
3/16/14	\$ 19.745	\$ 4.390	\$ 15.36	
3/17/14	\$ 19.745	\$ 4.390	\$ 15.36	
3/18/14	\$ 13.635	\$ 4.580	\$ 9.06	
3/19/14	\$ 6.955	\$ 4.445	\$ 2.51	
3/20/14	\$ 5.400	\$ 4.440	\$ 0.96	
3/21/14	\$ 5.450	\$ 4.350	\$ 1.10	
3/22/14	\$ 9.140	\$ 4.310	\$ 4.83	
3/23/14	\$ 9.140	\$ 4.310	\$ 4.83	
3/24/14	\$ 9.140	\$ 4.310	\$ 4.83	
3/25/14	\$ 13.250	\$ 4.395	\$ 8.86	
3/26/14	\$ 17.345	\$ 4.500	\$ 12.85	
3/27/14	\$ 7.425	\$ 4.430	\$ 3.00	
3/28/14	\$ 5.000	\$ 4.385	\$ 0.62	
3/29/14	\$ 5.005	\$ 4.480	\$ 0.52	
3/30/14	\$ 5.005	\$ 4.480	\$ 0.52	

	Tennessee			
	Z6	Henry Hub	Basis	
3/1/15	\$ 14.275	\$ 2.770	\$ 11.51	
3/2/15	\$ 14.275	\$ 2.770	\$ 11.51	

Market Area Pricing Compared to Henry Hub Pricing

Tennessee			
	Z6	Henry Hub	Basis
3/31/13 \$	4.525	\$ 4.083	\$ 0.44

Tennessee			
	Z6	Henry Hub	Basis
3/31/14 \$	5.005	\$ 4.480	\$ 0.52

Tennessee		
Z6	Henry Hub	Basis

EXHIBIT JAR-8

Petitioner's Response to Data Request Staff 2-1

REDACTED VERSION

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities

DG 14-380

Petition for Approval of a Firm Transportation Agreement with the Tennessee Gas Pipeline
Company, LLC

Staff Data Requests - Set 2

Date Request Received: 2/5/15
Request No. Staff 2-1

Date of Response: 2/17/15
Respondent: Francisco C. DaFonte

REQUEST:

Please provide an explanation of all variables listed in the Sendout runs presented in attachments 3, 4, and 5.

RESPONSE:

The Company assumes that Staff's request is referring to the SENDOUT® runs provided in Attachments 4, 5 and 6.

All pricing inputs (fixed and variable) are provided in Confidential Attachment Staff-2-1. Pursuant to Puc 203.08, the Company has a good faith basis for seeking confidential treatment of the information contained in Confidential Attachment Staff 2-1, and will file a motion for protective treatment regarding this information prior to the final hearing in this matter. The basis numbers used in the SENDOUT® inputs were derived through analysis performed by the LDC consortium based on various historical and forward looking basis relationships and include assumptions on various projects getting constructed and or expanded including the Constitution Pipeline to Wright, NY and the Millennium Pipeline to Ramapo, NJ.

<u>NED</u>	
MDQ =	115,000 Dth
Fuel =	1.05%
Transportation Rate =	0.0811
Rate - Other Variable =	0.0067
Demand Rate (D1)	
100% Load Factor Rate	per Dth

<u>C2C</u>	
MDQ =	115,000 Dth
Fuel =	3.00%
Transportation Rate =	0.044
Rate - Other Variable =	
Demand Rate (D1)	
100% Load Factor Rate	per Dth

<u>Atlantic Bridge</u>	
MDQ =	115,000 Dth
Fuel =	0.97% w/1.07% s
Transportation Rate =	0.0212
Rate - Other Variable =	
Demand Rate (D1)	
100% Load Factor Rate	per Dth

<u>Concord Lateral</u>	
MDQ =	65,000 Dth
Fuel =	0.43%
Transportation Rate =	0.0334
Rate - Other Variable =	0.002
Demand Rate (D1)	
100% Load Factor Rate	per Dth

<u>Existing Dracut Capacity</u>	
MDQ =	50,000 Dth
Fuel =	0.43%
Transportation Rate =	0.0352
Rate - Other Variable =	
Demand Rate (D1)	\$9.2500 Weighted
100% Load Factor Rate	\$0.304 per Dth

<u>NYMEX Strip as of December 9, 2014</u>			
Nov 18	\$ 4.218	Jan 22	\$ 5.002
Dec 18	\$ 4.396	Feb 22	\$ 4.978
Jan 19	\$ 4.537	Mar 22	\$ 4.910
Feb 19	\$ 4.515	Apr 22	\$ 4.595
Mar 19	\$ 4.453	May 22	\$ 4.587
Apr 19	\$ 4.188	Jun 22	\$ 4.617
May 19	\$ 4.200	Jul 22	\$ 4.655
Jun 19	\$ 4.228	Aug 22	\$ 4.693
Jul 19	\$ 4.259	Sep 22	\$ 4.699
Aug 19	\$ 4.275	Oct 22	\$ 4.744
Sep 19	\$ 4.269	Nov 22	\$ 4.832
Oct 19	\$ 4.295	Dec 22	\$ 5.022
Nov 19	\$ 4.385	Jan 23	\$ 5.122
Dec 19	\$ 4.570	Feb 23	\$ 5.096
Jan 20	\$ 4.710	Mar 23	\$ 5.021
Feb 20	\$ 4.688	Apr 23	\$ 4.701
Mar 20	\$ 4.626	May 23	\$ 4.689
Apr 20	\$ 4.356	Jun 23	\$ 4.719
May 20	\$ 4.356	Jul 23	\$ 4.760
Jun 20	\$ 4.381	Aug 23	\$ 4.799
Jul 20	\$ 4.409	Sep 23	\$ 4.809
Aug 20	\$ 4.431	Oct 23	\$ 4.861
Sep 20	\$ 4.425	Nov 23	\$ 4.951
Oct 20	\$ 4.453	Dec 23	\$ 5.141
Nov 20	\$ 4.543	Jan 24	\$ 5.236
Dec 20	\$ 4.731	Feb 24	\$ 5.206
Jan 21	\$ 4.851	Mar 24	\$ 5.126
Feb 21	\$ 4.830	Apr 24	\$ 4.766
Mar 21	\$ 4.768	May 24	\$ 4.751
Apr 21	\$ 4.473	Jun 24	\$ 4.783
May 21	\$ 4.473	Jul 24	\$ 4.828
Jun 21	\$ 4.503	Aug 24	\$ 4.870
Jul 21	\$ 4.540	Sep 24	\$ 4.883
Aug 21	\$ 4.570	Oct 24	\$ 4.943
Sep 21	\$ 4.567	Nov 24	\$ 5.033
Oct 21	\$ 4.602	Dec 24	\$ 5.228
Nov 21	\$ 4.692	Jan 25	\$ 5.323
Dec 21	\$ 4.882	Feb 25	\$ 5.288
		Mar 25	\$ 5.203
		Apr 25	\$ 4.818
		May 25	\$ 4.803

<u>BASIS</u>		
<u>NED</u>	<u>C2C</u>	<u>Atl Bridge</u>
\$ 0.237	\$ 0.237	\$ (0.149)
\$ 1.177	\$ 1.177	\$ 0.580
\$ 1.648	\$ 1.648	\$ 0.947
\$ 1.299	\$ 1.299	\$ 1.187
\$ 1.059	\$ 1.059	\$ 0.515
\$ (0.559)	\$ (0.559)	\$ (0.575)
\$ (0.800)	\$ (0.800)	\$ (0.816)
\$ (0.739)	\$ (0.739)	\$ (0.755)
\$ (0.572)	\$ (0.572)	\$ (0.588)
\$ (0.712)	\$ (0.712)	\$ (0.727)
\$ (1.172)	\$ (1.172)	\$ (1.187)
\$ (1.124)	\$ (1.124)	\$ (1.140)

Note 1: The monthly Basis is kept constant for each month.

Note 2: Actual NYMEX futures strip used through May 2025. Escalation is 1% thereafter based on prior year's same month, e.g. June 2025 is 1% higher than June 2024.

**THERE IS NO EXHIBIT JAR-9 REFERENCED IN THE TESTIMONY.
FOR CONTINUITY OF NUMBERING, IT HAS BEEN INTENTIONALLY OMITTED.**

EXHIBIT JAR-10

Petitioner's Response to Data Request Staff 1-2

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities

DG 14-380

Petition for Approval of a Firm Transportation Agreement with the Tennessee Gas Pipeline Company, LLC

Staff Data Requests - Set 1

Date Request Received: 1/14/15
Request No. Staff 1-2

Date of Response: 1/30/15
Respondent: Francisco C. DaFonte

REQUEST:

Ref. DaFonte Testimony, Bates p. 9-10. iNATGAS forecast:

- a. Please explain how iNATGAS contract changes during the time period covered in your analysis (2015 -2038). How are those changes incorporated in your forecasting?
- b. Did Liberty consider any scenario related to iNATGAS other than presented in current filing? If yes, please provide details of those. If not, explain why not?

RESPONSE:

- a. The iNATGAS volume forecast is based on an assumption that a maximum of 22 standard CNG trailers can be filled during a design day. Given a maximum capacity of 355 Dth of CNG per trailer, the design day would be approximately 7,800 Dth. However, the facility expects that in 5-10 years new Titan trailers will be available and could hold up to 400 Dth of CNG which increases the design day to approximately 8,800 Dth. The demand forecast used by the Company assumes a ramp up of demand so that the 22 trailer maximum using standard trailers would not occur until 2019 and the 22 trailer maximum using the new Titan trailers would not occur until 2021.
- b. The Company did not model any additional scenarios for iNATGAS given the many variables that could impact the facilities usage including economic environment, alternate fuel prices, contract terms and conditions, etc. The Company reevaluates its demand forecast each year and will include the most recent projected iNATGAS demand as part of that forecast revision.

EXHIBIT JAR-11

Petitioner's Response to Data Request PLAN 1-14

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities

DG 14-380

Petition for Approval of a Firm Transportation Agreement with the Tennessee Gas Pipeline Company, LLC

Pipeline Awareness Network of the Northeast (“PLAN”) Data Requests – Set 1

Date Request Received: 3/11/15
Request No. PLAN 1-14

Date of Response: 3/23/15
Respondent: Francisco C. DaFonte

REQUEST:

Reference: DaFonte Testimony, Bates p. 21, line 5-7 and Bates p. 32

Do the NED costs in Table 3 include the annual cost of owning and operating the distribution facilities that would need to be built to the new West Nashua meter station?

RESPONSE:

The cost to expand the existing distribution system to tie into the new city gate for reliability purposes is not reflected in Table 3 as it is not part of the Company’s resource portfolio which is modeled in SENDOUT®. Likewise, any required distribution system enhancements to accept more volume through the Hudson lateral or any other gate station on the Concord lateral as a result of the required expansion of such lateral is not reflected in the costs in Table 3 for the C2C and Atlantic Bridge projects. With that said, even adding in the cost to enhance system reliability through the new distribution system tie-in with the NED project continues to result in significantly greater savings of between \$450 million and \$600 million for EnergyNorth’s customers as compared to the C2C and Atlantic Bridge alternatives.

EXHIBIT JAR-12

Petitioner's Response to Data Request OCA 1-1

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities

DG 14-380

Petition for Approval of a Firm Transportation Agreement with the Tennessee Gas Pipeline Company, LLC

OCA Data Requests - Set 1

Date Request Received: 3/2/15
Request No. OCA 1-1

Date of Response: 3/16/15
Respondent: Francisco C. DaFonte

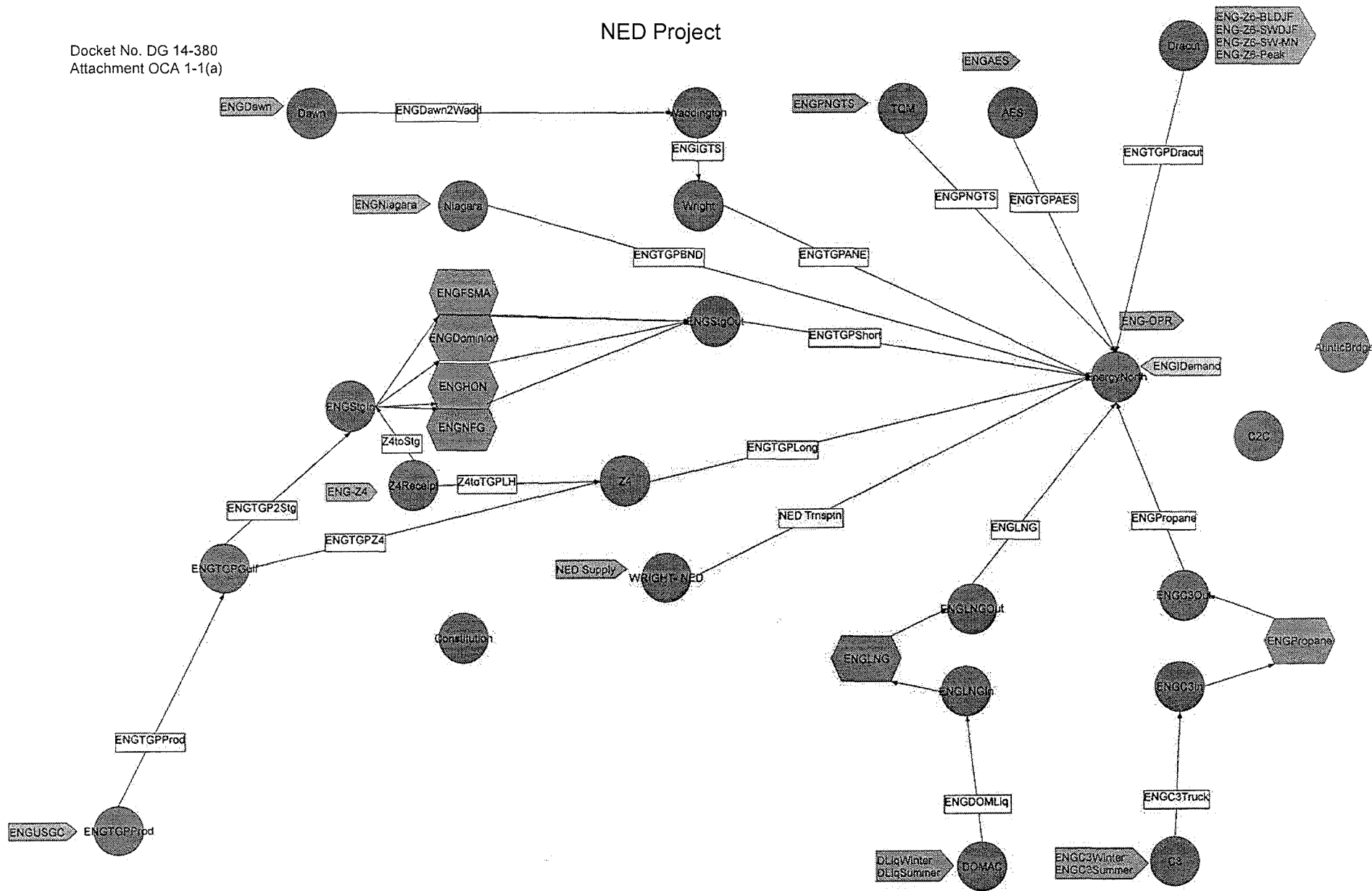
REQUEST

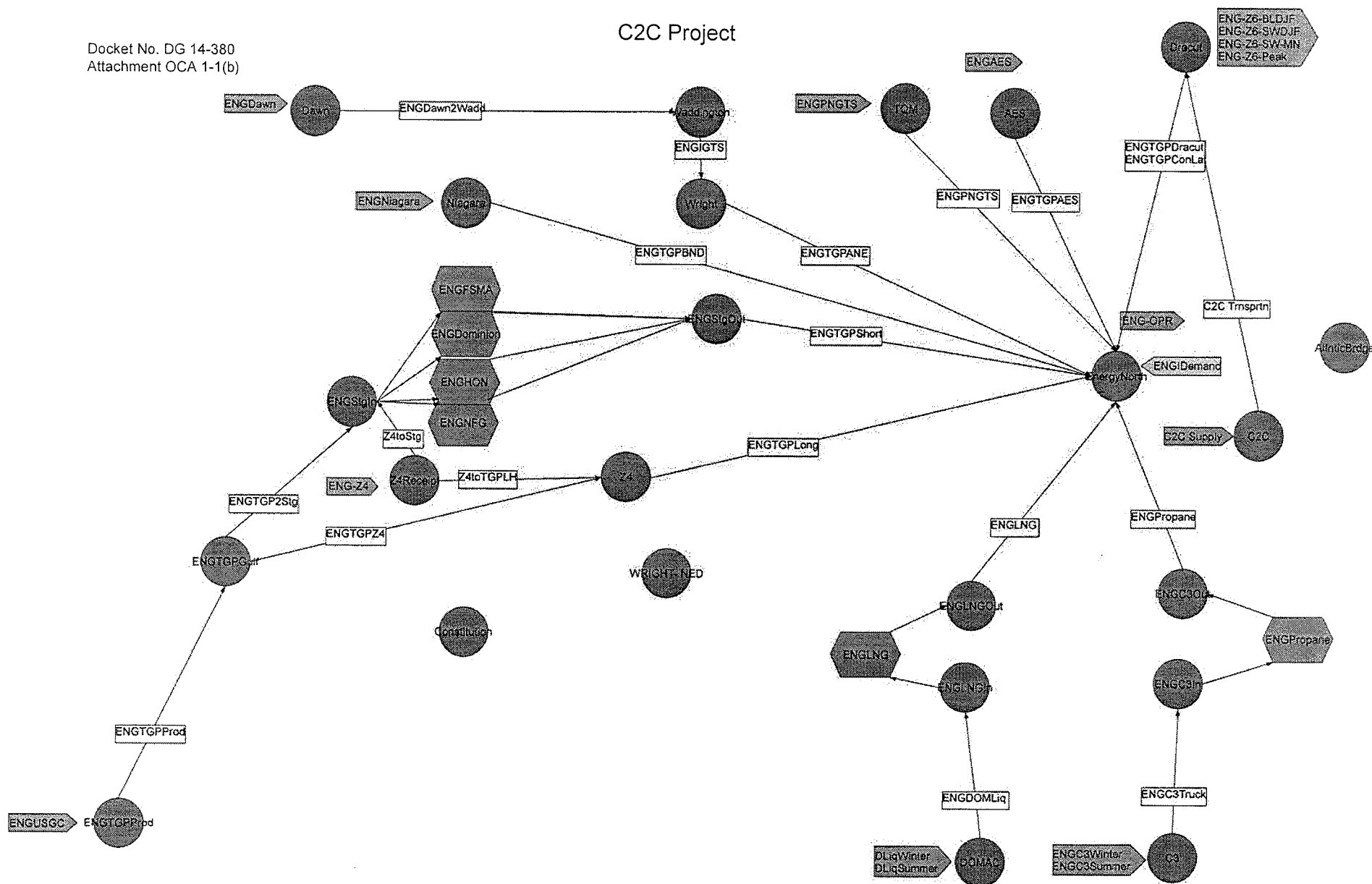
Ref. DaFonte Testimony, Attachments FCD-3, FCD-4 and FCD-5. It is our understanding that SENDOUT produces diagrammatic representations (one-pagers) of the runs. Please provide those representations depicting the schematic topology of the pipelines, loads, transportation costs, energy prices, etc.

RESPONSE:

SENDOUT® produces a one page Network Diagram that depicts the Company's resource portfolio and associated paths to deliver to EnergyNorth's distribution system. The Network Diagram for NED is provided in Attachment OCA-1-1(a), the Network Diagram for C2C is provided in Attachment OCA-1-1(b) and the Network Diagram for Atlantic Bridge is provided in Attachment OCA-1-1(c).

The last three pages of Attachment FCD-3, Attachment FCD-4 and Attachment FCD-5 provide a summary of the results of the 20-year SENDOUT® results.





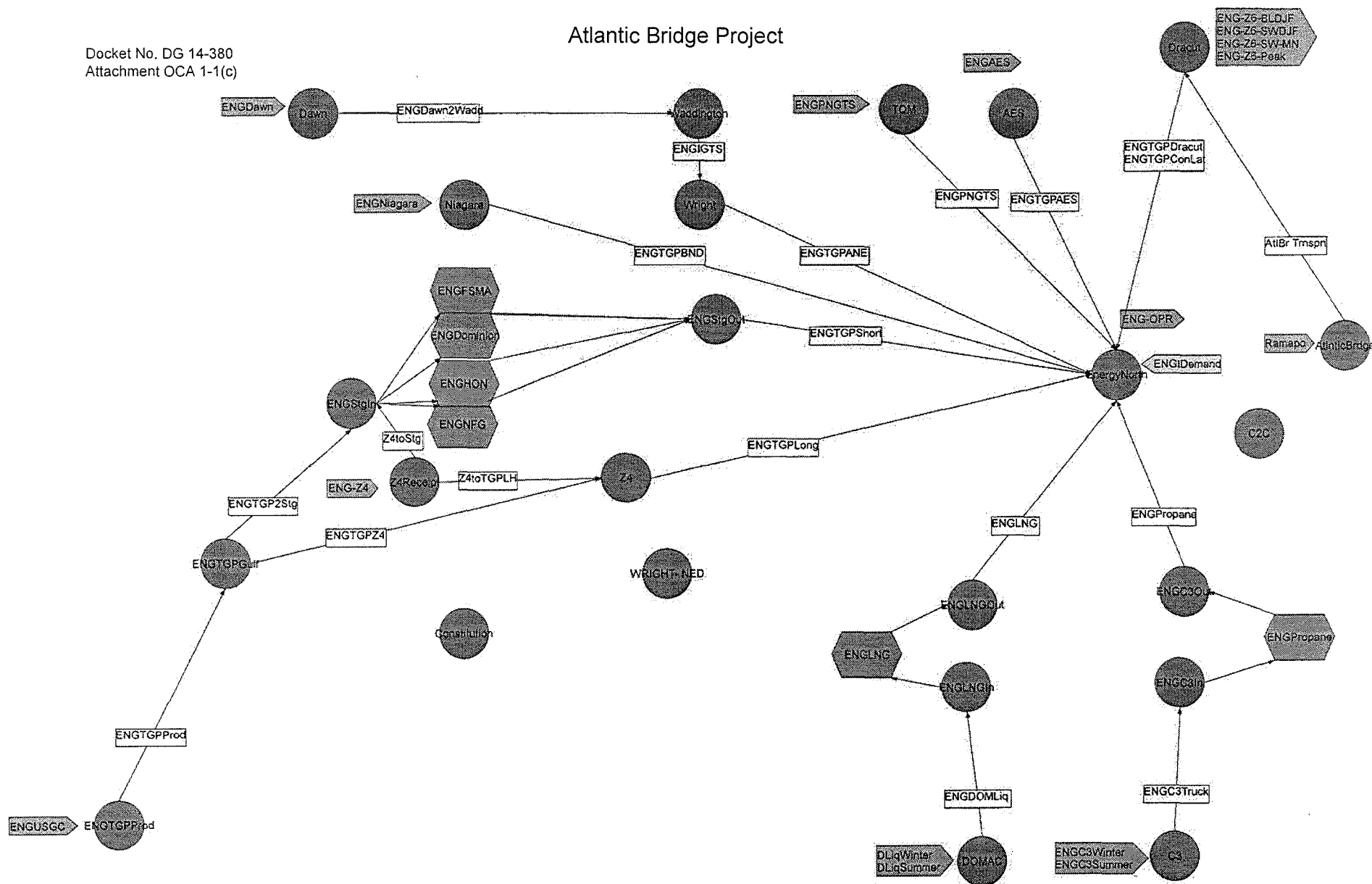


EXHIBIT JAR-13

Petitioner's Response to Data Request Staff 2-14

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities

DG 14-380

Petition for Approval of a Firm Transportation Agreement with the Tennessee Gas Pipeline Company, LLC

Staff Data Requests - Set 2

Date Request Received: 2/5/15
Request No. Staff 2-14

Date of Response: 2/17/15
Respondent: Francisco C. DaFonte

REQUEST:

Ref. DaFonte Testimony, Bates p. 19-20. Please answer the following with respect to the proposed NED project's role in EnergyNorth's portfolio:

- a. What is the minimum size of the planned NED project that can be built in order for the project to go forward?
- b. What is the shortest path that can be built for this project in order to provide the benefits that EnergyNorth requires for this project to be cost effective?
- c. Would EnergyNorth reduce the amount of capacity contracted for under a. and b., above, below the amount proposed in this petition?
- d. Does the cost-effectiveness of this project depend upon interconnection with Maritimes and Northeast US pipeline including the planned upgrade to capacity and associated change to bi-directional flow at Dracut, MA?
- e. Does the cost-effectiveness of this project depend upon EnergyNorth obtaining firm pipeline capacity upstream of Wright, NY?
- f. What is EnergyNorth's view of liquidity of supply at Wright, NY both at this time and after the NED project in-service date?

RESPONSE:

- a. The Company is not privy to the economics relied on by Kinder Morgan to determine the minimum capacity commitment to move forward with the construction of the project. Through its participation in the LDC consortium that negotiated the terms and conditions of the Precedent Agreement with Tennessee, it is aware that the approximate 500,000 Dth of capacity commitments by the consortium was a minimum threshold to finalize Precedent Agreements. However, the Company is not aware whether the initial

commitment of each LDC has changed since EnergyNorth executed its specific PA with Tennessee.

- b. It is the Company's understanding that the NED project is solely proposed to be built from Wright, NY to Dracut, MA with no alternative receipt or delivery point. The purpose of this project is to alleviate pipeline constraints in the New England market by accessing supplies of natural gas ultimately coming from the plentiful gas reserves in the Marcellus and Utica shale production regions. Currently, all capacity coming from the west on the Tennessee system is fully subscribed. Capacity from the east is available at Dracut but there is limited supply at Dracut which has caused the unprecedented natural gas price spikes seen in the winter of 2013-2014. As noted in its testimony, the Company analyzed two other proposed pipeline projects that would bring more capacity to Dracut but those projects were significantly more expensive than the Tennessee project and did not provide the additional reliability of a secondary feed into the west end of the EnergyNorth distribution system. In addition, both projects would require another costly expansion of the Concord lateral in order for incremental Dracut capacity to reach EnergyNorth's service territory.
- c. The Company believes it has demonstrated in its testimony that the 115,000 Dth per day of capacity on the NED contract is appropriate and required to satisfy its firm sales customer requirements for the 20-year period of the contract. New pipeline projects in New England are few and far between. The last greenfield pipeline project to be built in New England was the Joint Facilities pipeline between Portland Natural Gas Transmission ("PNGTS") and Maritimes and Northeast Pipeline ("Maritimes") in 1999. With the projected in-service date of the NED project it would be nearly 20 years between new pipeline projects. For this reason and the economic and reliability benefits discussed earlier, the Company believes the NED project to be a unique opportunity that may not be available again and the capacity commitment level is needed to economically meet the growing needs of EnergyNorth's customers and to facilitate economic expansion of EnergyNorth's service territory.
- d. As with any pipeline project, the greater the volume of committed capacity the lower the unit rate of the capacity. By locating the terminus of the NED project at Dracut, Tennessee is able to interconnect with both the PNGTS and Maritimes pipelines which would provide for access to additional natural gas markets that, if developed, could lower rates on the NED project, further benefiting New Hampshire customers.
- e. The NED project as currently constituted with a receipt point at Wright, NY is already the most cost-effective pipeline alternative for EnergyNorth's customers. However, the Company continues to explore opportunities to lower costs to its customers by considering other pipeline projects that would directly access Marcellus and Utica shale supplies and deliver them to Wright, NY. Should these alternatives contribute to the Company's least cost portfolio, it will file a petition with the Commission for prior approval of any proposed contract.

- f. Currently the Wright, NY interconnect between Tennessee and Iroquois Gas Transmission lacks sufficient liquidity. However, the FERC has already approved the development of the Constitution Pipeline project which will bring 650,000 Dth per day of Marcellus and Utica shale supplies to Wright in 2016. In addition, a further Constitution expansion and a Tennessee Supply Path project are being proposed that could bring upwards of an additional Bcf of Marcellus and Utica supplies to Wright.

EXHIBIT JAR-14

Petitioner's Response to Data Request PLAN 2-11

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities

DG 14-380

Petition for Approval of a Firm Transportation Agreement with the Tennessee Gas Pipeline Company, LLC

Pipeline Awareness Network of the Northeast ("PLAN") Data Requests – Set 2

Date Request Received: 4/1/15
Request No. PLAN 2-11

Date of Response: 4/13/15
Respondent: Francisco C. DaFonte

REQUEST:

Reference: DaFonte Testimony, Bates p. 26, lines 4-11.

- a) Who are the firm shippers on the Constitution Pipeline?
- b) Are the Constitution Pipeline shippers offering firm gas to new customers beginning in 2018, or do they already have sales commitments to other buyers?
- c) Please describe any negotiations that EnergyNorth has undertaken for firm supply at Wright, either directly or with the LDC consortium.
- d) Has EnergyNorth entered into any binding or non-binding agreements for firm gas supply at Wright?

RESPONSE:

- a) It is the Company's understanding that the firm shippers on the Constitution Pipeline project are Marcellus gas producers Cabot Oil & Gas Corp. and Southwestern Energy.
- b) It is the Company's understanding that the producers are negotiating with multiple parties to sell their production at Wright.
- c) EnergyNorth has had preliminary discussions with the producers.
- d) EnergyNorth has not entered into any agreement for firm gas supply at Wright.

EXHIBIT JAR-15

Petitioner's Response to Data Request PLAN 2-24¹

¹ The Attachment PLAN 1-3 referenced in the response to data request forming this exhibit is voluminous and has been marked **CONFIDENTIAL** by the Petitioner. Both **CONFIDENTIAL** and **REDACTED** versions are being provided separately electronically on a CD accompanying this filing.

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities

DG 14-380

Petition for Approval of a Firm Transportation Agreement with the Tennessee Gas Pipeline Company, LLC

Pipeline Awareness Network of the Northeast ("PLAN") Data Requests – Set 2

Date Request Received: 4/1/15
Request No. PLAN 2-24

Date of Response: 4/13/15
Respondent: Francisco C. DaFonte

REQUEST:

Reference: PLAN 1-11(b), CONFIDENTIAL Attachment PLAN 1-3

EnergyNorth states that "based on the Consortium pricing analysis, it is expected that the basis price at Waddington will be roughly double the basis price at Wright in the winter."

- a) How does this expected price relationship between Waddington and Wright compare with the actual relationship between Waddington prices and Wright prices during the 2014-15 winter season?
- b) If the basis price at Waddington is roughly double the basis price at Wright in the winter, does EnergyNorth expect that gas flows at Waddington during the winter will be from north-to-south or from south-to-north? If EnergyNorth expects that winter gas flows will be from south-to-north, please explain when winter gas flows at Waddington are projected to reverse, and EnergyNorth's analysis supporting this forecast.
- c) Please explain the apparent inconsistency between the results of the Consortium pricing analysis and the forward prices in Attachment PLAN 1-3 that show the winter season Waddington price to be below the Iroquois Zone 1 price through 2021.

RESPONSE:

- a) As stated in the Company's response to PLAN request Plan 2-12, the Company has access to historical ICE trade information and is providing that information for Waddington and Wright in Attachment PLAN-2-24. As discussed previously in its response to PLAN 2-12, the Wright is a very illiquid trading point and as a result there were only 23 days in which an ICE index printed for this past winter.
- b) As stated in the Company's response to PLAN request PLAN 1-11(b), it is difficult to determine with any certainty what gas flows will look like at Waddington in 2018-2019 and beyond given the number of variables at play including how much gas supply from the Constitution Pipeline project will go to Waddington versus staying at Wright, how much gas supply will go to Waddington from Dawn, Ontario versus staying in Canada and how much demand will come from eastern Canada and Ontario. With that said, the Company cannot hazard a guess at this time; however, the Company is in negotiations

with pipeline project sponsors that would provide direct access to Marcellus and Utica shale production which would avoid flow uncertainty.

- c) As shown in Confidential Attachment PLAN 1-3 under the tab “SNL Forwards NY-NE”, the relationship between the Waddington price and the Wright price is kept constant with an approximately \$0.07 per Dth differential between the two points for every month through August 2021. Clearly there was not much market analysis conducted by SNL in the derivation of the forwards for Wright given many of the possible market variables discussed in part (b) above. The Consortium analysis did not rely solely on one publication or opinion. As noted in the “Tables” tab of Confidential Attachment PLAN 1-3, the Waddington price forecast was calculated using a “3 part blend of forward curve, Dawn plus TCPL, Wright plus Iroquois BH” so as to develop a more balanced price forecast.

EXHIBIT JAR-16

RESUME OF JOHN A. ROSENKRANZ

JOHN A. ROSENKRANZ

56 Washington Drive

Acton, MA 01720

(617) 755-3622

jrosenkranz@verizon.net

PROFESSIONAL EXPERIENCE

North Side Energy, LLC, Acton, MA
PRINCIPAL

2006 – Present

Consultant on natural gas market and regulatory issues. Recent projects include:

- Review gas distribution company resource plans and cost of gas filings for public advocates in two Northeastern states.
- Advise the Ontario Independent Electricity System Operator on gas issues affecting power generators.
- Expert witness on gas transmission and storage cost allocation in utility rate proceedings.

Calpine Corporation, Boston, MA
DIRECTOR, GAS ORIGATION

2000 – 2006

Developed and implemented fuel supply plans for gas-fired power plants in the Northeast U.S. and Eastern Canada. Negotiated and managed contracts with natural gas suppliers and transporters.

- Worked with industrial gas users, distribution companies and state agencies in a natural gas pipeline rate case, leading to over \$2 million in rate discounts for Maine gas consumers.
- Testified on the availability of natural gas supply and pipeline delivery capacity to support the permitting of a gas-fired power plant in Minnesota.
- Member of a commercial and legal team that obtained arbitration decisions to enforce long-term natural gas contracts with \$50 million in mark-to-market value.

PG&E Gas Transmission, Boston, MA and Portland, OR
DIRECTOR, BUSINESS DEVELOPMENT

1997 – 1999

Identified and managed development projects and investment opportunities involving natural gas pipelines, underground storage and LNG peaking plants.

- Project manager for a \$1.2 million geologic testing program at a potential natural gas storage site.
- Owner representative and management committee member for the Iroquois Gas Transmission System and Portland Natural Gas Transmission System partnerships.

J. Makowski Co. (acquired by U.S. Generating Company), Boston, MA
MANAGER, PROJECT DEVELOPMENT

1992 – 1997

Supervised a team that provided project management and marketing support for natural gas pipeline and storage projects. Conducted regional gas market studies for internal projects and outside clients.

VICE PRESIDENT - EnerPro, Inc., Chicago, IL

1990 – 1992

Gas supply consultant to gas distribution companies. Helped clients define gas portfolio objectives, draft requests for proposals, evaluate suppliers, and negotiate long-term contracts.

MANAGER, GAS MODELING GROUP - Planmetrics, Inc., Chicago, IL

1986 – 1990

Consultant for gas supply planning systems used by local distribution companies.

ADVISORY ECONOMIST - Chicago Board of Trade, Chicago, IL

1983 – 1986

Researched commodity markets for futures and options trading potential. Prepared a natural gas futures trading proposal that was submitted to the Commodity Futures Trading Commission.

EDUCATION

Graduate study in Economics - Northwestern University, Evanston, IL
Completed all course and examination requirements for Ph.D.

Bachelor of Arts, Economics - George Washington University, Washington, DC

REGULATORY PROCEEDINGS

Natural Gas Supply Planning and Cost of Gas

Northern Utilities, Inc. Integrated Resource Plan

Case #: MPUC Dockets 2015-00018 and 2011-00526

Client: Maine Public Advocate

Scope: Prepare discovery requests and participate in technical conferences.

Northern Utilities, Inc. Cost of Gas Factor

Case #: MPUC Dockets 2014-00247, 2013-00417, 2012-00413

Client: Maine Public Advocate

Scope: Review annual cost of gas filings. Prepare discovery requests and participate in technical conferences.

Bangor Gas Company Annual Review of Cost of Gas Activities

Case #: MPUC Docket 2014-00204

Client: Maine Public Advocate

Scope: Review annual cost of gas filings. Prepare discovery requests and participate in technical conferences.

New Jersey Natural Gas Company Basic Gas Supply Service Review

Case #: NJBPU Dockets GR14060537, GR13050425, and GR12060472

Client: New Jersey Division of Rate Counsel

Scope: Review annual cost of gas filings. Prepare discovery requests, provide written report to client, and support settlement negotiations.

South Jersey Gas Company Basic Gas Supply Service Review

Case #: NJBPU Dockets GR14050510 and GR13050434

Client: New Jersey Division of Rate Counsel

Scope: Review annual cost of gas filings. Prepare discovery requests, provide written report to client, and support settlement negotiations.

Elizabethtown Gas Capacity Management Plan

Case#: NJBPU Docket GO13040272

Client: New Jersey Division of Rate Counsel

Scope: Prepare discovery requests and participate in settlement negotiations.

Northern Utilities Hedging Program Review

Case #: MPUC Docket 2012-00448

Client: Maine Public Advocate

Scope: Review proposed changes to hedge program. Participate in technical conferences.

UNS Gas Inc. Rate Case

Case #: ACC Docket No. G-04204A-11-0158

Client: Arizona Corporation Commission Utilities Division Staff

Scope: Review gas procurement activities. Testimony with findings and recommendations.

Cost Allocation and Rates

Union Gas 2014 Rate Case

Case #: EB-2013-0365

Client: Canadian Manufacturers & Exporters and other consumer groups

Scope: Testimony recommending changes to the allocation of transmission costs.

Union Gas 2013 Rate Case

Case #: EB-2011-00210

Client: Canadian Manufacturers & Exporters and other consumer groups

Scope: Testimony on the allocation of storage and transmission costs between distribution and transportation services.

Union Gas 2010 Earning Sharing and Deferral Accounts Proceeding

Case #: EB-2011-0038

Client: Canadian Manufacturers & Exporters and other consumer groups

Scope: Testimony on the allocation of costs and sales margins between utility and non-utility storage operations.

Northern Utilities Approval of Affiliated Interest Transaction

Case #: MPUC Dockets 2011-00302, 2012-00393, and 2013-00259

Client: Maine Public Advocate

Scope: Review proposed contract with pipeline affiliate. Examine rate implications for sales customers.

Northern Utilities, Inc. Rate Case

Case #: 2011-00092

Client: Maine Public Advocate

Scope: Filed testimony on cost issues related to gas supply activities.

Florida Gas Transmission Rate Case

Case #: FERC Docket No. RP10-21

Client: Atlantic Power Corporation

Scope: Support Atlantic Power's participation in shipper group opposing rate increase.

Granite State Gas Transmission, Inc. Rate Case

Case #: FERC Docket No. RP10-896

Clients: Maine Public Advocate and MPUC Staff

Scope: Review rate case application. Participate in settlement negotiations.

Maritimes & Northeast Rate Case

Case #: FERC Docket No. RP04-360

Client: Calpine Corporation

Scope: Testimony on distance-based rates.

Natural Gas Markets

Union Gas 2016 Dawn Parkway Expansion Project

Case #: EB-2014-0261

Client: Canadian Manufacturers & Exporters and other consumer groups

Scope: Testimony on market developments that may reduce Northeast U.S. companies' demand for Canadian gas transportation services.

Ontario Natural Gas Market Review

Case #: OEB Case EB-2014-0289 and EB-2010-0199

Client: Canadian Manufacturers & Exporters and other consumer groups

Scope: Written and oral submissions on natural gas market issues.

Enbridge Gas Distribution GTA Project

Case #: OEB Case EB-2012-0451

Client: Green Energy Coalition

Scope: Prepare discovery requests on the need for a proposed expansion project.

Portland Natural Gas Transmission System Rate Case

Case #: FERC Docket RP10-729

Client: Maine Public Advocate

Scope: Rebuttal testimony on the market risks faced by the pipeline.

Natural Gas for Power Generation

New Jersey Natural Gas Service Agreement for Red Oak Power

Case #: NJBPU Docket GO13010059

Client: New Jersey Division of Rate Counsel

Scope: Prepare discovery requests and participate in settlement negotiations.

Ontario Integrated Power System Plan

Case #: OEB Case EB-2007-0707

Client: Ontario Power Authority

Scope: Report on the implications of increased gas-fired power generation for the Ontario gas market.

Natural Gas Electricity Interface Review

Case #: OEB Case EB-2005-0551

Client: Association of Power Producers of Ontario

Scope: Written evidence on power generators' gas service needs. Expert witness at hearing.

Greenfield Energy Centre Leave to Construct

Case#: OEB Case EB-2005-0441

Client: Greenfield Energy Centre

Scope: Witness supporting a generator's application to construct its own gas supply pipeline.

Mankato Energy Center

Case #: MN PUC Case IP-6345/CN-03-1884

Client: Calpine Corporation

Scope: Testimony on the availability of natural gas for power generation in Minnesota.

Wisconsin Electric Power

Case #: WPSC Case 05-CE-130

Client: Calpine Corporation

Scope: Rebuttal testimony on the availability of natural gas for power generation in Wisconsin.

Rulemaking

Storage and Transportation Access Rules

Case #: OEB Case EB-2008-0052

Client: Ontario Energy Board Staff

Scope: Report on transporter and storage operator conduct and reporting requirements in other jurisdictions. Assist Staff in drafting proposed rules and reviewing intervenor comments.

Guidelines for Pre-Approval of Long-Term Gas Supply Contracts

Case #: OEB Case EB-2008-0280

Client: Ontario Energy Board Staff

Scope: Assist Board Staff in evaluating policy options.

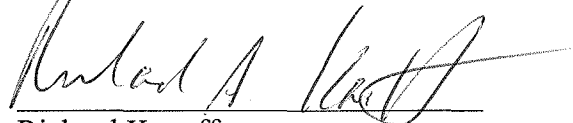
BEFORE THE NEW HAMPSHIRE
PUBLIC UTILITIES COMMISSION

Re: Liberty Utilities (EnergyNorth Natural Gas) Corp.

Docket DG 14-380

Certificate of Service

I hereby certify that on May 8, 2015, pursuant to Puc 203.02 & 203.11, I served an electronic copy of the Testimony of John A. Rosenkranz On Behalf Of Pipe Line Awareness Network for the Northeast, Inc., on each person identified on the Commission's service list for this docket and with the Office of the Consumer Advocate, by delivering it to the email address specified on the Commission's service list for the docket.



Richard Kanoff