

1 IROZ2 and Leidy spot prices over the November 1, 2011 to June 30, 2015 period. In
 2 addition, the Company developed a daily structured Wright price.²² Next, the Company
 3 determined the daily price multiplier by dividing the daily IROZ2 spot price by the daily
 4 structured price at the Wright, New York point. Finally, the Company developed HDD
 5 level ranges, and determined the price multiplier for each HDD level range as the simple
 6 average of the daily price multipliers. Table 2 summarizes the average prices and price
 7 multiplier for each grouping of HDDs used in the SENDOUT® analysis.

8 **Table 2: Price Multiplier**

KMHT HDDs	Avg. IROZ2 Spot Price	Avg. Structured Wright Price		Avg. IROZ2/Wright Price Multiplier
60 - 64	\$ 20.52	\$4.03	\$4.04	5.1
50 - 59	\$ 19.10	\$4.62	\$4.64	4.0
40 - 49	\$ 12.39	\$4.69	\$4.71	2.6
30 - 39	\$ 5.64	\$4.49	\$4.52	1.3
20 - 29	\$ 4.58	\$4.18	\$4.32	1.1

9
 10 As shown in Table 2 above, at HDD levels between 60 and 64, the average IROZ2 price is
 11 approximately 5.1 times higher than the structured price at the Wright, New York point; at
 12 HDD levels between 50 and 59, the price multiplier is approximately 4.0; at HDD levels
 13 between 40 and 49, the price multiplier is approximately 2.6 times; at HDD levels between

²² The structured Wright price was calculated as the Leidy price index plus the calculated demand charges associated with the transportation path from Marcellus to Wright (i.e., Constitution Pipeline). For example, the structured Wright price in December was the daily Leidy spot price plus \$1.68/MMBtu. This approach is the same methodology utilized by the Company to calculate the structured Wright price in Docket DG 14-380 (i.e., in the evaluation of the Market Path Project).

30 and 39, the price multiplier is approximately 1.3 times; and finally, at HDD levels between 20 and 29, the price multiplier is approximately 1.1 times.

Q. What are the results of the SENDOUT® analyses performed by EnergyNorth?

A. Table 3 below summarizes the results of the SENDOUT® analyses for the four volume scenarios with the inclusion of the price multiplier.

Table 3: Summary of SENDOUT® Results

Volume Scenario	Supply Path Volume (Dth/day)	Total Costs (\$000)	Capacity Release (\$000)	Net Costs (\$000)
(1) Supply Path = 0K (All Purchases at Wright)	0	\$4,228,254 \$4,331,828	\$130,513	\$4,097,742 \$4,201,315
(2) Supply Path = 115K	115,000	\$3,933,818	\$250,087	\$3,683,731
(3) Resource Mix	78,080 79,920	\$3,764,439 \$3,771,714	\$165,223 \$168,326	\$3,599,216 \$3,603,388
(4) Resource Mix (Rounded Volume Level)	78,000	\$3,764,153 \$3,769,697	\$164,774 \$165,438	\$3,599,382 \$3,604,259

As illustrated in Table 3 above, the option to purchase all of the Market Path PA supplies at Wright, New York (i.e., Volume Scenario 1) is the most expensive option, with a net cost of approximately \$4.~~1~~2 billion over the analysis period. However, if the Supply Path PA capacity is equal to the Market Path PA capacity (i.e., Volume Scenario 2), the net cost is reduced to approximately \$3.7 billion (i.e., a savings of approximately \$~~400~~500 million) over the analysis period. Finally, if the Resource Mix module in SENDOUT® is utilized, the optimal Supply Path volume is ~~78,080~~79,920 Dth per day (i.e., Volume Scenario 3), resulting in a net cost of \$3.6 billion over the analysis period. Stated differently, Volume

1 Scenario 3 (i.e., the Resource Mix volume) represents a savings of approximately \$~~500~~ 600
2 million, compared to Volume Scenario 1 (i.e., no capacity on the Supply Path project), and
3 a savings of approximately \$~~85~~ 80 million compared to Volume Scenario 2 (i.e., the Supply
4 Path volume equal the Market Path volume). In Volume Scenario 4, the Company rounded
5 the Resource Mix volume level of ~~78,080~~ 79,920 Dth per day to 78,000 Dth per day.
6 Similar to Volume Scenario 3, the rounded Resource Mix volume (i.e., Volume Scenario
7 4) results in a net cost of approximately \$3.6 billion over the analysis period. Therefore,
8 based on the results of the SENDOUT® analysis, a Supply Path PA volume of 78,000 Dth
9 per day is the optimal rounded volume level.

10 **VII. EnergyNorth's Demand Forecast**

11 **Q. Why did EnergyNorth begin its evaluation with an analysis of the cost-effectiveness**
12 **of natural gas purchases within the Appalachian supply basin rather than a**
13 **discussion of the demand forecast?**

14 A. The Supply Path PA is distinct from most firm transportation agreements considered by
15 EnergyNorth. While most pipeline projects would be premised on the supply of
16 incremental transportation capacity to the EnergyNorth system to meet demand, the Supply
17 Path PA is, instead, focused on providing the lowest cost natural gas supplies to
18 EnergyNorth's customers. This was one of the options that was enabled by entering into
19 the Market Path PA.

20 More specifically, the Supply Path PA will provide EnergyNorth with access to more
21 liquid, proximate trading points that can lower the cost of natural gas supplied to

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2 compared to Volume Scenario 1 (i.e., no capacity on the Supply Path project), and a savings
3 of approximately \$80 million compared to Volume Scenario 2 (i.e., the Supply Path
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6 Volume Scenario 3, the rounded Resource Mix volume (i.e., Volume Scenario 4) results in
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