

NORTHERN UTILITIES

NEW HAMPSHIRE DIVISION

PREFILED TESTIMONY OF FRANCISCO C. DAFONTE

1 Q. Please state your name and business address.

2 A. Francisco C. DaFonte. My business address is 300 Friberg Parkway,  
3 Westborough, MA 01581.

4 Q. By whom are you employed and in what capacity?

5 A. I am a Director, Energy Supply Services for Bay State Gas Company (“Bay  
6 State”), Northern Indiana Public Service Company (“NIPSCO”) and Northern  
7 Utilities, Inc. (“Northern” or “the Company”).

8 Q. Please summarize your educational background and professional experience.

9 A. I received a Bachelor of Science Degree in Mathematics from the University of  
10 Massachusetts at Amherst in 1985. I was subsequently hired by Commonwealth  
11 Gas Company (now NSTAR Gas Company), where I was employed primarily as  
12 a supervisor in gas dispatch and gas supply planning for nine years. In 1994, I  
13 joined Bay State and its affiliate Northern as a Gas Resource Marketing Analyst.  
14 In May 1996, I was promoted to Director of Gas Control. In July 2001 I was  
15 given my current title of Director, Energy Supply Services.

16 Q. Are you a member of any professional organizations?

17 A. Yes. I am a member of the Northeast Gas Association, the American Gas  
18 Association, the National Energy Services Association and the New England  
19 Canada Business Council.

20 Q. Have you previously testified before any regulatory or governmental bodies?

21 A. Yes, I have testified in a number of proceedings before the Massachusetts  
22 Department of Telecommunications and Energy, the New Hampshire Public  
23 Utilities Commission, the Maine Public Utilities Commission, the Indiana Utility  
24 Regulatory Commission and the Federal Energy Regulatory Commission.

1 Q. What is the purpose of your testimony in this proceeding?

2 A. The purpose of my testimony in this proceeding is to describe the manner in  
3 which Northern met the natural gas requirements of its firm customers during the  
4 2004-2005 winter season and to describe the manner in which Northern will meet  
5 the natural gas requirements of its firm customers during the 2005-2006 winter  
6 season.

7

8 **2004 - 2005 WINTER SEASON**

9 Q. From whom did Northern purchase its firm pipeline natural gas during the 2004-  
10 2005 winter season?

11 A. Northern purchased its firm pipeline natural gas from Granite State and six (6)  
12 producers/marketers with which it had firm contracts.

13 Q. For the 2004-2005 winter season, what was the total firm daily upstream  
14 transportation capacity available to Northern?

15 A. Northern had a total of 100,000 MMBtu per day of firm daily transportation  
16 capacity on the upstream pipeline that transports Northern's firm supplies to its  
17 citygate.

18 Q. Have you prepared an exhibit that shows, during the 2004-2005 winter season, the  
19 daily volumes of the various gas supplies that were distributed to Northern's  
20 customers?

21 A. Yes. That data is shown in Exhibit A.

22 Q. Have you prepared a summary, which shows the supply balance for the 2004-  
23 2005 winter season?

24 A. Yes. That summary is shown in Exhibit B.

25 Q. During the 2004-2005 winter season, what was the volume of LP-air produced by  
26 Northern?

27 A. During the 2004-2005 winter season, Northern produced 268 MMBtu of LP-air.

1 Q. How many gallons of propane does this volume of LP-air gas represent?

2 A. This volume of LP-air gas represents approximately 2,921 gallons of propane.

3 Q. Did Northern have any propane volumes under contract for the 2004-2005 winter

4 season?

5 A. No, Northern did not have any propane under contract for the 2004-2005 winter

6 season. Northern had its propane inventory full prior to the winter and

7 determined that its firm customers did not require any incremental propane supply

8 during the winter.

9 Q. Would you describe for the Commission the 2004-2005 winter in terms of

10 severity?

11 A. Overall, the 2004-05 winter season was slightly colder than normal. The period

12 November 1, 2004 through April 30, 2005 was 1.7 % colder than normal. The

13 historically coldest month of January was 6.5% colder than normal and the

14 historically coldest period of December through February mirrored the winter

15 overall and was also 1.5% colder than normal.

16 Q. Did Northern experience a new peak throughput during this period?

17 A. No. Northern did not experience a new peak throughput. Northern's peak day

18 was 101,808 and occurred on January 18, 2005 . The historical peak for Northern

19 of 114,631 MMBtu occurred on January 15, 2004.

20 Q. What impact did this type of winter have on Northern?

21 A. Although the month of January was colder than normal, the remaining winter

22 months averaged about normal resulting in less underground storage being

23 required in those months and supplemental supplies being utilized only in

24 January.

25 Q. How did the slightly-colder-than-normal winter impact commodity prices?

26 A. NYMEX prices reached a high for the December contract settlement at \$7.976

27 primarily due to continued supply disruptions brought on by Hurricane Ivan in

1 September. As the winter progressed and due to a lack of sustained cold weather,  
2 NYMEX prices fell into the \$6.20 - \$6.30 range for January, February and March  
3 before regaining some momentum on higher crude prices for April to close at  
4 \$7.25. Spot prices in New England did not approach the record \$63 per MMBtu  
5 seen in January 2004 due to the lack of extreme cold weather; however, spot  
6 prices did go above \$20.00 per MMBtu on several days. In summation, prices for  
7 the 2004-2005 winter period, while not as high on the spot market, were still  
8 higher than their historical average when considering the NYMEX settlement  
9 prices.

10 Q. Please explain Northern's strategy relating to the use of underground storage.

11 A. Northern's underground storage capacity in MichCon through CoEnergy Trading  
12 Company ("CTC") is 5,134,000 MMBtu with a withdrawal rate of 34,000  
13 MMBtu/day. This equates to 151 days of service. Northern attempts to use this  
14 contract whenever possible from November through March; however, the CTC  
15 contract is also Northern's primary balancing resource and must be used to  
16 manage load swings due to weather fluctuation. Northern also has available from  
17 Tennessee Gas Pipeline ("TGP") under its rate schedule FS-MA storage capacity  
18 of 259,337 MMBtu with a maximum daily firm transportation capacity of 2,653  
19 MMBtu, which equates to a 98-day service. Based on normal weather patterns,  
20 one would expect that the FS-MA storage volumes would be most likely utilized  
21 from mid-November through mid-March.

22 Q. Within operational limitations, why does Northern attempt to fully utilize its  
23 storage volumes during the winter season?

24 A. Northern attempts to fully utilize its storage volumes during the winter period:  
25 first, to meet its firm requirements in lieu of more expensive supplemental  
26 supplies; second, to allow Northern to refill the storage inventory during the  
27 summer months when less costly pipeline supplies are typically available; and

1 third, to avoid pipeline balancing penalties by utilizing storage injection and  
2 withdrawal flexibility.

3 Q. What volumes did Northern withdraw from its underground storage inventory  
4 during the 2004-2005 winter season?

5 A. Northern's storage inventory withdrawals for the 2004-2005 winter season were  
6 3,175,534 MMBtu in total. This translates into an overall utilization of 59 percent  
7 of available storage. Exhibit B provides detailed utilization of each of Northern's  
8 storage inventories.

9 Q. During the 2004-2005 winter season, was Northern able to secure any additional  
10 pipeline citygate spot gas supplies in addition to its firm contractual supplies?

11 A. Yes, during the November through April period, Northern was able to secure  
12 456,206 MMBtu of citygate spot market supplies in addition to its firm  
13 contractual supplies.

14 Q. Have you prepared an exhibit, which summarizes these purchases by Northern?

15 A. Yes, and that data is presented in Exhibit C.

16 Q. Please describe the ProGas supply for the 2004-2005 season.

17 A. In my testimony for the 2004-2005 winter COG proceeding, I estimated that the  
18 volume of gas that would be available from ProGas for the winter season would  
19 be 45,760 MMBtu. The actual volume available from ProGas for the winter  
20 season was 80,345 MMBtu. These volumes are made available when the  
21 MassPower facility is not purchasing 75 percent of its contractual supply from  
22 ProGas due to dispatch or plant unscheduled outages.

23 Q. How did the price paid for the ProGas supply compare with Northern's other  
24 alternatives?

25 A. During this period the price that Northern paid for ProGas was \$496,376, while  
26 the price that Northern would have paid for alternative supply was \$615,473.

27 Q. What was the impact on gas costs from the ProGas supply?

1 A. As a result of the ProGas supply, Northern's gas cost for the winter season was  
2 favorably impacted by \$119,097.

3 Q. Why was the ProGas supply less costly during the 2004-2005 winter season?

4 A. Due to the continued high natural gas prices the "basket of fuels" pricing  
5 associated with the ProGas supply was more economic than pipeline supplies.

6 Q. Have you prepared an exhibit that details this?

7 A. Yes. This detail is shown in Exhibit D.

8 Q. Have you prepared an exhibit that shows the monthly volumes that were supplied  
9 from ProGas?

10 A. Yes. That data is supplied in Exhibit E.

11 Q. Within operating limits, did Northern utilize its full allocation of pipeline gas on  
12 all days that supplemental gas was required?

13 A. Yes. With the exception of January supplemental supplies were not required in  
14 any other months other than for testing of the peak shaving facilities.

15 Q. Have you prepared an exhibit to demonstrate this point?

16 A. Yes, the comparison of two exhibits, Exhibits A and F, demonstrates this point.  
17 Exhibit A lists those days when supplemental supplies of LP-air and LNG were  
18 utilized. Exhibit F sets forth Northern's purchase of pipeline gas on those days.

19 Q. Would you describe the results of Northern's hedging program implemented for  
20 the 2004-2005 winter COG period?

21 A. As described in my testimony for the 2004-2005 winter COG period, Northern  
22 planned to hedge 40% of its pipeline supply requirements through non-  
23 discretionary hedges utilizing NYMEX Futures contracts and an additional 2%  
24 through the execution of one of the predetermined discretionary price targets for  
25 April 2005. As a result of the hedging program, Northern ratepayers realized a net  
26 financial gain of \$651,117, which was passed through as a credit to the COG.  
27 More importantly, even though gas prices remained at high levels during the

1 2004-2005 winter COG period, Northern ratepayers were insulated from much of  
2 the price run up through the hedging program and Northern did not have to adjust  
3 its COG during the winter period.

4  
5 **2005-2006 WINTER SEASON**

6 Q. Do you anticipate that any change to Northern's gas supply portfolio during the  
7 2005-2006 winter season?

8 A. Yes, I do. In accordance with the terms of Northern's peaking contract with Duke  
9 Energy Trading and Marketing, the maximum daily quantity will increase from  
10 24,000 MMBtu/day to 30,000 MMBtu/day and the annual contract quantity will  
11 increase from 384,000 MMBtu to 600,000 MMBtu.

12 Q. Will the ProGas supply continue to be available to Northern for the 2005-2006  
13 winter season?

14 A. No. As mentioned previously, the ProGas volumes are made available when the  
15 MassPower facility is not purchasing 75 percent of its contractual supply from  
16 ProGas due to dispatch or plant unscheduled outages. MassPower has recently  
17 negotiated a buy out of NSTAR's Power Purchase Agreement (PPA) with the  
18 facility. As a result, MassPower will no longer need its ProGas supply to generate  
19 power under its previous PPA with NSTAR and will terminate the ProGas supply.

20 Q. Are there any additional changes to Northern's portfolio?

21 A. Yes. Northern's long-term Canadian supply contract with Husky Energy  
22 Marketing will expire on November 1, 2005. Northern will continue to utilize its  
23 Tennessee capacity path from Niagara to purchase a winter only replacement  
24 supply.

25  
26 Q. Within operating limits, is it Northern's intention to purchase its full daily  
27 allocation of pipeline natural gas on all days when the requirements of Northern's

1 firm customers are equal to or greater than Northern's daily allocation of pipeline  
2 natural gas?

3 A. Yes, it is.

4 Q. If normal weather is experienced during the 2005-2006 winter season, how much  
5 underground storage does Northern plan to utilize?

6 A. After allowing for fuel gas retention, Northern estimates that 3,230,374 MMBtu  
7 of underground storage gas will be utilized to meet the normal winter  
8 requirements of its firm customers.

9 Q. Will Northern continue to monitor its ability to "segment" capacity from  
10 Tennessee?

11 A. Yes. Northern will continue to monitor the level of its ability to "segment"  
12 capacity on Tennessee and reflect such analysis in future estimates of  
13 underground storage and spot gas availability.

14 Q. Will Northern fill its propane storage tanks prior to November 1, 2005?

15 A. Yes. Northern will purchase an adequate volume of propane on the spot market  
16 this summer to ensure that its propane storage tanks are full by November 1,  
17 2005.

18 Q. If normal weather is experienced during the 2005-2006 winter season, how much  
19 LP-air gas does Northern plan to utilize?

20 A. If normal weather is experienced during the winter season, Northern plans to  
21 utilize 5,000 MMBtu of LP-air gas.

22 Q. For purposes of this proceeding, what is Northern estimating will be the inventory  
23 cost of its propane supply for the 2005-2006 winter season?

24 A. Northern is estimating that the inventory cost will be \$0.85 per gallon. This  
25 propane price is equivalent to a product price of \$9.265 per MMBtu. Assuming  
26 fuel for vaporization of 2.55%, the cost to produce propane-air is estimated to be  
27 \$9.507 per MMBtu.

- 1 Q. Will Northern fill its LNG storage tanks prior to November 1, 2005?
- 2 A. Yes, Northern will utilize any remaining volumes on the current Distrigas contract  
3 as well as spot liquid purchases to fill its LNG storage tanks.
- 4 Q. Have you prepared a summary of the manner in which Northern estimates that it  
5 will meet the normal and design winter requirements of its customers during the  
6 2005-2006 winter season?
- 7 A. Yes, and the results of those summaries are set forth in Exhibits G and H. Exhibit  
8 G presents the resources needed to satisfy Northern's normalized demand for the  
9 2005-2006 winter period. New Hampshire's allocated shares of these resources to  
10 meet normal winter requirements are presented in the Gas Cost Exhibit section  
11 filed with the testimony of Joseph A. Ferro.

#### **HEDGING PROGRAM**

- 13 Q. Does Northern plan to hedge a portion of its anticipated pipeline purchases for  
14 this upcoming winter?
- 15 A. Yes. Northern will continue to minimize price volatility in accordance with the  
16 revised hedging plan approved by the New Hampshire Commission via Order No.  
17 24,037, on August 16, 2002
- 18 Q. How much of Northern's anticipated normal winter requirements will be hedged?
- 19 A. Northern will physically hedge approximately 61% of its requirements through its  
20 underground storage, LNG and propane supplies. Of the remaining 39%, 40%  
21 will be hedged under the non-discretionary portion of the plan and an additional  
22 2% will be hedged through the execution of one of the predetermined  
23 discretionary price targets for April 2006. Thus, 42% of the remaining 39% of  
24 pipeline supply requirements, or 16.4% of total normal winter period  
25 requirements, will be hedged through a combination of non-discretionary and  
26 discretionary hedges. When combined with the physical hedges described above,

1 Northern will have approximately 77% of its total normal winter period  
2 requirements hedged either physically or financially. At these hedged levels  
3 Northern's customers should be fairly well insulated from the impact of any  
4 significant natural gas price spikes similar to those that have taken place in three  
5 of the last four years, and thus avoid any associated need to significantly revise  
6 the cost of gas rate, i.e., COG.

7 Q. Has the Company established new price triggers for its hedging program?

8 A. Yes. Pursuant to Commission Order in Docket No. 2001-679, the price triggers  
9 of the discretionary component of the hedging program are re-established every  
10 six months, at the time of the seasonal COG filings. These price triggers are  
11 based on trigger points set at the 65<sup>th</sup>, 35<sup>th</sup> and 20<sup>th</sup> percentiles of a matrix of  
12 NYMEX traded futures contracts analyzed by Risk Management Inc. (RMI), an  
13 independent broker used by the Company. The RMI price matrix is adjusted for  
14 inflation and weighted, with 20% of the price being attributed to the most recent  
15 year (short-term) and 80% being attributed to the last four years (long-term). This  
16 scaled distribution gives the matrix a slight bias toward recent prices, allowing for  
17 greater market sensitivity to the current environment. This market sensitivity is  
18 needed because these weighted prices are broken into deciles for the purposes of  
19 developing meaningful buy or trigger points. Exhibit I presents the RMI Matrix  
20 that sets forth the price triggers per MMBtu of \$6.185, \$5.125 and \$4.15 for the  
21 65<sup>th</sup>, 35<sup>th</sup> and 20<sup>th</sup> percentile, respectively.

22 Q. Mr. DaFonte, does this complete your direct prefiled testimony in this  
23 proceeding?

24 A. Yes, it does.