

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 2003-2004 winter season and to describe the manner in which Northern will meet
5 the natural gas requirements of its firm customers during the 2004-2005 winter
6 season.

7
8 **2003 - 2004 WINTER SEASON**

9 Q. From whom did Northern purchase its firm pipeline natural gas during the 2003-
10 2004 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 2003-2004 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 pipelines that transport Northern's firm supplies to its
17 citygate.

18 Q. Have you prepared an exhibit that shows, during the 2003-2004 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 2003-
23 2004 winter season?

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

25 Q. During the 2003-2004 winter season, what was the volume of LP-air produced by
26 Northern?

27 A. During the 2003-2004 winter season, Northern produced 159 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 1,733 gallons of propane.

3 Q. Did Northern have any propane volumes under contract for the 2003-2004 winter
4 season?

5 A. No, Northern did not have any propane under contract for the 2003-2004 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 2003-2004 winter in terms of
10 severity?

11 A. Overall, the 2003-04 winter season was slightly colder than normal. The period
12 November 1, 2003 through April 30, 2004 was 0.7 % colder than normal. The
13 month of January was 19% colder than normal and was one of the coldest on
14 record with some historically low temperatures. However, all other winter months
15 were between 4% and 5% warmer than normal. (In addition, despite the record
16 cold in January, the historically coldest months of December, January and
17 February were only 4% colder than normal.)

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

19 A. Yes. Northern experienced a new peak throughput of 114,631 MMBtu on
20 January 15, 2004. Further, Northern experienced throughput of 110,374 MMBtu,
21 104,833 MMBtu and 101,780 MMBtu on January 14, January 9 and January 8,
22 respectively, which also surpassed the previous peak throughput of 100,641
23 MMBtu experienced on January 17, 2000.

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

25 A. Although the month of January was extremely cold, the remaining winter months
26 were warmer than normal resulting in less underground storage and supplemental
27 supplies being required in those months.

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

2 A. Commodity prices during the January cold snap reached historical highs on the
3 spot market and peaked at approximately \$63.00 per MMBtu for the Algonquin
4 city-gate index price on January 15. Since the January cold was not sustainable
5 through the winter, spot prices subsided considerably from their peak and were
6 lower for the remainder of the winter period as compared to the same period in
7 2002-2003. Overall, the NYMEX strip for the 2003-2004 winter period averaged
8 \$5.32 per MMBtu compared to \$5.53 per MMBtu for the same period in 2002-
9 2003, which included a settlement price of \$9.13 per MMBtu for March 2003.
10 Absent the March NYMEX spike, the 2003-2004 winter period average NYMEX
11 settlement price would have been higher than the 2002-2003 period by
12 approximately \$0.40 per MMBtu. In summation, prices for the 2003-2004 winter
13 period were significantly higher than their historical average.

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

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

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

26 A. Northern attempts to fully utilize its storage volumes during the winter period:
27 first, to meet its firm requirements in lieu of more expensive supplemental

1 supplies; second, to allow Northern to refill the storage inventory during the
2 summer months when less costly pipeline supplies are typically available; and
3 third, to avoid pipeline balancing penalties by utilizing storage injection and
4 withdrawal flexibility.

5 Q. What volumes did Northern withdraw from its underground storage inventory
6 during the 2003-2004 winter season?

7 A. Northern's storage inventory withdrawals for the 2003-2004 winter season were
8 2,490,642 MMBtu in total. This translates into an overall utilization of 46 percent
9 of available storage. Exhibit B provides detailed utilization of each of Northern's
10 storage inventories.

11 Q. During the 2003-2004 winter season, was Northern able to secure any additional
12 pipeline citygate spot gas supplies in addition to its firm contractual supplies?

13 A. Yes, during the November through April period, Northern was able to secure
14 561,249 MMBtu of citygate spot market supplies in addition to its firm
15 contractual supplies.

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

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

18 Q. Please describe the ProGas supply for the 2003-2004 season.

19 A. In my testimony for the 2003-2004 winter COG proceeding, I estimated that the
20 volume of gas that would be available from ProGas for the winter season would
21 be 46,046 MMBtu. The actual volume available from ProGas for the winter
22 season was 47,009 MMBtu. These volumes are made available when the
23 MassPower facility is not purchasing 75 percent of its contractual supply from
24 ProGas due to dispatch or plant unscheduled outages.

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

1 A. During this period the price that Northern paid for ProGas was \$244,423, while
2 the price that Northern would have paid for alternative supply was \$308,140.

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

4 A. As a result of the ProGas supply, Northern's gas cost for the winter season was
5 favorably impacted by \$63,718.

6 Q. Why was the ProGas supply less costly during the 2003-2004 winter season?

7 A. As mentioned, the 2003-2004 winter saw abnormally high natural gas prices,
8 particularly in January, making the "basket of fuels" pricing associated with the
9 ProGas supply more economic than pipeline supplies.

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

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

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

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

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

17 A. Yes. Other than the January cold snap mentioned previously in my testimony,
18 supplemental supplies were not required due to the warmer than normal weather.

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

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

23 Q. Would you describe the results of Northern's hedging program implemented for
24 the 2003-2004 winter COG period?

25 A. As described in my testimony for the 2003-2004 winter COG period, Northern
26 planned to hedge 40% of its pipeline supply requirements through non-
27 discretionary hedges utilizing NYMEX Futures contracts. Northern did not

1 anticipate entering into any discretionary hedges for the 2003-2004 winter COG
2 period as the established price targets were not likely to be achieved. As a result
3 of the hedging program, Northern ratepayers realized a net financial gain of
4 \$214,228 , which was passed through as a credit to the COG. More importantly,
5 even though gas prices reached historically high levels during the 2003-2004
6 winter COG period, Northern ratepayers were insulated from much of the price
7 run up through the hedging program.

8
9 **2004-2005 WINTER SEASON**

10 Q. Do you anticipate that there be any change to Northern's gas supply portfolio
11 during the 2004-2005 winter season?

12 A. Yes, I do. In accordance with the terms of Northern's peaking contract with Duke
13 Energy Trading and Marketing, the maximum daily quantity will increase from
14 18,400 MMBtu/day to 24,000 MMBtu/day and the annual contract quantity will
15 increase from 239,200 MMBtu to 384,000 MMBtu.

16 Q. Are there any changes to the operational capabilities of Northern's peaking
17 facilities?

18 A No, there are not. As set forth in my testimony for the 2003-2004 winter COG
19 period, Northern's peaking facilities together will have a demonstrated
20 operational capacity on design day of approximately 14,000 MMBtu. As load is
21 added or as additional system uprates are instituted, the operational capacity of
22 these facilities will change and Northern will update the peak vaporization output
23 annually.

24 Q. Will there be any changes to Northern's firm transportation capacity contract with
25 Granite State for the upcoming winter period of 2004-2005?

1 A. No. As the result of an agreement reached in 2003, the Company continues to
2 have 100,000 MMBtu per day of firm transportation capacity at a discounted rate
3 through October 31, 2008.

4 Q. What was that agreement?

5 A. That agreement is the contract between Northern and Granite State that went into
6 effect on November 1, 2003. Significantly, the rate and terms it contains were
7 negotiated by and among Maine and New Hampshire Commission staffs, the
8 Maine OPA, the New Hampshire OCA, Northern, and Granite State. All relevant
9 documentation and information was provided to the New Hampshire Commission
10 under letter dated November 25, 2003, and was in connection with Docket DG
11 03-179. Also, under letter dated December 18, 2003, the Company filed with the
12 Commission a copy of the executed Contract FT-NN between Northern Utilities
13 and Granite State.

14 Q. Within operating limits, is it Northern's intention to purchase its full daily
15 allocation of pipeline natural gas on all days when the requirements of Northern's
16 firm customers are equal to or greater than Northern's daily allocation of pipeline
17 natural gas?

18 A. Yes, it is.

19 Q. If normal weather is experienced during the 2004-2005 winter season, how much
20 underground storage does Northern plan to utilize?

21 A. After allowing for fuel gas retention, Northern estimates that 3,812,744 MMBtu
22 of underground storage gas will be utilized to meet the normal winter
23 requirements of its firm customers.

24 Q. Will Northern continue to monitor its ability to "segment" capacity from
25 Tennessee?

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

4 Q. Will Northern fill its propane storage tanks prior to November 1, 2004?

5 A. Yes. Northern will purchase an adequate volume of propane on the spot market
6 this summer to ensure that its propane storage tanks are full by November 1,
7 2004.

8 Q. If normal weather is experienced during the 2004-2005 winter season, how much
9 LP-air gas does Northern plan to utilize?

10 A. If normal weather is experienced during the winter season, Northern plans to
11 utilize 867 MMBtu of LP-air gas.

12 Q. For purposes of this proceeding, what is Northern estimating will be the inventory
13 cost of its propane supply for the 2004-2005 winter season?

14 A. Northern is estimating that the inventory cost will be \$0.69 per gallon. This
15 propane price is equivalent to a product price of \$7.79 per MMBtu. Assuming
16 fuel for vaporization of 2.55%, the cost to produce propane-air is estimated to be
17 \$7.85 per MMBtu.

18 Q. Will Northern fill its LNG storage tanks prior to November 1, 2004?

19 A. Yes, Northern will utilize any remaining volumes on the current Distrigas contract
20 as well as spot liquid purchases to fill its LNG storage tanks.

21 Q. Have you prepared a summary of the manner in which Northern estimates that it
22 will meet the normal and design winter requirements of its customers during the
23 2004-2005 winter season?

24 A. Yes, and the results of those summaries are set forth in Exhibits G and H. Exhibit
25 G presents the resources needed to satisfy Northern's normalized demand for the
26 2004-2005 winter period. New Hampshire's allocated shares of these resources to

1 meet normal winter requirements are presented in the Gas Cost Exhibit section
2 filed with the testimony of Joseph A. Ferro.
3
4

HEDGING PROGRAM

5 Q. Does Northern plan to hedge a portion of its anticipated pipeline purchases for
6 this upcoming winter?

7 A. Yes. Northern will continue to minimize price volatility in accordance with the
8 revised hedging plan approved by the New Hampshire Commission via Order No.
9 24,037, on August 16, 2002.

10 Q. How much of Northern's anticipated normal winter requirements will be hedged?

11 A. Northern will physically hedge approximately 65% of its requirements through its
12 underground storage, LNG and propane supplies. Of the remaining 35%, 40%
13 will be hedged under the non-discretionary portion of the plan and an additional
14 2% will be hedged through the execution of one of the predetermined
15 discretionary price targets for April 2005. Thus, 42% of the remaining 35% of
16 pipeline supply requirements, or 14.7% of total normal winter period
17 requirements, will be hedged through a combination of non-discretionary and
18 discretionary hedges. When combined with the physical hedges described above,
19 Northern will have approximately 80% of its total normal winter period
20 requirements hedged either physically or financially. At these hedged levels
21 Northern's customers should be fairly well insulated from the impact of any
22 significant natural gas price spikes similar to those that have taken place in three
23 of the last four years, and thus avoid any associated need to significantly revise
24 the cost of gas rate, i.e., COG.

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

1 A. Yes. Pursuant to Commission Order No. 24,037 in DG 02-137, the Commission
2 encouraged the Company to monitor and if appropriate recommend new target
3 prices of the discretionary component of the hedging program in the semiannual
4 COG proceedings. These price triggers are based on trigger points set at the 65th,
5 35th and 20th percentiles of a matrix of NYMEX traded futures contracts analyzed
6 by Risk Management Inc. (RMI), an independent broker used by the Company.
7 The RMI price matrix is adjusted for inflation and weighted, with 20% of the
8 price being attributed to the most recent year (short-term) and 80% being
9 attributed to the last four years (long-term). This scaled distribution gives the
10 matrix a slight bias toward recent prices, allowing for greater market sensitivity to
11 the current environment. This market sensitivity is needed because these weighted
12 prices are broken into deciles for the purposes of developing meaningful buy or
13 trigger points. Exhibit I presents the RMI Matrix that sets forth the price triggers
14 per MMBtu of \$5.73, \$4.76 and \$3.77 for the 65th, 35th and 20th percentile,
15 respectively.

16 Q. Mr. DaFonte, does this complete your direct prefiled testimony in this
17 proceeding?

18 A. Yes, it does.