## NORTHERN UTILITIES

## NEW HAMPSHIRE DIVISION

## PREFILED TESTIMONY OF FRANCISCO C. DAFONTE

1	0.	Please	state	vour	name	and	business	address.
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A. Francisco C. DaFonte. My business address is 300 Friberg Parkway,
Westborough, MA 01581.

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

A. I am a Director, Energy Supply Services for NiSource Corporate Services
representing Bay State Gas Company ("Bay State"), Northern Indiana Public
Service Company ("NIPSCO") and Northern Utilities, Inc. ("Northern" or "the
Company").

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

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

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

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

Q. Have you previously testified before any regulatory or governmental bodies?
A. Yes, I have testified in a number of proceedings before the Massachusetts
Department of Telecommunications and Energy, the New Hampshire Public

1		Utilities Commission, the Maine Public Utilities Commission, the Indiana Utility
2.		Regulatory Commission and the Federal Energy Regulatory Commission.
3	Q.	What is the purpose of your testimony in this proceeding?
4	А.	The purpose of my testimony in this proceeding is to describe the manner in
5		which Northern met the natural gas requirements of its firm customers during the
6		2005-2006 winter season and to describe the manner in which Northern will meet
7		the natural gas requirements of its firm customers during the 2006-2007 winter
8		season.
9		
10		<b>2005 - 2006 WINTER SEASON</b>
11	Q.	From whom did Northern purchase its firm pipeline natural gas during the 2005-
12		2006 winter season?
13	A.	Northern purchased its firm pipeline natural gas from Granite State and six (6)
14		producers/marketers with which it had firm contracts.
15	Q.	For the 2005-2006 winter season, what was the total firm daily upstream
16		transportation capacity available to Northern?
17	A.	Northern had a total of 100,000 MMBtu per day of firm daily transportation
18		capacity on the upstream pipeline that transports Northern's firm supplies to its
19		citygate.
20	Q.	Have you prepared an exhibit that shows, during the 2005-2006 winter season, the
21		daily volumes of the various gas supplies that were distributed to Northern's
22		customers?
23	A.	Yes. That data is shown in Exhibit A.
24	Q.	Have you prepared a summary, which shows the supply balance for the 2005-
25		2006 winter season?
26	А.	Yes. That summary is shown in Exhibit B.

<u>`</u> .	1	Q.	During the 2005-2006 winter season, what was the volume of LP-air produced by
	2		Northern?
	3	A.	During the 2005-2006 winter season, Northern did not produce any LP-air.
	4	Q.	Did Northern have any propane volumes under contract for the 2005-2006 winter
	5		season?
	6	А.	No, Northern did not have any propane under contract for the 2005-2006 winter
	7		season. Northern had its propane inventory full prior to the winter and
	8		determined that its firm customers did not require any incremental propane supply
	9		during the winter.
	10	Q.	Would you describe for the Commission the 2005-2006 winter in terms of
	11		severity?
	12	A.	Overall, the 2005-06 winter season was much warmer than normal. The period
<b>S</b> .	13		November 1, 2005 through April 30, 2006 was 7.2 % warmer than normal.
	14		Moreover, the historically coldest month of January was 23% warmer than
	15		normal, one of the warmest on record.
	16	Q.	Did Northern experience a new peak throughput during this period?
	17	А.	No. Northern did not experience a new peak throughput. Northern's peak day
	18		was 87,022 MMBtu and occurred on February 27, 2006. The historical peak for
	19		Northern of 114,631 MMBtu occurred on January 15, 2005.
	20	Q.	What impact did this type of winter have on Northern?
	21	А.	The extreme warm weather, particularly in January, resulted in reduced
	22		underground storage utilization and no supplemental supplies being utilized.
	23	Q.	How did the extremely warm winter impact commodity prices?
	24	A.	NYMEX prices reached all time highs leading up to and during the early part of
	25		the winter as a result of significant supply disruptions brought on by Hurricane
	26		Katrina and Hurricane Rita. The November NYMEX contract expired at an all
	27		time high of \$13.832 and the December and January NYMEX contracts expired at

1 \$11.18 and \$11.431, respectively. As the winter progressed, and due to a lack of 2 any cold weather, NYMEX prices fell into the \$7.11 - \$8.40 range for February, 3 March and April. Spot prices in New England were manageable due to the lack of 4 cold weather and did not approach \$20 on any day compared to prices of \$63.00 5 per MMBtu in January 2004 and several days above \$20.00 per MMBtu during 6 the winter of 2004-2005. In summation, prices for the 2005-2006 winter period 7 started out high in anticipation of possible supply shortfalls but dropped 8 significantly when cold weather did not materialize. 9 Q. Please explain Northern's strategy relating to the use of underground storage.

10 Northern's underground storage capacity in MichCon through DTE Energy Α. 11 Trading (DTE) (formerly CoEnergy Trading Company) is 5,134,000 MMBtu with 12 a withdrawal rate of 34,000 MMBtu/day. This equates to 151 days of service. 13 Northern attempts to use this contract whenever possible from November through 14 March; however, the DTE contract is also Northern's primary balancing resource 15 and must be used to manage load swings due to weather fluctuation. Northern also 16 has available from Tennessee Gas Pipeline ("TGP") under its rate schedule FS-17 MA storage capacity of 259,337 MMBtu with a maximum daily firm 18 : transportation capacity of 2,653 MMBtu, which equates to a 98-day service. 19 Based on normal weather patterns, one would expect that the FS-MA storage 20 volumes would be most likely utilized from mid-November through mid-March. 21 Q. Within operational limitations, why does Northern attempt to fully utilize its 22 storage volumes during the winter season?

A. Northern attempts to fully utilize its storage volumes during the winter period:
first, to meet its firm requirements in lieu of more expensive supplemental
supplies; second, to allow Northern to refill the storage inventory during the
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 2005-2006 winter season?
5	А.	Northern's storage inventory withdrawals for the 2005-2006 winter season were
6		3,004,977 MMBtu in total. This translates into an overall utilization of 56 percent
7		of available storage. Exhibit B provides detailed utilization of each of Northern's
8		storage inventories.
9	Q.	During the 2005-2006 winter season, was Northern able to secure any additional
10		pipeline citygate spot gas supplies in addition to its firm contractual supplies?
11	Α.	Yes, during the November through April period, Northern was able to secure
12		514,372 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	А.	Yes, and that data is presented in Exhibit C.
16	Q.	Within operating limits, did Northern utilize its full allocation of pipeline gas on
17		all days that supplemental gas was required?
18	А.	Yes. With the exception of minor testing in December and utilization on 3 days in
19		March in order to prevent excessively high BTU content in the LNG tank,
20		supplemental supplies were not required in any other months.
21	Q.	Have you prepared an Exhibit to demonstrate this point?
22	А.	Yes, the comparison of two Exhibits, Exhibits A and D, demonstrates this point.
23		Exhibit A lists those days when supplemental supplies of LP-air and LNG were
24		utilized. Exhibit D sets forth Northern's purchase of pipeline gas on those days.
25	Q.	Would you describe the results of Northern's hedging program implemented for
26		the 2005-2006 winter CGF period?

	1	А.	As described in my testimony for the 2005-2006 winter CGF period, Northern
	2		planned to hedge 40% of its pipeline supply requirements through non-
	3		discretionary hedges utilizing NYMEX Futures contracts and an additional 2%
	4		through the execution of one of the predetermined discretionary price targets for
	5		April 2006. As a result of the hedging program, Northern's New Hampshire
	6		Division ratepayers realized a net financial gain of \$1,140,559, which was passed
	7		through as a credit to the CGF. More importantly, even though gas prices started
	8		out the winter season at record high levels, Northern ratepayers were insulated
	9		from much of the price run up through the hedging program and Northern did not
	10		have to adjust its CGF during the winter period.
	11		
	12		2006-2007 WINTER SEASON
Ń	13	Q.	Do you anticipate that any change to Northern's gas supply portfolio during the
	14		2006-2007 winter season?
	15	А.	Yes, I do. In accordance with the terms of Northern's peaking contract with Duke
	16		Energy Trading and Marketing, the maximum daily quantity will increase from
	17		30,000 MMBtu/day to 36,000 MMBtu/day and the annual contract quantity will
	18		increase from 600,000 MMBtu to 756,000 MMBtu.
	19	Q.	Are there any additional changes to Northern's supply portfolio?
	20	А	Yes. Northern's long-term Canadian supply contract with Direct Energy
	21		Marketing will expire on November 1, 2006. Northern will continue to utilize the
	22		TransCanada and PNGTS capacity path associated with this supply to purchase a
	23		replacement supply.
	24	Q.	Mr. DaFonte, will the DOMAC Peaking contract continue to be available to
	25		Northern?
K	26	A.	No. The DOMAC peaking contract providing 10,000 MMBtu per day expires on
	27		November 1, 2006 and will not be replaced.

1	Q.	Are there any changes to Northern's transportation contracts?
2	А.	Yes, Northern has acquired transportation contracts on Vector Gas Pipeline
3		("Vector"), Union Gas ("Union"), and TransCanada Gas Pipeline ("TCPL").
4	Q.	How do these contracts fit into Northern's total resource portfolio?
5	А.	The Vector, Union and TCPL contracts are upstream contracts that ultimately
6		bring Midwest gas supplies to Northern via Iroquois Gas Transmission System
7		("Iroquois"). The Vector contract accesses supplies from the Chicago market and
8		delivers them to Dawn, Ontario. At Dawn, Union transports the gas to its
9	-	interconnect with TCPL in Parkway, Ontario. TCPL then transports the gas to
10		Iroquois. Northern acquired these contracts in order to acquire gas supplies in
11		the Chicago market which is more liquid and competitive than the market at the
12		Iroquois interconnect with TCPL at Waddington, NY. This extended path will
13		help avoid price spikes that typically occur with purchases made at Waddington
14		during the winter season.
15	Q.	Did Northern utilize the process described in its long range resource plan ("IRP")
16		to acquire these resources for its portfolio?
17	А.	Yes, it did.
18	Q.	Within operating limits, is it Northern's intention to purchase its full daily
19		allocation of pipeline natural gas on all days when the requirements of Northern's
20		firm customers are equal to or greater than Northern's daily allocation of pipeline
21		natural gas?
22	A.	Yes, it is.
23	Q.	If normal weather is experienced during the 2006-2007 winter season, how much
24		underground storage does Northern plan to utilize?
25	A.	After allowing for fuel gas retention, Northern estimates that 2,727,915 MMBtu
26		of underground storage gas will be utilized to meet the normal winter
27		requirements of its firm customers.

~	1	Q.	Will Northern continue to monitor its ability to "segment" capacity from TGP?
	2	А.	Yes. Northern will continue to monitor the level of its ability to "segment"
	3		capacity on TGP and reflect such analysis in future estimates of underground
	4		storage and spot gas availability.
	5	Q.	Will Northern fill its propane storage tanks prior to November 1, 2006?
	6	А.	Yes. Northern will purchase an adequate volume of propane on the spot market
	7		this summer to ensure that its propane storage tanks are full by November 1,
	8		2006.
	9	Q.	If normal weather is experienced during the 2006-2007 winter season, how much
	10		LP-air gas does Northern plan to utilize?
	11	А.	If normal weather is experienced during the winter season, Northern does not plan
	12		to utilize any LP-air gas.
~	13	Q.	For purposes of this proceeding, what is Northern estimating will be the inventory
	14		cost of its propane supply for the 2006-2007 winter season?
	15	A.	Northern is estimating that the inventory cost will be \$0.85 per gallon. This
	16		propane price is equivalent to a product price of \$9.265 per MMBtu. Assuming
	17		fuel for vaporization of 2.55%, the cost to produce propane-air is estimated to be
	18		\$9.507 per MMBtu.
	19	Q.	Will Northern fill its LNG storage tanks prior to November 1, 2006?
	20	А.	Yes, Northern will utilize any remaining volumes on the current Distrigas contract
	21		as well as spot liquid purchases to fill its LNG storage tanks.
	22	Q.	Have you prepared a summary of the manner in which Northern estimates that it
	23		will meet the normal and design winter requirements of its customers during the
	24		2006-2007 winter season?
	25	А.	Yes, and the results of those summaries are set forth in Exhibits E and F. Exhibit
	26		E presents the resources needed to satisfy Northern's normalized demand for the
	27		2006-2007 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 Ronald Gibbons.
3		
		HEDGING PROGRAM
4	Q.	Does Northern plan to hedge a portion of its anticipated pipeline purchases for
5		this upcoming winter?
6	А.	Yes. Northern will continue to minimize price volatility in accordance with the
7		revised hedging plan approved by the New Hampshire Commission via Order No.
8		24,037, on August 16, 2002.
9	Q.	How much of Northern's anticipated normal winter requirements will be hedged?
10	А.	Northern will physically hedge approximately 58% of its requirements through its
11		underground storage, LNG and propane supplies. Of the remaining 42%, 40%
12		will be hedged under the non-discretionary portion of the plan and an additional
13		4% will be hedged through the execution of two of the predetermined
14		discretionary price targets for April 2007 and May 2007. Thus, 44% of the
15		remaining 42% of pipeline supply requirements, or 18.48% of total normal winter
16	•	period requirements, will be hedged through a combination of non-discretionary
17		and discretionary hedges. When combined with the physical hedges described
18		above, Northern will have approximately 76.5% of its total normal winter period
19		requirements hedged either physically or financially. At these hedged levels
20		Northern's customers should be fairly well insulated from the impact of any
21		significant natural gas price spikes and thus avoid any associated need to
22		significantly revise the cost of gas rate, i.e., CGF.
23	Q.	Has the Company established new price triggers for its hedging program?
24	A.	Yes. Pursuant to Commission Order in Docket No. 2001-679, the price triggers
25		of the discretionary component of the hedging program are re-established every
26		six months, at the time of the seasonal CGF filings. These price triggers are 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 NYMEX 1 2 traded futures contracts analyzed by Risk Management Inc. (RMI), an 3 independent broker used by the Company. The RMI price matrix is adjusted for inflation and weighted, with 20% of the price being attributed to the most recent 4 5 year (short-term) and 80% being attributed to the last four years (long-term). This 6 scaled distribution gives the matrix a slight bias toward recent prices, allowing for 7 greater market sensitivity to the current environment. This market sensitivity is 8 needed because these weighted prices are broken into deciles for the purposes of 9 developing meaningful buy or trigger points. Exhibit G presents the RMI Matrix 10 that sets forth the price triggers per MMBtu of \$8.44, \$6.865 and \$6.15 for the 65<sup>th</sup>, 35<sup>th</sup> and 20<sup>th</sup> percentile, respectively. 11

12 Q. Mr. DaFonte, does this complete your direct prefiled testimony in this13 proceeding?

14 A. Yes, it does.