

STATE OF NEW HAMPSHIRE



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October 21, 2005

Ms. Debra Howland
Executive Director & Secretary
New Hampshire Public Utilities Commission
21 South Fruit Street, Suite 10
Concord, New Hampshire 03301

Re: DG 05-147 – Northern Utilities, Inc.
Winter Cost of Gas 2005/06



Dear Ms. Howland:

Attached please find the original and 8 copies of the Testimony of George R. McCluskey, Utility Analyst in the above referenced docket.

Sincerely,

A handwritten signature in cursive script that reads "Edward N. Damon".

Edward N. Damon
Staff Attorney

Attachments
END/db

cc: Service List

**STATE OF NEW HAMPSHIRE
PUBLIC UTILITIES COMMISSION**

DG 05-147

**In the Matter of:
Northern Utilities, Inc.
Winter Cost of Gas 2005/06**

Testimony

of

**George R. McCluskey
Utility Analyst**

October 21, 2005

1 **I. INTRODUCTION**

2 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

3 A. My name is George McCluskey, and my business address is the New Hampshire
4 Public Utilities Commission, 21 South Fruit Street, Suite 10, Concord, NH 03301.

5
6 Q. WHAT IS YOUR POSITION WITH THE NHPUC?

7 A. I am a Utility Analyst within the Electricity Division of the NHPUC. I also assist
8 the staff of the Gas & Water Division on gas-related policy issues.

9
10 Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE COMMISSION ON
11 GAS-RELATED ISSUES?

12 A. Yes, on several occasions.

13
14 Q. PLEASE DESCRIBE YOUR EDUCATION AND YOUR BUSINESS
15 EXPERIENCE.

16 A. I am a utility ratemaking specialist with over 20 years experience in utility
17 economics. I rejoined the NHPUC in March 2005 after working as a consultant
18 for La Capra Associates, a Boston-based consulting firm that specializes in
19 electric industry restructuring, wholesale and retail power procurement, and
20 market price and risk analysis. Prior to joining La Capra Associates, I directed
21 the electric utility restructuring division of the Commission and before that was
22 manager of least cost planning, directing and supervising the review and
23 implementation of electric utility least cost plans and demand-side management

1 programs. I have participated in electric and gas restructuring-related activities in
2 New Hampshire, Arkansas, Pennsylvania, California and Ohio. A copy of my
3 resume is included as Exhibit GRM-1.

4
5 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS CASE?

6 A. Northern Utilities, Inc. (Northern) provides retail gas supply and delivery services
7 in portions of Maine and New Hampshire through its Maine and New Hampshire
8 Divisions. Effective November 1, 1999, the Maine Public Utilities Commission
9 (MEPUC) authorized the Maine Division to revise its Gas Tariff to allow all
10 commercial and industrial (C&I) customers to switch from firm sales service to
11 transportation service. The MEPUC did not, however, require customers who
12 switched to pay the fixed capacity costs incurred by Northern on their behalf. The
13 decision not to require switching customers to pay their fair share of fixed
14 capacity costs has encouraged significant numbers of firm sales customers in
15 Maine to switch to transportation, which in turn has led to cost shifting to the New
16 Hampshire Division.

17 As a result of this phenomenon, I estimate that Northern is seeking to recover
18 from New Hampshire customers over the Winter 2005-06 period approximately
19 \$1.35 million of fixed capacity costs that are the responsibility of Maine
20 customers. My testimony recommends that the Commission remove these costs
21 from the Winter 2005-06 Cost of Gas (COG) pending the outcome of the ongoing
22 investigation with the MEPUC of the continued reasonableness of the

1 Proportional Responsibility Methodology (PR Methodology) in Docket No. 05-
2 080.

3

4 Q. HOW IS YOUR TESTIMONY ORGANIZED?

5 A. Following this introduction, I examine in the second section the impact of the
6 MEPUC's transportation policy on the customers of the New Hampshire
7 Division. Based on this examination, I present in the third section my
8 recommendations in this proceeding.

9

10 **II. THE IMPACT OF MAINE'S TRANSPORTATION POLICY ON NEW**
11 **HAMPSHIRE GAS CUSTOMERS**

12 Q. HOW DOES NORTHERN MEET ITS GAS SUPPLY OBLIGATIONS?

13 A. Northern is a gas utility that furnishes retail gas supply and transportation services
14 in portions of Maine and New Hampshire through its Maine and New Hampshire
15 Divisions. To fulfill its gas supply obligations, Northern plans, constructs, and
16 operates a single portfolio of supply resources, with the objective of maintaining
17 gas supply reliability at minimum cost to the combined Northern system. The
18 resource portfolio comprises capacity held on long and short haul interstate
19 pipelines, capacity held under contracts with underground storage facilities and
20 suppliers of liquefied natural gas (LNG), and the capacity of Northern's LNG and
21 propane-air peaking facilities. Each resource in Northern's portfolio is
22 characterized by its variable commodity and fixed capacity costs.

1 Q. WHAT ARE THE CAPACITY COSTS ASSOCIATED WITH NORTHERN'S
2 PORTFOLIO?

3 A. The fixed capacity costs associated with Northern's pipeline, underground storage
4 and LNG supplies are expected to cost just under \$27 million over the twelve
5 months ending April 2006. Because most of those supplies are procured under
6 long term contracts with many years remaining, the fixed capacity cost is likely to
7 continue at a high level well into the future.

8

9 Q. HOW DOES NORTHERN ALLOCATE FIXED CAPACITY COSTS
10 BETWEEN ITS TWO DIVISIONS?

11 A. Prior to 1995, fixed capacity costs were allocated between the Divisions based on
12 firm sendout for each Division.¹ In January 1995, Northern petitioned to revise
13 this method and subsequently entered into discussions with the staffs of both
14 Commissions. As a result of these discussions, Northern revised its proposal in
15 favor of the Proportional Responsibility Methodology (PR Methodology), which
16 was approved by both Commissions in the same year in separate proceedings.

17 In its simplest terms, the PR Methodology first assigns Northern's total pipeline,
18 underground storage and LNG capacity costs to each month using monthly
19 weights. Different weights are used for pipeline and non-pipeline related
20 resources. The month with the highest total firm sendout under design-weather

¹ At the time, firm sendout was defined as the total gas purchased from pipelines, withdrawn from underground storage facilities (net of injections) and produced by peaking facilities, within a specified time interval, to meet the needs of firm sales customers.

1 conditions is assigned the highest weight, the month with the next highest sendout
2 the next highest weight, and so on. This step is designed to reflect in the
3 allocation process the seasonal variation in the utilization of the resource
4 portfolio. The next step is to allocate between the Divisions the monthly capacity
5 costs using monthly allocation factors that are derived by dividing firm sendout
6 under design-year conditions for each Division by the corresponding total firm
7 sendout under design-year conditions. The final step is to determine the annual
8 allocation factor for each Division by dividing the sum of the monthly allocated
9 capacity costs for each Division by the annual total capacity cost. It is this annual
10 allocation factor that is used to determine each Division's share of fixed capacity
11 costs. Northern collects these allocated costs dollar for dollar through winter and
12 summer Cost of Gas rate proceedings in each state.

13 Under the PR Methodology, the Division that places more demand on capacity
14 available during peak periods is assigned more of the fixed capacity costs. By
15 contrast, under the method previously in effect, the annual fixed capacity costs
16 were spread evenly across the year, which did not capture each Division's unique
17 peak requirements. See transcript of hearing testimony in DR 95-257, pages 23,
18 27 (October 19, 1995).

19

20 Q. DOES THE PR METHODOLOGY APPROVED BY THE COMMISSION IN
21 1995 IGNORE TRANSPORTATION?

1 A. Yes, the definition of firm sendout did not include a factor for transportation
2 load.² Instead, firm sendout was defined as gas sendout to meet the needs of firm
3 sales customers only. That does not mean, however, that firm sendout is
4 unaffected by transportation load. To the contrary, if firm sales customers in
5 Maine disproportionately switch to transportation service, firm sendout for the
6 Maine Division will be reduced relative to the New Hampshire Division, resulting
7 in a reduced allocation of capacity costs to the Maine Division and an increased
8 allocation to the New Hampshire Division.

9

10 Q. DID SALES CUSTOMERS IN MAINE DISPROPORTIONATELY SWITCH
11 TO TRANSPORTATION SERVICE?

12 A. Yes. Beginning November 1999, the MEPUC expanded the availability of
13 transportation service to all C&I customers taking firm sales service. Importantly,
14 the MEPUC allowed sales customers to switch without paying any of the fixed
15 capacity costs that had been incurred on their behalf. Due to this policy, 408 C&I
16 customers switched to firm transportation service since March 14, 2000, resulting
17 in a reduction of 5% in firm sales volumes.³

18

19 Q. HOW DOES NEW HAMPSHIRE'S TRANSPORTATION POLICY COMPARE
20 TO MAINE'S?

21 A. As of March 14, 2000, the availability of transportation in New Hampshire was
22 expanded to all C&I customers. Unlike Maine, customers that switched after that

² Perhaps because transportation service was not available at the time.

³ March 14, 2000 is the date New Hampshire implemented mandatory capacity assignment.

1 date were required to pay their full share of fixed capacity costs.⁴ As a result,
2 only 185 customers have switched to transportation in the New Hampshire
3 Division since March 14, 2000, which reduced firm sales by only 1%. The net
4 effect of these divisional volume changes has been to increase the New
5 Hampshire Division's share of fixed capacity costs under the PR Methodology
6 and to decrease the Maine Division's share.

7

8

9 Q. DOES NORTHERN AGREE WITH YOUR ANALYSIS?

10 A. Yes, it does. In COG testimony submitted in Maine in Docket 2005-480, Joseph
11 Ferro for Northern stated that discussions have taken place in Docket No. 2005-
12 087 on the continued reasonableness of the PR Methodology, prompted by:

13 "... the increasing awareness of the parties that the New Hampshire Division
14 allocation factors were increasing due to declining Maine Division firm sales
15 load."
16

17 Mr. Ferro goes on to say that:

18 "This decline is the result of Maine customers switching from firm sales to
19 transportation service, without being assigned any of Northern's capacity.
20 This development has caused unassigned capacity costs (approximately 50%)
21 to be allocated to New Hampshire firm customers and Maine firm sales
22 customers."
23

24 Q. WHAT IS THE MAGNITUDE OF THE COST SHIFT TO NEW HAMPSHIRE?

25 A. In percentage terms, New Hampshire's share of the total fixed capacity cost has
26 risen from approximately 47% just prior to the adoption of the MEPUC's
27 expanded transportation policy in 1999 to 57% for the twelve month period

⁴ This requirement was implemented when the Commission adopted mandatory capacity assignment.

1 ending April 2006. The Maine and New Hampshire allocation factors are shown
2 in Table 1 below. Northern estimates that in 2005-06 alone, the increase in New
3 Hampshire's allocation percentage will cost customers an additional \$1.5 million,
4 of which \$1.35 million is allocated to the Winter period. The calculation
5 supporting these cost estimates is provided in Exhibit GRM-2.
6

TABLE 1
ANNUAL ALLOCATION FACTORS

	Maine	NH
Period	%	%
1998-99	52.87	47.13
1999-00	52.53	47.47
2000-01	52.45	47.55
2001-02	49.94	50.06
2002-03	49.18	50.82
2003-04	47.27	52.73
2004-05	46.23	53.77
2005-06	42.83	57.17

7

8

9 Q. PLEASE EXPLAIN IN SUMMARY FORM THE CALCULATION OF THE
10 \$1.35 MILLION COST SHIFT.

11 A. The objective is to determine the capacity cost associated with the Maine
12 Division's transportation load that is allocable to New Hampshire. The
13 calculation comprises three steps. Step 1 calculates the ratio of the Maine
14 Division design-day transportation load to Northern's total design-day load less

1 grandfathered transportation.⁵ Step 2 calculates the capacity cost attributable to
2 the Maine Division's transportation load by multiplying the above percentage by
3 Northern's total fixed capacity cost. Step 3 calculates the New Hampshire
4 Division's allocated share of the capacity cost derived in Step 2 by multiplying
5 the Step 2 cost by the New Hampshire Division's PR annual allocation factor.

6

7 Q. AS NOTED ABOVE, THE \$1.35 MILLION COST SHIFT ESTIMATE
8 ASSUMES THAT NEW HAMPSHIRE GRANDFATHERED CUSTOMERS
9 IMPOSE NO COSTS ON NORTHERN. IS THIS A LEGITIMATE
10 ASSUMPTION?

11 A. Yes, it is. Because Northern is not obligated to take back grandfathered New
12 Hampshire customers, it does not plan for their return. That is, Northern does not
13 incur capacity costs to backstop those customers. The same is not true for Maine
14 customers that switched on or before March 14, 2000 because Northern believes
15 that it has an obligation to backstop all firm transportation customers in Maine.

16

17 **III. RECOMMENDATIONS**

18 Q. WHAT IS YOUR RECOMMENDATION?

19 A. I recommend that the Commission remove the estimated \$1.35 million cost shift
20 from Northern's Winter 2005-06 COG pending the outcome of Docket 05-80.

⁵ Grandfathered transportation is subtracted because that load does not attract capacity costs. A grandfathered customer is a New Hampshire customer that switched to transportation on or before March 14, 2000. No Maine customers are considered grandfathered for purposes of this calculation.

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Q. IN ORDER NO. 24,389 (OCTOBER 29, 2004) IN DOCKET NO. DG 04-162, THE COMMISSION AUTHORIZED THE COLLECTION OF THE WINTER 2004-05 COST SHIFT THROUGH NORTHERN'S WINTER 2004-05 COG, BUT RESERVED STAFF'S RIGHT TO REQUEST A REFUND. PLEASE EXPLAIN WHY STAFF IS NOT RECOMMENDING THAT THIS PROCESS BE USED IN THIS PROCEEDING.

A. In the Winter 2004-5 COG proceeding, Staff's understanding of the factors driving the cost shift was less complete than it is today. In addition, Northern had informed Staff that the task of estimating the magnitude of the cost shift was not a simple exercise and that the work was unlikely to be completed before the hearing. For these reasons, Staff was content to reserve its rights to request a refund. Since that time, the Company has responded to numerous discovery requests on the subject of cost shifting and developed a detailed method for estimating its magnitude. In addition, the Company has proposed in this COG proceeding to credit customers for the Winter 2004-05 cost shift, thus effectively agreeing to remove that cost pending the outcome of Docket No. 05-080. Finally, the Company entered into an agreement with the Staff and the OCA to remove from its Summer 2005 COG the Summer 2005 estimated cost shift, again pending the outcome of Docket No. 05-080. Accordingly, there is ample precedent to support Staff's recommendation in this proceeding.

1 Q. WHAT ARE THE FINANCIAL IMPLICATIONS OF YOUR
2 RECOMMENDATION?

3 A. Although I do not dispute that the recommendation will reduce Northern's cash
4 flow over the upcoming Winter 2005-6 period, I believe the financial impact
5 could have been mitigated had the Company anticipated the recommendation (a
6 reasonable expectation given the outcome of Northern's Summer 2005 COG
7 proceeding) and sought recovery of the shortfall in Maine. In addition, the
8 financial harm to Northern must be balanced by the financial harm to customers
9 of including in rates costs that Northern candidly agrees are attributable to the
10 failure to assign capacity costs to Maine transportation customers.

11

12 Q. HOW DO YOU RESPOND TO THE ARGUMENT THAT YOUR
13 RECOMMENDATION CONFLICTS WITH THE 1995 COMMISSION ORDER
14 THAT APPROVED THE PR METHODOLOGY?

15 A. The 1995 Commission Order authorizing the PR Methodology was intended to
16 allocate fixed capacity costs more equitably than the method previously in effect.
17 My testimony in this proceeding and Mr. Ferro's testimony in Docket No. 2005-
18 480 present a compelling case that, based on cost causation principles, the PR
19 Methodology no longer achieves the goal of an equitable allocation. Therefore,
20 removing the shifted costs from the Winter 2005-06 COG pending the outcome of

1 Docket No. 05-080 is consistent with the premise of the 1995 Order, which was to
2 ensure fairness in the allocation of capacity costs.

3

4 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

5 A. Yes.

GEORGE R. McCLUSKEY

NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION
Utility Analyst

George McCluskey is a ratemaking specialist with over 20 years experience in utility economics. Since rejoining the New Hampshire Public Utilities Commission (“NHPUC.”) in 2005, he has worked on default service and standby rate issues in the electric sector and cost allocation issues in the gas sector. While at La Capra Associates, a Boston-based consulting firm specializing in electric industry restructuring, wholesale and retail power procurement, market price and risk analysis, and power systems models and planning methods, he provided strategic advice to numerous clients on a variety of issues. Prior to joining La Capra Associates, Mr. McCluskey directed the electric utility restructuring division of the NHPUC and before that was manager of least cost planning, directing and supervising the review and implementation of electric and gas utility least cost plans and demand-side management programs. He has testified as an expert witness in numerous electric and gas cost-of-service and rate design proceedings before the NHPUC and the FERC.

ACCOMPLISHMENTS

Recent project experience includes:

Staff of the New Hampshire Public Utilities Commission – Expert testimony before the NHPUC regarding default service design and pricing issues in case involving Unifil Energy Systems.

Staff of the Arkansas Public Service Commission – A nalysis and case support regarding Entergy Arkansas Inc.’s application to transfer ownership and control of its transmission assets to a Transco. Also analyzed Entergy Arkansas Inc.’s stranded generation cost claims.

Massachusetts Technology Collaborative – Evaluated proposals by renewable resource developers to sell Renewable Energy Credits to MTC in reponse to 2003 RFP.

Pennsylvania Office of the Consumer Advocate – Analysis and case support

regarding horizontal and vertical market power related issues in the PECO/Unicom merger proceeding. Also advised on cost-of-service, cost allocation and rate design issues in FERC base rate case for interstate natural gas pipeline company.

Staff of the New Hampshire Public Utilities Commission – Expert testimony before the NHPUC regarding stranded cost issues in Restructuring Settlement Agreement submitted by Public Service Company of New Hampshire and various settling parties. Testimony presents an analysis of PSNH's stranded costs and makes recommendations regarding the recoverability of such costs.

Town of Waterford, CT – Advisory and expert witness services in litigation to determine property tax assessment of for nuclear power plant.

Washington Electric Cooperative, Vt – Prepared report on external obsolescence in rural distribution systems in property tax case.

New Hampshire Public Utilities Commission - Expert testimony on behalf of the NHPUC before the Federal Energy Regulatory Commission regarding the Order 888 calculation of wholesale stranded costs for utilities receiving partial requirements power supply service.

Ohio Consumer Council - Expert testimony regarding the transition cost recovery requests submitted by the AEP companies, including a critique of the DCF and revenues lost approaches to generation asset valuation.

EXPERIENCE

New Hampshire Public Utilities Commission (2005 to Present)

Utility Analyst, Electricity Division

La Capra Associates (1999 to 2005)

Senior Consultant

New Hampshire Public Utilities Commission (1987 – 1999)

Director, Electric Utilities Restructuring Division

Manager, Lease Cost Planning

Utility Analyst, Economics Department

Electricity Council, London, England (1977-1984)

Pricing Specialist, Commercial Department

Information Officer, Secretary's Office

EDUCATION:

Ph.D. candidate in Theoretical Plasma Physics, University of Sussex Space Physics Laboratory.

Withdrew in 1997 to accept position with the Electricity Council.

B.S., University of Sussex, England, 1975.

Theoretical Physics

**NHPUC ESTIMATE OF
2005-06 COST SHIFT TO NEW HAMPSHIRE
ALL MAINE TRANSPORTATION CUSTOMERS**

1	Total Maine Design Day Trans Load	22,924
2	Maine Cap Exempt Design Day Trans Load	<u>11,742</u>
3 = (1)-(2)	Maine Net Design Day Trans Load	11,182
4	NH Grandf Design Day Trans Load	9,310
5 = (2)+(4)	Total Cap Exempt Trans Load	21,052
6	Northern Design Day Load	126,306
7 = (6)-(5)	Design Day Load less Cap Exempt Trans (i.e., Effective Design Day Sales)	105,254
8 = (3)/(7)	Maine Net Design Trans Load as % of Effective Design Day Sales	10.62%
9	Total Northern Capacity Cost	\$26,513,077
10	Total Capacity Release	-\$682,519
11=(10)*(8)	Maine Trans Capacity Release	\$68,866
12=(10)+(11)	Net Capacity Release	-\$613,653
13=(9)+(12)	Net Demand Cost	\$25,899,424
14=(13)*(8)	Portion Attributable to Maine Net Trans Load	\$2,751,509
15=(14)-(11)	Maine Demand Cost less Maine Trans Capacity Release	\$2,682,643
16	NH PR Allocation Factor	56.98%
17=(15)*(16)	NH Portion of Maine Trans Demand Cost	\$1,528,570
18=(15)*(1-(16))	Maine Portion of Maine Trans Demand Cost	\$1,154,073
19	Total Summer 2006 Demand Costs	\$1,664,558
20=(19)*(8)	NH Portion of Summer Costs	\$176,840
21=(17)-(20)	NH Portion of Winter Costs	\$1,351,730