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N.H.P.U.C. Case No.	DG 09-053
Exhibit No.	#10
Witness	Palma
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THE STATE OF NEW HAMPSHIRE
BEFORE THE
PUBLIC UTILITIES COMMISSION

NORTHERN UTILITIES, INC.
Gas Energy Efficiency Program

Docket DG 09-053

UPDATED PREFILED DIRECT TESTIMONY OF
THOMAS PALMA, ESQ.

JULY 913, 2010

1 **I. INTRODUCTION**

2 **Q. State your name, position, and background.**

3

4 A. My name is Thomas Palma, Esq. I am the Manager of Distributed Energy
5 Resources, Planning and Design, for Unitil Service Corp. My business address is 325
6 West Road, Portsmouth, New Hampshire 03801.

7

8 I have been employed by Unitil since November, 2009. As part of my responsibilities, I
9 am involved with Northern Utilities' ("Northern" or the "Company") energy efficiency
10 programs. Previously I worked for the New Hampshire Electric Cooperative. During my
11 career I have gained extensive knowledge of renewable energy systems and energy
12 efficiency systems. I have created renewable energy programs and researched
13 renewable energy and energy efficiency technologies. I have also managed projects
14 regarding the above-mentioned topics. I hold a Bachelor of Science Degree in
15 Mechanical Engineering from the University of Massachusetts, Amherst and a Juris
16 Doctorate Degree from Suffolk University. I am also a member of the Massachusetts
17 Bar.

18

19 I have also been active in leadership roles in various organizations including the New
20 Hampshire Sustainable Energy Association, the Northeast Sustainable Energy
21 Association, and the Cooperative Research Network.

22

1 **Q. What is the purpose of your testimony?**

2

3 A. The purpose of my testimony is to update and supplement the information
4 contained in the February 17, 2010 letter filed by Attorney Epler on behalf of Northern
5 Utilities, Inc. ("Northern" or "the Company") in support of Northern's request to exceed
6 its budget for the Residential Gas Networks component of its Gas Energy Efficiency
7 Program and to withdraw a transfer of funds from the Residential Energy Star Homes
8 Program to the Residential Gas Networks Program.

9

10 **II. BACKGROUND**

11 **Q. Please summarize the background to this proceeding.**

12

13 A. On February 17, 2010, the Company filed a letter (Schedule TP-1) with the
14 Commission detailing the status of its Residential Gas Appliance Rebate program for
15 the 20-month program year May 2009 through December 2010, and requesting
16 Commission approval to transfer funds from the Residential Energy Star Homes
17 (Homes) Program to the Gas Networks® Appliance (GN) program¹. At that time it was
18 anticipated that with that transfer, the GN Program would be able to meet its current
19 obligations, but that both the GN and Homes Programs would effectively be closed for
20 the remainder of the year.

¹ For ease of reference the Company continues to refer to the Gas Heating Equipment Appliance Rebates as "Gas Networks®". The Company formally withdrew from the Gas Networks consortium early in 2010 when it realized that the rebate offerings had been changed and were no longer consistent with the Company's Tariff on file with the Commission. The Company has continued to process rebate requests at the levels reflected in its Tariff.

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Q. What is the current status of Northern’s Weatherization (HPwES), Homes, and GN programs?

A. As of July 1, 2010, the status of spending in these programs is shown in Schedule TP-2 and is summarized as follows: The Homes program is under spent by \$69,614, or 93.2% of budget; GN is overspent by \$190,267, or 145.6% of budget; and HPwES is overspent by \$18,735, or 14.2% of budget. The Company is not presently accepting GN rebate requests and is holding HPwES inquiries in a waiting list (comprised of 8 customers to date). Because some HPwES projects may not go forward, waiting list projects may receive funding.

A review of potential activity in the Homes program suggests that all Homes funds will be spent by the end of 2010. The latest review of the project in question (a 32 unit building in Exeter) indicates that it will be completed in 2010. With this latest information, the Company respectfully withdraws its request to shift approximately \$70,000 from the Homes program to the GN program as indicated in its February 17, 2010 letter referenced above.~~there will be no un-met demand for 2010 applicants even if all remaining funds are transferred. This is because the only project (a 32-unit building in Exeter) in line to receive the budgeted funds will most likely not be completed in time to received funds in 2010. The Company is currently seeking confirmation of the project status from the builder.~~ Regardless, the Company will continue to promote the Homes program because any new projects that come along in the second half of 2010

1 are likely to be completed in 2011. The New Hampshire electric utilities recently filed a
2 RE-CORE proposal in response to RGGI RFP #10-001 that included HPwES and
3 Homes, both fuel neutral programs. If approved, this proposal could meet any new
4 2010 demand for the Homes Program and would reopen HPwES to Northern's gas
5 customers via their electric utility.

6

7 **Q. Please provide an update of the steps the Company has taken since**
8 **February 17, 2010 relative to the GN program.**

9

10 A. A letter of notification was issued to GN trade allies on February 23, 2010. See
11 Schedule TP-3. Subsequently, the Company has promoted the OEP ARRA Appliance
12 program on the Company website with a link to www.nhsaves.com, which describes the
13 program in detail. See Schedule TP-4 which contains screen shots of the Company's
14 website and the NHSaves website. Also, based on the conversation at the technical
15 session on June 30, ~~2011~~2010, the Company is preparing a follow-up letter to be sent
16 directly to GN trade allies promoting the OEP program.

17

18 **III. BILL IMPACT**

19 **Q. What would the impact on customer rates be from continuing to offer**
20 **Homes and GN for the remainder of this year?**

21

22 A. In responding to this question, the first thing to note is that GN program spending
23 continued to rise subsequent to the Company's letter of February 17, 2010 requesting a

1 transfer of \$70,000 from the Homes program. In spite of the Company's diligence to
2 communicate the closing of this program, spending in excess of budget in the GN
3 program budget has approached \$200,000. The GN programs in Massachusetts and
4 New Hampshire are fulfillment programs not pre-approval based programs. In other
5 words, customers who complete projects send in a rebate form after the fact not a pre-
6 approval application before starting their project. The reason for the above-described
7 budget excess is that there were many more open projects than the Company expected
8 at the time the February 23, 2010 contractor letter was sent.

9

10 | The Company no longer continues to recommends that the remaining approximately
11 | \$70,000 in funds from the Homes program be transferred to meet the above-budget
12 | expenses in the GN program as stated above. ~~even though the~~ The Company
13 | recognizes that the net impact of overspending the residential programs budgets in the
14 | current program year will result in an increase in rates when these costs are reconciled
15 | and recovered in the LDAC filing to increase the DSM Conservation Charge rate for
16 | Residential Heating and Non-heating (CC) to be effective November 1, 2010. The
17 | impact on residential rates is estimated in Schedule TP-5, which contains the response
18 | to DG 09-053 Staff 2-5. TP-5 has been updated to include the latest information
19 | regarding the transfer of funds from the Homes program to the GN program.

20

21 | If the Company were to re-open the GN program from September 1, 2010 to December
22 | 31, 2010, the timeframe when it is estimated that the OEP heating appliance program
23 | funding would be exhausted, we estimate the additional expense will be approximately

1 \$80,000. If this is recovered in rates during the LDAC period beginning November 1,
2 2010, the impact would be in addition to the impact from the current period
3 reconciliation. The result is also shown in Schedule TP-5.

4
5 In the event the Company were to seek recovery of these additional costs in the current
6 LDAC period through an out-of-cycle rate increase, the impact on the future CC charge
7 would be eliminated, but the current period rate increase would be significant, as the
8 increase would only apply for two or three months during a low-use period of the year.

9
10 **Q. What is the Company's response to OCA's recommendation to increase**
11 **energy efficiency program budgets?**

12
13 A. The Company notes that any increase in the budget is ultimately reflected,
14 sooner or later, in an increase in rates. Due to the general economic conditions being
15 faced by our customers, the Company is not comfortable increasing rates beyond the
16 reconciliation noted above for higher spending in 2010. In addition to the over-spending
17 in the current program year, reopening programs that are now closed is disfavored as it
18 will put added pressure on the rate increases customers are likely to experience
19 effective November 1, 2010. Moreover, because the Company is expecting to propose
20 increased budgets in some programs for 2011 and 2012, which will be reviewed by the
21 Commission within the context of an entire energy efficiency program filing, the
22 Company believes that expanding programs and budgets at this juncture is premature
23 and inappropriate.

1

2 As referenced in my response to the prior question, the Company is concerned about
3 the impact on customers of any mid-year increase in the current CC.

4

5 **Q. Has the Company analyzed the comparative levels of spending for gas**
6 **versus electric energy efficiency in response to the assertions about those**
7 **spending levels contained in the Office of Consumer Advocate's letter of May 14,**
8 **2010?**

9

10 A. Yes, we have. However we note that this is not a simple analysis. Specifically, a
11 comparison between gas and electricity energy efficiency funding needs to factor in a
12 number of considerations. One is that electricity is produced largely by combustion in
13 central power stations and the combined generation, transmission and distribution
14 losses required to deliver that to customers do not apply to natural gas. An analysis of
15 BTU per dollar saved based on fossil fuel input for electric service would be as much as
16 three times higher as the same analysis based on delivered kWh. In comparing heating
17 fuels only, an MMBTU comparison at the meter may have validity, but, electricity is
18 mostly used for appliances not heat in NH.

19

20 Other considerations in comparing gas and electric EE rates include the broader
21 societal benefits derived from EE programs. For example, the environmental benefits
22 from reduced electricity use are much higher than the environmental benefits from
23 reduced use of natural gas by customers. For that reason alone, it may be more

1 appropriate for electric customers to pay a higher energy efficiency rate than gas
2 customers. In addition, the relative benefits to customers and to specific groups of
3 customers such as low income or business customers, will also vary. All customers use
4 electricity – a far smaller number use natural gas. There are differences as well in the
5 cost-effectiveness of electric versus gas energy efficiency measures, and differences in
6 the potential savings both in energy and in customer bills.

7

8 An additional consideration in identifying the right level of spending for energy efficiency
9 programs for a given company or set of customers is to avoid large increases at any
10 one time. Ramping up rates too quickly could have negative impacts on customer bills.

11

12 A further consideration may be the impact on consumer choices in competitive markets.
13 Natural gas is a direct competitor in many applications with oil, whereas many electricity
14 applications have no competitive options. Imposing energy efficiency costs in electric
15 rates will thus have little impact on competitive choices. In contrast, imposing energy
16 efficiency costs in natural gas rates when the gas company's competitor, the oil
17 company, has no such costs included in its price, will tend to distort competitive choices.
18 Even though current market conditions set gas rates below oil per BTU delivered, this
19 will not always be the case.

20

21 Finally, it is important to consider the relative size of the energy efficiency budget as a
22 proportion of the customer's total annual bill. As the following table shows, EE charges
23 as a proportion of total expenditures for the average customer served by UES for

1 electricity are lower than for customers served by Northern for natural gas. The table
 2 also compares the electric and gas costs and percentages assuming the average
 3 customer has UES as its electric supplier and Northern as its gas supplier. This
 4 comparison does not consider the other factors listed above.

	Usage Units	Rate	Annual Cost	Percent of Total	CC Rate	Annual CC Cost	Percent of Total
UES Average Customer	6,589 kWh	\$0.1330	\$876	50.9%	\$0.0015	\$9.88	41.8%
Northern Average Customer	745 therms	\$1.1361	\$846	49.1%	\$0.0185	\$13.78	58.2%
Total			\$1,723			\$23.67	

5 For the purpose of the table above, the comparison is based on 2009 actual sales
 6 (16,143,774 therms and 480,638,599 kWh) and the average number of meters (21,669
 7 for Northern and 72,947 for UES). Sales and the number of meters going forward will
 8 vary.

9

10 **IV. RECOMMENDATION**

11 **Q. What is the Company's recommendation at this time?**

12

1 A. The Company recommends that the Commission:

- 2 1. Approve of the Company's withdrawal of its request to the budget transfer
3 approximately \$70,000 from the Homes Program to the GN Program of ~~approximately~~
4 ~~\$70,000~~.
- 5 2. Maintain ~~the Homes and~~ GN programs in a closed status.
- 6 3. Allow the Company to continue to manage the HPwES waiting list and serve as many
7 customers as possible, subject to available funds.
- 8 4. Allow the Company to continue to promote the OEP Appliance program.
- 9 5. Allow the Company to review changes in budgets and program design elements in
10 the context of the 2011/2012 gas energy efficiency program filing, which is scheduled to
11 be made on August 2, 2010.
- 12 6. Allow the Company to reconcile the current program year overspending in its
13 November 1, 2010 reconciliation process.
- 14 7. Allow the Company to keep the Homes program open.

15

16 **V. CONCLUSION**

17 **Q. Does that complete your testimony?**

18

19 Yes

NORTHERN UTILITIES, INC.

DG 09-053

DATA REQUESTS FROM COMMISSION STAFF - SET #2

GAS ENERGY EFFICIENCY PROGRAM

Data Request Received: June 28, 2010 Date of Response: July 8¹³, 2010

Request No. Staff 2-5 Updated Response _____ Witness:
Thomas Palma

REQUEST:
Staff 2-5

If Northern were to continue to support the Residential Gas Networks® program for the duration of Northern's currently approved 20-month Energy Efficiency plan ending December 31, 2010, it appears that the estimated Local Distribution Adjustment Charge - Residential DSM Rate might have to be updated. Please provide the EEAC-Residential DSM Rate calculation schedules.

RESPONSE:

Yes, the Company will update its upcoming LDAC filing (rates to be in effect November 1, 2010 through October 31, 2011) with actual and re-estimated DSM Conservation Charge rate for Residential Heating and Non-heating (CC) spending for the current program year.

Please note that GN program spending continued to rise subsequent to the Company's letter of February requesting a transfer of \$70,000 from the Homes program. In spite of the Company's diligence in closing the program, the spending in excess of budget in the GN program budget is now approaching \$200,000. We ~~no longer continue to~~ recommend the transfer of the remaining funds from the Homes program due to latest information regarding a 32 unit project in Exeter planning to be completed in 2010, but the net impact of overspending in the residential programs in the current program year will be an

increase in rates as these costs are reconciled and recovered in the LDAC rate adjustment filing to be effective November 1, 2010.

The table below reflects an estimated increase in the CC to cover the overage, estimated rates, and average costs. This includes a row for reallocating funds from the Homes program.

	Required Increase	Usage therms	EE Rate Increase	- EE Rate	- EE Cost	Annual Increase	Percent Increase
A.	-	745	-	\$0.01850	\$13.78	-	-
B.	\$130,000	745	\$0.00805	\$0.02655	\$19.78	\$6.00	43.5%
C.	\$200,000	745	\$0.01239	\$0.03089	\$23.01	\$9.23	67.0%

	Gas Rate	Annual Cost	Percent Increase
A.	\$1.13610	\$846.40	-
B.	\$1.14415	\$852.40	0.7%
C.	\$1.14849	\$855.63	1.1%

	Required Increase	Usage therms	EE Rate Increase	- EE Rate	- EE Cost	Annual Increase	Percent Increase
A.	-	745	-	\$0.01850	\$13.78	-	-
B.	\$200,000	745	\$0.01239	\$0.03089	\$23.01	\$9.23	67.0%

	Gas Rate	Annual Cost	Percent Increase
A.	\$1.13610	\$846.40	-
B.	\$1.14849	\$855.63	1.1%

Where:

A. No under collection reflected in reconciliation/current rate

B. \$130,000 overage included in reconciliation after reallocating \$70,000 from Homes and assumes all other programs are fully spent.

C. \$200,000 overage. Assumes that all other programs including Homes are fully spent.

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The Company estimates that for the period from ~~October~~ September 1, 2010 through December 31, 2010, \$80,000 would be needed to fund the Residential Gas Networks® program if the program were to be reopened after OEP exhausted its appliance rebate funds. ~~The number of gas customers is 21,938.~~

See the table below that reflects the increase in the CC and average customer increased cost that would result if the additional cost were collected in the November 1, 2010 reconciliation

Required Increase	Usage therms	EE Rate Increase	Increased Cost
\$80,000	745	\$0.00496	\$3.69184

For the purpose of the tables above, projected sales are based on 2009 actual sales (16,143,774 therms) and the average number of meters (21,669). Sales and the number of meters going forward will vary from the quantities listed above.

In the event the Company were to seek recover of these additional costs in the current period LDAC through an out-of-cycle rate filing, it would eliminate or reduce the impact on the future LDAC charge, but would have a significant impact on current rates, as the increase would only apply for two or three months during a low-use period of the year. The Company does not support this option.

The table below shows the cumulative effect of rate increases of the \$200,000 due to GN overspending and \$80,000 for re-opening the GN program.

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	Required Increase	Usage therms	EE Rate Increase	EE Rate	EE Cost	Annual Increase	Percent Increase
A.	-	745	-	\$0.01850	\$13.78	-	-
B.	\$200,000	745	\$0.01239	\$0.03089	\$23.01	\$9.23	67.0%
C.	\$280,000	745	\$0.01734	\$0.03584	\$26.70	\$12.92	93.8%

	Gas Rate	Annual Cost	Percent Increase
A.	\$1.13610	\$846.40	-
B.	\$1.14849	\$855.63	1.1%
C.	\$1.15344	\$859.32	1.5%

For the purpose of the tables above, projected sales are based on 2009 actual sales (16,143,774 therms) and the average number of meters (21,669). Sales and the number of meters going forward will vary from the quantities listed above.