

ORIGINAL  
N.H.P.U.C. Case No. DE 09-035  
Exhibit No. #10  
Witness Panel 1  
DO NOT REMOVE

THE STATE OF NEW HAMPSHIRE

BEFORE THE

NEW HAMPSHIRE PUBLIC UTILITIES  
COMMISSION

Docket No. DE 09-035

DIRECT TESTIMONY OF

Stephen R. Hall

Request for Permanent Delivery Rates

*June 30, 2009*

000094

**I. INTRODUCTION**

**Q. Please state your name, position and business address.**

A. My name is Stephen R. Hall. I am Rate and Regulatory Services Manager for Public Service Company of New Hampshire ("PSNH"). My business address is PSNH Energy Park, 780 North Commercial Street, Manchester, New Hampshire.

**Q. Have you previously testified before the Commission?**

A. Yes, I have testified on numerous occasions before the Commission over the past twenty-nine years. A listing of my educational background and experience is contained in Attachment SRH-1.

**Q. Did you previously submit pre-filed testimony in this docket concerning PSNH's request for temporary rates?**

A. Yes, I did. In this testimony, I will be incorporating my previous testimony by reference to the extent necessary.

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

A. The purpose of my testimony is to present PSNH's tariff pages containing permanent rates designed to recover the revenue requirements described in Mr. Baumann's testimony. I will list PSNH's revenue pro forma adjustments that I previously discussed in my temporary rates testimony. I will describe the allocation of revenue requirements to customer class and the resulting rate design that PSNH used to calculate permanent rates. I will describe PSNH's tariff and the changes that PSNH is proposing to some of the tariff language, terms and conditions, including a description of a new type of street lighting service that PSNH is proposing.

## **II. REVENUE AND EXPENSE PRO FORMA ADJUSTMENTS**

**Q. Please describe PSNH's revenue pro forma adjustments.**

A. PSNH's revenue pro forma adjustments are contained in Schedule 1 Attachment to Mr. Baumann's testimony. These adjustments decrease PSNH's test year distribution revenue by \$ 287,000. PSNH revised the revenue pro forma adjustments from the temporary rate filing to take into account a minor rounding difference of \$5,000 in the adjustment which stated distribution revenue at the rate level effective July 1, 2008. This pro forma, a decrease of \$199,000 in the temporary rate filing, has been revised slightly to a decrease of \$194,000. The other revenue pro forma adjustment, a decrease of \$93,000 due to the expiration of special pricing arrangements, is unchanged from the amount described in my testimony on temporary rates.

## **III. PROPOSED TARIFF PAGES AND REVENUE ALLOCATION**

**Q. Please describe generally the rates and charges contained in Attachment SRH-2.**

A. Attachment SRH-2 is PSNH's proposed Electricity Delivery Service Tariff – NHPUC No. 7, which contains the rates and charges necessary to recover PSNH's cost of providing delivery service to customers. The tariff contains the currently-effective Energy Service rate, Stranded Cost Recovery Charge rates and Transmission Cost Adjustment Mechanism rates. All of those rates are subject to change on August 1, 2009 as a result of PSNH's filings in Dockets DE 08-113, DE 08-114, and DE 09-114, respectively. Once the final rates in each of those dockets have been determined, the tariff will be updated to incorporate the rates ultimately approved.

We've also included a "blacklined" version of the tariff in Attachment SRH-3 as well as a summary of the tariff changes in Attachment SRH-4.

1     **Q.     What is PSNH's proposed overall distribution revenue target?**

2     A.     PSNH's proposed overall distribution revenue target is \$295,039,000, which is the total  
3           of the current retail billed distribution revenue, as pro formed, of \$243,931,000 plus the  
4           revenue deficiency of \$51,108,000 discussed in Mr. Baumann's testimony.

5     **Q.     Please reconcile the difference between the \$243,931,000 pro formed retail billed**  
6           **revenue and the pro formed distribution operating revenue shown in Mr.**  
7           **Baumann's schedules.**

8     A.     Mr. Baumann's Schedule 1, Page 1 shows total pro forma distribution operating revenue  
9           of \$259,824,000, which includes not only billed distribution revenue, but an additional  
10          \$15,893,000 of unbilled revenue, wholesale revenue and other operating revenues (late  
11          payment charges, miscellaneous service revenue, transformer rental revenue, and other  
12          electric revenue).

13    **Q.     Please describe how you allocated revenue to each class for the purpose of**  
14          **calculating PSNH's proposed distribution rates.**

15    A.     Revenue was allocated to each class in the same manner as the revenue allocation for  
16          PSNH's proposed temporary rates. Specifically, revenue was allocated to classes by  
17          increasing each class's current revenue component by the same percentage amount, as  
18          shown on Attachment SRH-5.

19          Attachment SRH-6 is PSNH's "Report of Proposed Rate Changes". This report shows  
20          the proposed distribution rate changes on a class-by-class basis, compared to the rate  
21          level currently in effect. The report shows an overall increase of \$51.1 million or 4.2%  
22          attributable exclusively to the proposed permanent distribution charges. Since the SCRC,

1 Energy Service and TCAM rates for effect on August 1, 2009 are not yet certain, all of  
2 the revenue amounts in this report (in both the current and proposed columns) are  
3 premised upon the currently-effective SCRC, Energy Service and TCAM charges.

#### 4 **IV. RATE DESIGN**

5 **Q. Is PSNH proposing any changes to rate design?**

6 A. Yes, we are. PSNH is proposing modest increases to its customer charges and demand  
7 charges, and correspondingly reducing its energy (kilowatt-hour) charges in order to  
8 more closely match the cost of providing service. We are not proposing any reallocation  
9 of revenue responsibility between classes.

10 **Q. Did you rely on PSNH's cost of service study to design your rates?**

11 A. Yes, to a certain extent. The cost of service study is included in Volume III and is  
12 described in the technical statement of Charles R. Goodwin. The cost of service study  
13 shows that the customer-related costs attributable to providing service to several  
14 customer classes and subclasses (Residential, General Service Rate G, Load Controlled  
15 Service and Large General Service Rate LG) are significantly higher than what the level  
16 of the customer charge would be absent any changes to rate design. It also shows that  
17 demand charges for general service classes are relatively close to the cost of service. A  
18 summary of the unitized costs is shown on Attachment SRH-7.

19 In this proceeding, we are not proposing a rigorous re-design of PSNH's rates. Rather,  
20 we are proposing minor changes to customer and demand charges to more closely align  
21 those charges with the cost of providing service as determined in the cost of service  
22 study.

1     **Q.     Will your proposed changes completely align PSNH's customer and demand**  
2     **charges with the costs shown in the cost study?**

3     A.     No, they will not. We are seeking to make a very gradual change to our rate design to  
4     avoid a significant bill impact on individual customers. We will continue to examine rate  
5     design during the next few rate cases and will assess whether additional changes to rate  
6     design should be made during those future cases. By making modest, gradual changes to  
7     rate design, we are hoping to more closely align our rates to costs over time without  
8     significantly impacting any particular customer's bill amount. Moreover, the embedded  
9     cost of service study provides only one measurement of the individual rate components.  
10    In order to perform a rigorous rate re-design, one might want to consider other  
11    measurements as well, such as a marginal cost of service study.

12   **Q.     Other than more closely aligning your rates with cost of service, are there other**  
13   **benefits to your proposed rate re-design?**

14   A.     Yes. Higher customer and demand changes and lower energy charges will provide PSNH  
15   with a modicum of additional revenue to the extent that customers engage in significant  
16   conservation efforts. This positive effect is a small step toward addressing the problem  
17   of attrition discussed in Mr. Long's testimony. To the extent that PSNH's kilowatt-hour  
18   sales continue to decrease, the rate design that we are proposing will slightly offset the  
19   revenue loss that would otherwise occur if all rates and charges were increased by the  
20   same proportion. Conversely, to the extent that kilowatt-hour sales increase, PSNH  
21   would not realize as much of an increase in revenue under the proposed rate design.

22   **Q.     Please continue with your description of your rate design.**

1 A. The first step in designing rates was to allocate revenue to each class of service.  
2 Attachment SRH-5 shows the calculation of proposed distribution revenue by rate class.  
3 Once each class's revenue level was determined, we set customer and demand charges at  
4 specific levels, calculated the amount of revenue that will be received through those  
5 charges, and subtracted the result from the total class revenue requirement. The  
6 remaining class revenue requirement was then achieved by adjusting all class  
7 kilowatt-hour charges by an equal percentage.

8 The results of PSNH's rate design changes are shown in Attachment SRH-8. This  
9 attachment contains a summary of PSNH's current rate level, rates and charges at the  
10 proposed rate level if all rates and charges were increased by an equal percentage amount  
11 (i.e., without any rate design changes), and the proposed redesigned rates and charges.

12 To summarize the results of PSNH's rate design, all of the customer charges and meter  
13 charges for all classes of service were increased by the same approximately percentage.  
14 For all rate classes that have demand charges, those demand charges were also all  
15 increased by the same approximate percentage. Compared to charges without any rate  
16 design changes, energy charges were reduced to reflect the additional revenue to be  
17 obtained from higher customer and demand charges.

18 A description of the calculation for each rate class and sub-class follows. In each case,  
19 the comparison is between rates increased by a uniform percentage (no rate design  
20 changes) and the proposed, redesigned rates.

1        Residential Delivery Service Rate R: We increased the customer charge from the \$10.80  
2        per month level that results from proportionally adjusting all rates and charges to \$12.00  
3        per month. The increase in revenue that will result was used to reduce the energy charge  
4        from 3.525 cents per kWh to 3.315 cents per kWh.

5        Uncontrolled Water Heating: The meter charge was increased from \$3.81 per month to  
6        \$4.25 per month, and the energy charge was reduced from 1.727 cents per kWh to  
7        1.625 cents per kWh.

8        Controlled Water Heating: The meter charge was increased from \$6.71 per month to  
9        \$7.50 per month, and the energy charge was reduced by 0.006 cents per kWh. Although  
10       the cost of service study indicates a lower meter charge due to the age of the meters used  
11       to provide this service, we are proposing increasing the meter charge by the same  
12       approximate percentage as the proposed increase to the meter charge for uncontrolled  
13       water heating to keep the pricing for the two rates relatively consistent.

14       Residential Time-of-Day Delivery Service Rate R-OTOD: The customer charge was  
15       increased by the same approximate percentage as the increase to the Rate R customer  
16       charge, and energy charges were decreased by the same percentage as the decrease to the  
17       Rate R energy charge. Since this is such a small group of customers, they are included in  
18       the Residential Power and Light and Space Heating column of the embedded cost of  
19       service study. Therefore, pricing for Rate R-OTOD was changed consistently with the  
20       pricing for Rate R.



1       General Delivery Service Rate G: The customer charge for single phase service was  
2       increased from \$12.17 per month to \$13.50 per month; the customer charge for three  
3       phase service was increased from \$24.35 to \$27.00 per month; and the demand charge  
4       was increased from \$7.37 per kW to \$7.80 per kW. Energy charges were reduced by  
5       approximately 6.8% in recognition of the additional revenue to be derived from the  
6       higher customer and demand charges.

7       Space Heating: The meter charge was increased from \$2.43 per month to \$2.70 per  
8       month and the energy charge was reduced from 2.989 cents per kWh to 2.636 cents  
9       per kWh.

10      General Time-of Day Delivery Service Rate G-OTOD: This small group of customers  
11      was included in the Rate G Power and Light and Space Heating column of the embedded  
12      cost of service study. As a result, the customer, demand and energy charges were  
13      changed commensurately with the changes to the corresponding charges for Rate G.

14      Load Controlled Delivery Service Rate LCS: Customer charges for the radio-controlled  
15      and switch options were increased from \$7.77 per month to \$8.75 per month; the  
16      customer charge for the 8-, 10-, or 11-hour option was increased from \$6.71 to \$7.50 per  
17      month. Since the majority of these customers are Residential, the energy charges were  
18      reduced by the same percentage as the remaining Residential energy charges.

19      Primary General Delivery Service Rate GV: The customer charge was increased from  
20      \$163.90 per month to \$180.00 per month; demand charges were increased by the same  
21      approximate percentage as the demand charge for Rate G; and energy charges were  
22      decreased as required to achieve the class revenue target. In the cost of service study, no

1 distribution costs are allocated to energy. PSNH bills energy charges for distribution  
2 service in order to maintain continuity between rate classes and smooth the transition  
3 when a customer's load increases or decreases sufficiently to require the customer to take  
4 service under a different rate class.

5 Large General Delivery Service Rate LG: The customer charge was increased from  
6 \$498.15 to \$550.00 per month; the demand charge was increased by the same  
7 approximate percentage as the Rate G and Rate GV demand charges, from \$4.02 to  
8 \$4.25 per kVa, and energy charges were reduced as required to achieve the class revenue  
9 target. As in the case of Rate GV, there are no distribution costs allocated to energy in  
10 the cost study, and energy charges are set at a level that provides for rate continuity  
11 between classes.

12 Backup Delivery Service Rate B: The administrative charge was increased from \$280.86  
13 per month to \$310.00 per month; the translation charge was increased from \$46.80 per  
14 month to \$52.00 per month; and the demand charge (for customers taking service below  
15 115 kV) was increased from \$3.77 per kVa to \$4.00 per kVa. Customers are billed for  
16 energy under the otherwise applicable standard tariff rate schedule, so energy charges for  
17 Rate B customers will change based on the changes in energy charges in Rates GV and  
18 LG.

19 We did not make any changes to the design of the outdoor lighting service rates  
20 (Rates OL and EOL). Rather, the prices per luminaire were all increased by the same  
21 percentage amount.

1     **Q.     Will any changes need to be made to rate design if the Commission approves a**  
2     **different level of distribution revenue?**

3     A.     Yes, changes might be needed to maintain relative relationships between rate classes and  
4           to moderate bill impacts on customers. We would need to examine the effect of any  
5           changes from the proposed revenue level and possibly make minor adjustments to some  
6           customer and/or demand charges. Beyond this, changes might be necessary to the extent  
7           that there is any recoupment or reimbursement of the difference between the level of  
8           permanent and temporary rates. I believe that the best way to address any such changes  
9           is through discussions and technical sessions with the parties once a final rate level has  
10          been determined by the Commission.

11    **V.     DELIVERY SERVICE TARIFF**

12    **Q.     Is PSNH proposing any changes to the language, terms or conditions of the tariff?**

13    A.     Yes, we are.

14    **Q.     Have you included anything in this filing that will assist the Commission and the**  
15    **parties in identifying all of the proposed changes?**

16    A.     Yes, we have. We have provided three separate documents: a copy of the Delivery  
17           Service Tariff in its final form (Attachment SRH-2); a copy of the Delivery Service Tariff  
18           that highlights all of the new sections and blacklines all of the deleted sections  
19           (Attachment SRH-3); and a narrative entitled "Summary of Changes to PSNH's  
20           Currently Effective Tariff No. 6" that identifies and describes all of the tariff changes  
21           (Attachment SRH-4).

22    **Q.     Please describe the proposed tariff changes and the reasons for each change.**

1 A. There are four proposed tariff changes. Three of the four changes are described below,  
2 while the forth change is described in Section VI.

3 1) Pole-mounted Apparatus Rental Under Primary General Service Rate GV and Large  
4 General Delivery Service Rate LG

5 PSNH is proposing to add language to the Apparatus section of Primary General Service  
6 Rate GV and Large General Delivery Service Rate LG to indicate that PSNH is not  
7 required to rent pole-mounted apparatus. Customers receiving delivery service under  
8 Rate GV or Rate LG are currently responsible for furnishing, owning and maintaining all  
9 the necessary substation foundations, structures, and all controlling, regulating,  
10 transforming and protective apparatus. Upon a customer's request, PSNH will rent either  
11 pole-mounted or pad-mounted transforming apparatus to the customer at a charge of  
12 18% per year of the equipment cost. PSNH would like to have the option to refuse to  
13 rent pole-mounted transformers because PSNH has no control over the maintenance of  
14 the support structures or the area surrounding the support structures. PSNH will  
15 determine, on a case by case basis, whether or not a pole-mounted transformer can be  
16 rented from PSNH based on immediate hazards that may be present (such as trees and  
17 proximity to parking and delivery areas) and environmental considerations (such as the  
18 proximity to water supplies and water ways, including drains that lead to water ways). In  
19 situations where PSNH refuses to rent a pole-mounted transformer, the customer would  
20 have the option of renting a pad-mounted transformer from PSNH, assuming it can be  
21 installed in accordance with PSNH's environmental requirements and it is a standard size  
22 transformer that PSNH stocks in its inventory.

23 In addition to adding language to indicate that PSNH is not required to rent pole-mounted  
24 apparatus, PSNH is also proposing to add language to indicate that PSNH is authorized to  
25 terminate an existing apparatus rental agreement and to remove a pole-mounted

transformer upon 90 days written notice to a customer. PSNH would only utilize this authorization in the event a customer-owned structure supporting a PSNH owned pole-mounted transformer is deemed insufficient or threatened by trees or other hazards and the customer refuses to replace the support structure and/or to remove the hazard.

2) Meters Section of the Terms and Conditions for Delivery Service

PSNH is proposing to add language to the Meters section of the Terms and Conditions for Delivery Service section of PSNH's Tariff to clarify that each unit of a new or renovated domestic structure with more than one dwelling unit will be metered separately and each meter will be billed as an individual customer. This language describes the metering policy PSNH has utilized since the early 1980's in compliance with the rules of the Public Utilities Commission.

3) Removal of the Option to Pay Excess Costs Over a Sixty Month Period from Outdoor Lighting Delivery Service Rate OL

PSNH is proposing to remove the option available to governmental units and civic groups to pay for excess costs associated with new installations, extensions and replacements under Rate OL, including interest at the Prime Rate over a period not to exceed sixty months. This tariff language has been in place since the early 1970's and is an outdated policy. PSNH is not aware of any instances over the past ten years where a governmental unit or civic group has paid excess costs under Rate OL over a time period. In its place, PSNH is proposing that all customers pay excess costs as a lump sum prior to the installation or replacement of the equipment under Rate OL. This is consistent with the policy used to collect excess costs under PSNH's existing and proposed line extension policies.

**VI. MIDNIGHT OUTDOOR LIGHTING SERVICE OPTION**

**Q. Is PSNH proposing a new lighting service option?**

A. Yes, we are. PSNH is proposing to add a midnight outdoor lighting service option to Outdoor Lighting Delivery Service Rate OL and Energy Efficient Outdoor Lighting Delivery Service Rate EOL.

**Q. Please briefly describe the midnight outdoor lighting service option that PSNH is proposing.**

A. Under the proposed midnight outdoor lighting service option (midnight option), a customer can receive partial night's lighting service (from dusk to midnight) for energy-efficient luminaires (i.e. high pressure sodium and metal halide). In order to receive service under the midnight option, the existing all-night photocell which turns the luminaire on at dusk and off at dawn will be removed and replaced with a photocell capable of turning the luminaire on at dusk and off at midnight.

**Q. Why is PSNH proposing a midnight option?**

A. PSNH is proposing a midnight option because municipal outdoor lighting service customers have expressed an interest in partial night outdoor lighting service as a way to reduce their electric service bills and to reduce their kilowatt-hour consumption, thereby reducing their carbon footprint. In addition, the New Hampshire legislature passed House Bill 585, which encourages outdoor lighting efficiency at the municipal and state level and requires utilities to offer a partial night option for unmetered outdoor lighting service. PSNH worked with the legislature on House Bill 585 and made a commitment to seek the Commission's approval of a partial night rate option in the near future following passage of the bill. Offering a partial night outdoor lighting service option is also

1 consistent with PSNH's commitment to assist customers in managing their cost of  
2 electricity, to support energy-efficiency initiatives, and to support New Hampshire's  
3 clean energy goals and protecting the natural environment.

4 **Q. If a customer has more than one luminaire, will the customer be allowed to select**  
5 **the midnight option for a portion of the luminaires?**

6 A. Yes. A customer will be able to select the midnight option for either a portion of their  
7 luminaires or for all of their luminaires.

8 **Q. Please describe the rates under the midnight service option.**

9 A. The distribution rates under the midnight service option are the same as the rates under  
10 the all-night service option, because the fixture (excluding the photocell), lamp and  
11 maintenance costs do not change under the midnight option. The distribution rates are  
12 flat monthly charges for each luminaire. However, transmission, stranded cost recovery,  
13 energy service, system benefits charge and consumption tax rates are applied to the  
14 monthly kilowatt-hours associated with each luminaire. Monthly kilowatt-hours under  
15 the midnight option will be lower, reflecting the number of dark hours in each month  
16 from dusk to midnight. Therefore, municipalities will receive lower monthly charges for  
17 all rates that are billed on a kilowatt-hour basis, since the monthly kilowatt-hours used for  
18 each luminaire under the midnight option will be lower than under the standard all-night  
19 service.

20 **Q. Are customers required to pay any costs up-front before they can receive service**  
21 **under the midnight service option?**

1 A. Yes. Since the additional equipment and installation cost associated with the new  
2 photocell are not reflected in the distribution charges under the midnight service option,  
3 customers requesting midnight service are required to pay for these costs prior to the  
4 installation of the new photocell. The following is a summary of the requirements of  
5 service under the midnight option:

6 1) Customers requesting a modification of service from the all-night option to the midnight  
7 option are responsible to pay the estimated installed cost of the new photocell. The  
8 estimated installed cost includes the cost of the additional equipment required, labor,  
9 vehicles and overheads. If such a request is concurrent with PSNH's existing schedule  
10 for lamp replacement and maintenance, the customer is only responsible to pay for the  
11 estimated cost of the new photocell, since PSNH would already be at the location to  
12 replace the lamp and perform any required maintenance.

13 2) Customers requesting a modification of service from the midnight option to the all-night  
14 option are responsible to pay the estimated installation cost of the all-night option  
15 photocell. The estimated installation cost includes the cost of labor, vehicles and  
16 overheads. If such a request is concurrent with PSNH's existing schedule for lamp  
17 replacement and maintenance, no additional costs are required to modify service from the  
18 midnight option to the all-night option.

19 3) Customers requesting the installation of a luminaire at a new location under the midnight  
20 option are required to pay for the incremental cost of the midnight option photocell.



1 **Q. Does PSNH plan to utilize fixed price estimates per luminaire for the estimated**  
2 **installed cost, the additional equipment cost and the equipment installation cost?**

3 A. Yes. PSNH is proposing to utilize fixed price estimates per luminaire for the estimated  
4 installed cost, the additional equipment cost and the equipment installation cost and will  
5 update the fixed price estimates each year based upon current costs. Attachment SRH-9  
6 contains PSNH's current estimate of the installed cost, the additional equipment cost and  
7 the equipment installation cost per luminaire. PSNH plans to update the estimates using  
8 current costs upon the Commission's approval of the midnight service option and will  
9 update the estimates annually.

10 **Q. Can a customer request a modification of their lighting service option at any time or**  
11 **is PSNH proposing to utilize a specific enrollment period each year?**

12 A. PSNH is proposing to utilize a specific enrollment period each year to handle municipal  
13 and state roadway lighting customer requests to modify their lighting service from the  
14 all-night option to the midnight option. The open enrollment period is defined as the  
15 calendar months of January and February. Therefore, these customers may request a  
16 modification of their lighting service from the all-night option to the midnight option  
17 during this period only. Customer requests received after the enrollment period will be  
18 implemented during the next enrollment period, unless PSNH determines that it is  
19 feasible and practicable to implement the request prior to the next enrollment period. All  
20 other customer requests, as well as customer requests to modify their lighting service  
21 from the midnight option to the all-night option will be handled throughout the year at  
22 PSNH's discretion with consideration given to minimizing travel and set-up time.

23 **Q. Why is PSNH proposing to utilize a specific enrollment period each year?**

1 A. PSNH is proposing to utilize a specific enrollment period each year to limit the number  
2 of requests received from cities or towns to modify individual luminaires or a few  
3 luminaires several times a year. PSNH would prefer to handle modifications of service  
4 from the all-night option to the midnight option on a group basis once a year to limit  
5 travel and set-up time; thereby resulting in a more efficient use of its limited resources  
6 and lower costs to customers.

7 **Q. If traffic control is required by a city or town during a modification of service from**  
8 **the all-night option to the midnight option or from the midnight option to the**  
9 **all-night option, is the customer required to provide and to pay for the cost of traffic**  
10 **control?**

11 A. Yes. In the event traffic control is required by a city or town during a modification of the  
12 service option, the customer is responsible for coordinating and providing traffic control  
13 and for paying all costs associated with traffic control. If the customer requesting the  
14 modification of service is a residential or General Service Rate G customer, PSNH may  
15 coordinate and provide traffic control on the customer's behalf and the customer will be  
16 responsible to reimburse PSNH for all costs associated with the traffic control provided  
17 by PSNH.

18 **Q. What savings will customers realize under the midnight service option?**

19 A. Attachment SRH-10 contains a comparison of the annual charges per luminaire under the  
20 all-night option and the midnight option under Rate OL and Rate EOL based on rates  
21 effective January 1, 2009. As shown, customers receiving service under the midnight  
22 option will save from \$16.20 to \$308.26 annually per luminaire. The annual percentage  
23 savings ranges from 16.0% to 40.6% under Rate EOL and from 9.9% to 31.4% under  
24 Rate OL.

1     **Q.     What is the simple payback to convert from the all-night option to the midnight**  
2     **option?**

3     A.     Attachment SRH-10 contains a calculation of the simple payback to convert from the  
4     all-night option to the midnight option for each luminaire. As shown, if a customer  
5     schedules a conversion from the all-night option to the midnight option that is not  
6     concurrent with PSNH's existing plans for lamp replacement and maintenance, the  
7     simple payback ranges from seven months to ten years using PSNH's current installed  
8     cost estimate of \$160 per luminaire. If a customer schedules a conversion from the  
9     all-night option to the midnight option concurrent with PSNH's existing schedule for  
10    lamp replacement and maintenance, the simple payback ranges from one month to  
11    15 months.

12    **Q.     Does this conclude your testimony?**

13    A.     Yes, it does.

## QUALIFICATIONS OF STEPHEN R. HALL

### CURRENT POSITION AT PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

#### Rate and Regulatory Services Manager

Responsible for regulatory relations at PSNH, including the interface with the NHPUC Staff on regulatory matters. Also responsible for various aspects of rate design, new service offerings, special contract development, rate policy and planning, special rate projects and related regulatory matters.

### EDUCATIONAL BACKGROUND

Bachelor of Science Degree in Mathematics from the University of New Hampshire in 1977.

Master of Business Administration Degree from the University of New Hampshire in 1979.

Various managerial short courses offered by the Company.

### PRIOR WORK POSITIONS AND EXPERIENCE

#### At PSNH

Assistant Rate Research Analyst, 1979

Rate Administrator, 1981

Rate Research Analyst, 1982

Staff Rate Research Analyst, 1983

Rate Research and Administration Supervisor, 1985

Rate Projects Manager, 1986

Rate Research and Administration Manager, 1989

## PREVIOUS TESTIMONY

Testified before the NHPUC in every fuel adjustment, ECRM and FPPAC proceeding from June 1980 through December 1993. Also submitted testimony and/or testified in the following proceedings:

| <u>Docket No.</u> | <u>Docket Subject</u>                    | <u>Subject of Testimony</u>                 |
|-------------------|--|---|
| <u>NHPUC</u>      |  |   |
| DE 09-114         | Transmission Cost Adjustment Mechanism   | TCAM Pricing                                |
| DE 08-077         | Lempster Wind Contracts                  | Rebuttal of Constellation Testimony         |
| DE 08-071         | Major Storm Cost Reserve                 | Pricing for MSCR Increase                   |
| DE 08-069         | Transmission Cost Adjustment Mechanism   | TCAM Pricing                                |
| DE 07-122         | Hemphill Settlement                      | Cost Recovery for Payments to Hemphill      |
| DE 07-108         | Least Cost Plan                          | Rebuttal of Staff Testimony                 |
| DE 07-096         |  |   |
| & 07-097          | ES & SCRC Settlement                     | Description of Settlement Agreement         |
| DE 06-061         | Energy Policy Act                        | Implementation of Standards for TOU Rates   |
| DE 06-028         | Delivery Rate Case                       | Tariff Changes, Rate Design                 |
| DE 04-072         | Least Cost Plan                          | Standards for Least Cost Plans              |
| DE 03-186         | (Seabrook) Florida Power and Light       | Criteria for Granting Public Utility Status |
| DE 03-200         | Delivery Rate Case                       | Tariff Changes, Rate Design                 |
| DE 03-078         | Wausau Papers                            | Special Pricing                             |
| DE 03-064         | Fraser N.H. LLC Special Contract         | Pricing for Incremental Load                |
| DE 02-166         | Transition Service                       | Transition Service Pricing                  |
| DE 02-127         | Stranded Cost Recovery Charge            | Stranded Cost Reconciliation                |
| DE 02-064         |  |   |
| through           | Hydro IPP Negotiations                   | Hydro IPP Settlements                       |
| DE 02-074         |  |   |
| DE 01-227         | Sale of Vermont Yankee                   | Sale Approval                               |
| DE 00-211         | Smith Hydro Valuation                    | Public Interest of Hydro Divestiture        |
| DE 01-089         |  |   |
| through           | IPP Renegotiations                       | IPP Settlement                              |
| DE 01-091         |  |   |
| DE 00-009         | ConEd/NU Merger                          | Merger Settlement Agreement                 |
| DR 98-139         | FPPAC BA & Special Contracts             | Special Contracts                           |
| DR 98-014         | FPPAC                                    | FPPAC BA/Special Contracts                  |
| DR 96-390         | Seacoast Mills Special Contract          | Load Retention                              |
| DR 96-171         | Heidelberg Special Contract              | Load Retention                              |
| DR 96-138         | Wausau Special Contract                  | Load Retention                              |
| DR 96-121         | OSRAM SYLVANIA, Inc.                     | Load Development                            |
| DR 96-113         | Unitrode Special Contract                | Economic Development                        |
| DR 96-068         | Isaacson Special Contract                | Load Retention                              |
| DR 96-058         | Elliott Rose of Madbury Special Contract | Load Development                            |
| DR 96-035         | Praxair, Inc. Special Contract           | Load Retention                              |
| DR 95-321         | American Tissue Mill Of NH               | Spec. Contract Business Retention           |
| DR 95-320         | Hitchiner Mfg., Inc./Metal Casting Tech. | Load Retention                              |
| DR 95-318         | Bay Ridge Special Contract               | Load Retention                              |
| DR 95-303         | Wyman-Gordon Special Contract            | Economic Development                        |

| <u>Docket No.</u> | <u>Docket Subject</u>                   | <u>Subject of Testimony</u>             |
|-------------------|---|---|
| <u>NHPUC</u>      |   |   |
| DR 95-270         | Textron Special Contract                | Business Retention                      |
| DR 95-250         | Retail Competition Pilot Program        | Retail Competition                      |
| DR 95-230         | MPB Special Contract                    | Business Retention                      |
| DR 95-214         | Kollsman Special Contract               | Business Retention                      |
| DR 95-205         | Teradyne, Inc.                          | Business Retention/Economic Development |
| DR 95-149         | Nashua Foundries, Inc.                  | Business Retention                      |
| DR 95-131         | New England Wood Pellet Spec. Contract  | Economic Development                    |
| DR 95-129         | Rehrig Pacific Special Contract         | Economic Development/Load Retention     |
| DR 95-113         | Elliott & Williams Roses Spec. Contract | Load Retention                          |
| DR 95-103         | Tourist Village Special Contract        | Load Retention                          |
| DR 95-070         | Owens-Brockway Special Contract         | Business Retention/Economic Development |
| DR 95-064         | NH Ball Bearings Special Contract       | Business Retention                      |
| DR 95-048         | Batesville Casket Co. Spec. Contract    | Business Retention                      |
| DR 95-012         | Summit Packaging Systems Spec. Contract | Business Retention                      |
| DR 94-311         | Nashua Corp. Special Contract           | Business Retention                      |
| DR 94-309         | CE-KSB Pump Co. Special Contract        | Interruptible Service                   |
| DR 94-293         | Polyvac, Inc. Special Contract          | Load Retention/Economic Development     |
| DR 94-255         | Anheuser Busch Special Contract         | Load Retention                          |
| DR 94-252         | Freudenberg-NOK Special Contract        | Economic Development                    |
| DR 94-193         | PSNH Ski Areas Special Contracts        | Load Retention                          |
| through           |   |   |
| DR 94-200         |   |   |
| DR 94-135         | Monadnock Paper Mills Spec. Contract    | Load Retention                          |
| DR 94-132         | Lockheed Sanders Special Contract       | Business Retention/Economic Development |
| DR 94-074         | Wyman-Gordon Special Contract           | Business Retention                      |
| DR 94-057         | Excalibur Special Contract              | Load Retention                          |
| DR 94-033         | OSRAM Special Contract                  | Load Retention                          |
| DR 93-247         | Radio-Controlled Option Under Rate LCS  | Space Heating Rate                      |
| DR 93-243         | Gilford Special Contract                | Load Retention                          |
| DR 93-103         | Freudenberg-NOK Special Contract        | Economic Development                    |
| DR 93-042         | Bronze Craft Special Contract           | Pilot Load Management Program           |
| DR 92-232         | CE-KSB Pump Special Contract            | Interruptible Service                   |
| DR 89-058         | Wentworth Special Contract              | Rate WI                                 |
| DR 88-191         | Wildcat Special Contract                | Rate WI                                 |
| DR 88-190         | Gunstock Special Contract               | Rate WI                                 |
| DR 88-179         | Bretton Woods                           | Rate WI                                 |
| DR 88-167         | DRED                                    | Rate WI                                 |
| DR 87-197         | Rate WI Tariff Schedule                 | Interruptible Service                   |
| DR 90-131         | Rate WI Tariff Schedule                 | Interruptible Service                   |
| DR 89-171         | Rate WI Tariff Schedule                 | Interruptible Service                   |
| DR 88-126         | Rate WI Tariff Schedule                 | Interruptible Service                   |
| DR 84-131         | Rate WI Tariff Schedule                 | Interruptible Service                   |
| DR 82-333         | Rate Increase Request                   | Rate Design                             |
| DR 79-187         | Rate Increase Request                   | Rate Design                             |

FERC

ER 86-133      Recovery of Schiller Conversion Costs

Resale Fuel Adjustment Rate

Maine Public Utilities Commission

DR 81-9      Retail Fuel Adjustment

Fuel Adjustment Rate

Rev 6/5/09

