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N.H.P.U.C. Case No. <u>DE 13-108</u>
Exhibit No. <u>4</u>
Witness <u>Panel 1</u>
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Before the  
STATE OF NEW HAMPSHIRE  
PUBLIC UTILITIES COMMISSION

DE 13-108

In the Matter of:  
Public Service Company of New Hampshire

Reconciliation of Energy Service and Stranded Cost Recovery Charge Revenues and Expenses  
for Calendar Year 2012

Direct Testimony

of

Steven E. Mullen  
Assistant Director – Electric Division

November 20, 2013

**Public Service Company of New Hampshire  
DE 13-108**

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

2 A. My name is Steven E. Mullen. I am employed by the New Hampshire Public Utilities  
3 Commission as Assistant Director of the Electric Division. My business address is 21  
4 South Fruit Street, Suite 10, Concord, New Hampshire.

5 **Q. Please summarize your educational background and work experience.**

6 In 1989, I graduated *magna cum laude* from Plymouth State College with a Bachelor of  
7 Science degree in Accounting. I attended the NARUC Annual Regulatory Studies  
8 Program at Michigan State University in 1997. In 1999, I attended the Eastern Utility  
9 Rate School sponsored by Florida State University. I am a Certified Public Accountant  
10 and have obtained numerous continuing education credits in accounting, auditing, tax,  
11 finance and utility related courses.

12  
13 From 1989 through 1996, I was employed as an accountant with Chester C. Raymond,  
14 Public Accountant in Manchester, New Hampshire. My duties involved preparation of  
15 financial statements and tax returns as well as participation in year-end engagements. In  
16 1996, I joined the Commission as a PUC Examiner in the Finance Department. In that  
17 capacity I participated in field audits of regulated utilities' books and records in the  
18 electric, telecommunications, water, sewer and gas industries. I also performed rate of  
19 return analysis, participated in financing dockets and presented oral testimony before the  
20 Commission. In 1998, I was promoted to the position of Utility Analyst III and  
21 continued to work in all of the regulated industry fields, although the largest part of my

1 time was concentrated on electric and water issues. As part of an internal reorganization  
2 of the Commission's Staff in 2001, I became a member of the Electric Division. I was  
3 promoted to Utility Analyst IV in 2007 and then Assistant Director of the Electric  
4 Division in 2008. Working with the Director of the Electric Division, I am responsible  
5 for the day-to-day management of the Electric Division including decisions on matters of  
6 policy. In addition, I evaluate and make recommendations concerning rate, financing,  
7 accounting and other general industry filings. I represent Staff in meetings with company  
8 officials, outside attorneys, accountants and consultants relative to the Commission's  
9 policies, procedures, Uniform System of Accounts, rate case, financing and other  
10 industry and regulatory matters.

11 **Q. Have you previously testified before this Commission?**

12 A. Yes. I have testified before the Commission on numerous occasions.

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

14 A. The purpose of my testimony is to provide Staff's comments regarding changes made by  
15 Public Service Company of New Hampshire (PSNH) with respect to the average year of  
16 final retirement (AYFR) of certain of its electric generating plants.

17 **Q. Please explain what an AYFR is.**

18 A. As explained by PSNH, an AYFR for a generating plant is an engineering determination  
19 of an estimate of the year in which the plant would exhaust its useful life, given existing  
20 plant condition and operating characteristics. The AYFR of a plant can change over time  
21 depending on improvements made, changes in operating characteristics or other factors.  
22 Once an AYFR is determined for a plant, the remaining book value is depreciated over  
23 the remaining number of years until the AYFR.

1 **Q. What is the impact from an accounting and rate perspective when the AYFR for a**  
2 **particular plant changes?**

3 A. All else being equal, the net book value is depreciated over a shorter or longer period of  
4 time resulting in a larger or smaller amount of annual depreciation expense for that plant.  
5 I say “all else being equal” because as part of normal business each year there can be  
6 additions or retirement of plant components that will impact the depreciation calculation.

7 **Q. When did this issue first arise?**

8 A. In late September of each year, PSNH files a preliminary calculation of its energy service  
9 rate for the ensuing calendar year. That preliminary calculation is subsequently updated  
10 in December of that year. In December of 2011, as part of its updated calculation of its  
11 2012 energy service rate, PSNH indicated that it had performed a “periodic update of  
12 generation unit service lives” that resulted in a decrease to depreciation expense.<sup>1</sup> In its  
13 order on the mid-2012 review of PSNH’s energy service rate, the Commission directed  
14 Staff “to review PSNH’s revised 2012 depreciation rates for its generation units in the  
15 Company’s reconciliation proceeding for calendar year 2012,”<sup>2</sup> what is now the current  
16 docket.

17 **Q. How often has PSNH performed such updates of the generation unit service lives?**

18 A. According to PSNH, the last five such studies, which it refers to as “Technical Updates,”  
19 were performed in 1986, 1997, 1998, 2007 and 2012.<sup>3</sup> PSNH also indicated that the  
20 studies are triggered “by either the present year closely approaching the assessment

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<sup>1</sup> See DE 11-215, Exhibit 2.

<sup>2</sup> Order No. 25,380 (June 27, 2012) in DE 11-215 at 7.

<sup>3</sup> See Attachment SEM-1, page 1 of PSNH’s response to Staff 2-1 in DE 11-215. I note that while the last date is shown as “2012,” since the study was mentioned in the December 14, 2011 energy service update filing, it had to have been performed in 2011. “2012” appears to reference the year the changes were factored into the energy service rate calculation.

1 AYFR or a large investment in a Unit.”<sup>4</sup> As I mentioned above, a change in operational  
2 time would also impact the AYFR.

3 **Q. How does the engineering analysis PSNH performed compare to a “depreciation  
4 study” filed as part of a typical electric distribution rate case?**

5 A. While there are similarities, there are also differences. Both types of studies seek to  
6 determine the appropriate useful lives of assets over which to recover the cost of the  
7 asset. While a “depreciation study” will typically examine assets on a group basis  
8 (usually by FERC account number), the “groups” for purposes of the engineering  
9 analysis performed by PSNH are essentially groups of one; that is, each generating asset  
10 must be assessed on its own as the generating units are not homogeneous.

11 **Q. In electric distribution rate cases, the Commission has traditionally approved the  
12 use of the whole-life technique. How does that differ from the methodology used by  
13 PSNH with respect to its generating assets?**

14 A. Under a whole-life methodology where a service life has changed, the depreciation on the  
15 books is compared to what the depreciation should have been given the revised service  
16 life. The difference is reflected as either an increase or decrease to depreciation expense  
17 for a period of time going forward. Under PSNH’s methodology, which is a remaining-  
18 life methodology, the remaining net book value is depreciated over the remaining revised  
19 service life. In either case, the focus is to ensure recovery of no more than 100 percent of  
20 the cost of the plant asset.

21 **Q. Has PSNH historically used the same methodology as the one at issue in this  
22 proceeding for determining depreciation expense for its generating plants?**

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<sup>4</sup> Id.

1 A. Yes. I see no need to revise its methodology for the purposes of this case. Likewise,  
 2 with respect to any future distribution rate proceedings, PSNH should continue to use the  
 3 Commission-approved whole-life methodology.

4 **Q. How is a change such as a change to an AYFR viewed from an accounting  
 5 perspective?**

6 A. A change in the depreciable life of an asset is viewed as a change in estimate. Changes in  
 7 estimates are to be taken into account on a going-forward basis rather than through a  
 8 retroactive restatement of results.

9 **Q. Was PSNH’s application of the change done on a going forward basis?**

10 A. Yes.

11 **Q. What are the AYFRs used by PSNH and included in the 2012 energy service  
 12 reconciliation, and how have they changed over time?**

13 A. Below is a table showing the current AYFRs determined by PSNH along with the  
 14 AYFRs determined in the prior two Technical Updates:

	Average Year of Final Retirement			
	per Technical Updates:			
Station	2011	2007	1998	
Wyman Unit 4	2021	2011	2011	
Newington	2039	2014	2014	
Lost Nation	2017	2012	2004	
Merrimack Jet	2017	2012	2004	
Schiller Jet	2017	2012	2004	
White Lake	2017	2012	2004	
Merrimack	2038	2023	2005/2007	(Unit 1/Unit 2)
Schiller	2020	2020	2002/2005/2007	(Unit 4/Unit 5/Unit 6)

15  
 16 As shown in the table, with the most recent Technical Update, all AYFRs have  
 17 been extended to future years with the exception of Schiller Station.

18 **Q. Why do Merrimack Station and Schiller Station, which used to have separate**

1 **AYFRs for each of the generating units, now have a single AYFR for the entire**  
2 **plant?**

3 A. PSNH addressed this in its response to Staff 2-4 in the current docket.<sup>5</sup> To summarize  
4 that response, the change for Merrimack Station relates to the wet flue gas desulfurization  
5 scrubber that was installed and is tied to both Unit 1 and Unit 2. As for Schiller Station,  
6 PSNH explained that the use of a single AYFR stems from the conversion of Unit 5 to a  
7 biomass boiler and recognizes the “significant portion of common facility, facility  
8 infrastructure and systems used at Schiller Station.”

9 **Q. Are you aware of capital additions that have been made at the plants and how the**  
10 **plants have operated in recent years?**

11 A. Yes. In addition, in assessing the AYFRs, I spoke with Staff’s consultant in this  
12 proceeding, Michael D. Cannata, Jr. of the Accion Group. Mr. Cannata has reviewed  
13 PSNH’s plant operations for a number of years and is very familiar with the physical and  
14 operating conditions at the plants.

15 **Q. What are your comments with respect to the updated AYFRs for the various plants**  
16 **shown in the table above?**

17 A. Based on my review of the discovery materials and my discussions with Mr. Cannata, the  
18 AYFRs resulting from the most recent Technical Update do not appear to be  
19 unreasonable given recent capital additions and the current physical and operating  
20 conditions at the plants. I can add that the extension of the AYFRs for the plants are also  
21 consistent with discussions I have had with Mr. Cannata in past years related to his  
22 annual reviews of plant operations. PSNH has performed similar analyses in the past and

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<sup>5</sup> See Attachment SEM-2.

1 the resulting depreciation rates were incorporated into the energy service rate  
2 calculations. It is important to note, however, that the updates to the AYFRs are based on  
3 technical and engineering assessments of the plants. While comparison of the dispatch  
4 prices of the units to market prices can help determine the AYFR (i.e., if the plant runs  
5 less it should last longer—recent low energy prices have reduced many of the units’ run  
6 times), the AYFRs are not based on an economic assessment of the plant’s profitability.

7 **Q. Do you have any further comments regarding the AYFR for any of the particular**  
8 **plants in the above table?**

9 A. I do have comments regarding the AYFRs for Merrimack Station, Schiller Station and  
10 Newington Station. The updated AYFRs for Merrimack Station and Schiller Station are  
11 consistent with the depreciable lives of the scrubber (25 years) and biomass boiler (15  
12 years), considering the year of installation for each, discussed in the dockets for each of  
13 those capital investments, DE 11-250<sup>6</sup> and DE 03-166, respectively. With respect to  
14 Newington Station, significant capital additions in recent years when the plant was  
15 operating at much higher capacity factors coupled with minimal current operational time  
16 serve to lengthen the potential useful life of the plant.

17 **Q. Should an AYFR be construed as representing a commitment to retire a particular**  
18 **generating plant in a particular year?**

19 A. No. An AYFR should be viewed as assessment of the useful life of the plant and  
20 equipment based on known physical and operating conditions. As shown in the table  
21 above, circumstances can and will change which can and will impact expected plant

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<sup>6</sup> DE 11-250 is an ongoing proceeding in which the Commission has not made any determinations about issues such as the appropriate depreciable life of the scrubber. My comment was merely to point out the consistency of the AYFR for Merrimack Station in this proceeding with the information put forth by PSNH in DE 11-250. While the costs of the scrubber are not at issue in this reconciliation, the fact that it was installed does impact the operation of the plant as a whole.

1 operations and life spans. I expect that the AYFRs will change in the future as  
2 circumstances dictate.

3 **Q. Could a plant be retired in a year other than what was determined to be the AYFR**  
4 **per PSNH's analysis?**

5 A. Certainly. There are many reasons—economic, political, unexpected changes in  
6 operating characteristics—why an electric generating plant may be retired prior to the  
7 AYFR. Determining an AYFR based on an engineering analysis does not mean those  
8 factors no longer exist, they just were not part of the underlying analysis.

9 **Q. Have you calculated the rate impact of PSNH's proposed updates to the AYFRs of**  
10 **its generating plants?**

11 A. Yes. Prior to updating the AYFRs, PSNH initially included \$22.6 million in annual  
12 depreciation expense for the affected plants. When PSNH updated its 2012 energy  
13 service rate calculation including the updated AYFRs in December of 2011, it reduced  
14 that amount by \$4.8 million to \$17.8 million. In this reconciliation, the actual amount of  
15 depreciation expense was \$18.2 million, or a decrease of \$4.4 million as compared to the  
16 original calculation with the old AYFRs. Using total 2012 energy service sales of  
17 4,600,990,000 kilowatt-hours (kWh), the rate impact to a residential default service  
18 customer who uses 650 kWh/month was a decrease of \$0.00095 per kWh, or  
19 \$0.62/month.

20 **Q. Do you have any concluding comments?**

21 A. Yes. As explained above, an engineering assessment of electric generating plants has a  
22 different focus and purpose from that of an economic analysis. Given that PSNH's  
23 generating plants are currently the subject of considerable discussion, particularly from

1 an economic perspective, it is important to understand and keep in mind the differences  
2 in the analyses.

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

4 A. Yes, it does.