

STATE OF NEW HAMPSHIRE
PUBLIC UTILITIES COMMISSION

DE 10-122

In the Matter of:
Public Service Company of New Hampshire
Petition for Approval of Long-Term and Short-Term Debt Financings

Direct Testimony

of

Steven E. Mullen
Assistant Director – Electric Division

August 20, 2010

Public Service Company of New Hampshire

DE 10-122

I. INTRODUCTION AND SUMMARY

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

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

Q. Please summarize your educational background and work experience.

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

From 1989 through 1996, I was employed as an accountant with Chester C. Raymond, Public Accountant in Manchester, NH. My duties involved preparation of financial statements and tax returns as well as participation in year-end engagements. In 1996, I joined the Commission as a PUC Examiner in the Finance Department. In that capacity I participated in field audits of regulated utilities' books and records in the electric, telecommunications, water, sewer and gas industries. I also performed rate of return analysis, participated in financing dockets and presented oral testimony before the Commission. In 1998, I was promoted to the position of Utility Analyst III and

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

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

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

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

15 A. The purpose of my testimony is to provide comments and recommendations regarding
16 Public Service Company of New Hampshire's (PSNH) May 3, 2010 filing seeking
17 certain financing authorizations. Specifically, in its petition PSNH requested the
18 following approvals:

- 19 1. the issuance of up to \$600 million aggregate principal amount of
- 20 long-term debt securities through December 31, 2012;
- 21 2. the mortgaging of property;
- 22 3. the execution of interest rate transactions;
- 23 4. long-term borrowing pursuant to an unsecured revolving credit
- 24 agreement; and
- 25 5. extension of its current short term debt limit of 10% of net fixed
- 26 plant plus a fixed amount of \$60 million.
- 27

28 **Q. Did PSNH subsequently amend any of its requests in this proceeding?**

29 A. Yes. On July 23, 2010, in response to the Commission's Order No. 25,131, PSNH filed

1 amended testimony to revise its request for long-term debt borrowing authority
2 downward by \$100 million to \$500 million. PSNH also provided additional testimony
3 further explaining its request to have the period during which it could issue the long-term
4 debt – referred to by PSNH as the “Financing Period” – open until December 31, 2012.
5 Finally, PSNH provided an update regarding the status of its negotiations with its lenders
6 on a new revolving credit agreement.

7 **Q. What are your recommendations regarding PSNH’s requested authorizations?**

8 A. Subject to PSNH further clarifying and/or detailing certain issues, I recommend that that
9 Commission approve PSNH’s requests, as amended, regarding its long- and short-term
10 debt. Regarding the request to have the long-term debt authorization period open until
11 December 31, 2012, I further recommend that PSNH be required to file, on or before
12 December 31, 2011, an interim report detailing then-current financing market conditions,
13 updated estimates regarding expected financing costs for future issuance(s) and any other
14 issues of significant relevance to potential future issuance(s) that could occur through
15 December 31, 2012.

16 **Q. What issues need to be further clarified and/or detailed?**

17 A. PSNH has described options for issuing its long-term debt (e.g., first mortgage bonds,
18 promissory note, revolving credit agreement), but it has not explained whether those are
19 equal options or if there is some priority with which it will pursue those options. In
20 addition, regarding the promissory note option, PSNH has not stated what interest rate
21 would apply in the event a promissory note is issued. Finally, PSNH needs to clarify the
22 short-term versus long-term nature of the proposed new revolving credit facility.
23 Although I have had conversations with PSNH regarding these issues, the details
24 regarding these issues need to be clear and explicit for the Commission’s consideration.

1 **Q. What are the proposed terms and conditions of the long-term debt financing?**

2 A. Although the financing terms have not been made final and will not be finalized until the
3 time of issuance, PSNH provided the following description of the proposed long-term
4 debt financing in paragraphs 4 and 5 on page 2 of its petition:

- 5 4. To provide the Company with financing flexibility, PSNH seeks
6 authority to issue and sell up to \$600 million in aggregate principal
7 amount of Long-term Debt in one or more series with a maturity
8 ranging from one to forty years. This Long-term Debt may be in
9 the form of first mortgage bonds, debt secured by first mortgage
10 bonds, or unsecured notes, and may carry either a fixed or floating
11 interest rate; and may be sold to either retail or institutional
12 investors in either the public or private markets. The Long-term
13 Debt may also be issued to PSNH's parent, Northeast Utilities, or
14 issued under a new, unsecured Revolving Credit Agreement.
15
16 5. The exact financing structure, terms and conditions, amount,
17 documentation and coupon rate of the Long-term Debt will be
18 determined at the time of issuance depending on market
19 conditions. The coupon will be consistent with market rates for an
20 instrument of similar maturity and risk, but the credit spread above
21 the then applicable fixed or floating interest rate index will not
22 exceed 400 basis points (4.00%).
23

24 **Q. Please refer to the last sentence of paragraph 4 of PSNH's petition that reads "The**
25 **Long-term Debt may also be issued to PSNH's parent, Northeast Utilities, or issued**
26 **under a new, unsecured Revolving Credit Agreement." How do you interpret that**
27 **sentence?**

28 A. As I read that sentence in the context of the entire paragraph, it gives the initial
29 impression that the long-term debt could be issued in one of three forms that appear to be
30 equal options: 1) long-term bonds, 2) a promissory note from Northeast Utilities (NU) or
31 3) pursuant to a new revolving credit agreement.

32 **Q. Have you had discussions with PSNH and NU personnel to better understand**
33 **PSNH's proposal?**

1 A. Yes. As PSNH explained it to me, there is actually a priority among the options, with the
2 issuance of debt in the market being the preferred option. Borrowing through a
3 promissory note or under the revolving credit agreement would be pursued only if market
4 financing was not a viable option, for whatever reason.

5 **Q. Is that priority of long-term financing methods clearly stated in PSNH's filing?**

6 A. No. PSNH should clarify this issue either through a supplemental filing or during the
7 hearing in this proceeding.

8 **Q. Regarding the promissory note option, did PSNH include a sample promissory note**
9 **in its filing?**

10 A. Yes. A sample promissory note was included as Attachment 9 to Susan B. Weber's May
11 3, 2010 testimony.¹

12 **Q. Does that sample promissory note provide any indication of what interest rate**
13 **would apply in the event the promissory note route was pursued?**

14 A. No, it does not. Again, as part of a discussion I had with PSNH and NU personnel, I was
15 informed that the interest rate that would apply would be the same rate that NU incurs on
16 its own debt. This is another issue that PSNH should further detail either through a
17 supplemental filing or during the hearing in this proceeding.

18 **Q. Assuming that PSNH's preferred financing method of first mortgage bonds takes**
19 **place, what are PSNH's current plans regarding the amount and number of long-**
20 **term debt issuances it plans through December 31, 2012?**

21 A. According to its testimony, PSNH currently plans to issue a total of approximately \$435
22 million – \$210 million in the first quarter of 2011 and \$225 million in the first quarter of
23 2012. Both the time frames and the amounts are approximate.

¹ PSNH's May 3, 2010 filing, Bates page 52.

1 **Q. If PSNH only has plans to issue \$435 million of long-term debt, why is it seeking**
2 **authority to issue up to \$500 million (after amendment)?**

3 A. PSNH has requested the additional borrowing authority to provide it with flexibility
4 should circumstances warrant the additional borrowing (for example, emergency storm
5 restoration²) or if existing conditions in the financial markets provide an opportunity to
6 take advantage of favorable borrowing terms.

7 **Q. How does PSNH plan to use the proceeds of the long-term debt financing?**

8 A. In its testimony, PSNH explained that it plans to use the proceeds to repay existing short-
9 term debt, to finance ongoing capital expenditures and to pay issuance costs. Those
10 planned uses are typical of PSNH's previous long-term debt financings. As of March 31,
11 2010, PSNH had approximately \$16 million of outstanding short-term debt. Regarding
12 capital expenditures, I have included as Attachment SEM-1 a copy of PSNH's 2010
13 capital budget listing its planned capital projects for they year in relation to its
14 distribution, transmission and generation operations.

15 **Q. Have you reviewed that list of projects?**

16 A. Yes. Putting aside comment regarding the Merrimack Station scrubber project which
17 was discussed at length in the Commission's orders in PSNH's prior financing
18 proceeding, Docket No. DE 09-033, PSNH's 2010 capital budget includes hundreds of
19 projects that appear to be consistent with PSNH's obligations in relation to owning and
20 operating its distribution, transmission and generation facilities. My comments should
21 not be construed in any way as comments regarding the prudence of any individual
22 project.

23 **Q. What are your thoughts regarding the \$500 million requested limit of long-term**

² "Emergency storm restoration" I understand to mean major storms such as the December 2008 ice storm for which restoration funding would be beyond that provided through PSNH's existing Major Storm Cost Reserve.

1 **debt financing authority?**

2 A. Although PSNH currently only has plans to issue approximately \$435 million of long-
3 term debt, I can understand the need to allow for some flexibility, especially given the
4 requested extended time frame – in this case, two years – over which such financing
5 would be issued. I will say that I am much more comfortable with the revised limit of
6 \$500 million as compared to the proposed limit of \$600 million that was contained in
7 PSNH’s original filing. By moving from \$165 million of potential excess over the
8 currently planned amount to \$65 million, PSNH has now reduced what I’ll call the
9 “flexibility factor” from 38% to 15%. I do not think that 15% is unreasonable given the
10 two-year timetable and the potential for such events as emergency storm restoration.

11 **Q. Are there other factors that lessen any potential concern over the requested \$500**
12 **million borrowing authority limit?**

13 A. Yes. As part of its filing, PSNH has described its plans to receive equity contributions
14 from its parent in amounts that will stabilize its debt-to-equity ratio as it issues additional
15 debt. Keeping a fairly stable debt-to-equity ratio is important to PSNH not just from a
16 rating agency perspective, but also to remain in compliance with the terms of the
17 approved settlement agreement in PSNH’s recent distribution rate case, Docket No. DE
18 09-035. As part of that agreement, PSNH agreed to maintain a capital structure that is
19 similar, in terms of component percentages, to the capital structure used in the
20 agreement.³ So, hypothetically speaking, if PSNH were to issue the entire \$500 million
21 and there was any question about whether PSNH was becoming too highly debt
22 leveraged, PSNH would already be obligated to obtaining additional equity from its
23 parent to keep its debt-to-equity ratio in check. With all that in mind, it is important to

³ Docket No. DE 09-035, Exhibit 20, page 4, Section 3.1 and page 5, section 4.5.

1 remember that the \$500 million is only a limit. PSNH has testified that it "...is not going
2 to issue \$500 million of long-term debt just because it has the authority to do so. Any
3 issuance must make sense from an overall financial perspective or it will not happen."⁴

4 **Q. Why has PSNH requested a Financing Period that runs through December 31,**
5 **2012?**

6 A. As explained by PSNH witness Susan B. Weber in her July 23, 2010 amended
7 testimony, PSNH has requested financing authority through December 31, 2012
8 for mainly two reasons. First, the extended period would avoid a situation where
9 PSNH would effectively be "shut out" of the debt capital markets during a time of
10 potentially favorable market conditions where PSNH would otherwise deem it
11 advantageous to issue debt. Second, Ms. Weber described the extended
12 authorization request as

13 "an attempt to reduce the administrative burden on both the
14 Commission and Staff from having to consider annual requests for
15 2011 and 2012 financings which would be essentially identical in
16 nature, with the second request filed most likely immediately after
17 the first one was granted." (Weber July 23, 2010 testimony page 5,
18 lines 15-18)
19

20 **Q. Do you recommend that the Commission approve PSNH's request for a Financing**
21 **Period through December 31, 2012?**

22 A. Yes, but I do have a further recommendation on this point. Considering the
23 potential for changing market conditions during the Financing Period as well as
24 potential changes in PSNH's financing needs due to events such as major storms,
25 I recommend that PSNH be required to file, on or before December 31, 2011, an
26 interim report detailing then-current financing market conditions, updated
27 estimates regarding expected financing needs as well as the estimated financing

⁴ July 23, 2010 amended testimony of Susan B. Weber, page 4, lines 8-10.

1 costs for future issuance(s) and any other issues of significant relevance to
2 potential future issuance(s) that could occur through December 31, 2012. I view
3 this as an informational status filing that would provide useful information
4 consistent with the Commission's duty to keep informed pursuant to RSA 374:4.

5 **Q. What would happen in the event PSNH's financing needs changed during the**
6 **pendency of the Financing Period?**

7 A. If, for some reason, PSNH's plans were to be significantly altered due to events
8 subsequent to the Commission order in this proceeding, or due to significant
9 changes in the financial markets, such that any remaining debt to be issued no
10 longer would conform to the parameters outlined in any Commission ruling in this
11 proceeding, PSNH would have to file a new petition to request financing
12 approval, or at the least, amendment of the Commission's order. By
13 "significantly altered," I mean that PSNH's plans changed enough that the
14 parameters of any financing needs would no longer fit within the scope of the
15 requests made in this proceeding.

16 **Q. Turning to the proposed terms and conditions of the proposed long-term debt**
17 **issuance(s), do those terms appear reasonable and consistent with Commission**
18 **decisions in prior PSNH financing dockets?**

19 A. Yes. The proposed terms and conditions concerning the maturity, form, interest
20 rate and credit spread of the debt, while allowing for degrees of flexibility, are
21 consistent with prior Commission decisions and appear reasonable given current
22 conditions in the financial markets as well as the requested length of the financing
23 period.

24 **Q. Do you have any concerns with PSNH's requests for authority to mortgage its**

1 **property or to execute interest rate transactions?**

2 A. No. The Commission has previously authorized PSNH to mortgage its property and to
3 enter into interest rate transactions in connection with prior financings, and the requests
4 in the current petition are consistent with those prior decisions. Although PSNH has
5 stated that it has no current plans to enter into interest rate transactions, the purpose for
6 doing so would be to mitigate interest rate risk and any such action would be dictated by
7 market conditions at the time of the long-term debt issuance(s).

8 **Q. PSNH has requested approval for long-term borrowing pursuant to an unsecured**
9 **revolving credit agreement. Is PSNH currently a party to such an agreement?**

10 A. Yes. PSNH is party to a revolving credit agreement along with Connecticut Light and
11 Power Company, Western Massachusetts Electric Company and Yankee Gas Services
12 Company. Under the current agreement, which is set to expire on November 6, 2010, the
13 total borrowing limit applicable in the aggregate for all of the participating companies is
14 \$400 million, with the individual limit for PSNH being \$100 million.

15 **Q. Does the proposed new revolving credit agreement have different borrowing**
16 **limitations?**

17 A. While the proposed revolving credit agreement has not yet been finalized, based on what
18 has been filed in the docket the aggregate limitation of \$400 million applicable to all
19 participants in the agreement will remain. PSNH's individual limitation, however, is
20 planned to be increased from \$100 million to \$300 million.⁵ In her July 23, 2010
21 amended testimony, Ms. Weber provided an update on the status of the new revolving
22 credit agreement. According to Ms. Weber, the terms of the agreement have not yet been
23 finalized⁶, but PSNH anticipates a closing date on or about October 1, 2010.

⁵ See Attachment SEM-2, a copy of PSNH's response to data request TS-01, Q-TECH-001.

⁶ PSNH did provide, on a confidential basis, a summary of the terms of its new agreement in response to data

1 **Q. Would any debt outstanding pursuant to the revolving credit agreement be**
2 **considered short-term or long-term?**

3 A. Borrowings under revolving credit facilities are typically viewed as short-term, but
4 PSNH's petition discusses the revolving credit facility as long-term⁷ and Ms. Weber's
5 testimony indicates that borrowings under the facility may be either short-term or long-
6 term.

7 **Q. Do you think that PSNH should clarify the short-term/long-term nature of the**
8 **proposed revolving credit facility?**

9 A. Yes. PSNH should be required to provide the Commission with a better understanding as
10 to how it would identify any future amounts outstanding at any point in time as either
11 short-term or long-term and a description of how such a determination would be made.
12 Further, such a clarification is necessary as approvals related to short-term versus long-
13 term indebtedness implicate different sections of RSA 369, specifically RSA 369:1 (long-
14 term debt) and RSA 369:7 (short-term debt) as well as N.H. Code Admin. Rule 307.05
15 which also applies to short-term debt.

16 **Q. Given the proposed \$300 million individual borrowing limitation on the facility**
17 **applicable to PSNH, please describe any further restrictions that would apply if**
18 **PSNH were to draw on the facility on either a short-term or long-term basis.**

19 A. As mentioned, borrowings under revolving credit facilities are typically viewed as short-
20 term commitments. PSNH's short-term borrowings – which are also the subject of this
21 proceeding and will be discussed later in this testimony – are currently limited to 10% of
22 net plant plus a fixed amount of \$60 million. According to PSNH's August 3, 2010
23 response to a technical session data request (see Attachment SEM-2), its current short-

request OCA-01, Q-OCA-007.

⁷ PSNH's May 3, 2010 petition, page 4, paragraph 18(D).

1 term debt limit under that formula is approximately \$218 million. Thus, any short-term
2 borrowings under the revolving credit facility would be further constrained by limitations
3 imposed by the Commission. In addition, any borrowings under the revolving credit
4 facility, either short-term or long-term, would need to be offset with additional equity, as
5 necessary, to avoid PSNH becoming too highly debt-leveraged and in violation of the
6 terms of the previously mentioned settlement agreement in Docket No. DE 09-035.

7
8 An additional limitation is that any borrowings that PSNH would make under the
9 revolving credit facility would be restricted by the aggregate amounts outstanding for
10 each of the other participating affiliated companies in light of the overall \$400 million
11 borrowing limit.

12
13 Finally, the length of time that any amounts could be outstanding pursuant to the
14 revolving credit agreement will be limited to the term of the facility which I understand
15 to be no more than five years.

16 **Q. When was the current formula for determining PSNH's short-term debt limit, that**
17 **is, 10% of net fixed plant plus \$60 million, approved?**

18 A. The formula was approved by the Commission in Docket No. DE 09-033 in its order No.
19 25,021 dated October 5, 2009. In that order, the Commission also stated that the formula
20 was approved "...until the Company's next filing for the issuance of debt."⁸

21 **Q. How long has PSNH requested that approval of the existing short-term debt**
22 **formula be extended?**

23 A. PSNH has requested that the existing formula approach for determining its short-term

⁸ Order No. 25,021, Docket No. DE 09-033 (October 5, 2009) at 13.

1 debt limit “remain in place until further ordered by the Commission.”

2 **Q. Do you think that request is unreasonable?**

3 A. No. I think the use of a formula approach to establishing a short-term debt borrowing
4 limit is an efficient method for dealing with short-term debt limits as it allows the limit to
5 change in tandem with the growth of a utility’s plant in service. Also, adding \$60 million
6 to the 10% of net fixed plant restriction found in Puc 307.05 results in an overall level
7 that better meets the needs of PSNH’s day-to-day utility operations. The formula
8 approach in this proceeding is quite similar to one that was approved by the Commission
9 for Unitil Energy Systems, Inc in 2009.⁹ Moreover, an extension “until further ordered
10 by the Commission” does not restrict the Commission – or any party, for that matter –
11 from revisiting the issue at any time in the future.

12 **Q. Has PSNH calculated the rate impacts of the proposed financing transactions?**

13 A. Yes. In Attachments SEM-3 and SEM-4 I’ve provided copies of PSNH’s rate impact
14 calculations as supplied in its responses to data requests Staff set 1, #13 and technical
15 session set 1, #4 (a follow-up question to Staff set 1, #13), respectively. As detailed in
16 those responses, PSNH has calculated that there would either be no impact or no material
17 impact to its energy service, stranded cost, transmission or distribution rates as a result of
18 the financing transactions.

19 **Q. Given the significant amount of debt financing that is at issue in this proceeding,**
20 **how is it that there would essentially be no rate impact?**

21 A. Rate impacts from financing transactions result primarily from changes in a utility’s
22 capital structure or changes in a utility’s overall cost of capital. PSNH has committed to
23 keep the debt and equity components of its capital structure, on a percentage basis,

⁹ See Order No. 25,027, Docket No. DE 08-085 (October 22, 2009) wherein a formula for establishing a short-term debt borrowing limit was established based on “10% of net fixed plant, as stated in its annual FERC [Form] 1 filing,

1 similar to where they were at the time of entering into the settlement agreement in DE 09-
2 035. In addition, in calculating the estimated rate impacts, PSNH used indicative long-
3 term debt rates based on existing financial market conditions. As a result, and based on
4 those calculations, PSNH's capital structure and overall cost of capital will be largely
5 unchanged from where they are today.

6 **Q. Did PSNH make any proposals regarding how it would report the final results of its**
7 **various financing transactions?**

8 A. Yes. In her May 3, 2010 testimony, Ms. Weber stated that in relation to the long-term
9 debt,

10 The Company would file a report with the Commission within 30 days
11 following the issuance of [l]ong-term [d]ebt that would summarize the
12 terms and conditions and actual costs of the transaction, and demonstrate
13 compliance with the pre-approved parameters.¹⁰
14

15 **Q. Do you have anything to add to that proposal?**

16 A. Yes. Along with a "report," I recommend that PSNH be required to file copies of the
17 actual executed financing documents. This would include not only first mortgage bonds,
18 but also any promissory note, if applicable, and the revolving credit agreement.

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

20 A. Yes, it does.

plus \$10 million."

¹⁰ May 3, 2010 Weber testimony, Bates page 92, lines 8-11.

**Public Service Company of New
Hampshire**
Docket No. DE 10-122

Data Request STAFF-01

**Dated: 07/01/2010
Q-STAFF-012
Page 1 of 12**

Witness: Stephen R. Hall
Request from: New Hampshire Public Utilities Commission Staff

Question:

Please provide a copy of PSNH's 2010 construction budget (which was previously filed with the Commission on February 26, 2010) for purposes of consideration in this proceeding.

Response:

A copy of the 2010 construction budget is attached.

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
CONSTRUCTION BUDGET FOR YEAR 2010
SUMMARY

1	EXPENDITURES TO COMPLETE PROJECTS IN PROGRESS	
2	Schedule 1 - Projects Started In Prior Years	223,602,009
3	NEW PROJECTS BUDGETED FOR 2010	
4	Schedule 2 - Annual Projects	52,744,283
5	Schedule 3 - Projects Under \$50,000	568,910
6	Schedule 4 - Projects \$50,000 And Over	63,439,020
7	Schedule 5 - Contingent Projects	<u>6,150,034</u>
8	TOTAL NEW PROJECTS BUDGETED FOR 2010	<u>122,902,247</u>
9	ESTIMATED TOTAL CONSTRUCTION BUDGETED FOR YEAR	<u>346,504,256</u>
10	Less Estimated Non-Cash Items	
11	Allowance For Funds Used During Construction	20,595,773
12	Contributions And Reimbursements	<u>-4,965</u>
13	Total Non-Cash Items	<u>20,590,808</u>
14	ESTIMATED CASH REQUIREMENTS FOR 2010 CONSTRUCTION	<u><u>325,913,448</u></u>

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

2010 CONSTRUCTION BUDGET

PROCESS SUMMARY

<u>Budget Item</u>	<u>Total</u>	<u>Distribution</u>	<u>Generation</u>	<u>Transmission</u>
Schedule 1 - Projects Started In Prior Years	223,602,009	23,171,759	157,071,519	43,358,731
Schedule 2 - Annual Projects	52,744,283	48,171,408	1,560,029	3,012,846
Schedule 3 - Projects Under \$50,000	568,910	346,989	155,947	65,974
Schedule 4 - Projects \$50,000 And Over	63,439,020	31,323,282	26,568,926	5,546,812
Schedule 5 - Contingent Projects	<u>6,150,034</u>	<u>6,150,034</u>	<u>0</u>	<u>0</u>
Estimated Total Construction Authorized For Year	346,504,256	109,163,472	185,356,421	51,984,363
Less: Estimated Non-Cash Items	<u>20,590,808</u>	<u>1,713,883</u>	<u>15,717,565</u>	<u>3,159,360</u>
Estimated Cash Requirements for 2010 Construction	<u><u>325,913,448</u></u>	<u><u>107,449,589</u></u>	<u><u>169,638,856</u></u>	<u><u>48,825,003</u></u>

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

2010 CONSTRUCTION BUDGET DETAILS

CUSTOMER OPERATIONS/ENERGY DELIVERY

Number	Project Description	2010 Budget
	SCHEDULE 1 - PROJECTS STARTED PRIOR TO 2010	
2001	Renovation and Construction at 1250 Hooksett Road, Hooksett	3,966,861
2002	Rebuild New London Substation, New London	2,666,377
2003	Construct 115/34.5KV Thornton Substation, Merrimack	2,500,052
2004	Install 34.5/12.47KV 10MVA Transformer at Valley Street Substation, Manchester	2,190,156
2005	Construct New 115/34.5KV Shields Brook Substation, Derry	2,050,062
2006	Rebuild 34.5 KV Bus at Brook Street Substation, Manchester	1,999,580
2007	Construct New 12.47kV Distribution Lines from Valley Street Substation, Manchester	1,100,070
2008	Construct New 34.5KV 3701 Line from Derry Substation, Derry	941,015
2009	Construct Line 3235 from Monadnock Substation, Peterborough	903,355
2010	Rebuild 386 Line from North Rochester to Farmington Substation, Rochester	487,417
2011	34.5KV Circuit Breaker Replacement Program, Various Substations	476,113
2012	Replace Obsolete Underground Oil Switches Downtown Portsmouth	476,074
2013	Replace Cables 19X5/19X6, Manchester	475,918
2014	Install Mobile Hook-up at Mammoth Road Substation, Londonderry	350,074
2015	Construct New Barrington Substation, Barrington	265,079
2016	Replace Capacitor Switcher at Hudson Substation, Hudson	261,993
2017	Install Infrastructure for Mobile Peak Shaving Generator, New Boston	235,038
2018	Replace Load Break Switch 17J3 and 17J4 on 3171 Line, Portsmouth	172,363
2019	Acquire Easement for 3701 Line, Londonderry	150,070
2020	Speech Move In - Move Out	134,651
2021	Line Terminal Addition at Monadnock Substation, Peterborough	133,036
2022	Upgrade Radio System	130,088
2023	Rebuild 316 Line, Source Feed to New London Substation, New London	120,030
2024	Replace Two Switches Keene Underground, Keene	95,441
2025	Install Step Transformer and Regulator at North Swanzey Substation, Swanzey	95,366
2026	Upgrade Blaine Street Substation, Manchester	90,099
2027	Purchase and Implement Call Logic	89,827
2028	Convert 9H2, 1H13, 1H19 to 12KV, Keene	76,180
2029	Radio Narrow Banding	70,022
2030	Add Second 34.5/12.47MVA Transformer at North Rochester Substation, Rochester	69,051
2031	Install Mobile Substation Connection at Jackman Substation, Hillsborough	50,059
2032	Retrofit Capacitor Bank Controls, Keene	49,973
2033	Install New Viper Recloser on 3157X1 Line, Middleton	47,679
2034	Install Viper on 399X15, Dover	47,656
2035	Replace Wood Structure at Lowell Rd Substation, Hudson	47,654
2036	Install Viper on 392X, Flagg Road, Rochester	47,543
2037	Rebuild 3171 and 3111 Lines, Portsmouth	44,746
2038	Construct New 115/34.5KV Portland Street Substation, Rochester	25,027
2039	CSF Upgrade to Pernova Designer	23,267
2040	Construct New 34.5KV Getaway Lines at Thornton Substation, Thornton	10,020
2041	Construct New 34.5/12.47KV 5MVA Substation, New Boston	2,711
2042	Construct New 115/34.5KV Substation in the Candia Road Area, Manchester	2,312
2043	Various	1,654
	TOTAL SCHEDULE 1	23,171,759
	SCHEDULE 2 - ANNUAL PROJECTS	
2044	Purchase Transformers and Regulators	11,930,054
2045	Replace Obsolete/Damaged Facilities, Various	8,655,826
2046	Provide Service to New and Existing Customers	8,141,302

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

2010 CONSTRUCTION BUDGET DETAILS

CUSTOMER OPERATIONS/ENERGY DELIVERY

Number	Project Description	2010 Budget
2047	Install Secondary Services (less than 600V)	5,618,025
	SCHEDULE 2 - ANNUAL PROJECTS (continued)	
2048	Enhanced Tree Trimming	2,000,000
2049	Purchase Meters	1,511,118
2050	Line Relocations, Various	1,471,729
2051	Capitalization of Exclusionary Storm Material Costs	1,081,600
2052	Distribution Substations Additions, Various	1,057,048
2053	NHDOT Additions/Changes	959,020
2054	Reliability Improvements, Various	952,201
2055	ROW Distribution Annual	761,689
2056	Maintain Voltage, Various	600,017
2057	Purchase Tools and Equipment	582,299
2058	2010 Facilities Modifications, Distribution	476,335
2059	2010 Facilities Modifications, Properties Inc	475,000
2060	Non-Roadway Lighting	463,296
2061	Purchase Hardware	311,888
2062	Telephone Additions/Changes	309,078
2063	High Pressure Sodium Lighting Additions and Changes	205,798
2064	Local Area Network Changes and Additions	175,014
2065	Cable TV Projects Annual	134,302
2066	Storm Capitalization	119,000
2067	Wide Area Network Changes and Additions	100,039
2068	Telecommunications Additions	50,049
2069	Purchase Office Furniture and Equipment	16,890
2070	Real Estate Annual, Economic Development	9,169
2071	Real Estate Annual, Properties Inc	3,600
2072	Environmental Annual	22
	TOTAL SCHEDULE 2	48,171,408
	SCHEDULE 3 - PROJECTS UNDER \$50,000	
2073	Retrofit Capacitor Banks, Various Locations	47,782
2074	Replace Failed Cable Franklin Substation, Franklin	47,558
2075	Replace Obsolete Equipment, Various Substations	47,539
2076	Cascade Algorithm And Rules Engine	45,021
2077	Call Center Development Environment	33,593
2078	C2 Regulatory Enhancements	31,467
2079	Purchase PMI Voltage Current Power Meters	24,480
2080	Bad Debt Performance and Reserve Analytics	22,422
2081	Customer Relationship Management	22,018
2082	Construct 12.47KV Line in Right of Way, Swanzey Substation to Keene Substation	20,009
2083	Purchase Personal Computer Equipment	5,100
	TOTAL SCHEDULE 3	346,989
	SCHEDULE 4 - PROJECTS \$50,000 AND OVER	
2084	Purchase Vehicles, Distribution	6,620,085
2085	Distribution Real Estate Strategic Transactions	2,300,043
2086	Porcelain Change-out, Various Locations	1,904,398
2087	Build Infrastructure for Smart Grid Initiatives, Various	1,900,041
2088	Replace Obsolete Poles, Various Locations	1,666,274

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

2010 CONSTRUCTION BUDGET DETAILS

CUSTOMER OPERATIONS/ENERGY DELIVERY

Number	Project Description	2010 Budget
2089	Capital Work Resulting from NESCRS Inspections, Various Locations	1,428,516
2090	Replace Failed Cable, Various Locations	1,333,062
	SCHEDULE 4 - PROJECTS \$50,000 AND OVER (continued)	
2091	Replace Direct Buried Cable, Various Locations	1,189,891
2092	GIS Capital Program	1,000,044
2093	Electric System Control Center Electronic Mapboard Added to Areva System, Manchester	900,150
2094	New Business Specific Projects, Various Locations	748,776
2095	Replace Polymer Insulators on 337 Line	618,853
2096	Install two 5.4MVA Capacitors Timber Swamp Substation, Hampton	513,059
2097	Upgrades to Worst Performing Circuits, Various	479,809
2098	Construct 3141X Lane Road, Derry	474,908
2099	PSNH.COM Rearchitecture	457,080
2100	Replace Legacy REDAC 70 Radio Transmitting Units, Various Substations	428,850
2101	Replace Legacy ASW Pole Top Radio Transmitting Units, Various Locations	404,681
2102	Construct New Phase 3155X2 Averil Road, Brookline	375,009
2103	Replace Getaway Cables, Various Substations	332,934
2104	Mobile Strategy Development Project	300,010
2105	Replace Troubled Protection Equipment, Various Substations	285,646
2106	Enable Radio Transmitting Units to Connect to Windsor Server Center, Manchester	271,376
2107	Conversion of 46H1 Circuit from 2.4kV to 12.5kV, New London	250,012
2108	Replace Overloaded Step Transformer with Larger Step Transformer, Dunbarton	235,064
2109	Replacement of Routers at 1580 Elm Street, Manchester	200,091
2110	Arc Energy Outage Notification System	200,045
2111	Install New Underfrequency Relays, Various Substations	190,988
2112	Distribution Line Wire Upgrade, Various	190,558
2113	Replace Circuit Switcher South Milford Substation, Milford	190,484
2114	Air Brake Switch Replacement Program, Various Locations	190,216
2115	Replace Relay Line 3152 Packer Falls Substation, Durham	157,189
2116	Replace Relay Line 382 Monadnock Substation, Troy	157,153
2117	NEI NHPUC Storm Assessment	150,105
2118	Contractor Web Site UPG Redesign	150,105
2119	Pole Reinforcement, Various Locations	150,019
2120	Replace Cables 11H2A Circuit, Manchester	147,647
2121	Direct Buried Cable Injection, Various Locations	142,834
2122	Replace Vault Tops, Transformers and Protectors, Manchester	142,764
2123	Rebuild 4KV Circuit in Millyard, Manchester	142,753
2124	Purchase and Implement Bill Logic	134,732
2125	Construct Additional Phases on 3133X Circuit, Windham	130,028
2126	Customer System Requirements	125,727
2127	Install New Step Transformers Blueberry Lane, Laconia	120,039
2128	C2 Data Warehouse Development	112,353
2129	Queue Optimazation Tools	112,328
2130	Web Self Service Improvements	112,328
2131	Replace Switch Gear on 68W6 Circuit, Laconia	104,722
2132	Construct New 34.5KV Line, Dover	100,655
2133	Rebuild 311 and 317 Lines at Davisville Substation, Contoocook	100,165
2134	Replace Tower and Equipment Sheds, Various Locations	100,073
2135	Install Signal 60 Voltage Reduction Equipment, Various Substations	95,761
2136	Replace Steel Towers, Various Locations	95,292
2137	Install Second 44.8MVA Transformer at Kingston Substation, Kingston	95,112
2138	Cascade Rearchitecture	90,043
2139	Reconductor 3601 Line, Farmington	85,005
2140	Replace J8770 Switch on 387 Line, Manchester	80,944

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

2010 CONSTRUCTION BUDGET DETAILS

CUSTOMER OPERATIONS/ENERGY DELIVERY

Number	Project Description	2010 Budget
2141	Install Parallel Step Transformers on 333XS Heath Road, Conway	80,019
2142	Install Motor Operator and Radio Control on 317 Line, Warner	76,364
2143	Offload 4.5-4.16KV Transformer at Messer Street Substation, Laconia	75,096
	SCHEDULE 4 - PROJECTS \$50,000 AND OVER (continued)	
2144	Workforce Management Core Replacement	72,968
2145	Install Radio Controlled Reclosers on 388 Line, Malvern Street Substation, Manchester	71,389
2146	Unattended Dialer Initiatives	67,306
2147	Construct New 34.5KV 3349 Line from PSNH to NHEC, Tuftonboro	57,063
2148	CACS 9X Upgrade	56,221
2149	Construct New 34.5KV Line from Kingston Substation, Kingston	50,027
	TOTAL SCHEDULE 4	<u>31,323,282</u>
	SCHEDULE 5 - CONTINGENT PROJECTS	
2150	Provision for Unbudgeted Distribution Projects	5,880,334
2151	Provision for Unbudgeted Information Technology Projects	269,700
	TOTAL SCHEDULE 5	<u>6,150,034</u>
	ESTIMATED GROSS CONSTRUCTION BUDGETED FOR 2010	109,163,472
	Less Estimated Non-Cash Items:	
	Allowance For Funds Used During Construction	1,718,848
	Contributions and Reimbursements	<u>-4,965</u>
	Total Non-Cash Items	<u>1,713,883</u>
	ESTIMATED CASH REQUIREMENTS FOR 2010 CONSTRUCTION	<u>107,449,589</u>

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

2010 CONSTRUCTION BUDGET DETAILS

GENERATION

Line Item Number	Project Description	2010 Budget
	SCHEDULE 1 - PROJECTS STARTED PRIOR TO 2010	
5001	Wet Flue Gas Desulphurization System, Merrimack	148,556,057
5002	Upgrade Dock Coal Unloader, Schiller	5,323,066
5003	Replace Reheat Superheat Tubes Unit 1, Merrimack	2,972,074
5004	Install Headgate Debris Handler, Garvins	122,400
5005	Replace Brown Glass in Switchyard, Various Hydros	97,922
	TOTAL SCHEDULE 1	157,071,519
	SCHEDULE 2 - ANNUAL PROJECTS	
5006	Capital Annual, Merrimack	542,130
5007	Capital Annual, Hydro	429,917
5008	Capital Annual, Wyman	390,000
5009	Capital Annual, Machine Shop	116,994
5010	Capital Annual, Staff	80,988
	TOTAL SCHEDULE 2	1,560,029
	SCHEDULE 3 - PROJECTS UNDER \$50,000	
5011	Replace Voltage Regulator on Combustion Turbine Unit 1, Merrimack	47,912
5012	Replace Boiler Pipe Hangers Unit 2, Merrimack	46,368
5013	Replace Economizer Expansion Joint Unit 1, Merrimack	41,268
5014	Replace Electronic Dispatch Control Box, Merrimack	20,392
5015	Various	7
	TOTAL SCHEDULE 3	155,947
	SCHEDULE 4 - PROJECTS \$50,000 AND OVER	
5016	Station Improvements, Various Hydro Sites	4,590,000
5017	Station Improvements, Schiller Station	3,426,359
5018	Large Equipment Annual, Hydro	3,080,633
5019	Station Improvements, Newington	1,905,177
5020	Replace Catalyst Layer #1 Unit 2, Merrimack	1,705,510
5021	Rewind Unit 2, Amoskeag	1,033,539
5022	Replace Crusher, Merrimack	1,013,236
5023	Replace Penthouse Roof Unit 1, Merrimack	926,542
5024	Replace Tempering Duct Unit 2, Merrimack	857,907
5025	Replace Gas Breaker, Merrimack	771,951
5026	Purchase Vehicles, Generation	662,082
5027	Replace Load Centers Unit 2, Merrimack	618,914
5028	Replace Fire Suppression System, Merrimack	420,968
5029	Replace Selective Catalytic Reduction Expansion Joints Unit 2, Merrimack	340,703
5030	Replace Breaker Unit 2, Merrimack	334,883
5031	Replace Car Thaw Transformer, Merrimack	247,298
5032	Replace Cyclone Vortex Burners Unit 1, Merrimack	241,807
5033	Convert Controls to Programmable Logic Controller Type, Lost Nation	234,974
5034	Replace Tempering Duct Expansion Joint Unit 2, Merrimack	226,691

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

2010 CONSTRUCTION BUDGET DETAILS

GENERATION

Line Item Number	Project Description	2010 Budget
5035	Replace Gas Recirculator Fan Expansion Joint Unit 2, Merrimack	222,569
	SCHEDULE 4 - PROJECTS \$50,000 AND OVER (continued)	
5036	Breaker Replacement Program, Merrimack	210,394
5037	Purchase Magnetic Separator, Merrimack	206,749
5038	Purchase NOX Analyzers Unit 2, Merrimack	206,082
5039	Replace Miscellaneous Valves Unit 1, Merrimack	204,868
5040	Generation Real Estate Strategic Transactions	200,088
5041	Purchase Cable Buss Duct, Merrimack	189,985
5042	Upgrade Technology for Flux System, Merrimack	171,103
5043	Replace Trash Rake Unit 2, Eastman	159,465
5044	Replace Miscellaneous Valves Unit 2, Merrimack	155,169
5045	Replace Precipitator C-Field Plates Unit 1, Merrimack	154,656
5046	Replace Condensate Polisher Controls Unit 2, Merrimack	153,000
5047	Upgrade Foxboro Computer Unit 2, Merrimack	127,332
5048	Install Reverse Osmosis System, Merrimack	106,131
5049	Substation Device Replacement Program, Various Substations	104,352
5050	Clean Water Act Compliance, Merrimack	103,708
5051	Install Tripper Room Water Wash, Merrimack	103,041
5052	Install Metal Detector, Merrimack	103,041
5053	Replace Selective Catalytic Reduction Expansion Joints Unit 1, Merrimack	98,822
5054	Replace Tripper Room Chutes, Merrimack	97,888
5055	Replace Gas Recirculator Fan Inlet Expansion Joints Unit 2, Merrimack	92,738
5056	Replace Precipitator Inlet Expansion Joints Unit 2, Merrimack	91,706
5057	Cover Flyash Pit, Merrimack	81,378
5058	Replace Headgates Unit 3, Garvins	78,289
5059	Replace B and C Chutes, Merrimack	77,281
5060	Purchase Flux Probe for Generator Unit 1, Merrimack	77,044
5061	Replace Control Cable to Eastside Substation, Smith Hydro	66,627
5062	Install Waste Water Treatment Control Programmable Logic Controller Unit 2, Merrimack	61,200
5063	Replace Motor Control Center Unit 2, Merrimack	60,180
5064	Replace Gas Recirculator Fan Outlet Expansion Joints Unit 2, Merrimack	56,673
5065	Replace A Belt, Merrimack	56,673
5066	Relocate Precipitator Controllers Unit 2, Merrimack	51,520
	TOTAL SCHEDULE 4	26,568,926
	SCHEDULE 5 - CONTINGENT PROJECTS	
5067	Provision for Contingencies	0
	TOTAL SCHEDULE 5	0
	ESTIMATED GROSS CONSTRUCTION BUDGETED FOR 2010	185,356,421
	Less Estimated Non-Cash Items:	
	Allowance For Funds Used During Construction	15,717,565
	Contributions and Reimbursements	0
	Total Non-Cash Items	15,717,565
	ESTIMATED CASH REQUIREMENTS FOR 2010 CONSTRUCTION	169,638,856

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

2010 CONSTRUCTION BUDGET DETAILS

TRANSMISSION

Line Item Number	Project Description	2010 Budget
	SCHEDULE 1 - PROJECTS STARTED PRIOR TO 2010	
6001	Install 345/115KV Autotransformer at Deerfield Substation, Deerfield	5,746,867
6002	Reconfigure Littleton Substation, Littleton	4,737,384
6003	Breakers and Bus Expansion at Bridge Street Substation Upgrades, Nashua	4,257,951
6004	Install OPGW Fiber on 379 Line, Chestnut Hill Substation to Fitzwilliam Substation	4,175,113
6005	Rebuild L175 Line, Deerfield Substation to Madbury Substation	4,151,902
6006	Construct New 115/34.5KV Thornton Substation, Merrimack	2,732,098
6007	Construct New 345KV Line, Maine to New Hampshire	2,479,086
6008	Install Bus Expansion and Protection & Control Upgrades Madbury Substation, Madbury	1,563,452
6009	Replace 345KV Breakers at Scobie Pond Substation, Londonderry	1,301,155
6010	Purchase Land for Thornton Substation, Merrimack	1,240,036
6011	Replace Relays at Pemigewasset and Webster Substations A111 Line	1,160,906
6012	Construct New Direct Current Line Hydro Quebec to New Hampshire	1,000,069
6013	Construct Foundation for Spare Autotransformer at Merrimack Substation, Bow	973,987
6014	Rebuild G192 Line, Bridge Street Substation to Power Street Substation	876,051
6015	Build K165 Line Split between K165 and Thornton Substation, Merrimack	720,018
6016	Replace 115KV Breakers at Greggs Substation, Goffstown	697,032
6017	Replace 345KV Relays on Scobie Pond Substation 363 Line, Londonderry	645,028
6018	Replace Relay at Pemigewasset Substation E115 Line, New Hampton	601,579
6019	Construct New 115KV Eastport Substation, Rochester	471,027
6020	Upgrade 373 Line Relay at Scobie Pond Substation, Londonderry	460,002
6021	Install 345/115KV Spare Autotransformer at Scobie Pond Substation, Londonderry	397,080
6022	Construct New 115KV/34.5KV Shields Brook Substation, Derry	390,083
6023	Install Emergency Generators at North Merrimack and Littleton Substations	379,159
6024	Upgrade ESCC Energy Management System	370,041
6025	Install Lightning Protection at Monadnock Substation, Troy	239,083
6026	Upgrade Protection and Control 379 Line at Fitzwilliam Substation, Fitzwilliam	236,249
6027	Purchase Software for Transmission Outage Application	200,000
6028	Upgrade P134 Line, Long Hill Substation to Power St Substation, Nashua	156,068
6029	Install Backup Generators at Merrimack, Newington and Schiller Substations	100,037
6030	Replace Disconnect Switches at Three Rivers Substation, Eliot, Maine	99,019
6031	Reconductor M183 Line, Dover	98,030
6032	Install Critical Infrastructure Protection, Various Substations	94,178
6033	Purchase Spare Autotransformer Fitzwilliam Substation, Fitzwilliam	90,812
6034	Upgrade M183 Line Protection and Control, Dover	89,269
6035	Purchase Land in Derry, NH	75,074
6036	Install 345/115KV Autotransformer at Fitzwilliam Substation, Fitzwilliam	70,195
6037	Replace 115KV Breakers at Keene Substation, Keene	40,004
6038	Install Digital Fault Recorders, Various Substations	38,069
6039	Install Frequency Meters, Various Substations	32,194
6040	Install OPGW Fiber on 367 Line, Fitzwilliam Substation to Amherst Substation	31,820
6041	Install HVAC in Various Transmission Substation Control Rooms	25,184
6042	Replace 115KV Breaker at Eddy Substation, Manchester	21,094
6043	Add Transformer and Associated Equipment at Swanzev Substation, Swanzev	19,944
6044	Replace 345KV Breaker at Merrimack Substation, Bow	15,055

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

2010 CONSTRUCTION BUDGET DETAILS

TRANSMISSION

Line Item Number	Project Description	2010 Budget
	SCHEDULE 1 - PROJECTS STARTED PRIOR TO 2010 (continued)	
6045	Replace 115KV Relays, Various Substations	14,986
6046	Replace 115KV Breakers at Lost Nation Substation, Northumberland	13,058
6047	Replace 345KV Breakers at Webster Substation, Webster	10,020
6048	Install Capacitor Bank at Jackman Substation, Hillsborough	8,893
6049	Replace 115KV Breaker at Jackman Substation, Hillsborough	8,029
6050	Various Other Transmission Projects	5,261
	TOTAL SCHEDULE 1	43,358,731
	SCHEDULE 2 - ANNUAL PROJECTS	
6051	Transmission Line Additions	1,550,039
6052	Purchase Construction, Test & Maintenance Tools	405,059
6053	Transmission Crossarm Replacement	387,004
6054	Transmission Substation Additions	338,374
6055	Purchase Vehicles for Transmission	179,969
6056	Transmission ESCC Information Technology Annual	100,206
6057	Transmission Information Technology Additions	50,059
6058	Transmission Real Estate Purchases and Sales	2,136
	TOTAL SCHEDULE 2	3,012,846
	SCHEDULE 3 - PROJECTS UNDER \$50,000	
6059	Build New Y170 Line to Rochester Substation, Rochester	45,005
6060	Replace Cap & Pin Bus Only Insulators, 2011-2012	20,969
	TOTAL SCHEDULE 3	65,974
	SCHEDULE 4 - PROJECTS \$50,000 AND OVER	
6061	Replace Relays on J114 Line at Eddy and Greggs Substations, Manchester, Goffstown	1,197,768
6062	Replace Relays on H137 Line at Merrimack Substation and Garvins Substation, Bow	1,197,068
6063	Replace Relays at Greggs and Reeds Ferry Substations, Goffstown and Londonderry	1,191,274
6064	Construct New 345KV Line Scobie Substation to Tewksbury	1,000,138
6065	Construct Deerfield-Webster-Coolidge 115KV Line to Serve NH-VT Interconnection	500,050
6066	Rebuild Northern 115KV Loop	100,161
6067	Reinforce Critical Infrastructure Protection, Cyber and Physical	100,139
6068	Upgrade Transmission PI Enterprise System	100,047
6069	Upgrade Project Reporting Database	80,136
6070	Upgrade Asset Health Reporting System	80,031
	TOTAL SCHEDULE 4	5,546,812

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

2010 CONSTRUCTION BUDGET DETAILS

TRANSMISSION

Line Item Number	Project Description	2010 Budget
6071	SCHEDULE 5 - CONTINGENT PROJECTS	
	Provision for Contingencies	<u>0</u>
	TOTAL SCHEDULE 5	<u>0</u>
	ESTIMATED GROSS CONSTRUCTION BUDGETED FOR 2010	51,984,363
	Less Estimated Non-Cash Items:	
	Allowance For Funds Used During Construction	3,159,360
	Contributions and Reimbursements	<u>0</u>
	Total Non-Cash Items	<u>3,159,360</u>
	ESTIMATED CASH REQUIREMENTS FOR 2010 CONSTRUCTION	<u><u>48,825,003</u></u>

Public Service Company of New
Hampshire
Docket No. DE 10-122

Data Request TS-01

Dated: 07/26/2010
Q-TECH-001
Page 1 of 1

Witness: Susan B. Weber
Request from: Technical Session

Question:

Re: OCA-01, Q-OCA-007, please explain the differences between current and proposed borrowing limits and current and indicative interest rates.

Response:

The proposed borrowing limit of up to \$300 million is designed to allow PSNH greater access to its revolving credit facility as a source of liquidity which can be used to fund capital expenditures and working capital on a short-term basis.

PSNH's current short-term debt limit of 10% of net fixed plant plus \$60 million, as approved by the Commission's Order No. 25,021 in Docket No. DE 09-033 dated October 5, 2009 and as clarified in Order No. 25,050 dated December 8, 2009, is currently equal to \$218 million. However, PSNH's net fixed plant is forecasted to reach approximately \$2.39 billion at December 31, 2012, at which time PSNH's short-term debt limit is forecasted to be \$298 million or approximately equal to the proposed borrowing limit of \$300 million.

The indicative estimated borrowing rates and fees provided are based on recent utility transactions in the bank market and are dependent on the borrower's unsecured credit ratings. The increase in indicative borrowing rates and fees compared to the existing borrowing rates and fees, is reflective of the changes in the bank market since the existing revolving credit agreement was executed in December 2005, when bank fees were at or near their lowest levels. The change in the bank market has been driven by the general decline in economic conditions, which has resulted in significantly higher bank fees. There is no correlation between the increase in indicative borrowing rates and fees and the proposed increase of PSNH's borrowing limit.

Public Service Company of New
Hampshire
Docket No. DE 10-122

Data Request STAFF-01

Dated: 07/01/2010
Q-STAFF-013
Page 1 of 6

Witness: Stephen R. Hall
Request from: New Hampshire Public Utilities Commission Staff

Question:

Please provide any analysis of the projected rate impacts to each of PSNH's rate components related to the proposed financing transactions. Please include all supporting calculations and explanation of all assumptions used in the calculations.

Response:

Attached is a spreadsheet showing a recalculation of PSNH's Energy Service Rate rate effective July 1, 2010 assuming the financing took place in the first quarter of 2010 (the time period used for determining capital structure in the ES rate recalculation). As shown in the attachment, the financing does not have a material impact of PSNH's projected ES costs, as the cost difference is too small to impact a rate that is rounded to the nearest 0.01¢.

This calculation was performed by recalculating the return component on PSNH's generation assets that will result once the financing is completed. PSNH assumed the issuance of \$210 million of long-term debt at a rate of 4.74%, and deferred issuance costs of \$1.7 million. In order to maintain its existing debt (52%) to equity (48%) ratio at March 31, 2010, a capital contribution was assumed.

The only other component of PSNH's rates that could be impacted in the Stranded Cost Recovery Charge. However, in view of the smaller asset balances to which return is applied under the SCRC as compared to under Energy Service, and because the SCRC is spread over a greater number of kilowatt-hours, the effect of the financing on the average SCRC rate will be even less than the effect on the ES rate. Therefore, we have not performed a recalculation of the SCRC rate.

The Distribution component of PSNH's rates will not be impacted because under the rate case settlement, rates cannot be changed except for specifically enumerated items or events. However, even if Distribution rates could be changed for this financing, we believe that the impact would be *de minimus*, as is the case with the ES rate.

TCAM will not be impacted by the financing, as the allowed return on working capital is based on the return allowed in the rate case settlement.

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
2010 ENERGY SERVICE RATE CALCULATION
(Dollars in 000's)

Traditional Approach

Summary of Actual and Forecasted Energy Service

Cost For January 2010 Through December 2010	TOTAL COST	Cents per KWH (2)	Reference
Fossil energy costs	\$ 165,321	3.09	Attachment RAB-2, page 2
F/H O&M, depreciation & taxes	133,721	2.50	Attachment RAB-2, page 2
Return on rate base	40,678	0.76	UPDATED for NEW BOND
ISO-NE ancillary	2,317	0.04	Attachment RAB-2, page 2
Capacity	14,212	0.27	Attachment RAB-2, page 2
NH RPS	10,963	0.21	Attachment RAB-2, page 2
RGGI costs	6,672	0.12	Attachment RAB-2, page 2
Vermont Yankee	7,108	0.13	Attachment RAB-2, page 2
IPP costs (1)	28,592	0.53	Attachment RAB-2, page 2
Purchases and sales	75,624	1.41	Attachment RAB-2, page 2
Return on ES Deferral	348	0.01	Attachment RAB-2, page 2
Merrimack projected O&M insurance proceeds	(6,500)	(0.12)	Attachment RAB-2, page 2
Merrimack projected RPC insurance proceeds	(8,700)	(0.16)	Attachment RAB-2, page 2
Company Use	(689)	(0.01)	Attachment RAB-2, page 2
2009 Actual ES under/(over) recovery	4,442	0.08	Attachment RAB-2, page 2
Total Updated Energy Service Cost	\$ 474,108	8.87	<--No impact on overall costs
Total Updated Revenue at 8.96 cents per kwh	478,964		
Energy Service (Over)/Under Recovery	(4,856)		
Forecasted Retail MWH Sales July-December 2010	2,693,785		
Increase in Energy Service Rate - cents per kwh (L31/L33)	(0.18)		
Energy Service Rate as approved in DE 09-180 - cents per kwh	8.96		
Updated Energy Service Rate - cents per kwh	8.78		

(1) The IPP costs represent the forecasted market value of IPP generation.

(2) Cents per KWH was calculated using the 2010 actual and forecasted sales from Attachment RAB-2, page 2, line 34.

Amounts shown above may not add due to rounding.

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
2010 ENERGY SERVICE RATE CALCULATION
FOSSIL/HYDRO RETURN ON RATE BASE
(Dollars in 000's)

	January 2010 Actual	February 2010 Actual	March 2010 Actual	April 2010 Actual	May 2010 Actual	June 2010 Estimate	July 2010 Estimate	August 2010 Estimate	September 2010 Estimate	October 2010 Estimate	November 2010 Estimate	December 2010 Estimate	Total
Return on Rate Base													
Rate base													
Net Plant	283,340	283,340	277,517	277,517	277,517	282,773	281,837	281,035	281,702	281,655	295,480	304,837	
Working Capital Allow. (45 days of O&M)	12,020	12,020	12,020	12,020	12,020	12,605	12,605	12,605	12,605	12,605	12,605	12,605	
Fossil Fuel Inventory	81,748	81,748	65,480	65,480	65,480	62,000	62,000	62,000	62,000	62,000	62,000	62,000	
Mat'ls and Supplies	53,616	53,616	53,762	53,762	53,762	53,885	53,937	54,001	54,164	54,221	54,403	54,873	
Prepayments	2,428	2,428	2,292	2,292	2,292	1,789	1,789	1,789	1,789	1,789	1,789	1,789	
Deferred Taxes	(20,454)	(20,454)	(18,780)	(18,780)	(18,780)	(21,748)	(20,591)	(19,121)	(20,487)	(20,105)	(18,856)	(16,535)	
Other Regulatory Obligations	(12,409)	(12,409)	(15,521)	(15,521)	(15,521)	(7,606)	(8,665)	(9,705)	(11,055)	(11,946)	(12,846)	(13,643)	
Total Rate Base (L15 thru L22)	400,289	400,289	376,770	376,770	376,770	383,698	382,912	382,604	380,718	380,219	394,575	405,926	
Average Rate Base (prev + curr month)	400,662	400,289	388,530	376,770	376,770	380,234	383,305	382,758	381,661	380,469	387,397	400,251	
x Return	0.8765%	0.8765%	0.8765%	0.8828%	0.8828%	0.8828%	0.8828%	0.8828%	0.8828%	0.8828%	0.8828%	0.8828%	
Return (L25 x L26)	\$ 3,512	\$ 3,509	\$ 3,205	\$ 3,326	\$ 3,326	\$ 3,357	\$ 3,384	\$ 3,379	\$ 3,369	\$ 3,359	\$ 3,420	\$ 3,533	\$ 40,678

Recalc return	40,678	Sales	5,345,441
Return per June 2010 filing	40,788	Cost kWh	0.76
Savings	(110)		

Amounts shown above may not add due to rounding.

Public Service Company of New Hampshire and Subsidiaries
PRO FORMA—Capitalization @ 3/31/10 - for FH Purposes Only

Data Request STAFF-01
Dated 7/1/10
Q-STAFF-013
Page 4 of 6

	[A] Balance-LTD		[B] Unamor Issuance Expense	[C] Net Balance [A] + [B]	[D] Annualized Amor. Expense	[E] Int Rate*	[F] Ann. Int. Exp. [A] X [E]	[G] Total Ann. Exp. [D] + [F]	[H] Eff. Int. Rate [G]/[C]
PCRB Series A Tax-Prepaid Ins 2001	-		(18,667)	(18,667)	224,000		-	224,000	
PCRB Series A Tax-Exempt	89,250,000	see	(3,340,562)	85,909,438	301,404	0.32%	285,600	587,004	
PCRB Series A Tax-Exempt - VR	-	detail	(1,000)	(1,000)	-	0.32%	-	-	
PCRB Series B Tax-Exempt-FR	89,250,000	below	(4,319,661)	84,930,339	389,744	4.75%	4,239,375	4,629,119	
PCRB Series C Tax-Exempt	108,985,000		(4,735,920)	104,249,080	427,301	5.45%	5,939,683	6,366,984	
PCRB Series D Tax-Exempt	75,000,000		(950,386)	74,049,614	85,749	6.00%	4,500,000	4,585,749	
PCRB Series E Tax-Exempt	44,800,000		(547,242)	44,252,758	49,375	6.00%	2,688,000	2,737,375	
FMB Series L - 2004	50,000,000		(275,150)	49,724,850	63,496	5.25%	2,625,000	2,688,496	
FMB Series M - 2005	50,000,000		(590,576)	49,409,424	23,160	5.60%	2,800,000	2,823,160	
FMB Series N - 2007	70,000,000		(661,651)	69,338,349	89,211	6.15%	4,305,000	4,394,211	
FMB Series O - 2008	110,000,000		(1,666,116)	108,333,884	206,117	6.00%	6,600,000	6,806,117	
FMB Series P - 2009	150,000,000		(1,694,400)	148,305,600	172,778	4.50%	6,750,000	6,922,778	
PSNH NEW BOND	210,000,000		(1,721,750)	208,278,250	172,175	4.74%	9,954,000	10,126,175	
Total Debt	1,047,285,000		(20,523,080)	1,026,761,920	2,204,511		50,686,658	52,891,169	5.1513%

	[A] Balance-LTD		[B] Capitalization Percentage	[C] Embedded Cost/Return	[D] Weighted Avg. [B] * [C]	[E] Tax Gross-up [D]/ [1-TR]	[F] Tax-Adjusted Return	[G] Return By Month
Capitalization---								
LTD--use net of issuance exp-above	1,026,761,920	<--incl bond	52.0226%	5.1513%	2.6798%	N/A	2.6798%	
Total OCI Adj Equity	946,922,440	<--incl cap cont	47.9774%	9.8100%	4.7066%	7.9135%	7.9135%	
Total	1,973,684,359		100.0000%		7.3864%		10.5934%	0.882781%

*--Series A is variable rate debt

Statutory Tax Rate (STR) -- 40.525%

Amortization of Issuance costs and Loss on Reacquisition--Use quarterly data and annualize (1)

	Issuance/Prepaid -			Loss on reacquisition/discounts/prepaid -			Comp Income Amortization, net		Total - Issuance and Loss on reacquisition/discounts -	
	Acct #	Bal-Issuance *	Amor. Expense*	Acct #	Bal-Loss on Re*	Amor. Expense*	Net Balance (3)	Amor. Expense*	Total Balances	Amor. Expense
PCRB Series A Tax-Prepaid Ins 2001	165.QA	(9,333)	28,000	165.Q6	(9,333)	28,000	-	-	(18,667)	56,000
PCRB Series A Tax-Exempt-VR	181.QA	(1,289,478)	29,086	189.PA	(2,051,084)	46,265	-	-	(3,340,562)	75,351
PCRB Series A Tax-Exempt-VR	181.RB	-	-	189.RC	(1,000)	-	-	-	(1,000)	-
PCRB Series B Tax-Exempt-FR	181.Q6	(584,229)	13,178	189.QB	(3,735,432)	84,258	-	-	(4,319,661)	97,436
PCRB Series C Tax-Exempt	181.QC	(2,014,109)	45,431	189.PC	(2,721,811)	61,394	-	-	(4,735,920)	106,825
PCRB Series D Tax-Exempt	181.ND	(604,545)	13,636	189.PD	(345,840)	7,801	-	-	(950,386)	21,437
PCRB Series E Tax-Exempt	181.NE	(368,178)	8,305	189.PE	(179,064)	4,039	-	-	(547,242)	12,344
FMB Series 2004	181.P3	(232,250)	13,399	226.P3 (2)	(42,900)	2,475	-	-	(275,150)	15,874
FMB Series 2005	181.P4	(492,400)	4,827	226.P4 (2)	(98,175)	962	-	-	(590,576)	5,790
FMB Series 2007	181.6A	(572,873)	19,310	226.6A (2)	(88,778)	2,992	-	-	(661,651)	22,303
FMB Series 2008	181.NF	(749,933)	23,194	226.NF	(211,622)	6,545	(704,562)	21,791	(1,666,116)	51,529
FMB Series 2009	181.CV	(1,133,251)	28,682	226.CV	(561,150)	14,512	-	-	(1,694,400)	43,195
Total		(8,050,579)	227,049		(10,046,189)	259,245	(704,562)	21,791	(18,801,330)	508,084

(1) THIS DATA IS LINKED TO AMORTIZATION SCHEDULE FOR THE QUARTER.

(2) THIS IS THE "DEBT DISCOUNT" (LIABILITY) ACCOUNT DUE TO PURCHASING BONDS AT LESS THAN PAR VALUE.

(3) NET BALANCE OF OTHER COMPREHENSIVE INCOME AGREES WITH THE SUM OF THE 219.NE ACTIVITY LISTED ABOVE.

Public Service Company of New Hampshire and Subsidiaries
Pro Forma Adjustments to Capitalization

1. Effective Interest Rate--New Bond

	[A] Balance-LTD	[B] Unamor Issuance Expense	[C] Net Balance [A] + [B]	[D] Annualized Amor. Expense	[E] Int Rate	[F] Ann. Int. Exp. [A] X [E]	[G] Total Ann. Exp. [D] + [F]	[H] Eff. Int. Rate [G]/[C]
PSNH NEW BOND	210,000,000	(1,721,750)	208,278,250	172,175	4.740%	9,954,000	10,126,175	4.862%

	Bal-Issuance	Annual Amor. Expense	
PSNH NEW BOND--Issuance	1,721,750	172,175	<--10 years

2. Adjustments to Maintain Cap Structure

	Actual Balance-LTD	Pro Forma Adjustments	Pro Forma Balance-LTD
Capitalization---			
LTD, net of issuance exp	818,483,670	208,278,250	1,026,761,920
Total OCI Adj Equity	754,839,562	192,082,878	946,922,440
Total	1,573,323,231		1,973,684,359
	Capitalization Percentage		Capitalization Percentage
LTD	52.0226%		52.0226%
Equity	47.9774%		47.9774%
	100.0000%		100.0000%

33

Public Service Company of New Hampshire and Subsidiaries
ACTUAL--Capitalization @ 3/31/10 - for FH Purposes Only

Data Request STAFF-01
Dated 7/1/10
Q-STAFF-013
Page 6 of 6

	[A] Balance-LTD	[B] Acct #s	[C] Unamor Issuance Expense	[D] Net Balance [A] + [B]	[E] Annualized Amor. Expense	[F] Int Rate*	[G] Ann. Int. Exp. [A] X [E]	[H] Total Ann. Exp. [D] + [F]	[I] Eff. Int. Rate [G]/[C]
PCRB Series A Tax-Prepaid Ins 2001	-		(18,667)	(18,667)	224,000		-	224,000	
PCRB Series A Tax-Exempt	89,250,000	see	(3,340,562)	85,909,438	301,404	0.32%	285,600	587,004	
PCRB Series A Tax-Exempt - VR	-	detail	(1,000)	(1,000)	-	0.32%	-	-	
PCRB Series B Tax-Exempt-FR	89,250,000	below	(4,319,661)	84,930,339	389,744	4.75%	4,239,375	4,629,119	
PCRB Series C Tax-Exempt	108,985,000		(4,735,920)	104,249,080	427,301	5.45%	5,939,683	6,366,984	
PCRB Series D Tax-Exempt	75,000,000		(950,386)	74,049,614	85,749	6.00%	4,500,000	4,585,749	
PCRB Series E Tax-Exempt	44,800,000		(547,242)	44,252,758	49,375	6.00%	2,688,000	2,737,375	
FMB Series L - 2004	50,000,000		(275,150)	49,724,850	63,496	5.25%	2,625,000	2,688,496	
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FMB Series N - 2007	70,000,000		(661,651)	69,338,349	89,211	6.15%	4,305,000	4,394,211	
FMB Series O - 2008	110,000,000		(1,666,116)	108,333,884	206,117	6.00%	6,600,000	6,806,117	
FMB Series P - 2009	150,000,000		(1,694,400)	148,305,600	172,778	4.50%	6,750,000	6,922,778	
Total Debt	837,285,000		(18,801,330)	818,483,670	2,032,336		40,732,658	42,764,994	5.2249%

Actual Per Books (credit balance) incl. OCI	754,135,000
Less: Bal 219.NE--swap 1(debit bal)	(1,950,339)
Less: Bal 219.NE--swap 2(credit bal)	1,245,777
Equity less OCI	754,839,562

	[A] Balance-LTD	[B] Capitalization Percentage	[C] Embedded Cost/Return	[D] Weighted Avg. [B] * [C]	[E] Tax Gross-up [D]/ [1-TR]	[F] Tax-Adjusted Return	[G] Return By Month
Capitalization---							
LTD--use net of issuance exp-above	818,483,670	52.0226%	5.2249%	2.7181%	N/A	2.7181%	
Total OCI Adj Equity	754,839,562	47.9774%	9.8100%	4.7066%	7.9135%	7.9135%	
Total	1,573,323,231	100.0000%		7.4247%		10.6317%	0.885973%

*--Series A is variable rate debt

Statutory Tax Rate (STR) -- 40.525%

Amortization of Issuance costs and Loss on Reacquisition--Use quarterly data and annualize (1)

Issuance/Prepaid -			Loss on reacquisition/discounts/prepaid -			Comp Income Amortization, net		Total - Issuance and Loss on reacquisition/discounts	
Acct #	Bal-Issuance *	Amor. Expense*	Acct #	Bal-Loss on Re*	Amor. Expense*	Net Balance (3)	Amor. Expense*	Total Balances	Amor. Expense
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FMB Series 2007	181.6A	(572,873)	19,310	226.6A (2)	(88,778)	2,992	-	(661,651)	22,303
FMB Series 2008	181.NF	(749,933)	23,194	226.NF	(211,622)	6,545	(704,562)	21,791	51,529
FMB Series 2009	181.CV	(1,133,251)	28,682	226.CV	(561,150)	14,512	-	(1,694,400)	43,195
Total		(8,050,579)	227,049		(10,046,189)	259,245	(704,562)	21,791	508,084

(1) THIS DATA IS LINKED TO AMORTIZATION SCHEDULE FOR THE QUARTER.

(2) THIS IS THE "DEBT DISCOUNT" (LIABILITY) ACCOUNT DUE TO PURCHASING BONDS AT LESS THAN PAR VALUE.

(3) NET BALANCE OF OTHER COMPREHENSIVE INCOME AGREES WITH THE SUM OF THE 219.NE ACTIVITY LISTED ABOVE.

Public Service Company of New
Hampshire
Docket No. DE 10-122

Data Request TS-01

Dated: 07/26/2010
Q-TECH-004
Page 1 of 8

Witness: Stephen R. Hall
Request from: Technical Session

Question:

Re: STAFF-01, Q-STAFF-013, please provide the calculation of the ES rate assuming a full \$500 million issuance. Please provide the calculation of the SCRC rate using the same assumption (\$500 million issuance).

Response:

Attached are three sets of spreadsheets consisting of (1) a recalculation of PSNH's Energy Service Rate rate effective July 1, 2010 assuming the financing took place in the first quarter of 2010 (the time period used for determining capital structure in the ES rate recalculation), (2) a recalculation of PSNH's Stranded Cost Recovery Charge Rate rate effective July 1, 2010 assuming the financing took place in the first quarter of 2010 (the time period used for determining capital structure in the SCRC rate recalculation), and (3) pro forma generation segment (6F for ES) and pro forma restructuring segment (6R for SCRC) weighted average cost of capital calculations reflecting the bond financing.

As shown in the ES and SCRC attachments, the financing does not have a material impact on PSNH's projected ES or SCRC costs, as the cost difference is too small to impact a rate that is rounded to the nearest 0.01¢.

The weighted average cost of capital calculations were performed by recalculating the return component used to calculate the return on both generation and stranded cost rate base assuming the financing was completed. PSNH assumed the following:

1. Two separate issuances of \$250 million of long-term debt at a rate of 4.74%, totalling \$500 million
2. Total deferred issuance costs of \$4.0 million, which are amortized over ten years.
3. NU Parent made capital contributions to maintain PSNH's existing debt (52%) to equity (48%) ratio at March 31, 2010 in segment 6F. In segment 6R, the stipulated capital structure of 60% debt/40% equity was assumed.

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
2010 ENERGY SERVICE RATE CALCULATION--Returns Recalculated for the \$500M Bond Issue
(Dollars in 000's)

Traditional Approach

Summary of Actual and Forecasted Energy Service

Cost For January 2010 Through December 2010	TOTAL COST	Cents per KWH (2)	Reference
Fossil energy costs	\$ 165,321	3.09	Attachment RAB-2, page 2
F/H O&M, depreciation & taxes	133,721	2.50	Attachment RAB-2, page 2
Return on rate base	40,582	0.76	See revised RAB-2, page 6
ISO-NE ancillary	2,317	0.04	Attachment RAB-2, page 2
Capacity	14,212	0.27	Attachment RAB-2, page 2
NH RPS	10,963	0.21	Attachment RAB-2, page 2
RGGI costs	6,672	0.12	Attachment RAB-2, page 2
Vermont Yankee	7,108	0.13	Attachment RAB-2, page 2
IPP costs (1)	28,592	0.53	Attachment RAB-2, page 2
Purchases and sales	75,624	1.41	Attachment RAB-2, page 2
Return on ES Deferral	348	0.01	Attachment RAB-2, page 2
Merrimack projected O&M insurance proceeds	(6,500)	(0.12)	Attachment RAB-2, page 2
Merrimack projected RPC insurance proceeds	(8,700)	(0.16)	Attachment RAB-2, page 2
Company Use	(689)	(0.01)	Attachment RAB-2, page 2
2009 Actual ES under/(over) recovery	4,442	0.08	Attachment RAB-2, page 2
Total Updated Energy Service Cost	\$ 474,012	8.87	<--No impact on overall costs
Total Updated Revenue at 8.96 cents per kwh	478,964		
Energy Service (Over)/Under Recovery	(4,953)		
Forecasted Retail MWH Sales July-December 2010	2,693,785		
Increase in Energy Service Rate - cents per kwh (L31/L33)	(0.18)		
Energy Service Rate as approved in DE 09-180 - cents per kwh	8.96		
Updated Energy Service Rate - cents per kwh	8.78		

(1) The IPP costs represent the forecasted market value of IPP generation.

(2) Cents per KWH was calculated using the 2010 actual and forecasted sales from Attachment RAB-2, page 2, line 34.

Amounts shown above may not add due to rounding.

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
2010 ENERGY SERVICE RATE CALCULATION
FOSSIL/HYDRO RETURN ON RATE BASE
(Dollars in 000's)

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	January 2010	February 2010	March 2010	April 2010	May 2010	June 2010	July 2010	August 2010	September 2010	October 2010	November 2010	December 2010	Total
Return on Rate Base	Actual	Actual	Actual	Actual	Actual	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	
Rate base													
Net Plant	283,340	283,340	277,517	277,517	277,517	282,773	281,837	281,035	281,702	281,655	295,480	304,837	
Working Capital Allow. (45 days of O&M)	12,020	12,020	12,020	12,020	12,020	12,605	12,605	12,605	12,605	12,605	12,605	12,605	
Fossil Fuel Inventory	81,748	81,748	65,480	65,480	65,480	62,000	62,000	62,000	62,000	62,000	62,000	62,000	
Mat'l's and Supplies	53,616	53,616	53,762	53,762	53,762	53,885	53,937	54,001	54,164	54,221	54,403	54,873	
Prepayments	2,428	2,428	2,292	2,292	2,292	1,789	1,789	1,789	1,789	1,789	1,789	1,789	
Deferred Taxes	(20,454)	(20,454)	(18,780)	(18,780)	(18,780)	(21,748)	(20,591)	(19,121)	(20,487)	(20,105)	(18,856)	(16,535)	
Other Regulatory Obligations	(12,409)	(12,409)	(15,521)	(15,521)	(15,521)	(7,606)	(8,665)	(9,705)	(11,055)	(11,946)	(12,846)	(13,643)	
Total Rate Base (L15 thru L22)	400,289	400,289	376,770	376,770	376,770	383,698	382,912	382,604	380,718	380,219	394,575	405,926	
Average Rate Base (prev + curr month)	400,662	400,289	388,530	376,770	376,770	380,234	383,305	382,758	381,661	380,469	387,397	400,251	
x Return	0.8765%	0.8765%	0.8765%	0.8800%	0.8800%	0.8800%	0.8800%	0.8800%	0.8800%	0.8800%	0.8800%	0.8800%	
Return (L25 x L26)	\$ 3,512	\$ 3,509	\$ 3,205	\$ 3,316	\$ 3,316	\$ 3,346	\$ 3,373	\$ 3,368	\$ 3,359	\$ 3,348	\$ 3,409	\$ 3,522	\$ 40,582

Recalc return 40,582
Return per June 2010 filing 40,788
Savings (206)

Sales 5,345,441
Cost kWh 0.76

Amounts shown above may not add due to rounding.

Docket No. DE 10-122
TS-01
Q-TECH-004
Dated: 07/26/10
Page 4 of 8

Attachment RAB - 1
Page 1 of 7

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

2010 SCRC RATE CALCULATION--Returns Recalculated for the \$500M Bond Issue

000s

	As Filed 06/11/2010	Pro Forma \$500M Bond Issue	
	Stranded Cost	Stranded Cost	
1 Part 1 - Rate recovery bonds (RRB)	\$ 61,287	\$ 61,287	
2 Part 2 - Ongoing SCRC Costs	26,958	27,017	See RAB-1, pages 6-7
3 Part 2 - 2009 Actual SCRC under/(over) Recovery	3,883	3,883	
4 Total Updated SCRC Cost (L1+L2+L3)	\$ 92,129	\$ 92,187	
5 Total Updated SCRC Revenue @ 1.18 cents/kwh	90,985	90,985	
6 Total SCRC under/(over) Recovery (L4 - L5)	1,144	1,202	
7 Forecasted Retail MWH Sales - July - December 2010	3,955,631	3,955,631	
8 Increase in SCRC Rate - cents/kwh (L6 / L7)	0.03	0.03	
9 Current SCRC rate approved in DE 09-179 - cents/kwh	1.18	1.18	
10 Updated SCRC Rate - cents/kwh (L8 +L9)	1.21	1.21	

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

2010 SCRC RATE CALCULATION

PART 2 ONGOING COSTS--Returns Recalculated for the \$500M Bond Issue

000's

SCRC Part 2 Ongoing Costs	Actual January 2010	Actual February 2010	Actual March 2010	Actual April 2010	Actual May 2010	Re-estimate June 2010	Total for the six months ended 06/30/10
Ongoing Costs - IPP							
1 Amortization and return on IPP							
2 Buydown/Buyout Savings (1)	\$ 237	\$ 249	\$ 274	\$ 292	\$ 272	\$ 237	\$ 1,561
3 IPP Ongoing costs:							
4 Total IPP Cost	5,441	4,488	5,470	5,214	4,772	4,461	29,846
5 less: IPP at Market Cost	3,439	2,244	2,089	2,315	2,340	2,011	14,438
6 Above Market IPP Cost	2,002	2,245	3,381	2,899	2,432	2,450	15,408
7 Total Part 2 Costs	\$ 2,239	\$ 2,494	\$ 3,654	\$ 3,191	\$ 2,703	\$ 2,687	\$ 16,969
Ongoing Costs - Return							
8 2009 Adjustment	11	-	-	-	-	-	11
9 Return on ADIT - Securitized							
10 Stranded Costs (1)	(490)	(478)	(467)	(452)	(441)	(430)	(2,757)
11 Return on Yankee Decommissioning							
12 Obligations and CVEC, net of deferred taxes (1)	(51)	(50)	(49)	(48)	(47)	(47)	(293)
13 Yankee Contract Obligations Adjustment	(2)	-	-	-	-	-	(2)
14 Return on SCRC deferred balance (1)	13	10	12	16	18	17	85
15 Total Part 2 Return	\$ (518)	\$ (519)	\$ (504)	\$ (484)	\$ (470)	\$ (460)	\$ (2,955)
16 Total Part 2 Ongoing Costs and Return	\$ 1,721	\$ 1,975	\$ 3,150	\$ 2,707	\$ 2,233	\$ 2,227	\$ 14,013
17 Amounts shown above may not add due to rounding.							

(1) Return assumes \$500 million bond issue as of March 31, 2010

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

2010 SCRC RATE CALCULATION

PART 2 ONGOING COSTS--Returns Recalculated for the \$500M Bond Issue

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SCRC Part 2 Ongoing Costs	Re-estimate						Total for the twelve months ended 12/31/10
	July 2010	August 2010	September 2010	October 2010	November 2010	December 2010	
Ongoing Costs - IPP							
1 Amortization and return on IPP							
2 Buydown/Buyout Savings (1)	\$ 215	\$ 208	\$ 210	\$ 220	\$ 237	\$ 249	\$ 2,900
3 IPP Ongoing costs:							
4 Total IPP Cost	4,608	4,167	3,735	4,493	5,325	5,755	57,929
5 less: IPP at Market Cost	2,221	2,001	1,613	2,081	2,690	3,243	28,287
6 Above Market IPP Cost	2,387	2,166	2,122	2,412	2,635	2,512	29,642
7 Total Part 2 Costs	\$ 2,602	\$ 2,374	\$ 2,332	\$ 2,632	\$ 2,872	\$ 2,761	\$ 32,542
Ongoing Costs - Return							
8 2009 Adjustment	-	-	-	-	-	-	11
9 Return on ADIT - Securitized							
10 Stranded Costs (1)	(419)	(407)	(395)	(383)	(371)	(360)	(5,092)
11 Return on Yankee Decommissioning							
12 Obligations and CVEC, net of deferred taxes (1)	(46)	(45)	(44)	(43)	(42)	(41)	(555)
13 Yankee Contract Obligations Adjustment	-	-	-	-	-	-	(2)
14 Return on SCRC deferred balance (1)	13	6	3	2	3	1	113
15 Total Part 2 Return	\$ (452)	\$ (447)	\$ (437)	\$ (424)	\$ (411)	\$ (400)	\$ (5,525)
16 Total Part 2 Ongoing Costs and Return	\$ 2,150	\$ 1,928	\$ 1,895	\$ 2,208	\$ 2,461	\$ 2,361	\$ 27,017
17 Amounts shown above may not add due to rounding.							

(1) Return assumes \$500 million bond issue as of March 31, 2010

Public Service Company of New Hampshire and Subsidiaries
PRO FORMA---Capitalization @ 3/31/10 - for FH Purposes Only

	[A] Balance-LTD	Acct #s	[B] Unamor Issuance Expense	[C] Net Balance [A] + [B]	[D] Annualized Amor. Expense	[E] Int Rate*	[F] Ann. Int. Exp. [A] X [E]	[G] Total Ann. Exp. [D] + [F]	[H] Eff. Int. Rate [G]/[C]
PCRB Series A Tax-Prepaid Ins 2001	-		(18,667)	(18,667)	224,000		-	224,000	
PCRB Series A Tax-Exempt	89,250,000	see	(3,340,562)	85,909,438	301,404	0.32%	285,600	587,004	
PCRB Series A Tax-Exempt - VR	-	detail	(1,000)	(1,000)	-	0.32%	-	-	
PCRB Series B Tax-Exempt-FR	89,250,000	below	(4,319,661)	84,930,339	389,744	4.75%	4,239,375	4,629,119	
PCRB Series C Tax-Exempt	108,985,000		(4,735,920)	104,249,080	427,301	5.45%	5,939,683	6,366,984	
PCRB Series D Tax-Exempt	75,000,000		(950,386)	74,049,614	85,749	6.00%	4,500,000	4,585,749	
PCRB Series E Tax-Exempt	44,800,000		(547,242)	44,252,758	49,375	6.00%	2,688,000	2,737,375	
FMB Series L - 2004	50,000,000		(275,150)	49,724,850	63,496	5.25%	2,625,000	2,688,496	
FMB Series M - 2005	50,000,000		(590,576)	49,409,424	23,160	5.60%	2,800,000	2,823,160	
FMB Series N - 2007	70,000,000		(661,651)	69,338,349	89,211	6.15%	4,305,000	4,394,211	
FMB Series O - 2008	110,000,000		(1,666,116)	108,333,884	206,117	6.00%	6,600,000	6,806,117	
FMB Series P - 2009	150,000,000		(1,694,400)	148,305,600	172,778	4.50%	6,750,000	6,922,778	
PSNH NEW BOND	500,000,000		(4,017,500)	495,982,500	401,750	4.74%	23,700,000	24,101,750	
Total Debt	1,337,285,000		(22,818,830)	1,314,466,170	2,434,086		64,432,658	66,866,744	5.0870%

	[A] Balance-LTD		[B] Capitalization Percentage	[C] Embedded Cost/Return	[D] Weighted Avg. [B] * [C]	[E] Tax Gross-up [D]/ (1-TR)	[F] Tax-Adjusted Return	[G] Return By Month
Capitalization---								
LTD--use net of issuance exp-above	1,314,466,170	<--incl bond	52.0226%	5.0870%	2.6464%	N/A	2.6464%	
Total OCI Adj Equity	1,212,255,236	<--incl cap cont	47.9774%	9.8100%	4.7066%	7.9135%	7.9135%	
Total	2,526,721,405		100.0000%		7.3530%		10.5599%	0.879994%

*--Series A is variable rate debt

Statutory Tax Rate (STR) -- 40.525%

Public Service Company of New Hampshire and Subsidiaries
PRO FORMA Capitalization @ 3/31/10 - for SC Purposes Only

Note: Assumes a 60% (debt), 40%
(equity) relationship, as required by the
Settlement Agreement

	[A] Balance-LTD	Acct #s	[B] Unamor Issuance Expense	[C] Net Balance [A] + [B]	[D] Annualized Amor. Expense	[E] Int Rate*	[F] Ann. Int. Exp. [A] X [E]	[G] Total Ann. Exp. [D] + [F]	[H] Eff. Int. Rate [G]/[C]
PCRB Series A Tax-Prepaid Ins 2001	-		(18,667)	(18,667)	224,000		-	224,000	
PCRB Series A Tax-Exempt	89,250,000	see	(3,340,562)	85,909,438	301,404	0.32%	285,600	587,004	
PCRB Series A Tax-Exempt-VR	-	detail	(1,000)	(1,000)	-	0.32%	-	-	
PCRB Series B Tax-Exempt-FR	89,250,000	below	(4,319,661)	84,930,339	389,744	4.75%	4,239,375	4,629,119	
PCRB Series C Tax-Exempt	108,985,000		(4,735,920)	104,249,080	427,301	5.45%	5,939,683	6,366,984	
PCRB Series D Tax-Exempt	75,000,000		(950,386)	74,049,614	85,749	6.00%	4,500,000	4,585,749	
PCRB Series E Tax-Exempt	44,800,000		(547,242)	44,252,758	49,375	6.00%	2,688,000	2,737,375	
FMB Series L	50,000,000		(275,150)	49,724,850	63,496	5.25%	2,625,000	2,688,496	
FMB Series M	50,000,000		(590,576)	49,409,424	23,160	5.60%	2,800,000	2,823,160	
FMB Series N	70,000,000		(661,651)	69,338,349	89,211	6.15%	4,305,000	4,394,211	
FMB Series O	110,000,000		(1,666,116)	108,333,884	206,117	6.00%	6,600,000	6,806,117	
FMB Series P - 2009	150,000,000		(1,694,400)	148,305,600	172,778	4.50%	6,750,000	6,922,778	
PSNH NEW BOND	500,000,000		(4,017,500)	495,982,500	401,750	4.74%	23,700,000	24,101,750	
Total Debt	1,337,285,000		(22,818,830)	1,314,466,170	2,434,086		64,432,658	66,866,744	5.0870%

	[A] Balance-LTD	[B] Capitalization Percentage	[C] Embedded Cost/Return	[D] Weighted Avg. [B] * [C]	[E] Tax Gross-up [D]/ [1-TR]	[F] Tax-Adjusted Return	[G] Return By Month
Capitalization--							
LTD--use net of issuance exp-above	1,314,466,170	60.0000%	5.0870%	3.0522%	N/A	3.0522%	
Total Equity (calculated at 60/40 from LTD)	876,310,780	40.0000%	8.0000%	3.2000%	5.3804%	5.3804%	
Total	2,190,776,949	100.0000%		6.2522%		8.4326%	0.702717%

*--Series A is variable rate debt

Statutory Tax Rate (STR) -- 40.525%