CHAIRMAN
Thomas B. Geth.H.P.U.C. Case No. DE 10-132

COMMISSION Entitle No.
Clifton C. Below
Amy L. Ignatius Witness Susan B Webel

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AND SECRETARY
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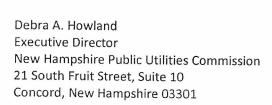
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August 20, 2010

Concord, N.H. 03301-2429



RE: DE 10-122 Public Service Company of New Hampshire – Financing Docket

Dear Ms. Howland:

Pursuant to the approved procedural schedule in the above-captioned docket, Staff is filing the testimony and related attachments of Steven E. Mullen, Assistant Director, Electric Division.

If you have any questions please do not hesitate to contact me.

Sincerely,

Suzanne G. Amidon Staff Attorney

# 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.	INTR	ODII	CTION	AND	SUMMA	$\mathbf{p}\mathbf{v}$
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1	Q.	r lease 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	A.	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, NH. My duties involved preparation of financial
15		statements and tax returns as well as participation in year-end engagements. In 1996, I
16		joined the Commission as a PUC Examiner in the Finance Department. In that capacity I
17		participated in field audits of regulated utilities' books and records in the electric,
18		telecommunications, water, sewer and gas industries. I also performed rate of return
19		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

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

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

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

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- 15 A. The purpose of my testimony is to provide comments and recommendations regarding Public Service Company of New Hampshire's (PSNH) May 3, 2010 filing seeking 16 17 certain financing authorizations. Specifically, in its petition PSNH requested the following approvals: 18
  - 1. the issuance of up to \$600 million aggregate principal amount of long-term debt securities through December 31, 2012;
  - 2. the mortgaging of property;
  - the execution of interest rate transactions; 3.
  - 4. long-term borrowing pursuant to an unsecured revolving credit agreement; and
    - 5. extension of its current short term debt limit of 10% of net fixed plant plus a fixed amount of \$60 million.

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

#### Q. What are your recommendations regarding PSNH's requested authorizations?

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

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

A.

A.

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

1 <b>Q.</b>	What are the propos	sed terms and condit	ions of the long-term	debt financing?
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- A. Although the financing terms have not been made final and will not be finalized until the time of issuance, PSNH provided the following description of the proposed long-term debt financing in paragraphs 4 and 5 on page 2 of its petition:
  - 4. To provide the Company with financing flexibility, PSNH seeks authority to issue and sell up to \$600 million in aggregate principal amount of Long-term Debt in one or more series with a maturity ranging from one to forty years. This Long-term Debt may be in the form of first mortgage bonds, debt secured by first mortgage bonds, or unsecured notes, and may carry either a fixed or floating interest rate; and may be sold to either retail or institutional investors in either the public or private markets. The Long-term Debt may also be issued to PSNH's parent, Northeast Utilities, or issued under a new, unsecured Revolving Credit Agreement.
  - 5. The exact financing structure, terms and conditions, amount, documentation and coupon rate of the Long-term Debt will be determined at the time of issuance depending on market conditions. The coupon will be consistent with market rates for an instrument of similar maturity and risk, but the credit spread above the then applicable fixed or floating interest rate index will not exceed 400 basis points (4.00%).

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

- A. As I read that sentence in the context of the entire paragraph, it gives the initial impression that the long-term debt could be issued in one of three forms that appear to be equal options: 1) long-term bonds, 2) a promissory note from Northeast Utilities (NU) or 3) pursuant to a new revolving credit agreement.
- Q. Have you had discussions with PSNH and NU personnel to better understand 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
- 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
- 3, 2010 testimony. 1
- 12 Q. Does that sample promissory note provide any indication of what interest rate
- 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
- informed that the interest rate that would apply would be the same rate that NU incurs on
- its own debt. This is another issue that PSNH should further detail either through a
- supplemental filing or during the hearing in this proceeding.
- 18 Q. Assuming that PSNH's preferred financing method of first mortgage bonds takes
- place, what are PSNH's current plans regarding the amount and number of long-
- term debt issuances it plans through December 31, 2012?
- 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.

<sup>&</sup>lt;sup>1</sup> 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
- restoration<sup>2</sup>) 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
- planned uses are typical of PSNH's previous long-term debt financings. As of March 31,
- 2010, PSNH had approximately \$16 million of outstanding short-term debt. Regarding
- capital expenditures, I have included as Attachment SEM-1 a copy of PSNH's 2010
- capital budget listing its planned capital projects for they year in relation to its
- distribution, transmission and generation operations.
  - Q. Have you reviewed that list of projects?
- 16 A. Yes. Putting aside comment regarding the Merrimack Station scrubber project which
- was discussed at length in the Commission's orders in PSNH's prior financing
- proceeding, Docket No. DE 09-033, PSNH's 2010 capital budget includes hundreds of
- projects that appear to be consistent with PSNH's obligations in relation to owning and
- 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.

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

<sup>&</sup>lt;sup>2</sup> "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.

### debt financing authority?

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

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

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

<sup>&</sup>lt;sup>3</sup> Docket No. DE 09-035, Exhibit 20, page 4, Section 3.1 and page 5, section 4.5.

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

<sup>&</sup>lt;sup>4</sup> 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.

- What would happen in the event PSNH's financing needs changed during the pendency of the Financing Period?
- A. 7 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 proceeding, PSNH would have to file a new petition to request financing 11 approval, or at the least, amendment of the Commission's order. By 12 "significantly altered," I mean that PSNH's plans changed enough that the 13 parameters of any financing needs would no longer fit within the scope of the 14 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

#### property or to execute interest rate transactions?

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

Q. PSNH has requested approval for long-term borrowing pursuant to an unsecured 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.

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

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

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

<sup>&</sup>lt;sup>6</sup> PSNH did provide, on a confidential basis, a summary of the terms of its new agreement in response to data

- Q. Would any debt outstanding pursuant to the revolving credit agreement be considered short-term or long-term?
- A. Borrowings under revolving credit facilities are typically viewed as short-term, but

  PSNH's petition discusses the revolving credit facility as long-term<sup>7</sup> and Ms. Weber's

  testimony indicates that borrowings under the facility may be either short-term or long
  term.
- Q. Do you think that PSNH should clarify the short-term/long-term nature of the proposed revolving credit facility?
- Yes. PSNH should be required to provide the Commission with a better understanding as to how it would identify any future amounts outstanding at any point in time as either short-term or long-term and a description of how such a determination would be made. Further, such a clarification is necessary as approvals related to short-term versus long-term indebtedness implicate different sections of RSA 369, specifically RSA 369:1 (long-term debt) and RSA 369:7 (short-term debt) as well as N.H. Code Admin. Rule 307.05 which also applies to short-term debt.
- Q. Given the proposed \$300 million individual borrowing limitation on the facility
  applicable to PSNH, please describe any further restrictions that would apply if
  PSNH were to draw on the facility on either a short-term or long-term basis.
- A. As mentioned, borrowings under revolving credit facilities are typically viewed as shortterm commitments. PSNH's short-term borrowings which are also the subject of this
  proceeding and will be discussed later in this testimony are currently limited to 10% of
  net plant plus a fixed amount of \$60 million. According to PSNH's August 3, 2010
  response to a technical session data request (see Attachment SEM-2), its current short-

request OCA-01, Q-OCA-007.

<sup>&</sup>lt;sup>7</sup> PSNH's May 3, 2010 petition, page 4, paragraph 18(D).

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

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

- Finally, the length of time that any amounts could be outstanding pursuant to the revolving credit agreement will be limited to the term of the facility which I understand 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."
- Q. How long has PSNH requested that approval of the existing short-term debt formula be extended?
- 23 A. PSNH has requested that the existing formula approach for determining its short-term

<sup>&</sup>lt;sup>8</sup> Order No. 25,021, Docket No. DE 09-033 (October 5, 2009) at 13.

debt limit "remain in place until further ordered by the Commission."

#### Q. Do you think that request is unreasonable?

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No. I think the use of a formula approach to establishing a short-term debt borrowing 3 A. limit is an efficient method for dealing with short-term debt limits as it allows the limit to 4 change in tandem with the growth of a utility's plant in service. Also, adding \$60 million 5 to the 10% of net fixed plant restriction found in Puc 307.05 results in an overall level 6 that better meets the needs of PSNH's day-to-day utility operations. The formula 7 approach in this proceeding is quite similar to one that was approved by the Commission 8 for Unitil Energy Systems, Inc in 2009. Moreover, an extension "until further ordered 9 10 by the Commission" does not restrict the Commission – or any party, for that matter – from revisiting the issue at any time in the future. 11

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

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

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

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

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<sup>&</sup>lt;sup>9</sup> 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 11 12 13		The Company would file a report with the Commission within 30 days following the issuance of [l]ong-term [d]ebt that would summarize the terms and conditions and actual costs of the transaction, and demonstrate compliance with the pre-approved parameters. <sup>10</sup>
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."  $^{\rm 10}$  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.

### 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	6,150,034	
8	TOTAL NEW PROJECTS BUDGETED FOR 2010	-	122,902,247
9	ESTIMATED TOTAL CONSTRUCTION BUDGETED FOR YEAR	-	346,504,256
10 11 12	Less Estimated Non-Cash Items Allowance For Funds Used During Construction Contributions And Reimbursements	20,595,773 -4,965	
13	Total Non-Cash Items	-	20,590,808
14	ESTIMATED CASH REQUIREMENTS FOR 2010 CONSTRUCTION		325,913,448

#### 2010 CONSTRUCTION BUDGET

#### PROCESS SUMMARY

Budget Item	Total	Distribution	<u>Generation</u>	Transmission
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	6,150,034	6,150,034	0	0
Estimated Total Construction Authorized For Year	346,504,256	109,163,472	185,356,421	51,984,363
Less: Estimated Non-Cash Items	20,590,808	1,713,883	15,717,565	3,159,360
Estimated Cash Requirements for 2010 Construction	325,913,448	107,449,589	169,638,856	48,825,003

#### 2010 CONSTRUCTION BUDGET DETAILS

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	476,113
2012	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	
2017	Install Infrastructure for Mobile Peak Shaving Generator, New Boston	261,993
2018	Replace Load Break Switch 17J3 and 17J4 on 3171 Line, Portsmouth	235,038
2019	Acquire Easement for 3701 Line, Londonderry	172,363
2020	Speech Move In - Move Out	150,070
2021	Line Terminal Addition at Monadnock Substation, Peterborough	134,651
2022	Upgrade Radio System	133,036
2023	Rebuild 316 Line, Source Feed to New London Substation, New London	130,088
2023		120,030
2025	Replace Two Switches Keene Underground, Keene	95,441
2026	Install Step Transformer and Regulator at North Swanzey Substation, Swanzey	95,366
2027	Upgrade Blaine Street Substation, Manchester	90,099
2028	Purchase and Implement Call Logic	89,827
2029	Convert 9H2, 1H13, 1H19 to 12KV, Keene	76,180
2030	Radio Narrow Banding	70,022
2030	Add Second 34.5/12.47MVA Transformer at North Rochester Substation, Rochester	69,051
2032	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
	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 2043	Construct New 115/34.5KV Substation in the Candia Road Area, Manchester Various	2,312
2043	vailous	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

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### PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

### 2010 CONSTRUCTION BUDGET DETAILS

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
	COLIED III E 4 DDO IECTO 850 000 AND OVED	
2004	SCHEDULE 4 - PROJECTS \$50,000 AND OVER	0.000.005
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

#### 2010 CONSTRUCTION BUDGET DETAILS

Number   Project Description   Budget			2010
2089         Capital Work Resulting from NESCRC Inspections, Various Locations         1,428,616           2090         Replace Falled Cable, Various Locations         1,333,062           2091         Replace Palled Cable, Various Locations         1,189,881           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-MWA Capacitors Timber Swamp Substation, Hampton         513,059           2097         Upgrades to Worst Performing Circuits, Various         479,809           2099         PSHH.COM Rearchitecture         477,808           2100         Replace Legacy READ-C7 or Radio Transmitting Units, Various Substations         428,850           2101         Replace Legacy NEAD-C7 or Radio Transmitting Units, Various Locations         448,811           2102         Construct New Phase 3165X Averil Rod, Brookine         375,009           2103         Replace Getavay Cables, Various Substations         332,934           2104         Mobile Strategy Development Project         300,010           2105         Replac	Number	Project Description	
2090   Replace Failed Cable, Various Locations   1,333,062			1,428,516
SCHEDULE 4 - PROJECTS \$50,000 AND OVER (continued)	2090		1,333,062
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 377 Line   618,853   2096   Instalt two 5.4MVA Capacitors Timber Swamp Substation, Hampton   513,058   2097   Upgrades to Worst Performing Circuits, Various   479,809   2098   Construct 3141X Lane Road, Derry   474,908   2099   Construct 3141X Lane Road, Derry   474,908   2090   Replace Legacy REDAC 70 Radio Transmitting Units, Various Substations   428,850   2101   Replace Legacy ASW Pole Top Radio Transmitting Units, Various Locations   404,861   2102   Construct New Phase 315582 Averill Road, Enrockine   375,009   2103   Replace Gelaway Cables, Various Substations   328,934   2104   Mobile Strategy Development Project   300,010   2105   Replace Gelaway Cables, Various Substations   328,934   2106   Replace Gelaway Cables, Various Substations   328,934   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   250,012   2108   Replace Gelaviated Step Step Step Transformer, Dunbarton   250,014   2110   Arc Energy Outage Notification System   200,091   2111   Arc Energy Outage Notification System   300,988   2112   Distribution Line Wire Upgrade, Various Locations   190,988   2112   Distribution Line Wire Upgrade, Various Locations   190,988   2113   Replace Circuit Switcher South Milford Substation, Milford   190,484   2114   Air Brake Switch Replacement Program, Various Locations   150,105   2116   Replace Relay Line 382 Monadnock Substation, Troy   157,153   2117   Pole Reinforcement, Various Locations   150,105   2118   Contractor Web Site UPG Redesign   157,153   2129   Pole Reinforcement Various Locations   150,105   2120   Replace Cable Injection, Various Locations   150,105   2121   Pole Reinforcement Various Locations   157,123   2122   Construct Ad			
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 Iwo 5.4MVA Capacitors Timber Swamp Substation, Hampton   513,059   2098   Upgrades to Worst Penforming Circuits, Various   479,809   2098   Construct 3141X Lane Road, Derry   474,908   2099   PSNH-COM Rearchitecture   475,080   2100   Replace Legacy REDAC 70 Radio Transmitting Units, Various Substations   428,850   2101   Replace Legacy REDAC 70 Radio Transmitting Units, Various Locations   404,881   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 2.44V to 12.54V, New London   280,012   2108   Replace Overloaded Step Transformer with Larger Step Transformer, Dunbarton   280,012   2109   Replace Overloaded Step Transformer with Larger Step Transformer, Dunbarton   280,012   2110   Arc Energy Outage Notification System   200,045   2111   Install New Underfrequency Relays, Various Substations   190,588   2112   Distribution Line Wite Ungrade, Various Substations   190,588   2113   Replace Relay Line 3152 Packer Falls Substation, Durham   157,189   2116   Replace Relay Line 3152 Packer Falls Substation, Durham   157,183   2117   NEI NI-PUC Storm Assessment   150,015   2118   Contractor Web Site UPG Redesign   150,015   2129   Pole Reinforcement, Various Locations   142,634   2120   Replace Cables 111-20   114,016   114,016   114,016   2121   Direct Buried Cables Indeplaced Nanchester   142,763   2122   Construct Additional Phases on 3133X Circuit, Windham   190,028   2123   Customer System Requirements   112,238   2124   Cu	2091	Replace Direct Buried Cable, Various Locations	1,189,891
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 314V1 Zane Road, Derry         474,908           2099         PSNH, COM Rearchitecture         457,080           2100         Replace Legacy ASE Pole Top Radio Transmitting Units, Various Substations         428,850           2101         Replace Legacy ASE Pole Top Radio Transmitting Units, Various Locations         404,881           2102         Construct New Phase 3155X2 Averil Road, Brookline         375,009           2103         Replace Getaway Cables, Various Substations         328,344           2104         Mobile Strategy Development Project         300,010           2105         Replace Strategy Development Project         300,010           2106         Enable Radio Transmitting Units to Connect to Windoor Server Center, Manchester         271,376           2107         Conversion of 46H1 Circuit from 24KV to 12,58KV, New London         280,012           2108         Replace Cables Steak With to 15,54KV, New London         280,012           2109         <	2092	GIS Capital Program	1,000,044
2095         Replace Polymer Insulators on 337 Line         618,853           2096         Install two 5,4WAV Capacitors Timber Swamp Substation, Hampton         513,059           2097         Upgrades to Worst Performing Circuits, Various         479,809           2098         Construct 3141X Lane Road, Derry         474,808           2099         PSNH-LCOM 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         404,881           2102         Construct New Phase 3155X2 Averil Road, Brockline         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 2,44V to 12,58V, New London         250,012           2108         Replace Overleaded Slep Transformer with Larger Step Transformer, Dunbarton         235,064           2109         Replacement of Routers at 1580 Elm Street, Manchester         200,045	2093	Electric System Control Center Electronic Mapboard Added to Areva System, Manchester	900,150
2096         Install two S-MAVA 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         477,809           2100         Replace Legacy REDAC 70 Radio Transmitting Units, Various Substations         428,850           2101         Replace Legacy ASW Pole Top Radio Transmitting Units, Various Locations         404,881           2102         Construct New Phase 3155X2 Avariel 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         225,646           2106         Enable Radio Transmitting Units to Connect to Windsor Server Center, Manchester         271,376           2107         Conversion of 46H1 Circuit from 24KV to 12,56K, New London         225,012           2108         Replace Overloaded Step Transformer with Larger Step Transformer, Dunbarton         235,064           2109         Replacement of Routers at 1580 Elm Street, Manchester         200,045           2111         Install New Loter Install Ave Underfrequency Relagos, Various Substatio	2094	New Business Specific Projects, Various Locations	748,776
2097         Upgrades to Worst Performing Circuits, Various         479,809           2098         Construct 3141X Lane Road, Derry         474,908           2099         PSNH-LOM Rearchitecture         457,080           2100         Replace Legacy, REDAC 70 Radio Transmitting Units, Various Substations         428,850           2101         Replace Legacy, REDAC 70 Radio Transmitting Units, Various Locations         404,881           2102         Construct New Phase 3155X2 Averil Road, Brookline         375,009           2103         Replace Getavacy Cables, Various Substations         332,934           2104         Mobile Strategy Development Project         300,010           2105         Replace Getavacy Cables, Various Substations         285,848           2106         Enable Radio Transmitting Units to Connect to Windsor Server Center, Manchester         271,375           2107         Conversion of 46H1 Circuit from 2.4kV to 12.5kV, New London         250,012           2108         Replace Central Stormers with Larger Step Transformer, Dunbarton         235,064           2109         Replacement of Routers at 1580 Elm Street, Manchester         200,045           2111         Arc Energy Outage Notification System         200,045           2111         Install New Unterferequency Relays, Various Substations         190,988           2112<	2095	Replace Polymer Insulators on 337 Line	618,853
2098         Construct 3141X Lane Road, Derry         474,908           2099         PSNH.COM Rearchitecture         457,080           2100         Replace Legacy REDAC 70 Redio Transmitting Units, Various Substations         428,850           2101         Replace Legacy ASW Pole Top Radio Transmitting Units, Various Locations         404,681           2102         Construct New Phase 3155X2 Avair 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         285,848           2106         Enable Radio Transmitting Units to Connect to Windsor Server Center, Manchester         271,376           2107         Conversion of 46ff Il 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         200,045           2111         Arc Energy Outage Notification System         200,045           2112         Distribution Line Wire Upgrade, Various Substations         190,884           2113         Replace Calvall Wire Lagrade, Various Substation, Milford         190,484	2096	Install two 5.4MVA Capacitors Timber Swamp Substation, Hampton	513,059
2099         PSNH-LCOM 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         404,881           2102         Construct New Phase 3156X2 Averil Road, Brookline         375,009           2103         Replace Gelaway 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 2.46V to 12.5kV, New London         250,012           2108         Replace Overloaded Step Transformer with Larger Step Transformer, Dunbarton         235,064           2109         Replace Cericulate Step Transformer with Larger Step Transformer, Dunbarton         235,064           2110         Arc Energy Outage Notification System         200,045           2111         Arc Energy Outage Notification System         200,045           2111         Install New Underfrequency Relays, Various Substations         190,588           2112         Distribution Line Wire Upgrade, Various Substations	2097	Upgrades to Worst Performing Circuits, Various	479,809
2100         Replace Legacy REDAC 70 Radio Transmitting Units, Various Substations         428,850           2101         Replace Legacy ASW Pole Top Radio Transmitting Units, Various Locations         404,881           2102         Construct New Phase 3155X2 Avenil 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         190,258           2112         Distribution Line Wire Upgrade, Various Substation, Millord         190,258           2113         Replace Relay Line 3152 Packer Falls Substation, Troy         157,158           2115         Replace Selay Line 3162 Packer	2098	Construct 3141X Lane Road, Derry	474,908
2101         Replace Legacy ASW Pole Top Radio Transmitting Units, Various Locations         404,881           2102         Construct New Phase 3155X2 Averil Road, Brookline         375,009           2103         Replace Geteway 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 48H1 Circuit from 2.44V to 12.58V, New London         250,012           2108         Replace Overloaded Step Transformer with Larger Step Transformer, Dunbarton         235,064           2109         Replace Cercuit State State State Mideration System         200,045           2110         Arc Energy Outage Notification System         200,045           2111         Install New Underfrequency Relays, Various Substations         190,988           2112         Distribution Line Wire Upgrade, Various         190,844           2113         Replace Circuit Switcher South Millford Substation, Millford         190,484           2114         Air Brake Switch Replacement Program, Various Locations         157,183           2115         Replace Relay Line 382 Monadnock Substation, Troy	2099	PSNH.COM Rearchitecture	457,080
2102	2100	Replace Legacy REDAC 70 Radio Transmitting Units, Various Substations	428,850
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 2.4kf to 12.5kf V, New London   250,012   2108   Replace Overloaded Step Transformer with Larger Step Transformer, Dunbarton   235,064   2109   Replacement of Routers at 1550 Elm Street, Manchester   200,094   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 382 Monadnock Substation, Durham   157,163   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 Cable Injection, Various Locations   150,019   2120   Replace Cable Injection, Various Locations   150,019   2120   Replace Cable Injection, Various Locations   142,834   2122   Replace Vault Tops, Transformers and Protectors, Manchester   147,647   2121   Direct Buried Cable Injection, Various Locations   142,834   2122   Replace Outline Milly Admanchester   142,763   2124   Purchase and Implement Bill Logic   134,732   2125   Construct Additional Phases on 3133X Circuit, Windham   130,028   2126   Customer System Requirements   125,727   19,181 New Step Transformers Blueberry Lane, Laconia   120,039   2128   C2 Data Warehouse Development   123,353   2129   Queue Optimazation Tools   112,328   2129   2120	2101	Replace Legacy ASW Pole Top Radio Transmitting Units, Various Locations	404,681
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 1550 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 Substations   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 3152 Packer Falls 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 Burlied Cable Injection, Various Locations   142,834   2122   Replace Walt Tops, Transformers and Protectors, Manchester   142,763   2124   Purchase and Implement Bill Logic   314,733   2125   Construct Additional Phases on 3133X Circuit, Windham   130,028   2126   Customer System Requirements   125,727   1nstall New Step Transformers Blueberry Lane, Laconia   120,333   2124   Replace Switch Gear on 68W6 Circuit, Laconia   104,722   2125   Construct New 34,5KY Line, Dover   10,655   2134   Replace Tower and Equipment Sheds, Various Locations   100,073   2135   Rebuild 311 and 317 Lines at Davisville Substation, Contoocook   100,165   2134   Replace Tower and Equipment Sheds, Various Locations   95,761   193,833   2126   Construct New 34,5KY Line, Dover   10,655   2134   Replace Tower and Equipment Sheds, Various Locations	2102	Construct New Phase 3155X2 Averil Road, Brookline	375,009
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         200,091           2111         Install New Underfrequency Relays, Various Substations         190,988           2112         Distribution Line Wire Upgrade, Various         190,988           2113         Replace Circuit Switcher South Milford Substation, Milford         190,484           2114         Air Brake Switch Replacement Program, Various Locations         190,216           2115         Replace Relay Line 382 Monadnock 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         145,647           2	2103	Replace Getaway Cables, Various Substations	332,934
2106         Enable Radio Transmitting Units to Connect to Windsor Server Center, Manchester         271,376           2107         Conversion of 48H1 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         190,216           2114         Air Brake Switch Replacement Program, Various Locations         190,216           2115         Replace Relay Line 3152 Packer Falls Substation, Durham         157,153           2116         Replace Relay Line 3152 Packer Falls 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	2104	Mobile Strategy Development Project	300,010
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         190,588           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         150,105           2119         Pole Reinforcement, Various Locations         142,834           2122         Replace Cables 11H2A Circuit, Manchester         147,647           2123         Rebuild 4KV Circuit in Millyard, Ma	2105	Replace Troubled Protection Equipment, Various Substations	285,646
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 Substations         190,588           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         150,015           2119         Pole Reinforcement, Various Locations         142,747           2120         Replace Cables 11H2A Circuit, Manchester         147,647           2121         Direct Buried Cable Injection, Various Locations         142,847           2122         Rebuild 4KV Circuit in Millyard, M	2106	Enable Radio Transmitting Units to Connect to Windsor Server Center, Manchester	271,376
2109         Replacement of Routers at 1580 Elm Street, Manchester         200,045           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 NI-PICU Storm Assessment         150,105           2118         Contractor Web Site UPG Redesign         150,105           2119         Pole Reinforcement, Various Locations         150,015           2119         Pole Reinforcement, Various Locations         147,647           2121         Direct Buried Cable Injection, Various Locations         142,764           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         134,73	2107	Conversion of 46H1 Circuit from 2.4kV to 12.5kV, New London	250,012
2110         Arc Energy Outage Notification System         200,045           2111         Install New Underfrequency Relays, Various         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         142,764           2123         Rebuild 4KV Circuit in Millyard, Manchester         142,764           2124         Purchase and Implement Bill Logic         134,732	2108	Replace Overloaded Step Transformer with Larger Step Transformer, Dunbarton	235,064
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         157,153           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           210         Replace Cables 11H2A Circuit, Manchester         147,647           212         Direct Burlied 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	2109	Replacement of Routers at 1580 Elm Street, Manchester	200,091
2112         Distribution Line Wire Upgrade, Various         190,558           2113         Replace Circuit Switcher South Millford Substation, Millford         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         126,727           2127         Install New Step Transformers Blueberry Lane, Laconia         120,339	2110	Arc Energy Outage Notification System	200,045
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         142,763           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         112,353           2129         Queue Optimazation Tools         112,328 <tr< td=""><td>2111</td><td>Install New Underfrequency Relays, Various Substations</td><td>190,988</td></tr<>	2111	Install New Underfrequency Relays, Various Substations	190,988
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         142,763           2123         Rebuild 4KV Circuit in Millyard, Manchester         142,763           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         112,328           2130         Web Self Service Improvements         112,328           2131	2112	Distribution Line Wire Upgrade, Various	190,558
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           2131         Replace Switch Gear on 68W6 Circuit, Laconia         104,722           2132         Cons	2113	Replace Circuit Switcher South Milford Substation, Milford	190,484
2116       Replace Relay Line 382 Monadnock Substation, Troy       157,153         2117       NEI NHPUC Storm Assessment       150,105         2118       Contractor Web Site UPG Redesign       150,015         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 31	2114	Air Brake Switch Replacement Program, Various Locations	190,216
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 Substat	2115	Replace Relay Line 3152 Packer Falls Substation, Durham	157,189
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       95,761	2116	Replace Relay Line 382 Monadnock Substation, Troy	157,153
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       95,761         2136       Replace Steel Towers, Various Locations       95,792      <	2117	NEI NHPUC Storm Assessment	150,105
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       95,761         2136       Replace Steel Towers, Various Locations       95,761         2136       Replace Steel Towers, Various Locations       95,292	2118	Contractor Web Site UPG Redesign	150,105
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       95,761         2135       Install Signal 60 Voltage Reduction Equipment, Various Substations       95,761         2136       Replace Steel Towers, Various Locations       95,791         2137       Install Second 44.8MVA Transformer at Kingston Substatio		Pole Reinforcement, Various Locations	
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       100,655         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 <td< td=""><td></td><td>Replace Cables 11H2A Circuit, Manchester</td><td>147,647</td></td<>		Replace Cables 11H2A Circuit, Manchester	147,647
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 </td <td></td> <td>· · · · · · · · · · · · · · · · · · ·</td> <td>142,834</td>		· · · · · · · · · · · · · · · · · · ·	142,834
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		Replace Vault Tops, Transformers and Protectors, Manchester	142,764
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	2123	Rebuild 4KV Circuit in Millyard, Manchester	142,753
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, Contocook       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		· · · · · · · · · · · · · · · · · · ·	134,732
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, Contocook       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		Construct Additional Phases on 3133X Circuit, Windham	
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		Customer System Requirements	
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		· · · · · · · · · · · · · · · · · · ·	
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		•	
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		•	
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		·	
2133Rebuild 311 and 317 Lines at Davisville Substation, Contoocook100,1652134Replace Tower and Equipment Sheds, Various Locations100,0732135Install Signal 60 Voltage Reduction Equipment, Various Substations95,7612136Replace Steel Towers, Various Locations95,2922137Install Second 44.8MVA Transformer at Kingston Substation, Kingston95,1122138Cascade Rearchitecture90,0432139Reconductor 3601 Line, Farmington85,005		·	
2134Replace Tower and Equipment Sheds, Various Locations100,0732135Install Signal 60 Voltage Reduction Equipment, Various Substations95,7612136Replace Steel Towers, Various Locations95,2922137Install Second 44.8MVA Transformer at Kingston Substation, Kingston95,1122138Cascade Rearchitecture90,0432139Reconductor 3601 Line, Farmington85,005		· · · · · · · · · · · · · · · · · · ·	
2135Install Signal 60 Voltage Reduction Equipment, Various Substations95,7612136Replace Steel Towers, Various Locations95,2922137Install Second 44.8MVA Transformer at Kingston Substation, Kingston95,1122138Cascade Rearchitecture90,0432139Reconductor 3601 Line, Farmington85,005		·	
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		· · · · · · · · · · · · · · · · · · ·	
2137Install Second 44.8MVA Transformer at Kingston Substation, Kingston95,1122138Cascade Rearchitecture90,0432139Reconductor 3601 Line, Farmington85,005			•
2138 Cascade Rearchitecture 90,043 2139 Reconductor 3601 Line, Farmington 85,005		· · · · · · · · · · · · · · · · · · ·	
2139 Reconductor 3601 Line, Farmington 85,005		· · ·	
2140 Replace J8770 Switch on 387 Line, Manchester 80,944		·	
	2140	Replace J8770 Switch on 387 Line, Manchester	80,944

### 2010 CONSTRUCTION BUDGET DETAILS

		2010
Number	Project Description	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 Intiatives	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	31,323,282
	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	6,150,034
	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	-4,965
	Total Non-Cash Items	1,713,883
	ESTIMATED CASH REQUIREMENTS FOR 2010 CONSTRUCTION	107,449,589

### DE 10-122 Attachment SEM-1 Page 8 of 12

### 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

### DE 10-122 Attachment SEM-1 Page 9 of 12

### PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

#### 2010 CONSTRUCTION BUDGET DETAILS

### GENERATION

Line Item Number	Project Description	2010
5035	Project Description Replace Gas Recirculator Fan Expansion Joint Unit 2, Merrimack	Budget 222,569
3033	SCHEDULE 4 - PROJECTS \$50,000 AND OVER (continued)	222,508
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	45 747 505
	Contributions and Reimbursements	15,717,565 0
	Total Non-Cash Items	15,717,565
	ESTIMATED CASH REQUIREMENTS FOR 2010 CONSTRUCTION	169,638,856

### 2010 CONSTRUCTION BUDGET DETAILS

#### TRANSMISSION

	e Item		2010
Nur	mber	Project Description	Budget
		COLISCUL S. A. DOO LECTO OTA DEED COLOR WAS ASSA	
	6004	SCHEDULE 1 - PROJECTS STARTED PRIOR TO 2010	E 740 007
	6001	Install 345/115KV Autotransformer at Deerfield Substation, Deerfield	5,746,867
	6002 6003	Reconfigure Littleton Substation, Littleton	4,737,384
		Breakers and Bus Expansion at Bridge Street Substation Upgrades, Nashua	4,257,951
	6004 6005	Install OPGW Fiber on 379 Line, Chestnut Hill Substation to Fitzwilliam Substation	4,175,113
	6006	Rebuild L175 Line, Deerfield Substation to Madbury Substation	4,151,902
	6007	Construct New 115/34.5KV Thornton Substation, Merrimack	2,732,098
	6007	Construct New 345KV Line, Maine to New Hampshire	2,479,086
		Install Bus Expansion and Protection & Control Upgrades Madbury Substation, Madbury	1,563,452
	600 <del>9</del> 6010	Replace 345KV Breakers at Scobie Pond Substation, Londonderry	1,301,155
	6011	Purchase Land for Thornton Substation, Merrimack	1,240,036
	6012	Replace Relays at Pemigewasset and Webster Substations A111 Line	1,160,906
	6013	Construct New Direct Current Line Hydro Quebec to New Hampshire	1,000,069
	6014	Construct Foundation for Spare Autotransformer at Merrimack Substation, Bow	973,987
	6015	Rebuild G192 Line, Bridge Street Substation to Power Street Substation	876,051
	6016	Build K165 Line Split between K165 and Thornton Substation, Merrimack Replace 115KV Breakers at Greggs Substation, Goffstown	720,018 697,032
	6017		•
	6018	Replace 345KV Relays on Scobie Pond Substation 363 Line, Londonderry Replace Relay at Pemigewasset Substation E115 Line, New Hampton	645,028
	6019	Construct New 115KV Eastport Substation, Rochester	601,579
	6020	Upgrade 373 Line Relay at Scobie Pond Substation, Londonderry	471,027 460,002
	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 Swanzey Substation, Swanzey	19,944
	6044	Replace 345KV Breaker at Merrimack Substation, Bow	15,055

#### 2010 CONSTRUCTION BUDGET DETAILS

### TRANSMISSION

Line Item		2010
Number	Project Description	Budget
6045	SCHEDULE 1 - PROJECTS STARTED PRIOR TO 2010 (continued)	14.000
	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
0000	Neplace Cap & 1 in bus Only insulators, 2011-2012	20,303
	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

#### 2010 CONSTRUCTION BUDGET DETAILS

### TRANSMISSION

Line Item Number	Project Description	2010 Budget
6071	SCHEDULE 5 - CONTINGENT PROJECTS Provision for Contingencies	0
	TOTAL SCHEDULE 5	0
	ESTIMATED GROSS CONSTRUCTION BUDGETED FOR 2010	51,984,363
	Less Estimated Non-Cash Items:	2 150 260
	Allowance For Funds Used During Construction Contributions and Reimbursements	3,159,360 0
	Total Non-Cash Items	3,159,360
	ESTIMATED CASH REQUIREMENTS FOR 2010 CONSTRUCTION	48,825,003

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: Request from: Susan B. Weber 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.

### DE 10-122 Attachment SEM-3 Page 2 of 6

Docket No.DE 09-180 Dated: 6/11/2010 Attachment RAB-1 Page 1

1 PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE 2 2010 ENERGY SERVICE RATE CALCULATION 3 (Dollars in 000's)										
5										
6										
7										
8 <u>Traditional Approach</u>										
9										
10 Summary of Actual and Forecasted Energy Service	~~	~ ^^~								
11 Cost For January 2010 Through December 2010	10	TAL COST	Cents per KWH (2)	Reference						
13 Fossil energy costs	s	405 004	2.00	Allechanest DAD O acces O						
14 F/H O&M, depreciation & taxes	\$	165,321 133,721		Attachment RAB-2, page 2						
15 Return on rate base		40,678		Attachment RAB-2, page 2 UPDATED for NEW BOND						
16 ISO-NE ancillary		2,317		Attachment RAB-2, page 2						
17 Capacity		14,212		Attachment RAB-2, page 2						
18 NH RPS		10,963		Attachment RAB-2, page 2						
19 RGGI costs		6,672		Attachment RAB-2, page 2						
20 Vermont Yankee		7,108		Atlachment RAB-2, page 2						
21 IPP costs (1)		28,592		Allachment RAB-2, page 2						
22 Purchases and sales		75,624		Attachment RAB-2, page 2						
23 Return on ES Deferral		348		Attachment RAB-2, page 2						
24 Merrimack projected O&M insurance proceeds		(6,500)		Attachment RAB-2, page 2						
25 Merrimack projected RPC insurance proceeds		(8,700)	(0.16)	Attachment RAB-2, page 2						
26 Company Use		(689)	(0.01)	Attachment RAB-2, page 2						
27 2009 Actual ES under/(over) recovery		4,442	0,08	Attachment RAB-2, page 2						
28										
29 Total Updated Energy Service Cost	\$	474,108	8.87	<no costs<="" impact="" on="" overall="" td=""></no>						
30 Total Updated Revenue at 8,96 cents per kwh		478,964								
31 Energy Service (Over)/Under Recovery		(4,856)								
32										
33 Forecasted Retail MWH Sales July-December 2010		2,693,785								
34 35 Increase in Energy Service Rate - cents per kwh (L31/L33) 36		(0.18)								
37 Energy Service Rate as approved in DE 09-180 - cents per kwh 38		8.96								
39 Updated Energy Service Rate - cents per kwh	-	8.78								

<sup>(1)</sup> The IPP costs represent the forecasted market value of IPP generation.

Amounts shown above may not add due to rounding.

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

Docket No.DE 09-180 Dated: 6/11/2010 Attachment RAB-2 Page 6

Sales

Cost kWh

13 14 15

> 21 22

> 26 27

23 24 25

Amounts shown above may not add due to rounding.	

3 9 0 1 <u>Return on Rate Base</u> 2	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
3													
4 Rate base 5 Net Plant 6	283,340	283,340	277,517	277,517	277,517	282,773	281,837	281,035	281,702	281,655	295,480	304,837	
7 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	
8 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	
9 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	
0 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	
1 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)	
2 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)	
3 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	
4													
5 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	
8 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%	
7 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

Savings

Return per June 2010 filing

40,678

40,788

(110)

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

DE 10-122 Attachment SEM-3 Page 3 of 6

5,345,441

0.76

2.6798%

7.9135%

10.5934%

0.882781%

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

	[A]		[B] Unamor Issuance	[C] Net Balance	[D] Annualized	[E]	[F] Ann. Int. Exp.	[G] Total Ann. Exp.	[H] Eff. Int. Rate
	Balance-LTD	Acct #s	Expense	[A] + [B]	Amor, Expense	Int Rate*	[A] X [E]	[D] + [F]	[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)		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]		[B]	[C]	[D]		[E]	[F]	[G]
	Balance-LTD		Capitalization Percentage	Embedded Cost/Return	Weighted Avg. [B] * [C]		Tax Gross-up [D]/ [1-TR]	Tax-Adjusted Return	Return By Month

52.0226%

47.9774%

100.0000%

\*--Series A is variable rate debt

LTD-use net of issuance exp-above

Statutory Tax Rate (STR) --

Capitalization---

Total

Total OCI Adj Equity

40.525%

1,026,761,920 <--incl bond

946,922,440 <--incl cap cont

1,973,684,359

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

	Issuance/Prepaid -					liscounts/prepaid -	Comp Income Amori	tization, 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	` <u>-</u>	-	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	

5.1513%

9.8100%

2.6798%

4.7066%

7.3864%

N/A

7.9135%

(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.

[H] Eff. Int. Rate

[G]/[C]

4.862%

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

	Effective Interest RateNew 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]
	PSNH NEW BOND	210,000,000	(1,721,750)	208,278,250	172,175	4.740%	9,954,000	10,126,175
	-	Bal-Issuance	Annual Amor. Expense					
	PSNH NEW BONDIssuance	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 Total OCI Adj Equity Total	818,483,670 754,839,562 1,573,323,231	208,278,250 192,082,878	1,026,761,920 946,922,440 1,973,684,359				
	_	Capitalization Percentage		Capitalization Percentage				
	LTD Equity	52.0226% 47.9774% 100.0000%		52.0226% 47.9774% 100.0000%				

33

#### Public Service Company of New Hampshire and Subsidiaries ACTUAL--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 PCRB Series A Tax-Exempt PCRB Series B Tax-Exempt - VR PCRB Series B Tax-Exempt-FR PCRB Series C Tax-Exempt PCRB Series D Tax-Exempt PCRB Series E Tax-Exempt FMB Series L - 2004 FMB Series M - 2005 FMB Series N - 2007	89,250,000 89,250,000 108,985,000 75,000,000 44,800,000 50,000,000 50,000,000 70,000,000	see detail below	(18,667) (3,340,562) (1,000) (4,319,661) (4,735,920) (950,386) (547,242) (275,150) (590,576) (661,651)	(18,667) 85,909,438 (1,000) 84,930,339 104,249,080 74,049,614 44,252,758 49,724,850 49,409,424 69,338,349	224,000 301,404 - 389,744 427,301 85,749 49,375 63,496 23,160 89,211	0.32% 0.32% 4.75% 5.45% 6.00% 6.00% 5.25% 5.60% 6.15%	285,600 - 4,239,375 5,939,683 4,500,000 2,688,000 2,625,000 2,800,000 4,305,000	224,000 587,004 4,629,19 6,366,89 4,585,749 2,737,375 2,688,496 2,823,160 4,394,211	
FMB Series O - 2008 FMB Series P - 2009 Total Debt	110,000,000 150,000,000 837,285,000		(1,666,116) (1,694,400) (18,801,330)	108,333,884 148,305,600 818,483,670	206,117 172,778 2,032,336	6.00% 4.50%	6,600,000 6,750,000 40,732,658	6,806,117 6,922,778 42,764,994	5.2249%
Actual Per Books (credit balance) incl. OCI Less: Bal 219.NEswap 1(debit bal) Less: Bal 219.NEswap 2(credit bal) Equity less OCI	754,135,000 (3) (1,950,339) (3) 1,245,777 754,839,562								
C. N. W.	[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 LTDuse net of issuance exp-above Total OCI Adj Equity Total	818,483,670 754,839,562 1,573,323,231		52.0226% 47.9774% 100.0000%	5.2249% 9.8100%	2.7181% 4.7066% 7.4247%		N/A 7.9135%	2.7181% 7.9135% 10.6317%	0.885973%
*Series A is variable rate debt			52.0226% 47.9774%						

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

40.525%

Statutory Tax Rate (STR) -

	lssuance/Prepaid -			Loss on reacquisition/a	Comp Income Amortization, net			Total - Issuance and Loss on reacquisition/discou			
	Acct #	Bal-Issuance *	Amor. Expense*	Acct #	Bal-Loss on Re*	Amor. Expense*	1	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

<sup>(1)</sup> 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: Request from: Stephen R. Hall

**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.

### DE 10-122 Attachment SEM-4 Page 2 of 8

Attachment RAB-1 Page 1

	1 PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE								
2	2010 ENERGY SERVICE RATE CAL	CULATIC	N-Returns Re	ecalculated for the \$5	00M Bond Issue				
3	<b>;</b>	(Doll	ars in 000's)						
4		•	•						
5									
6									
7									
	Traditional Approach								
9									
	Summary of Actual and Forecasted Energy Service								
	Cost For January 2010 Through December 2010	TO	TAL COST	Cents per KWH (2)	Reference				
12									
	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					
	(PP 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)		Attachment RAB-2, page 2				
	Merrimack projected RPC insurance proceeds		(8,700)		Attachment RAB-2, page 2				
	Company Use		(689)		Attachment RAB-2, page 2				
	2009 Actual ES under/(over) recovery		4,442	80.0	Attachment RAB-2, page 2				
28									
	Total Updated Energy Service Cost	\$	474,012	8.87	<no costs<="" impact="" on="" overall="" td=""></no>				
	Total Updated Revenue at 8.96 cents per kwh		478,964						
31 32	Energy Service (Over)/Under Recovery		(4,953)						
33 34	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.

Attachment RAB-2 Page 6

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

8 9 10 11 12	Return on Rate Base	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
13 14	Rate base													
15 16	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	
17	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	1
18	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	1
19	Mat'is 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	
20	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	
21	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)	
22	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)	
23	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	
24	•			,										
25	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	
26	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%	
27	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

Savings

Return per June 2010 filing

40,582

40,788

Amounts shown above may not add due to rounding.

5,345,441

0.76

Sales

Cost kWh

L

6

### DE 10-122 Attachment SEM-4 Page 4 of 8

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

			s Filed /11/2010		o Forma Bond Issue	
		Strat	nded Cost	Strai	nded 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	

### DE 10-122 Attachment SEM-4 Page 5 of 8

Q-TECH-004 Dated: 07/26/10 Page 5 of 8

Attachment RAB - 1 Page 6

#### 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	Ja	ctual nuary 2010	Acti Febru 201	uary	M	ctual arch	•	ctual \pril	N	ctual Nay 010	estimate June 2010	the s	otal for ix months ended 6/30/10
1 2	Ongoing Costs - IPP Amortization and return on IPP Buydown/Buyout Savings (1)	\$	237	\$ 2	249	\$	274	\$_	292	\$	272	\$ 237	\$	1,561
3 4 5 6	IPP Ongoing costs: Total IPP Cost  less: IPP at Market Cost Above Market IPP Cost		5,441 3,439 2,002	2	488 244 245		5,470 2,089 3,381		5,214 2,315 2,899		4,772 2,340 2,432	 4,461 2,011 2,450		29,846 14,438 15,408
7	Total Part 2 Costs	\$	2,239	\$ 2,4	194	\$	3,654	\$	3,191	\$ 2	2,703	\$ 2,687	\$	16,969
	Ongoing Costs - Return													
8	2009 Adjustment		11		-		-		-		-	-		11
9 10	Return on ADIT - Securitized Stranded Costs (1)		(490)	(4	178)		(467)		(452)		(441)	(430)		(2,757)
	Return on Yankee Decommissioning 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)	\$ (5	19)	\$	(504)	\$	(484)	\$	(470)	\$ (460)	\$	(2,955)
16	Total Part 2 Ongoing Costs and Return	<u>\$</u>	1,721	\$ 1,9	75	\$	3,150	\$ :	2,707	\$ 2	2,233	\$ 2,227	\$	14,013

<sup>17</sup> Amounts shown above may not add due to rounding.

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

### DE 10-122 Attachment SEM-4 Page 6 of 8

Q-TECH-004 Dated: 07/26/10 Page 6 of 8

Attachment RAB - 1 Page 7

#### PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

### 2010 SCRC RATE CALCULATION

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

000's

		<u> </u>					Re-esti	mat	-ρ					the	Total for twelve months
	SCRC Part 2	1 ,	July	A	ugust	Sep	tember			Nov	ember/	Dec	ember:		ended
	Ongoing Costs		2010	:	2010		2010	2	2010		2010		2010		12/31/10
	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

<sup>17</sup> Amounts shown above may not add due to rounding.

<sup>(1)</sup> 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 PCRB Series A Tax-Exempt PCRB Series A Tax-Exempt - VR PCRB Series B Tax-Exempt-FR PCRB Series C Tax-Exempt PCRB Series D Tax-Exempt PCRB Series E Tax-Exempt PCRB Series E Tax-Exempt FMB Series L - 2004 FMB Series L - 2007 FMB Series N - 2007 FMB Series O - 2008 FMB Series P - 2009 PSNH NEW BOND Total Debt	89,250,000 108,985,000 75,000,000 44,800,000 50,000,000 70,000,000 110,000,000 150,000,000 150,000,000 1,337,285,000	see detail below	(18,667) (3,340,562) (1,000) (4,319,661) (4,735,920) (950,386) (547,242) (275,150) (590,576) (661,651) (1,666,116) (1,694,400) (4,017,500) (22,818,830)	85,909,438 (1,000) 84,930,339 104,249,080 74,049,614 44,252,758 49,724,850 49,409,424 69,338,349 108,333,884	224,000 301,404 389,744 427,301 85,749 49,375 63,496 23,160 89,211 206,117 172,778 401,750 2,434,086	0.32% 0.32% 4.75% 5.45% 6.00% 5.25% 5.60% 6.15% 6.00% 4.50%	285,600 4,239,375 5,939,683 4,500,000 2,688,000 2,625,000 2,800,000 4,305,000 6,000,000 6,750,000 23,700,000 64,432,658	224,000 587,004 - 4,629,119 6,366,984 4,585,749 2,737,375 2,688,496 2,823,160 4,394,211 6,806,117 6,922,778 24,101,750 66,866,744	5.0870%
Capitalization LTDuse net of issuance exp-above Total OCI Adj Equity Total	[A]  Balance-LTD  1,314,466,170 1,212,255,236 2,526,721,405	<incl bond<br=""><incl cap="" cont<="" td=""><td>[B] Capitalization Percentage 52.0226% 47.9774% 100.0000%</td><td>[C] Embedded Cost/Return 5.0870% 9.8100%</td><td>[D] Weighted Avg. [B] * [C] 2.6464% 4.7066% 7.3530%</td><td></td><td>[E] Tax Gross-up [D]/ [1-TR] N/A 7.9135%</td><td>[F] Tax-Adjusted Return 2.6464% 7.9135% 10.5599%</td><td>[G] Return By Month </td></incl></incl>	[B] Capitalization Percentage 52.0226% 47.9774% 100.0000%	[C] Embedded Cost/Return 5.0870% 9.8100%	[D] Weighted Avg. [B] * [C] 2.6464% 4.7066% 7.3530%		[E] Tax Gross-up [D]/ [1-TR] N/A 7.9135%	[F] Tax-Adjusted Return 2.6464% 7.9135% 10.5599%	[G] Return By Month 

\*-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]		[B] Unamor Issuance	[C] Net Balance	[D] Annualized	[E]	[F] Ann. Int. Exp.	[G] Total Ann. Exp.	[H]
	Balance-LTD	Acct #s	Expense	[A] + [B]	Amor, Expense	Int Rate*	[A] X [E]	[D] + [F]	Eff. Int. Rate [G]/[C]
				15-11-12-1	THEORY EMPERIES	menace	1217(12)	10] , [1]	<u> </u>
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%	200,000	007,001	
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%

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	[A] Balance-LTD	[B] Capitalization Percentage	[C] Embedded Cost/Return	[D] Weighted Avg. [B] * [C]	[E] Tax Gross-u <sub>1</sub> [D]/ [1-TI		[G] Return By Month
Capitalization— LTD—use net of issuance exp-above Total Equity (calculated at 60/40 from LTD) Total	1,314,466,170 876,310,780 2,190,776,949	60.0000% 40.0000% 100.0000%			N/A 5.3	3.0522 304% 5,3804 8.4326	4

<sup>\*-</sup>Series A is variable rate debt

Statutory Tax Rate (STR) -

40.525%