Testimony of David E. Tufts

Granite State Electric Company d/b/a National Grid Docket No. DE 10-\_\_\_\_ Testimony of D.E. Tufts

## **Direct Testimony**

of

**David E. Tufts** 

Granite State Electric Company d/b/a National Grid Docket No. DE 10-\_\_\_\_ Testimony of D.E. Tufts

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1	I.	<b>INTRODUCTION AND QUALIFICATIONS</b>
2	Q.	Mr. Tufts, please state your full name and business address.
3	A.	My name is David E. Tufts. My business address is 40 Sylvan Road, Waltham,
4		Massachusetts 02451.
5		
6	Q.	By whom are you employed and in what position?
7	A.	I am Director, Electric Distribution and Generation Revenue Requirements for National
8		Grid USA Service Company, Inc. ("Service Company"). The Service Company provides
9		engineering, financial, administrative and other technical support to subsidiary companies
10		of National Grid USA. My current duties include revenue requirements oversight for
11		National Grid's electric distribution and generation activities in the US, including Granite
12		State Electric Company d/b/a National Grid ("National Grid" or "the Company").
13		
14	Q.	Please provide a brief summary of your educational background.
15	A.	In 1983, I earned a Bachelor of Science degree in Accounting, from Stonehill College in
16		Easton, Massachusetts.
17		
18	Q.	Please describe your professional background.
19	A.	From 1981 through April 2000, I was employed by various subsidiary companies of
20		Eastern Utilities Associates ("EUA"), including EUA Service Corporation which
21		provided accounting, financial, engineering, planning, data processing and other services
22		to all EUA System companies. I joined EUA's accounting department in 1983. I held

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1		positions of increasing responsibility in accounting and was promoted to the position of
2		Manager of Accounting Services in 1991. The EUA System was acquired by National
3		Grid USA in early 2000, at which time I joined the Service Company. In January 2009 I
4		became Director, Electric Distribution and Generation Revenue Requirements.
5		
6	Q.	Have you previously testified before the New Hampshire Public Utilities
7		Commission ("NHPUC" or "Commission")?
8	A.	Yes. I have previously testified before the Commission in Docket DE 09-094.
9		
10	II.	PURPOSE OF TESTIMONY
11	Q.	What is the purpose of this testimony?
12	A.	This testimony supports the Company's request for Commission approval to recover the
13		incremental operating and maintenance ("O&M") and capital investment allowance
14		expense associated with the Vegetation Management Program ("VMP") and Reliability
15		Enhancement Program ("REP") implemented during fiscal year 2010. Resulting from the
16		Company's Fiscal Year 2010 REP and VMP Report ("2010 REP/VMP Report") included
17		in this filing, the Company is seeking to recover the incremental O&M expense of
18		\$1,047,770 above the base O&M amount of \$1,360,000 through the REP/VMP
19		Adjustment Provision, and also to recover a REP Capital Investment Allowance of
20		\$163,663 which is the revenue requirement associated with \$876,243 of capital
21		investment for fiscal year 2010.

22

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1		The Company has calculated an annual rate adjustment of \$1,123,095 (including interest
2		on the O&M recovery during the recovery period) effective for usage on and after July 1,
3		2010 associated with the REP Capital Investment Allowance and the REP/VMP
4		Adjustment Provision. The REP Capital Investment Allowance revenue requirement of
5		\$163,663 translates into a percentage increase of 0.79% to base distribution rates. The
6		incremental O&M expense of \$1,073,092 (including interest) translates into a proposed
7		REP/VMP Adjustment Factor of \$0.00125 per kilowatt-hour. The VMP/REP
8		Adjustment Provision and REP Capital Investment Allowance revenue requirements and
9		rate design calculations are set forth in Schedules DET-1 and DET-2 respectively, to this
10		testimony. This filing also presents the reconciliation of the revenue related to the
11		existing REP/VMP Adjustment Factor that went into effect August 1, 2009 and will
12		continue through June 30, 2010.
13		
14	III.	INCREMENTAL REP/VMP O&M EXPENSE
15	Q.	Is the Company's request to recover the incremental REP/VMP O&M expense
16		incurred during fiscal year 2010 consistent with the terms of the comprehensive
17		settlement agreement approved by the Commission in Docket No. DG 06-107
18		("Settlement Agreement")?
19		
	A.	Yes. As required by the Settlement Agreement, on February 15, 2009 the Company
20	A.	Yes. As required by the Settlement Agreement, on February 15, 2009 the Company provided its proposed REP and VMP to Staff for fiscal year 2010 for Staff's review. The
	A.	

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1		Agreement at page 5 of Exhibit GSE-8 establishes a base O&M expense amount
2		approximately equal to \$1,360,000 for fiscal years 2009 through 2013. Actual expenses
3		incurred by the Company in implementing the O&M components of the annual REP and
4		VMP, as agreed to with Staff, shall be reconciled to the base O&M amount of \$1,360,000
5		and shall be subject to the REP/VMP Adjustment Provision. Following review and
6		discussion, the Company and Staff agreed to an O&M budget of \$1,943,966 for hazard
7		tree removals for fiscal year 2010, which was filed with the Commission on December
8		23, 2009. As shown in the 2010 REP/VMP Report, the Company incurred \$2,407,770 in
9		REP/VMP O&M expenses during fiscal year 2010. The Company is seeking recovery of
10		the incremental O&M expense above the base amount of \$1,360,000, to the actual O&M
11		expenses incurred for fiscal year 2010 of \$2,407,770, or \$1,047,770 pursuant to Exhibit
12		GSE-8, Section I of the Settlement Agreement which allows for the recovery of
13		deviations that are reasonable and prudent.
14		
15	IV.	<b>REP CAPITAL INVESTMENT ALLOWANCE</b>
16	Q.	Is the calculation of the REP Capital Investment Allowance included in the
17		Company's proposal consistent with the terms of the Settlement Agreement?
18	A.	Yes, it is. The Company is proposing to recover the incremental revenue requirement of
19		\$163,663 associated with \$876,243 of capital investments associated with fiscal year
20		2010. The calculation mirrors the calculation agreed to in the Settlement Agreement as
21		shown in Exhibit GSE-8, Attachment 1 of that document.

22

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1	Q.	Did the Company make any changes to the revenue requirement calculation from
2		that contained in the Settlement Agreement?
3	A.	Yes. The Company updated the composite depreciation rate and the property tax rate to
4		reflect the actual data for calendar year 2009. These new rates are reflected on Schedule
5		DET-1, page 3, lines 4 and 35, respectively.
6		
7	Q.	How has the Company determined the capital investment amount included in the
8		REP Capital Investment Allowance revenue requirement calculation contained on
9		Schedule DET-1?
10	A.	Pursuant to the terms of the Settlement Agreement, Exhibit GSE-8 at Page 7,
11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28		"The Company shall track all capital investments made in accordance with the REP for each fiscal year including FY 2008 though 2013. At the same time that the Company makes its reconciliation filing for the REP/VMP Adjustment reconciliation, the Company shall file a report detailing the actual amount of capital investments made in accordance with implementing the REP during the prior fiscal year. The report shall include a calculation of the revenue requirement for adding these additional capital investments into rate base, using the imputed capital structure and rates set forth in Section 3.(C) of the Rate Plan, and as illustrated on the accompanying Attachment 1. Provided that the investments were made in accordance with the REP, the Company will be allowed, subject to Commission approval, a permanent increase in its distribution rates to recover the annual revenue requirement for those investments. This permanent REP Capital Investment Allowance will take effect for usage on and after July 1, at the same time as any REP/VMP Adjustments are implemented for the preceding fiscal year as discussed in section (D) above."
28 29		As indicated in the 2010 REP/VMP Report, the Company invested \$876,243 in REP
30		capital investments in fiscal year 2010. The Settlement Agreement provides for the
31		recovery, subject to Commission approval, of revenue requirement associated with actual

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1		capital investment. Therefore, the Company is basing the revenue requirement
2		calculation on the \$876,243 actual capital investment for fiscal year 2010.
3		
4	Q.	Would you please walk through the revenue requirement calculation contained on
5		Schedule DET-1?
6	A.	Certainly. Lines 1 through 28 calculate the rate base upon which the Company's return
7		allowance is calculated. As shown on Line 1 and Line 2 in the "FY 2010" column, the
8		fiscal year 2010 annual and cumulative REP program spend is \$876,243 as previously
9		discussed. Lines 4 through 22 calculate the deferred tax reserve based on the
10		depreciation rate timing difference between book and tax depreciation rates. The
11		composite book depreciation rate was based on actual data for calendar year 2009 and
12		equals 3.71%. The tax depreciation rate reflects the MACRS 20 year utility property year
13		1 rate of 3.75%, the year 2 rate of 7.22 % and the year 3 rate of 6.68%. The resulting
14		cumulative book/tax timing difference is \$79,947. The cumulative deferred tax reserve
15		equals the cumulative book/tax timing difference times the effective federal and state tax
16		rate, incorporating a 8.5% state rate, of 40.53%, or \$32,399. The Company's year-end
17		net rate base of \$2,118,451, upon which the Company's return allowance is calculated, is
18		shown on Line 28 and consists of the cumulative REP capital investment through fiscal
19		year 2010, or \$2,326,243, accumulated book depreciation of \$175,394 and accumulated
20		deferred tax reserves of \$32,399.

21

### 22 **Q.** Please continue.

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1	A.	As agreed to in the Settlement Agreement, the return allowance for the REP capital
2		investment allowance for each July 1 rate adjustment is based on the prior fiscal year-end
3		rate base times the stipulated pre-tax weighted average cost of capital from the Settlement
4		Agreement as shown on Lines 43 through 49, or 11.91%. The resulting return allowance
5		equals the fiscal year-end rate base of \$2,118,451 times the stipulated pre-tax return rate
6		of 11.91%, or \$252,262 as shown on Line 33. Annual depreciation expense of \$86,304
7		and property taxes of \$66,676 are added to the return amount to arrive at the total revenue
8		requirement of \$405,242. The property tax amount is based on the actual ratio of
9		municipal tax expense to net plant in service for calendar year 2009 applied to the fiscal
10		year-end net plant in service, or the sum of lines 25 and 26.
11		
11		
12	Q.	What is reflected in the subsequent columns shown on page 3 of your Schedule
	Q.	What is reflected in the subsequent columns shown on page 3 of your Schedule DET-1?
12	<b>Q.</b> A.	
12 13		DET-1?
12 13 14		<b>DET-1?</b> The Company provided its proposed REP and VMP budgets and plan for fiscal year 2011
12 13 14 15		<b>DET-1?</b> The Company provided its proposed REP and VMP budgets and plan for fiscal year 2011 to Staff on February 12. Although the Company has not yet reached agreement with
12 13 14 15 16		<b>DET-1?</b> The Company provided its proposed REP and VMP budgets and plan for fiscal year 2011 to Staff on February 12. Although the Company has not yet reached agreement with Staff regarding the final budget to be implemented for fiscal year 2011, the REP
12 13 14 15 16 17		<b>DET-1?</b> The Company provided its proposed REP and VMP budgets and plan for fiscal year 2011 to Staff on February 12. Although the Company has not yet reached agreement with Staff regarding the final budget to be implemented for fiscal year 2011, the REP investment target for fiscal year 2011 was established at \$653,000. For illustrative
12 13 14 15 16 17 18		<b>DET-1?</b> The Company provided its proposed REP and VMP budgets and plan for fiscal year 2011 to Staff on February 12. Although the Company has not yet reached agreement with Staff regarding the final budget to be implemented for fiscal year 2011, the REP investment target for fiscal year 2011 was established at \$653,000. For illustrative purposes, that target was maintained for fiscal year 2012 and actual investments for that
12 13 14 15 16 17 18 19		<b>DET-1?</b> The Company provided its proposed REP and VMP budgets and plan for fiscal year 2011 to Staff on February 12. Although the Company has not yet reached agreement with Staff regarding the final budget to be implemented for fiscal year 2011, the REP investment target for fiscal year 2011 was established at \$653,000. For illustrative purposes, that target was maintained for fiscal year 2012 and actual investments for that year were assumed to be at the targeted level. The calculation of the cumulative revenue

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1	revenue requirement less the previous year's cumulative revenue requirement, shown on
2	Line 40 of page 3.

3

### 4 V. <u>SUMMARY</u>

### 5 Q. Would you please summarize Schedule DET-1 to your testimony?

6 A. Pages 1 of 3 provide a summary of estimated rate adjustments for the Incremental

7 VMP/REP O&M spend and REP capital investment allowance. The columns titled

8 "07/01/09" and "07/01/2010" represent actual data. The column titled "07/01/10" is the

9 basis for the rate adjustment to be implemented on July 1, 2010. For subsequent years

10 the annual rate adjustments are illustrative only and equal the sum of the previously

11 described annual Incremental VMP/REP O&M spend reflected on Page 2 of 3 and the

12 annual REP capital investment allowance reflected on Page 3 of 3. Those subsequent

13 year rate adjustments will be the subject of annual filings before the Commission. The

14 incremental annual revenue requirement to be recovered through the Company's

15 distribution rates commencing July 1, 2010 amounts to \$1,097,601.

16

### 17 VI. <u>RATE DESIGN</u>

Q. Is the procedure for adjusting distribution rates for the REP Capital Investment
 Allowance and REP/VMP Adjustment Provision consistent with the terms of the
 Settlement Agreement?

A. Yes. The rate design in Schedule DET-2 of my testimony is consistent with the terms of
the Settlement Agreement and is the same procedure used to adjust base distribution

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1		charges for the rate reductions, pursuant to the Settlement Agreement, which took place
2		for usage on and after August 11, 2007 and for usage on and after January 1, 2008. It is
3		also the same procedure used to adjust base distribution rates associated with the REP
4		Capital Investment Allowance implemented for usage on and after August 1, 2009
5		following Commission approval of the Company's REP Capital Allowance for fiscal year
6		2009 in Order No. 24,998 in Docket DE 09-094.
7		
8	Q.	Please describe the procedure for adjusting distribution rates for the REP Capital
9		Investment Allowance.
10	A.	The procedure for adjusting distribution rates is presented in Schedule DET-2. As
11		presented on Page 1 of Schedule DET-2, the Company simply divides the capital
12		investment allowance related to the REP on line (1) by the forecasted annual distribution
13		revenue for the twelve month period ended June 30, 2011 on line (2) to calculate the
14		percentage increase on line (3) which is then applied to each of the Company's base
15		distribution charge components. The calculation of the forecasted annual distribution
16		revenue is presented on Page 2 of Schedule DET-2.
17		
18	Q.	Please describe the procedure for calculating the REP/VMP Adjustment Factor.
19	A.	The procedure for calculating the REP/VMP Adjustment Factor is also presented in
20		Schedule DET-2. As presented on Page 3 of Schedule DET-2, the Company simply
21		divides incremental O&M expense related to the REP and VMP, including interest on
22		Line (3), by the Company's estimated kWh deliveries for the twelve month period ended

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1		June 30, 2011 on Line (4) to calculate the adjustment factor on Line (5) which is then
2		applied to all kWh's billed to customers. The calculation of interest is presented on Page
3		4 of Schedule DET-2. The calculation of the new base distribution rates as well as the
4		net proposed total distribution charges to be billed to customers is presented on Page 5 of
5		Schedule DET-2.
6		
7	Q.	Has the Company included a reconciliation of the existing REP/VMP Adjustment
8		Factor?
9	A.	Yes. Pursuant to the Settlement Agreement, this reconciliation is only associated with
10		the recovery (or refund) of approved incremental O&M expense. This reconciliation is
11		presented in Schedule DET-3. Of the \$113,832 of fiscal year 2009 incremental O&M
12		expense above base O&M expense to be collected through the currently effective
13		REP/VMP Adjustment Factor of \$0.00014 per kWh, \$86,836 has been collected through
14		April 2010. Any remaining balance after the end of the recovery period, positive or
15		negative, will be reflected as an adjustment in the reconciliation of the proposed
16		REP/VMP Adjustment Factor in the month of July 2010.
17		
18	VII.	EFFECTIVE DATE AND BILL IMPACT
19	Q.	How and when is the Company proposing that these rate changes be implemented?
20	A.	Consistent with the Commission's rules on the implementation of rate changes, the
21		Company is proposing that these distribution rate changes be made effective for usage on
22		and after July 1, 2010.

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1	Q.	Has the Company determined the impact of these rate changes on customer bills?
2	A.	Yes. These bill impacts are included as Schedule DET-4. Schedule DET-4 shows that
3		for a typical residential 500 kilowatt-hour Default Service customer, the bill impact of the
4		rates proposed for July 1, 2010, as compared to rates in effect today, is a bill increase of
5		\$0.70, or 1.1%, from \$66.39 to \$67.09. In addition, a bill comparison for a Default
6		Service residential customer with an average kilowatt-hour usage of 640, which is the
7		average monthly usage over the 12 months ending April 2010, has also been included on
8		Page 1 of Schedule DET-4. The total bill impact of the rates proposed in this filing, as
9		compared to rates in effect today, is a bill increase of \$0.91 or 1.1%, from \$85.57 to
10		\$86.48. For other customers, increases range from 1.0% to 1.2%.
11		
12	Q.	Has the Company prepared revised tariff pages reflecting the proposed rates?
13	A.	Yes. The revised tariff pages are set forth in Schedule DET-5.
14		
15	VIII.	CONCLUSION
16	Q.	Does that conclude your testimony?
17	A.	Yes, it does.

Schedules of David E. Tufts

Granite State Electric Company d/b/a National Grid Docket No. DE 10-\_\_\_\_ Witness: D.E. Tufts

### Schedules Table of Contents

Schedule DET-1	Revenue Requirements
Schedule DET-2	Rate Design
Schedule DET-3	Reconciliation of Recovery of FY 2009 Incremental O&M
	Expense Above Base O&M Expense
Schedule DET-4	Typical Bill Impacts
Schedule DET-5	Revised Tariff Pages

Schedule DET-1

Granite State Electric Company d/b/a National Grid Docket No. DE 10-\_\_\_\_ Witness: D.E. Tufts

Schedule DET-1 Revenue Requirement

#### Granite State Electric Company Incremental REP Program Annual Rate Changes FY 2010

4	Annual Incremental Rate Adjustments	<u>07/01/2007</u>	<u>07/01/2008</u>	<u>07/01/2009</u>	<u>07/01/2010</u>	<u>07/01/2011</u>	<u>07/01/2012</u>
1	REP and VMP O&M Program	\$0	\$0	\$113,832	\$1,047,770	\$0	\$0
3	REP Capital Program	\$0	\$165,840	\$75,740	\$163,663	\$102,296	\$98,117
4 5	Total for Fiscal Year	\$0	\$165,840	\$189,572	\$1,211,433	\$102,296	\$98,117
6 7	Termination of Prior Period O&M Recovery	\$0	\$0	\$0	(\$113,832)	(\$1,047,770)	\$0
8 9	Net Change in Recovery	\$0	\$165,840	\$189,572	\$1,097,601	(\$945,474)	\$98,117

Notes: Line 1 From Page 2 of 3 Line 15. Line 3 From Page 3 of 3 Line 40. Line 5 Line 1 + Line 3. Line 7 Line 1

#### Granite State Electric Company Incremental VMP and REP O&M Program Computation of Annual Revenue Requirement FY 2010

Ine	cremental VMP and REP O&M Spend	FY <u>2008</u>	FY <u>2009</u>	FY <u>2010</u>	FY <u>2011</u>	FY <u>2012</u>
1 2	Actual VMP and REP Program Spending	\$2,169,258	\$1,477,916	\$2,407,770	\$1,360,000	\$1,360,000
2 3 4	Amount Subject to Proposed Recovery	\$1,950,000	\$1,473,832	\$2,407,770	\$1,360,000	\$1,360,000
4 5 6	Amount Subject to Recovery	\$1,950,000	\$1,473,832	\$2,407,770	\$1,360,000	\$1,360,000
7	VMP and REP Base Spending Level	\$1,950,000	\$1,360,000	\$1,360,000	\$1,360,000	\$1,360,000
8 9	Total Revenue Requirement	\$0	\$113,832	\$1,047,770	\$0	\$0

Notes:

Line 1 Actual VMP and REP program spending for fiscal years 2008, 2009 and 2010. Projected spending for all other years.

Line 3 Approved FY 2010 program budget of \$1,943,066 pursuant to the Company's December 23, 2009 REP and VMP revised plan submission plus additional REP/VMP O&M spending of \$463,804. Approval of FY2011 is currently pending beforethe NHPUC.

Line 5 Lesser of Line 1 and Line 3.

Line 7 VMP and REP base spending level per Merger Settlement Agreement in Docket No. DG 06-107.

Line 9 Line 5 minus Line 7.

Granite State Electric Company d/b/a/ National Grid Docket No. DE 10-\_\_\_\_ Schedule DET-1 Page 3 of 3

#### Granite State Electric Company Incremental REP Capital Program Computation of Revenue Requirement FY 2010

1	Deferred Tax Calculation		FY 2008	FY <u>2009</u>	FY <u>2010</u>	FY <u>2011</u>	FY <u>2012</u>	FY <u>2013</u>
1	REP Progam Annual Spend	/1	\$950,000	\$500,000	\$876,243	\$653,000	\$653,000	
2	Cumulative REP Program Spend	/1	\$950,000	\$1,450,000	\$2,326,243	\$2,979,243	\$3,632,243	
3	Cumulative KEI Trogram Spend		\$950,000	\$1,450,000	\$2,520,245	\$2,979,243	\$5,052,245	
4	Book Depreciation Rate (a)		3.70%	3.72%	3.71%	3.71%	3.71%	
5	20 YR MACRS Tax Depr. Rates		3.75%	7.22%	6.68%	6.18%	5.71%	
6	Vintage Year Tax Depreciation:							
7	Year 1 Spend		\$35,625	\$68,581	\$63,432	\$58,682	\$54,274	
8	Year 2 Spend			\$18,750	\$36,095	\$33,385	\$30,885	
9	Year 3 Spend				\$32,859	\$63,256	\$58,507	
10	Year 4 Spend					\$24,488	\$47,140	
11	Year 5 Spend						\$24,488	
12								
13	Annual Tax Depreciation		\$35,625	\$87,331	\$132,386	\$179,810	\$215,293	
14	Cumulative Tax Depreciation		\$35,625	\$122,956	\$255,341	\$435,151	\$650,444	
15			<b>#25.150</b>	0.52 0.40	<b>#0( 204</b>	¢110.520	\$124 <i>75(</i>	
16	Book Depreciation		\$35,150	\$53,940 \$80,000	\$86,304	\$110,530	\$134,756 \$420,680	
17 18	Cumulative Book Depreciation		\$35,150	\$89,090	\$175,394	\$285,924	\$420,680	
19	Book/Tax Timer		\$475	\$33,866	\$79,947	\$149,228	\$229,764	
20	Effective Tax Rate		40.53%	40.53%	40.53%	40.53%	40.53%	
21								
22	Deferred Tax Reserve		\$192	\$13,724	\$32,399	\$60,474	\$93,112	
23								
24	Rate Base Calculation							
25	Plant In Service		\$950,000	\$1,450,000	\$2,326,243	\$2,979,243	\$3,632,243	
26	Accumulated Depreciation		(\$35,150)	(\$89,090)	(\$175,394)	(\$285,924)	(\$420,680)	
27	Deferred Tax Reserve		(\$192)	(\$13,724)	(\$32,399)	(\$60,474)	(\$93,112)	
28	Year End Rate Base		\$914,658	\$1,347,186	\$2,118,451	\$2,632,845	\$3,118,451	
29								
30	Revenue Requirement Calculation							
31	Year End Rate Base		\$914,658	\$1,347,186	\$2,118,451	\$2,632,845	\$3,118,451	
32	Pre-Tax ROR		11.91%	11.91%	11.91%	11.91%	11.91%	
33	Return and Taxes		\$108,916	\$160,421	\$252,262	\$313,516	\$371,341	
34	Book Depreciation	2 1 00/	\$35,150	\$53,940	\$86,304	\$110,530	\$134,756	
35 36	Property Taxes (b) Annual Revenue Requirement	3.10%	\$21,773 \$165,840	\$27,218 \$241,579	\$66,676 \$405,242	\$83,493 \$507,539	\$99,558 \$605,656	
30 37	Annual Revenue Requirement		\$105,840	\$241,379	\$403,242	\$307,339	\$003,030	
38	Annual Rate Adjustment			7/1/2008	7/1/2009	7/1/2010	7/1/2011	7/1/2012
39	Annual Katt Aujustitent		_	//1/2000	//1/2009	//1/2010	//1/2011	//1/2012
40	Incremental Annual Rate Adjustment			\$165,840	\$75,740	\$163,663	\$102,296	\$98,117
41	5		=					
42								
	Imputed Capital Structure (c)				Weighted			
44			Ratio	Rate	Rate	Pre Tax		
45	Long Term Debt		50.00%	7.54%	3.77%	3.77%		
46								
47	Common Equity		50.00%	9.67%	4.84%	8.14%		
48			100.000		0.6151			
49		:	100.00%	=	8.61%	11.91%		

/1 Actual REP capital spending for FY2008, FY2009 and FY 2010 exceeded the REP progam annual spend targets of \$950,000, \$500,000 and \$620,000, respectively.

(a) Actual 2009 Composite Depreciation rate for distribution property.

(b) Actual 2009 ratio of municipal tax expense to net plant in service.

(c) Capital structure per Merger Settlement in Docket DG 06-107, Exhibit 1, Section 3(c).

Schedule DET-2

Granite State Electric Company d/b/a National Grid Docket No. DE 10-\_\_\_\_ Witness: D.E. Tufts

Schedule DET-2 Rate Design

### Granite State Electric Company Rate Settlement Procedure for Adjusting Distribution Rates for Capital Investment Allowance Calculation of Percentage Adjustment to Distribution Rates Rates Effective July 1, 2010

(1)	Increase in Annual Revenue Requirement	\$163,663
(2)	Forecasted Base Distribution Revenue	\$20,811,651
(3)	Percentage of Adjustment to Distribution Rates	0.79%

- (1) Exhibit DET- 1, Page 1
- (2) Page 2, Forecasted Billing Units for the applicable period multiplied by current rates.
- (3) Line (1)  $\div$  Line (2)

# Granite State Electric Company Rate Settlement Procedure for Adjusting Distribution Rates for Capital Investment Allowance Calculation of Percentage Adjustment to Distribution Rates Forecasted Distribution Revenue for Period from July 2010 through June 2011

Rate Class	Distribution Rate Component	Current Base Distribution <u>Charges</u>	Forecasted <u>Units</u>	Forecasted <u>Revenue</u>
		(a)	(b)	(c)
D	Customer Charge	\$4.32	407,139	\$1,758,839
	1st 250 kWh	\$0.01629	90,117,610	\$1,468,016
	Excess 250 kWh	\$0.04242	161,192,939	\$6,837,804
	Off Peak kWh	\$0.01558	7,083,572	\$110,362
	Farm kWh	\$0.02533	1,067,744	\$27,046
	D-6 kWh	\$0.01629	963,574	\$15,697
	Interruptible Credit IC-1 Interruptible Credit IC-2	(\$4.81) (\$6.42)	2,530 407	(\$12,169) (\$2,613)
D-10	Customer Charge	\$7.42	5,162	\$38,302
	On Peak kWh	\$0.04709	1,995,365	\$93,962
	Off Peak kWh	\$0.00000		
G-1	Customer Charge	\$92.27 \$4.02	1,516	\$139,867
	Demand Charge	\$4.03	852,521	\$3,435,659
	On Peak kWh Off Peak kWh	\$0.00133 \$0.00000	145,130,139	\$193,023
	Credit for High Voltage Delivery $> 2.4$ kv	(\$0.26)	288,493	(\$75,008)
	Credit for High Voltage Metering	(\$0.20)	200,199	(\$52,006)
	Optional Charge			\$18,843
G-2	Customer Charge	\$24.70	9,910	\$244,769
	Demand Charge	\$4.45	530,452	\$2,360,511
	All kWh	\$0.00031	151,878,413	\$47,082
	Credit for High Voltage Delivery > 2.4 kv	(\$0.26)	424	(\$110)
	Credit for High Voltage Metering Optional Charge			(\$530) \$2,918
G-3	Customer Charge	\$5.47	65,016	\$355,639
	All kWh	\$0.03052	88,240,084	\$2,693,087
	Minimum Charge > 25 kVA	\$1.61		
М	Luminaire Charge Lamp Code			
	010	\$67.00	26	\$1,742
	003	\$48.49	350	\$16,972
	004	\$58.96	506	\$29,834
	005	\$111.50	72	\$8,028
	006	\$211.55	1	\$212
	023	\$123.31	39	\$4,809
	024	\$212.93	2	\$426
	070	\$50.19	2173	\$109,063
	072 074	\$60.84	1619 592	\$98,500
	075	\$106.83 \$139.20	251	\$63,243 \$34,939
	077	\$107.78	308	\$33,196
	078	\$148.79	473	\$70,378
	079	\$70.07	369	\$25,856
	Pole and Accessory Charge			
	Pole and Accessory Code P	\$59.14	138	\$8,161
	R	\$61.24	248	\$15,188
	С	\$103.85	112	\$11,631
	D	\$173.50	0	\$0
	F T	\$123.84 \$149.22	97 129	\$12,012 \$19,249
	All kWh	\$0.00000		
Т	Customer Charge	\$5.59	16,671	\$93,188
	All kWh	\$0.01994	23,056,944	\$459,755
	Interruptible Credit IC-1	(\$4.81)	3,113	(\$14,974)
	Interruptible Credit IC-2	(\$6.42)	99	(\$636)
v	Minimum Charge	\$5.84	282	\$1,649 \$10,242
	All kWh	\$0.02816	363,712	\$10,242 \$20,811,651
(a) (b)	Per currently effective tariffs Company Forecast			
<- /	r			

Company Forecast Column (a) x Column (b) (b) (c)

### Granite State Electric Company Rate Settlement Calculation of Reliability Enhancement Program and Vegetation Management Plan Adjustment Factor Rates Effective July 1, 2010

(1)	Incremental O&M Expense Above Base O&M Expense	\$1,047,770
(2)	Estimated Interest During Recovery Period	\$25,494
(3)	Incremental O&M Expense Above Base O&M Expense Including Interest	\$1,073,264
(4)	Estimated kWh deliveries	855,910,960
(5)	Reliability Enhancement Program and Vegetation Management Plan Adjustment Factor	\$0.00125

- (1) Exhibit DET- 1, Page 1
- (2) Page 4
- (3) Line (1) + Line (2)
- (4) Per Company forecast
- (5) Line  $(3) \div$  Line (4), truncated after 5 decimal places

#### Granite State Electric Company Calculation of Interest on FY 2010 Incremental O&M Expense Above Base O&M Expense

	Beginning Balance With Interest (a)	Estimated Recovery (b)	Ending Balance (c)	Balance Subject to Interest (d)	Effective Interest Rate (e)	Interest (f)	Cumulative Interest (g)
April 2010	(\$1,047,770)		(\$1,047,770)	(\$1,047,770)	3.25%	(\$2,796)	(\$2,796)
May	(\$1,050,566)		(\$1,050,566)	(\$1,050,566)	3.25%	(\$2,804)	(\$5,600)
June	(\$1,053,370)		(\$1,053,370)	(\$1,053,370)	3.25%	(\$2,811)	(\$8,411)
July	(\$1,056,181)	\$88,015	(\$968,166)	(\$1,012,174)	3.25%	(\$2,701)	(\$11,113)
August	(\$970,867)	\$88,261	(\$882,607)	(\$926,737)	3.25%	(\$2,473)	(\$13,586)
September	(\$885,080)	\$88,508	(\$796,572)	(\$840,826)	3.25%	(\$2,244)	(\$15,830)
October	(\$798,816)	\$88,757	(\$710,059)	(\$754,437)	3.25%	(\$2,013)	(\$17,843)
November	(\$712,072)	\$89,009	(\$623,063)	(\$667,568)	3.25%	(\$1,782)	(\$19,625)
December	(\$624,845)	\$89,264	(\$535,581)	(\$580,213)	3.25%	(\$1,548)	(\$21,173)
January 2011	(\$537,130)	\$89,522	(\$447,608)	(\$492,369)	3.25%	(\$1,314)	(\$22,487)
February	(\$448,922)	\$89,784	(\$359,138)	(\$404,030)	3.25%	(\$1,078)	(\$23,566)
March	(\$360,216)	\$90,054	(\$270,162)	(\$315,189)	3.25%	(\$841)	(\$24,407)
April	(\$271,003)	\$90,334	(\$180,669)	(\$225,836)	3.25%	(\$603)	(\$25,010)
May	(\$181,271)	\$90,636	(\$90,636)	(\$135,954)	3.25%	(\$363)	(\$25,372)
June	(\$90,999)	\$90,999	\$0	(\$45,499)	3.25%	(\$121)	(\$25,494)

(a) April 2010 per Page 3, Line (1); all other months = prior month Column (c) + prior month Column (f)

(b) Column (a) ÷ number of remaining months in recovery period

(c) Column (a) + Column (b)

(d) Average of Column (a) and Column (c)

(e) Interest rate on customer deposits

(f) Column (d) x [  $(1 + Column (e))^{(1 + 12) - 1}$ ]

(g) Prior month Column (g) + Current month Column (f)

#### Granite State Electric Company Rate Settlement Procedure for Adjusting Distribution Rates for Capital Investment Allowance & Incremental O&M Expense Rates Effective July 1, 2010

Rate Class	Distribution Rate Component	Current Base Distribution <u>Charges</u> (a)	Proposed Distribution <u>% Increase</u> (b)	Proposed Base Distribution <u>Charges</u> (c)	Current Business Profits <u>Surcharge</u> (d)	Current Default Service Cost Reclassification <u>Distribution Credit</u> (e)	Proposed REP & VMP Operations & Maintenance <u>Adjustment Factor</u> (f)	Proposed Total Distribution <u>Charges</u> (g)
D	Customer Charge	\$4.32	0.79%	\$4.35				\$4.35
	1st 250 kWh	\$0.01629	0.79%	\$0.01641	\$0.00057	(\$0.00017)	\$0.00125	\$0.01806
	Excess 250 kWh	\$0.04242	0.79%	\$0.04275	\$0.00057	(\$0.00017)	\$0.00125	\$0.04440
	Off Peak kWh	\$0.01558	0.79%	\$0.01570	\$0.00057	(\$0.00017)	\$0.00125	\$0.01735
	Farm kWh	\$0.02533	0.79%	\$0.02553	\$0.00057	(\$0.00017)	\$0.00125	\$0.02718
	D-6 kWh	\$0.01629	0.79%	\$0.01641	\$0.00057	(\$0.00017)	\$0.00125	\$0.01806
	Interruptible Credit IC-1	(\$4.81)	0.79%	(\$4.84)				(\$4.84)
	Interruptible Credit IC-2	(\$6.42)	0.79%	(\$6.47)				(\$6.47)
D-10	Customer Charge	\$7.42	0.79%	\$7.47				\$7.47
	On Peak kWh	\$0.04709	0.79%	\$0.04746	\$0.00057	(\$0.00008)	\$0.00125	\$0.04920
	Off Peak kWh	\$0.00000	0.79%	\$0.00000	\$0.00057	(\$0.00008)	\$0.00125	\$0.00174
G-1	Customer Charge	\$92.27	0.79%	\$92.99				\$92.99
	Demand Charge	\$4.03	0.79%	\$4.06				\$4.06
	On Peak kWh	\$0.00133	0.79%	\$0.00134	\$0.00057	\$0.00000	\$0.00125	\$0.00316
	Off Peak kWh	\$0.00000	0.79%	\$0.00000	\$0.00057	\$0.00000	\$0.00125	\$0.00182
	Credit for High Voltage Delivery > 2.4 kv	(\$0.26)	0.79%	(\$0.26)				(\$0.26)
G-2	Customer Charge	\$24.70	0.79%	\$24.89				\$24.89
	Demand Charge	\$4.45	0.79%	\$4.48				\$4.48
	All kWh	\$0.00031	0.79%	\$0.00031	\$0.00057	\$0.00000	\$0.00125	\$0.00213
	Credit for High Voltage Delivery > 2.4 kv	(\$0.26)	0.79%	(\$0.26)				(\$0.26)
G-3	Customer Charge	\$5.47	0.79%	\$5.51				\$5.51
	All kWh	\$0.03052	0.79%	\$0.03076	\$0.00057	(\$0.00017)	\$0.00125	\$0.03241
	Minimum Charge > 25 kVA	\$1.61	0.79%	\$1.62				\$1.62
М	Luminaire Charge Lamp Code							
	010	\$67.00	0.79%	\$67.52				\$67.52
	003	\$48.49	0.79%	\$48.87				\$48.87
	004	\$58.96	0.79%	\$59.42				\$59.42
	005	\$111.50	0.79%	\$112.38				\$112.38
	006	\$211.55	0.79%	\$213.22				\$213.22
	023 024	\$123.31 \$212.93	0.79% 0.79%	\$124.28 \$214.61				\$124.28 \$214.61
	070	\$50.19	0.79%	\$50.58				\$50.58
	072	\$60.84	0.79%	\$61.32				\$61.32
	074	\$106.83	0.79%	\$107.67				\$107.67
	075	\$139.20	0.79%	\$140.29				\$140.29
	077	\$107.78	0.79%	\$108.63				\$108.63
	078	\$148.79	0.79%	\$149.96				\$149.96
	079	\$70.07	0.79%	\$70.62				\$70.62
	Pole and Accessory Charge Pole and Accessory Code							
	Р	\$59.14	0.79%	\$59.60				\$59.60
	R	\$61.24	0.79%	\$61.72				\$61.72
	С	\$103.85	0.79%	\$104.67				\$104.67
	D F	\$173.50	0.79%	\$174.87				\$174.87
		\$123.84	0.79%	\$124.81				\$124.81
	T All kWh	\$149.22 \$0.00000	0.79% 0.79%	\$150.39 \$0.00000	\$0.00057	\$0.00000	\$0.00125	\$150.39 \$0.00182
Т	Customer Charge All kWh	\$5.59 \$0.01994	0.79% 0.79%	\$5.63 \$0.02009	\$0.00057	(\$0.00007)	\$0.00125	\$5.63 \$0.02184
	All KWn Interruptible Credit IC-1	(\$4.81)	0.79%	(\$4.84)	\$0.00037	(\$0.0007)	\$0.00125	\$0.02184 (\$4.84)
	Interruptible Credit IC-2	(\$6.42)	0.79%	(\$6.47)				(\$6.47)
N	Main an Channa	05.01	0.000					
V	Minimum Charge All kWh	\$5.84 \$0.02816	0.79% 0.79%	\$5.88 \$0.02838	\$0.00057	(\$0.00009)	\$0.00125	\$5.88 \$0.03011
		\$0.02010	0.7970	\$0.02030	<i>\$0.00037</i>	(30.00003)	30.00123	<i>40.03011</i>

Per currently effective tariffs Page 1, Line (3) (a) (b)

(c) (d)

Page 1, Line (5)
 Column (a) x (1+Column (b))
 Distribution Energy Charges include a Business Profits Tax Surcharge of \$0.00057 per kWh for usage on and after 8/1/01
 Per Default Service Cost Reclassification Adjustment Provision
 Page 3, Line (5)

(e) (f)

(g) Column (c) + Column (d) + Column (e) + Column (f)

Schedule DET-3

Granite State Electric Company d/b/a National Grid Docket No. DE 10-\_\_\_\_ Witness: D.E. Tufts

## Schedule DET-3 Reconciliation of Recovery of FY 2009 Incremental O&M Expense Above Base O&M Expense

Granite State Electric Company d/b/a National Grid Docket No. DE 10-\_\_\_ Schedule DET-3 Page 1 of 2

#### Granite State Electric Company Reconciliation of Recovery of FY 2009 Incremental O&M Expense Above Base O&M Expense

	Beginning Balance With Interest (a)	Recovery (b)	Adjustment (c)	Ending Balance (d)	Balance Subject to Interest (e)	Effective Interest Rate (f)	Interest (g)	Cumulative Interest (h)
April 2009	(\$113,832)			(\$113,832)	(\$113,832)	3.25%	(\$304)	(\$304)
May	(\$114,136)			(\$114,136)	(\$114,136)	3.25%	(\$305)	(\$608)
June	(\$114,440)			(\$114,440)	(\$114,440)	3.25%	(\$305)	(\$914)
July	(\$114,746)			(\$114,746)	(\$114,746)	3.25%	(\$306)	(\$1,220)
August	(\$115,052)	\$6,388		(\$108,664)	(\$111,858)	3.25%	(\$299)	(\$1,519)
September	(\$108,963)	\$10,431		(\$98,532)	(\$103,747)	3.25%	(\$277)	(\$1,795)
October	(\$98,809)	\$9,563		(\$89,246)	(\$94,027)	3.25%	(\$251)	(\$2,046)
November	(\$89,497)	\$9,588		(\$79,909)	(\$84,703)	3.25%	(\$226)	(\$2,272)
December	(\$80,135)	\$10,171		(\$69,964)	(\$75,050)	3.25%	(\$200)	(\$2,473)
January 2010	(\$70,164)	\$11,554		(\$58,611)	(\$64,388)	3.25%	(\$172)	(\$2,645)
February	(\$58,782)	\$9,773		(\$49,009)	(\$53,896)	3.25%	(\$144)	(\$2,788)
March	(\$49,153)	\$9,825		(\$39,329)	(\$44,241)	3.25%	(\$118)	(\$2,907)
April	(\$39,447)	\$9,544		(\$29,902)	(\$34,675)	3.25%	(\$93)	(\$2,999)
May	(\$29,995)	\$0		(\$29,995)	(\$29,995)	3.25%	(\$80)	(\$3,079)
June	(\$30,075)	\$0		(\$30,075)	(\$30,075)	3.25%	(\$80)	(\$3,159)
July	(\$30,155)	\$0		(\$30,155)	(\$30,155)	3.25%	(\$80)	(\$3,240)

Revised Schedule DET-2, page 4, Docket DE 09-094 Page 2

- (a)
- (b)
- (c) Column (a) + Column (b)
- (d) Average of Column (a) and Column (d)
- (e) Interest rate on customer deposits
- (f) Column (e) x [  $(1 + Column (f))^{(1 \div 12) 1}$ ]
- $(g) \quad \mbox{Prior month Column} (h) + \mbox{Current month Column} (g)$
- (h)

#### Granite State Electric Company Reconciliation of Recovery of FY 2009 Incremental O&M Expense Above Base O&M Expense

	kWh Deliveries (a)	Current REP/VMP Adjustment Factor (b)	Current REP/VMP Adjustment Factor Revenues (c)
August	45,627,665	\$0.00014	\$6,388
September	74,505,408	\$0.00014	\$10,431
October	68,305,841	\$0.00014	\$9,563
November	68,484,277	\$0.00014	\$9,588
December	72,650,778	\$0.00014	\$10,171
January 2010	82,527,210	\$0.00014	\$11,554
February	69,806,978	\$0.00014	\$9,773
March	70,176,311	\$0.00014	\$9,825
April	68,172,939	\$0.00014	\$9,544
May	0	\$0.00014	\$0
June	0	\$0.00014	\$0
July	0	\$0.00014	\$0

(a) Crystal Report CR97982A

(b) Revised Schedule DET-2, page 4, Docket DE 09-094

(c) Column (a) x Column (b)

Schedule DET-4

Granite State Electric Company d/b/a National Grid Docket No. DE 10-\_\_\_\_ Witness: D.E. Tufts

Schedule DET-4 Typical Bill Impacts

S:\RADATA1\2010 gse\REP\May 17, 2010 Filing\[GSE\_REP Schedule 4.xls]D No WH

14-May-10 01:20 PM

Granite State Electric Company Proposed July 1, 2010 Rates Calculation of Monthly Typical Bill Impact on Rate D Default Service Customers Without Water Heater Control 0% Off-Peak

Docket No. DE 10-\_\_\_\_\_ Schedule DET-4 Page 1 of 16

Granite State Electric Company d/b/a National Grid

	Γ			1.0%	1.0%	1.1%	1.1%	1.1%	1.1%
	(2)	ll ecrease)	%				l		
	(1) vs (2)	Overall Increase (Decrease)	Amount	\$0.27	\$0.48	\$0.70	\$0.91	\$1.06	\$1.42
	/		Delivery	\$12.49	\$21.25	\$31.31	\$40.69	\$48.07	\$64.83
ntrol	- (2)	Proposed Rates	Detault Service	\$14.31	\$25.04	\$35.78	\$45.79	\$53.66	\$71.55
Without Water Heater Control 0% Off-Peak			Total	\$26.80	\$46.29	\$67.09	\$86.48	\$101.73	\$136.38
Withou	/ /	r F	Delivery	\$12.22	\$20.77	\$30.61	\$39.78	\$47.01	\$63.41
	. (1)	Present Rates	Dervice	\$14.31	\$25.04	\$35.78	\$45.79	\$53.66	\$71.55
	//		Total	\$26.53	\$45.81	\$66.39	\$85.57	\$100.67	\$134.96
100.00%	0.00%		UTT-Peak kWh	0	0	0	0	0	0
kWh Split On-Peak	Оп-Реак		Un-Peak kWh	200	350	500	640	750	1,000
			Monthly kWh	200	350	500	640	750	1,000

	Pro	Present Rates	Proposed Rates
Customer Charge Distribution Charge		\$4.32	\$4.35
1st 250 kWh	kWh x	\$0.01683	\$0.01806
excess of 250 kWh Off Peak kWh	kWh x kWh x	\$0.04296 \$0.01612	\$0.04440 \$0.01735
Transmission Charge	kWh x	\$0.01811	\$0.01811
Stranded Cost Charge	kWh x	\$0.00070	0.00070
System Benefits Charge	kWh x	\$0.00330	\$0.00330
Electricity Consumption Tax	kWh x	\$0.00055	\$0.00055
Supplier Services			
Default Service	kWh x	\$0.07155	\$0.07155

S:RADATA1\2010 gselREP\May 17, 2010 Filing\[GSE\_REP Schedule 4.xis]D 6hr WH 14.May-10

14-May-10 01:20 PM

Granite State Electric Company Proposed July 1, 2010 Rates Calculation of Monthly Typical Bill Impact on Rate D Default Service Customers With 6 Hour Water Heater Control

Granite State Electric Company d/b/a National Grid Docket No. DE 10-\_\_\_\_ Schedule DET-4 Page 2 of 16

	80.00%	20.00%
kWh Split	On-Peak	Off-Peak

			1.2%	1.1%	1.1%	1.1%	1.1%
s (2)	rall Decrease)	%					
(1) vs (2)	Overall Increase (Decrease)	Amount	\$0.25	\$0.43	\$0.66	\$0.99	\$1.35
/	1:000 C	Delivery	\$7.62	\$14.51	\$23.77	\$39.17	\$54.58
- (2)	Proposed Rates	Service	\$14.31	\$25.04	\$35.78	\$53.66	\$71.55
//		Total	\$21.93	\$39.55	\$59.55	\$92.83	\$126.13
/	1:000 C	Delivery	\$7.37	\$14.08	\$23.11	\$38.18	\$53.23
(1)	Present Rates	Service	\$14.31	\$25.04	\$35.78	\$53.66	\$71.55
·,		Total	\$21.68	\$39.12	\$58.89	\$91.84	\$124.78
/	100 tr	kWh kWh	40	70	100	150	200
		VII-F cak kWh	160	280	400	600	800
	Monthly.	KWh	200	350	500	750	1,000

		Present Rates	Proposed Rates
Customer Charge Distribution Charge		\$4.32	\$4.35
1 st 250 kWh	kWh x	\$0.01683	\$0.01806
excess of 250 kWh	kWh x	\$0.04296	\$0.04440
Off Peak kWh	kWh x	\$0.01612	\$0.01735
Transmission Charge	kWh x	\$0.01811	\$0.01811
Stranded Cost Charge	kWh x	\$0.00070	\$0.00070
System Benefits Charge	kWh x	\$0.00330	\$0.00330
Electricity Consumption Tax	kWh x	\$0.00055	\$0.00055
Interruptible Credit #1		(\$4.81)	(\$4.84)
Supplier Services			
Default Service	kWh x	\$0.07155	\$0.07155

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01:20 PM

Granite State Electric Company Proposed July 1, 2010 Rates Calculation of Monthly Typical Bill Impact on Rate D Default Service Customers With 6 Hour Water Heater Control

Granite State Electric Company d/b/a National Grid Docket No. DE 10-\_\_\_\_ Schedule DET-4 Page 3 of 16

	60.00%	40.00%
kWh Split	On-Peak	Off-Peak

			//	- (1)	/	//	(2)	/	(1) vs (2)	
				Present Rates			Pronosed Rates		Overall Increase (Decrease)	(0)
Monthly KWh	On-Peak kWh	Off-Peak kWh	Total	Default Service	Retail Delivery	Total	Default Service	Retail Delivery	Amount	%
200	120	80	\$20.05	\$14.31	\$5.74	\$20.28	\$14.31	\$5.97	\$0.23	1.1%
350	210	140	\$36.67	\$25.04	\$11.63	\$37.08	\$25.04	\$12.04	\$0.41	1.1%
500	300	200	\$54.60	\$35.78	\$18.82	\$55.21	\$35.78	\$19.43	\$0.61	1.1%
750	450	300	\$86.20	\$53.66	\$32.54	\$87.15	\$53.66	\$33.49	\$0.95	1.1%
1,000	600	400	\$117.81	\$71.55	\$46.26	\$119.09	\$71.55	\$47.54	\$1.28	1.1%

		Present Rates	Proposed Rates
Customer Charge		\$4.32	\$4.35
Distribution Charge 1st 250 kWh	kWh x	\$0.01683	\$0.01806
excess of 250 kWh	kWh x	\$0.04296	\$0.04440
Off Peak kWh	kWh x	\$0.01612	\$0.01735
Transmission Charge	kWh x	\$0.01811	\$0.01811
Stranded Cost Charge	kWh x	\$0.00070	\$0.00070
System Benefits Charge	kWh x	\$0.00330	\$0.00330
Electricity Consumption Tax	kWh x	\$0.00055	\$0.00055
Interruptible Credit #2		(\$6.42)	(\$6.47)
Supplier Services			
Default Service	kWh x	\$0.07155	\$0.07155

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Granite State Electric Company Proposed July 1, 2010 Rates Calculation of Monthly Typical Bill Impact on Rate D-10 Default Service Customers

Docket No. DE 10-\_\_\_\_\_ Schedule DET-4 Page 4 of 16 Granite State Electric Company d/b/a National Grid

kWh Split	On-Peak	$Off_{Deal}$

			.1%	.1%	1%	.1%	.1%
(2)	all ecrease)	%	1	1	1	1	1
(1) vs (2)	Overall Increase (Decrease)	Amount	\$1.03	\$1.45	\$1.88	\$2.31	\$2.72
/		Retail Delivery	\$48.49	\$66.07	\$83.66	\$101.23	\$118.81
5	Pronosed Rates	Default Service	\$50.09	\$71.55	\$93.02	\$114.48	\$135.95
/		Total	\$98.58	\$137.62	\$176.68	\$215.71	\$254.76
·/ /		Retail Delivery	\$47.46	\$64.62	\$81.78	\$98.92	\$116.09
E	Present Rates	Default Service	\$50.09	\$71.55	\$93.02	\$114.48	\$135.95
		Total	\$97.55	\$136.17	\$174.80	\$213.40	\$252.04
80.00% 20.00% /		Off-Peak kWh	140	200	260	320	380
On-Peak Off-Peak		On-Peak kWh	560	800	1,040	1,280	1,520
		Monthly KWh	700	1,000	1,300	1,600	1,900

	Pr	Present Rates	<b>Proposed Rates</b>
Customer Charge		\$7.42	\$7.47
Distribution Charge On Peak kWh	kWh x	\$0.04772	\$0.04920
Off Peak kWh	kWh x	\$0.00063	000174
Transmission Charge	kWh x	\$0.01435	\$0.01435
Stranded Cost Charge	kWh x	\$0.00069	\$0.00069
System Benefits Charge	kWh x	\$0.00330	\$0.00330
Electricity Consumption Tax	kWh x	\$0.00055	\$0.00055
Supplier Services			
Default Service	kWh x	\$0.07155	\$0.07155

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Granite State Electric Company Proposed July 1, 2010 Rates Calculation of Monthly Typical Bill Impact on Rate D-10 Default Service Customers

Docket No. DE 10-\_\_\_\_\_ Schedule DET-4 Page 5 of 16 Granite State Electric Company d/b/a National Grid

				1.1%	1.1%	1.1%	1.1%	1.1%
	()	l crease)	%					
	(1) vs (2)	Overall Increase (Decrease)	Amount	\$1.02	\$1.42	\$1.82	\$2.24	\$2.65
	/		Retail Delivery	\$45.18	\$61.32	\$77.49	\$93.63	\$109.80
	- (2)	Proposed Rates	Default Service	\$50.09	\$71.55	\$93.02	\$114.48	\$135.95
			Total	\$95.27	\$132.87	\$170.51	\$208.11	\$245.75
	/ /	:	Retail Delivery	\$44.16	\$59.90	\$75.67	\$91.39	\$107.15
	- (1)	Present Rates	Default Service	\$50.09	\$71.55	\$93.02	\$114.48	\$135.95
	//		Total	\$94.25	\$131.45	\$168.69	\$205.87	\$243.10
70.00% 30.00%			Off-Peak kWh	210	300	390	480	570
On-Peak Off-Peak			On-Peak kWh	490	700	910	1,120	1,330
•			Monthly KWh	700	1,000	1,300	1,600	1,900

	H	Present Rates	<b>Proposed Rates</b>
Customer Charge		\$7.42	\$7.47
Distribution Charge			
On Peak kWh	kWh x	\$0.04772	\$0.04920
Off Peak kWh	kWh x	\$0.00063	\$0.00174
Transmission Charge	kWh x	\$0.01435	\$0.01435
Stranded Cost Charge	kWh x	\$0.00069	\$0.00069
System Benefits Charge	kWh x	\$0.00330	\$0.00330
Electricity Consumption Tax	kWh x	\$0.00055	\$0.00055
Supplier Services			
Default Service	kWh x	\$0.07155	\$0.07155

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Proposed July 1, 2010 Rates Calculation of Monthly Typical Bill Impact on Rate D-10 Default Service Customers Granite State Electric Company

Docket No. DE 10-\_\_\_\_\_ Schedule DET-4 Page 6 of 16 Granite State Electric Company d/b/a National Grid

kWh Split On-Peak Off-Peak

			1.1%	1.1%	1.1%	1.1%	1.1%
(2)	all Jecrease)	%					
(1) vs (2)	Overall Increase (Decrease)	Amount	\$0.98	\$1.39	\$1.78	\$2.18	\$2.58
/	Retail	Delivery	\$41.85	\$56.58	\$71.32	\$86.03	\$100.78
(2)	Proposed Rates Default	Service	\$50.09	\$71.55	\$93.02	\$114.48	\$135.95
/		Total	\$91.94	\$128.13	\$164.34	\$200.51	\$236.73
/ /	Retail	Delivery	\$40.87	\$55.19	\$69.54	\$83.85	\$98.20
(1)	Present Rates Default	Service	\$50.09	\$71.55	\$93.02	\$114.48	\$135.95
		Total	\$90.96	\$126.74	\$162.56	\$198.33	\$234.15
60.00% 40.00% /-	Off-Peak	kWh	280	400	520	640	760
Off-Peak	On-Peak	kWh	420	600	780	960	1,140
-	Monthlv	KWh	200	1,000	1,300	1,600	1,900

		Present Rates	Proposed Rates
Customer Charge		\$7.42	\$7.47
Distribution Charge			
On Peak kWh	kWh x	\$0.04772	\$0.04920
Off Peak kWh	kWh x	\$0.00063	\$0.00174
Transmission Charge	kWh x	\$0.01435	\$0.01435
Stranded Cost Charge	kWh x	\$0.00069	\$0.00069
System Benefits Charge	kWh x	\$0.00330	\$0.00330
Electricity Consumption Tax	kWh x	\$0.00055	\$0.00055
Supplier Services			
Default Service	к Wh х	\$0.07155	\$0.07155

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Granite State Electric Company Proposed July 1, 2010 Rates Calculation of Monthly Typical Bill Impact on Rate G-3 Default Service Customers

Granite State Electric Company d/b/a National Grid Docket No. DE 10-\_\_\_\_ Schedule DET-4 Page 7 of 16

Hours Use

ſ			1.1%	1.1%	1.1%	1.1%	1.1%
(2)	ull ecrease)	%					
(1) vs (2)	Overall Increase (Decrease)	Amount	\$0.85	\$1.12	\$1.66	\$2.07	\$2.74
/		Retail Delivery	\$37.55	\$48.23	\$69.59	\$85.62	\$112.31
- (2)	Pronosed Rates	Default Service	\$42.93	\$57.24	\$85.86	\$107.33	\$143.10
/		Total	\$80.48	\$105.47	\$155.45	\$192.95	\$255.41
·/ /		Retail Delivery	\$36.70	\$47.11	\$67.93	\$83.55	\$109.57
- (1)	Present Rates	Default Service	\$42.93	\$57.24	\$85.86	\$107.33	\$143.10
//		Total	\$79.63	\$104.35	\$153.79	\$190.88	\$252.67
~		Monthly kWh	600	800	1,200	1,500	2,000

		Present Rates	Proposed Rates
Customer Charge Distribution Charge Transmission Charge Stranded Cost Charge System Benefits Charge Electricity Consumption Tax	kWh x kWh x kWh x kWh x kWh x	\$5.47 \$0.03106 \$0.01644 \$0.0070 \$0.00330 \$0.00055	\$5.51 \$0.03241 \$0.01644 \$0.00070 \$0.00330 \$0.00055
<u>Supplier Services</u> Default Service	kWh x	\$0.07155	\$0.07155

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Granite State Electric Company d/b/a National Grid Schedule DET-4 Docket No. DE 10-\_\_\_

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Calculation of Monthly Typical Bill Impact on Rate T Default Service Customers Granite State Electric Company Proposed July 1, 2010 Rates

	//	(1)	/	//	(2)	/	(1) vs (2)	5)
		Present Rates			Pronosed Rates		Overall Increase (Decrease)	l crease)
Monthly kWh	Total	Default Service	Retail Delivery	Total	Default Service	Retail Delivery	Amount	%
600	\$73.78	\$42.93	\$30.85	\$74.57	\$42.93	\$31.64	\$0.79	1.1%
800	\$96.50	\$57.24	\$39.26	\$97.55	\$57.24	\$40.31	\$1.05	1.1%
1,200	\$141.96	\$85.86	\$56.10	\$143.51	\$85.86	\$57.65	\$1.55	1.1%
1,500	\$176.06	\$107.33	\$68.73	\$177.99	\$107.33	\$70.66	\$1.93	1.1%
2,000	\$232.87	\$143.10	\$89.77	\$235.43	\$143.10	\$92.33	\$2.56	1.1%

	Pres	Present Rates	roposed Rates
Customer Charge Distribution Charge Transmission Charge Stranded Cost Charge System Benefits Charge	kWh x kWh x kWh x kWh x	\$5.59 \$0.02058 \$0.01696 \$0.00070 \$0.00330	\$5.63 \$0.02184 \$0.01696 \$0.00070 \$0.00330
Electricity Consumption 1 ax Supplier Services	КМИХ	\$0.000.0%	cc000.0\$
Default Service	kWh x	\$0.07155	\$0.07155

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Granite State Electric Company Proposed July 1, 2010 Rates Calculation of Monthly Typical Bill Impact on Rate V Default Service Customers

Gramite State Electric Company d/b/a National Grid Docket No. DE 10-\_\_\_\_\_ Schedule DET-4 Page 9 of 16

_							
2)	l crease)	%	1.1%	1.1%	1.1%	1.1%	1.1%
(1) vs (2)	Overall Increase (Decrease)	Amount	\$0.80	\$1.07	\$1.59	\$2.00	\$2.66
/	Retail	Delivery	\$31.59	\$42.12	\$63.16	\$78.98	\$105.28
(2)	Proposed Rates Default	Service	\$42.93	\$57.24	\$85.86	\$107.33	\$143.10
//		Total	\$74.52	\$99.36	\$149.02	\$186.31	\$248.38
· /	Refail	Delivery	\$30.79	\$41.05	\$61.57	\$76.98	\$102.62
(1)	Present Rates Default	Service	\$42.93	\$57.24	\$85.86	\$107.33	\$143.10
/		Total	\$73.72	\$98.29	\$147.43	\$184.31	\$245.72
	Monthly	kWh	009	800	1,200	1,500	2,000

		Present Rates	Proposed Rates
Minimum Charge Distribution Charge Transmission Charge Stranded Cost Charge System Benefits Charge Electricity Consumption Tax	kWh x kWh x kWh x kWh x kWh x	\$5.84 \$0.02878 \$0.01797 \$0.00071 \$0.000330 \$0.00055	\$5.88 \$0.03011 \$0.01797 \$0.00071 \$0.00330 \$0.00055
Supplier Services Default Service	kWh x	\$0.07155	\$0.071 <i>55</i>

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Granite State Electric Company Proposed July 1, 2010 Rates Calculation of Monthly Typical Bill Impact on Rate G-1 Default Service Customers

Docket No. DE 10-\_\_\_\_ Schedule DET-4 Granite State Electric Company d/b/a National Grid

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TT TT	1 030	kWh Split	/000 07								
Hours Use	))	200 Un-Peak Off-Peak	60.00% 40.00%								
			/	//	(1) -	/ // //	//	(2)	/	(1) vs (2)	
										Overall	
					Present Rates		-	Proposed Rates		Increase (Decrease)	se)
	Monthly	On-Peak	Off-Peak		Default	Retail		Default	Retail		
kW	kWh	kWh	kWh	Total	Service	Delivery	Total	Service	Delivery	Amount	%
200	50,000	30,000	20,000	\$5,596.67	\$3,643.50	\$1,953.17	\$5,659.19	\$3,643.50	\$2,015.69	\$62.52	1.1%
300	75,000	45,000	30,000	\$8,348.87	\$5,465.25	\$2,883.62	\$8,442.29	\$5,465.25	\$2,977.04	\$93.42	1.1%
400	100,000	60,000	40,000	\$11,101.07	\$7,287.00	\$3,814.07	\$11,225.39	\$7,287.00	\$3,938.39	\$124.32	1.1%
500	125,000	75,000	50,000	\$13,853.27	\$9,108.75	\$4,744.52	\$14,008.49	\$9,108.75	\$4,899.74	\$155.22	1.1%
1,000	250,000	150,000	100,000	\$27,614.27	\$18,217.50	\$9,396.77	\$27,923.99	\$18,217.50	\$9,706.49	\$309.72	1.1%

	Pres	Present Rates	Proposed Rates
Customer Charge Distribution Charge		\$92.27	\$92.99
On Peak kWh	kWh x	\$0.00204	\$0.00316
Off Peak kWh	kWh x	\$0.00071	\$0.00182
Distribution Demand Charge	kW x	\$4.03	\$4.06
Transmission Charge	kWh x	\$0.01505	\$0.01505
Stranded Cost Charge	kWh x	\$0.00069	\$0.00069
System Benefits Charge	kWh x	\$0.00330	\$0.00330
Electricity Consumption Tax	kWh x	\$0.00055	\$0.00055
Supplier Services			
Default Service	kWh x	\$0.07287	\$0.07287

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Granite State Electric Company Proposed July 1, 2010 Rates Calculation of Monthly Typical Bill Impact on Rate G-1 Default Service Customers

Granite State Electric Company d/b/a National Grid Docket No. DE 10-\_\_\_\_ Schedule DET-4 Page 11 of 16

			1	//	. (1)	/ /	//	(2)	/	(1) vs (2)	
					Present Rates	:	I	Proposed Rates		Overall Increase (Decrease)	ease)
kW	Monthly kWh	On-Peak kWh	Off-Peak kWh	Total	Default Service	Retail Delivery	Total	Default Service	Retail Delivery	Amount	%
200	70,000	35,000	35,000	\$7,466.72	\$5,100.90	\$2,365.82	\$7,551.49	\$5,100.90	\$2,450.59	\$84.77	1.1%
300	105,000	52,500	52,500	\$11,153.95	\$7,651.35	\$3,502.60	\$11,280.74	\$7,651.35	\$3,629.39	\$126.79	1.1%
400	140,000	70,000	70,000	\$14,841.17	\$10,201.80	\$4,639.37	\$15,009.99	\$10,201.80	\$4,808.19	\$168.82	1.1%
500	175,000	87,500	87,500	\$18,528.40	\$12,752.25	\$5,776.15	\$18,739.24	\$12,752.25	\$5,986.99	\$210.84	1.1%
1,000	350,000	175,000	175,000	\$36,964.52	\$25,504.50	\$11,460.02	\$37,385.49	\$25,504.50	\$11,880.99	\$420.97	1.1%

		Present Rates	Proposed Rates
Customer Charge Distribution Charge		\$92.27	\$92.99
On Peak kWh	kWh x	\$0.00204	\$0.00316
Off Peak kWh	kWh x	\$0.00071	\$0.00182
Distribution Demand Charge	kW x	\$4.03	\$4.06
Transmission Charge	kWh x	\$0.01505	\$0.01505
Stranded Cost Charge	kWh x	\$0.00069	\$0.00069
System Benefits Charge	kWh x	\$0.00330	\$0.00330
Electricity Consumption Tax	кWh х	\$0.00055	\$0.00055
Supplier Services			
Default Service	kWh x	\$0.07287	\$0.07287

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Granite State Electric Company Proposed July 1, 2010 Rates Calculation of Monthly Typical Bill Impact on Rate G-1 Default Service Customers

Granite State Electric Company d/b/a National Grid Docket No. DE 10-\_\_\_\_ Schedule DET-4

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kWh Split 450 On-Peak 45.00% Off-Peak 55.00%	ti I	45.00% 55.00%			- - -						
			_	·		-/ /	//	(2)	/	(1) vs (2)	
					Dracout Datas		_	Dromocod Dates		Overall Increase (Decrease	(0)
Monthly On-Peak	On-Peal	~	Off-Peak		Default	Retail	-	Default	Retail	IIICI CASE (Deci Case)	( <u>)</u>
kWh kWh	kWh		kWh	Total	Service	Delivery	Total	Service	Delivery	Amount	%
90,000 40,500	40,5	00	49,500	\$9,337.44	\$6,558.30	\$2,779.14	\$9,444.46	\$6,558.30	\$2,886.16	\$107.02	1.1%
135,000 60,	60,	60,750	74,250	\$13,960.02	\$9,837.45	\$4,122.57	\$14,120.20	\$9,837.45	\$4,282.75	\$160.18	1.1%
180,000 81,	81,	81,000	000,66	\$18,582.60	\$13,116.60	\$5,466.00	\$18,795.93	\$13,116.60	\$5,679.33	\$213.33	1.1%
225,000 101	101	01,250	123,750	\$23,205.18	\$16,395.75	\$6,809.43	\$23,471.67	\$16,395.75	\$7,075.92	\$266.49	1.1%
450,000 202	202	202,500	247,500	\$46,318.10	\$32,791.50	\$13,526.60	\$46,850.34	\$32,791.50	\$14,058.84	\$532.24	1.1%

	Prese	resent Rates	Proposed Rates
Customer Charge Distribution Charge		\$92.27	\$92.99
On Peak kWh	kWh x	\$0.00204	0.00316
Off Peak kWh	kWh x	\$0.00071	\$0.00182
Distribution Demand Charge	kW x	\$4.03	\$4.06
Transmission Charge	kWh x	\$0.01505	\$0.01505
Stranded Cost Charge	kWh x	\$0.00069	\$0.00069
System Benefits Charge	kWh x	\$0.00330	0.00330
Electricity Consumption Tax	kWh x	\$0.00055	\$0.00055
Supplier Services			
Default Service	kWh x	\$0.07287	\$0.07287

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Granite State Electric Company Proposed July 1, 2010 Rates Calculation of Monthly Typical Bill Impact on Rate G-1 Default Service Customers

Granite State Electric Company d/b/a National Grid Docket No. DE 10-\_\_\_\_ Schedule DET-4 Page 13 of 16

			1.1%	1.1%	1.1%	1.1%	1.1%
2)	ll screase)	%		.1.	-1	1.	1.
(1) vs (2)	Overall Increase (Decrease)	Amount	\$106.98	\$160.11	\$213.24	\$266.37	\$532.02
/	Batail	Delivery	\$2,880.13	\$4,273.70	\$5,667.27	\$7,060.84	\$14,028.69
(2)	Proposed Rates	Service	\$6,558.30	\$9,837.45	\$13,116.60	\$16,395.75	\$32,791.50
/		Total	\$9,438.43	\$14,111.15	\$18,783.87	\$23,456.59	\$46,820.19
/	Betail	Delivery	\$2,773.15	\$4,113.59	\$5,454.03	\$6,794.47	\$13,496.67
(1)	Present Rates	Service	\$6,558.30	\$9,837.45	\$13,116.60	\$16,395.75	\$32,791.50
/		Total	\$9,331.45	\$13,951.04	\$18,570.63	\$23,190.22	\$46,288.17
40.00% 60.00%	신유.Dad	kWh	54,000	81,000	108,000	135,000	270,000
kWh Split 450 On-Peak Off-Peak	400 Un	kWh	36,000	54,000	72,000	90,000	180,000
450	Monthly	kWh	90,000	135,000	180,000	225,000	450,000
Hours Use		kW	200	300	400	500	1,000

	Prese	Present Rates	Proposed Rates
Customer Charge Distribution Charge		\$92.27	\$92.99
On Peak kWh	kWh x	\$0.00204	\$0.00316
Off Peak kWh	kWh x	\$0.00071	\$0.00182
Distribution Demand Charge	kW x	\$4.03	\$4.06
Transmission Charge	kWh x	\$0.01505	\$0.01505
Stranded Cost Charge	kWh x	\$0.00069	\$0.00069
System Benefits Charge	kWh x	\$0.00330	\$0.00330
Electricity Consumption Tax	kWh x	\$0.00055	\$0.00055
Supplier Services			
Default Service	kWh x	\$0.07287	\$0.07287

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Granite State Electric Company Proposed July 1, 2010 Rates Calculation of Monthly Typical Bill Impact on Rate G-2 Default Service Customers

Granite State Electric Company d/b/a National Grid Docket No. DE 10-\_\_\_\_ Schedule DET-4 Page 14 of 16

Hours Use

200

Present Rates Default Retail
\$291.48
\$728.70
\$1,093.05
\$1,457.40
\$2,186.10

		Present Rates	Proposed Rates
Customer Charge		\$24.70	\$24.89
Distribution Charge	kWh x	\$0.00102	\$0.00213
<b>Distribution Demand Charge</b>	kW x	\$4.45	\$4.48
Transmission Charge	kWh x	\$0.01622	\$0.01622
Stranded Cost Charge	kWh x	\$0.00070	\$0.00070
n Benefits Charge	kWh x	\$0.00330	\$0.00330
Electricity Consumption Tax	к Wh х	\$0.00055	\$0.00055
Supplier Services			
Default Service	kWh x	\$0.07287	\$0.07287

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Granite State Electric Company Proposed July 1, 2010 Rates Calculation of Monthly Typical Bill Impact on Rate G-2 Default Service Customers

Granite State Electric Company d/b/a National Grid Docket No. DE 10-\_\_\_\_ Schedule DET-4 Page 15 of 16

Hours Use

250

Present Rates         Proposed Rates           Default         Retail           Default         Retail           Service         Delivery           Service         Delivery           \$364.35         \$222.65           \$593.34         \$364.35           \$1,366.31         \$767.03           \$1,366.31         \$767.03           \$1,366.31         \$767.03           \$1,366.31         \$1,366.31           \$1,366.31         \$2,156.59           \$1,321.75         \$1,014.45           \$2,732.63         \$1,509.33           \$2,732.63         \$1,509.33			//	- (1)	/ /		(2)		(1) vs (2)	
Monthly         Present Rates         Proposed Rates           Monthly         Default         Retail         Default         I           \$\$ Nonthly         Total         Service         Default         I         Default         I           \$\$ Nonthly         Total         Service         Delivery         Total         Service         D           \$\$ 5,000         \$\$ 587.00         \$\$ 364.35         \$\$ 222.65         \$\$ 5593.34         \$\$ 364.35           \$\$ 12,500         \$\$ 1,430.46         \$\$ 910.88         \$\$ 519.58         \$\$ 1,446.03         \$\$ 910.88           \$\$ 18,750         \$\$ 2,133.34         \$\$ 1,366.31         \$\$ 767.03         \$\$ 2,156.59         \$\$ 1,366.31           \$\$ 25,000         \$\$ 2,836.20         \$\$ 1,821.75         \$\$ 1,014.45         \$\$ 2,367.14         \$\$ 1,821.75           \$\$ 37,500         \$\$ 4,241.96         \$\$ 2,732.63         \$\$ 1,509.33         \$\$ 4,288.28         \$\$ 2,732.63									Overall	
kWh         Total         Service         Delivery         Total         Service         D           5,000         \$587.00         \$364.35         \$222.65         \$593.34         \$364.35         \$364.35           12,500         \$1,430.46         \$910.88         \$519.58         \$1,446.03         \$910.88           12,500         \$1,430.46         \$910.88         \$519.58         \$1,446.03         \$910.88           18,750         \$2,133.34         \$1,366.31         \$767.03         \$2,156.59         \$1,366.31           25,000         \$2,836.20         \$1,821.75         \$1,014.45         \$2,867.14         \$1,821.75           37,500         \$4,241.96         \$2,732.63         \$1,509.33         \$4,288.28         \$2,732.63		Monthly		Present Rates Default	Retail		Proposed Rates Default	Retail	Increase (Decrease)	ase)
5,000       \$587.00       \$364.35       \$222.65       \$593.34       \$364.35         12,500       \$1,430.46       \$910.88       \$519.58       \$1,446.03       \$910.88         18,750       \$2,133.34       \$1,366.31       \$767.03       \$2,156.59       \$1,366.31         25,000       \$2,836.20       \$1,821.75       \$1,014.45       \$2,867.14       \$1,821.75         37,500       \$4,241.96       \$2,732.63       \$1,509.33       \$4,288.28       \$2,732.63		kWh	Total	Service	Delivery	Total	Service	Delivery	Amount	%
12,500       \$1,430.46       \$910.88       \$519.58       \$1,446.03       \$910.88         18,750       \$2,133.34       \$1,366.31       \$767.03       \$2,156.59       \$1,366.31         25,000       \$2,836.20       \$1,821.75       \$1,014.45       \$2,867.14       \$1,821.75         37,500       \$4,241.96       \$2,732.63       \$1,509.33       \$4,288.28       \$2,732.63	20	5,000	\$587.00	\$364.35	\$222.65	\$593.34	\$364.35	\$228.99	\$6.34	1.1%
18,750         \$2,133.34         \$1,366.31         \$767.03         \$2,156.59         \$1,366.31           25,000         \$2,836.20         \$1,821.75         \$1,014.45         \$2,867.14         \$1,821.75           37,500         \$4,241.96         \$2,732.63         \$1,509.33         \$4,288.28         \$2,732.63	50	12,500		\$910.88	\$519.58	\$1,446.03	\$910.88	\$535.15	\$15.57	1.1%
25,000         \$2,836.20         \$1,821.75         \$1,014.45         \$2,867.14         \$1,821.75           37,500         \$4,241.96         \$2,732.63         \$1,509.33         \$4,288.28         \$2,732.63	75	18,750		\$1,366.31	\$767.03	\$2,156.59	\$1,366.31	\$790.28	\$23.25	1.1%
37,500 \$4,241.96 \$2,732.63 \$1,509.33 \$4,288.28 \$2,732.63	100	25,000		\$1,821.75	\$1,014.45	\$2,867.14	\$1,821.75	\$1,045.39	\$30.94	1.1%
	150	37,500	\$4,241.96	\$2,732.63	\$1,509.33	\$4,288.28	\$2,732.63	\$1,555.65	\$46.32	1.1%

kWh x	kWh x \$0.07287

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Granite State Electric Company Proposed July 1, 2010 Rates Calculation of Monthly Typical Bill Impact on Rate G-2 Default Service Customers

Granite State Electric Company d/b/a National Grid Docket No. DE 10-\_\_\_\_ Schedule DET-4 Page 16 of 16

Hours Use

300

	/	//	- (1)	/ /	//	(2)	/	(1) vs (2)	
			Present Rates			Proposed Rates		Overall Increase (Decrease)	ease)
kW	Monthly kWh	Total	Default Service	Retail Delivery	Total	Default Service	Retail Delivery	Amount	%
20	6,000	\$681.66	\$437.22	\$244.44	\$689.11	\$437.22	\$251.89	\$7.45	1.1%
50	15,000	\$1,667.10	\$1,093.05	\$574.05	\$1,685.44	\$1,093.05	\$592.39	\$18.34	1.1%
75	22,500	\$2,488.31	\$1,639.58	\$848.73	\$2,515.73	\$1,639.58	\$876.15	\$27.42	1.1%
100	30,000	\$3,309.50	\$2,186.10	\$1,123.40	\$3,345.99	\$2,186.10	\$1,159.89	\$36.49	1.1%
150	45,000	\$4,951.90	\$3,279.15	\$1,672.75	\$5,006.54	\$3,279.15	\$1,727.39	\$54.64	1.1%

Proposed Rates	\$24.89	\$0.00213	\$4.48	\$0.01622	\$0.00070	\$0.00330	\$0.00055			\$0.07287
Present Rates	\$24.70	\$0.00102	\$4.45	\$0.01622	0.00070	\$0.00330	\$0.00055			\$0.07287
		kWh x	kW x	kWh x	kWh x	kWh x	kWh x			kWh x
	Customer Charge	Distribution Charge	Distribution Demand Charge	Transmission Charge	Stranded Cost Charge	System Benefits Charge	Electricity Consumption Tax	- -	Supplier Services	Default Service

Schedule DET-5

Granite State Electric Company d/b/a National Grid Docket No. DE 10-\_\_\_\_ Witness: D.E. Tufts

Schedule DET-5 Revised Tariff Pages

Granite State Electric Company d/b/a National Grid Docket No. DE 10-\_\_\_\_\_ Revised Schedule DET-5

Revised Page	Superseded Page	Rate Schedule
Ninth Revised Page 35	Superseding Eighth Revised Page 35	Rate D
Fifth Revised Page 36	Superseding Fourth Revised Page 36	Rate D
Sixth Revised Page 37	Superseding Fifth Revised Page 37	Rate D
Eleventh Revised Page 39	Superseding Tenth Revised Page 39	Rate D
Ninth Revised Page 40	Superseding Eighth Revised Page 40	Rate D-10
Ninth Revised Page 43	Superseding Eighth Revised Page 43	Rate D-10
Fifth Revised Page 44	Superseding Fourth Revised Page 44	Rate G-1
Tenth Revised Page 45	Superseding Ninth Revised Page 45	Rate G-1
Fifth Revised Page 50	Superseding Fourth Revised Page 50	Rate G-2
Sixth Revised Page 55	Superseding Fifth Revised Page 55	Rate G-3
Ninth Revised Page 57	Superseding Eighth Revised Page 57	Rate G-3
Fifth Revised Page 59	Superseding Fourth Revised Page 59	Rate M
Sixth Revised Page 60	Superseding Fifth Revised Page 60	Rate M
Sixth Revised Page 66	Superseding Fifth Revised Page 66	Rate T
Ninth Revised Page 68	Superseding Eighth Revised Page 68	Rate T
Fifth Revised Page 70	Superseding Fourth Revised Page 70	Rate V
Ninth Revised Page 72	Superseding Eighth Revised Page 72	Rate V
Sixty-fourth Revised Page 84	Superseding Sixty-third Revised Page 84	Summary of Rates

## N.H.P.U.C. No. 17 - ELECTRICITY GRANITE STATE ELECTRIC COMPANY

## DOMESTIC SERVICE RATE D

#### AVAILABILITY

Retail Delivery Service under this rate is available for all domestic purposes in an individual private dwelling or an individual apartment and for farm purposes. If electricity is delivered through more than one meter, the charge for electricity delivered through each meter shall be computed separately under this rate.

#### CHARACTER OF SERVICE

Service supplied under this rate will be single phase, 60 cycle, alternating current, normally three-wire service at a nominal voltage of 120/240 volts or three-wire 120/208 volts, whichever is available at the location.

#### RATE PER MONTH

The rate per month will be the sum of the applicable Customer and Energy Charges subject to the adjustments in this tariff:

Rates for Retail Delivery Service

Customer Charge

\$4.32<u>4.35</u> per month

**Distribution Energy Charges** 

Regular Use

1.6291.641 cents per kilowatt-hour for the first 250 kilowatt-hours 4.2424.275 cents per kilowatt-hour for the excess of 250 kilowatt-hours

For customers who received service under the off-peak provisions of the Domestic Service Rate D prior to April 1, 1991, the following rates shall apply:

#### Off-Peak Use: 16 Hour Control

For all electricity separately metered and delivered between the hours of 11:00 p.m. on each day and 7:00 a.m. on the next day, the price of such electricity shall be:

1.5581.570 cents per kilowatt-hour if a Customer has installed an electric water heater of a type approved by the Company, and electricity delivered to such water heater is supplied only under this rate.

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			Thomas B. King	
Effective:	August 1, 2009July 1, 2010	Title:	President	
(Issued in C	Compliance with Order No. 24,998	in Docket DE <del>09-094<u>10-</u></del>	lated July 31, 2009	)

## Off-Peak Use: 6 Hour Control

For all electricity separately metered and subject to the Company's right to limit the operation of the bottom water heating element up to 6 hours a day, the price of such electricity shall be:

1.6291.641 cents per kilowatt-hour if a Customer has installed an electric water heater of a type approved by the Company, and electricity delivered to such water heater is supplied only under this rate.

Farm use

The availability of the Farm Use Section is limited to those locations which were served under the Farm Use Section of Domestic Rate D, N.H.P.U.C. No. 8 - Electricity immediately prior to the effective date of this rate. For such farm customers, where all electricity is supplied by the Company, the RATE PER MONTH is modified as follows:

2.5332.553 cents per kilowatt-hour for all Regular Use kilowatt-hours in excess of the greater of the following:

- (a) 500 kilowatt-hours
- (b) 100 kilowatt-hours per kilovolt-ampere of transformer capacity needed to serve the Customer

# APPROVED TYPES OF WATER HEATERS FOR USE UNDER PROVISIONS OF OFF-PEAK USE CLAUSE OF DOMESTIC RATE D

The specifications for an approved type of water heater for all domestic applications are as follows:

(1) It shall be of standard manufacture and have a capacity and corresponding heating elements as specified below:

Approx.	Rating	Rating
Tank Size	<u>Top Unit</u>	Bottom Unit
<u>Gallons</u>	Watts	Watts
80*	4500	3000
100 to 120	4500	4500
150	5000	5000

\*Water heaters of less than 80 gallons with top and bottom heating elements of not more than 4500 watts each may be installed at the Company's option, with the permission of the Regional Executive.

(2) It shall be equipped with a top and bottom heating element, each controlled by a separate thermostatic switch. The thermostatic switch for the top element shall be of a double-throw type so connected as to

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permit operation of only one heating element at a time. The thermostat for the bottom element shall be of single-pole, single-throw type. The top and bottom units shall be designed for nominal 240-volt operation.

- (3) It shall have a pressure rating of not less than 250 pounds-per-square-inch test.
- (4) It shall be equipped as purchased with an approved fuel cut-off type temperature limit switch having its temperature sensitive element in contact with tank surface within 12 inches of top and so connected as to completely disconnect the heating elements from the power supply.
- (5) The thermostats for the top and the bottom heating units shall have a range of temperature settings extending from 120 degrees to 170 degrees Fahrenheit with the bottom element setting maintaining approximately a 10-degree differential above the setting of the top element.
- (6) The water heater and the installation thereof shall conform to the National Electric Code, to any State of local requirements, and to those of the Company.

The Customer shall provide a separate circuit for the water heater, of ample capacity and designed for 240-volt operation, to which no equipment other than the water heater shall be connected. Specific water heating connection diagrams for each type of service and rate application are available from the Company.

## INTERRUPTIBLE CREDITS

The Company will provide, own and maintain a suitable switch designed to control the operation of selected appliances so that the appliance may operate only during the hours chosen by the Company.

If the Customer has installed an electric water heater of a type approved by the Company, and permits the Company to control the operation of the water heater for the specified number of hours per day and during emergency situations, the Customer will receive the following credit each month:

	Control hrs./day	Credit
IC-1	6	\$4 <u>.814.84</u>
IC-2	16	\$ <del>6.42<u>6.47</u></del>

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#### ELECTRIC ASSISTANCE PROGRAM

Eligible customers taking service under this rate will receive a discount as provided on Page 86 of this Tariff of which this rate is a part. Eligibility shall be determined in accordance with the Electric Assistance Program Provision on Page 86 of this Tariff. A summary of energy charges in effect, with all adjustments, is provided on Page 84 of this Tariff.

#### SYSTEM BENEFITS CHARGE ADJUSTMENT PROVISION

Customers taking service under this rate will be charged a System Benefits Charge as provided on Page 77 of the Tariff of which this rate is a part. A summary of energy charges in effect, with all adjustments, is provided on Page 84 of this Tariff.

## MINIMUM CHARGE

\$4.324.35 per month Customer Charge.

## **BIMONTHLY BILLING**

The Company reserves the right to read meters and render bills on a bimonthly basis. When bills are rendered bimonthly, the Customer Charge, the kilowatt-hours stated in each block and the Minimum Charge shall be multiplied by two.

#### TERMS OF PAYMENT

The above rate is net, billed monthly or bimonthly and payable upon presentation of the bill.

#### TERMS AND CONDITIONS

The Company's Terms and Conditions in effect from time to time, where not inconsistent with any specific provisions hereof, are a part of this rate.

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Effective:	August 1, 2009July 1, 2010	Title:	Thomas B. King President	
(Issued in C	Compliance with Order No. 24,998	_ in Docket DE <del>09-094<u>10</u> d</del>	lated July 31, 2009)	)

## N.H.P.U.C. No. 17 - ELECTRICITY GRANITE STATE ELECTRIC COMPANY

## DOMESTIC SERVICE RATE D-10 OPTIONAL PEAK LOAD PRICING RATE

## AVAILABILITY

Retail Delivery Service under this rate is available for all domestic purposes in an individual private dwelling or an individual apartment and for farm purposes to selected customers presently served under Rate D.

If electricity is delivered through more than one meter, the charge for electricity delivered through each meter shall be computed separately under this rate. The availability of this rate will be subject to the Company's ability to obtain the necessary meters and to render such service.

## CHARACTER OF SERVICE

Service supplied under this rate will be single phase, 60 cycle, alternating current, normally three-wire service at a nominal voltage of 120/240 volts or three-wire 120/208 volts, whichever is available at the location.

## RATE PER MONTH

The rate per month will be the sum of the applicable Customer and Energy Charges subject to the adjustments in this tariff:

## Rates for Retail Delivery Service

Customer Charge

\$<del>7.42<u>7.47</u> month</del>

## **Distribution Energy Charges**

On-Peak 4.7094.746 cents per kilowatt-hour

Off-Peak 0.000 cents per kilowatt-hour

Peak hours will be from 8:00 a.m. to 9:00 p.m. daily on Monday through Friday excluding holidays.

Off-Peak hours will be from 9:00 p.m. to 8:00 a.m. daily Monday through Friday, and all day on Saturdays, Sundays, and holidays.

The holidays will be: New Year's Day, President's Day, Memorial Day, Independence Day, Columbus Day, Labor Day, Veteran's Day, Thanksgiving Day and Christmas Day. All holidays will be the nationally observed day.

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Effective:	August 1, 2009July 1, 2010	Title:	Thomas B. King President	
(Issued in C	Compliance with Order No. 24,998	_ in Docket DE <del>09-094<u>10-</u></del> c	dated <del>July 31, 2009</del>	)

## ELECTRIC ASSISTANCE PROGRAM

Eligible customers taking service under this rate will receive a discount as provided on Page 86 of this Tariff of which this rate is a part. Eligibility shall be determined in accordance with the Electric Assistance Program Provision on Page 86 of this Tariff. A summary of energy charges in effect, with all adjustments, is provided on Page 84 of this Tariff.

## SYSTEM BENEFITS CHARGE ADJUSTMENT PROVISION

Customers taking service under this rate will be charged a System Benefits Charge as provided on Page 77 of the Tariff of which this rate is a part. A summary of energy charges in effect, with all adjustments, is provided on Page 84 of this Tariff.

#### MINIMUM CHARGE

\$7.427.47 per month Customer Charge

#### TERMS OF PAYMENT

The above rate is net, billed monthly or bimonthly and payable upon presentation of the bill.

## TERMS OF AGREEMENT

The agreement for service under this rate will continue for an initial term of one year if electricity can be properly delivered to a Customer without an uneconomic expenditure by the Company. The agreement may be terminated at any time on or after the expiration date of the initial term by twelve (12) months prior written notice.

## TERMS AND CONDITIONS

The Company's Terms and Conditions in effect from time to time, where not inconsistent with any specific provisions hereof, are a part of this rate.

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(Issued in C	compliance with Order No. 24,998	_ in Docket DE <del>09-094<u>10</u> c</del>	lated July 31, 2009)

## GENERAL SERVICE TIME-OF-USE RATE G-1

#### AVAILABILITY

Retail Delivery Service under this rate is available for all purposes except resale, subject to the provisions of this section. A Customer will take delivery service on this rate if the Company estimates that its average use will be greater than or equal to 200 kW of Demand.

A Customer may be transferred from rate G-1 at its request or at the option of the Company if the customer's 12 month average monthly demand is less than 180 kW of Demand for 3 consecutive months.

If electricity is delivered through more than one meter, except at the Company's option, the charge for electricity delivered through each meter shall be computed separately under this rate. If any electricity is delivered hereunder at a given location, then all electricity delivered by the Company at such location shall be furnished hereunder, except such electricity as may be delivered under the provisions of the Limited Commercial Space Heating Rate V.

The actual delivery of service and the rendering of bills under this rate is contingent upon the installation of the necessary time-of-use metering equipment by the Company; subject to both the availability of such meters from the Company's supplier and the conversion or installation procedures established by the Company.

All customers served on this rate must elect to take their total electric service under the time-of-use metering installation as approved by the Company. If delivery is through more than one meter, except at the Company's option, the Monthly Charge for service through each meter shall be computed separately under this rate.

#### CHARACTER OF SERVICE

Service supplied under this rate will be 60 cycle, three-phase alternating current normally at a nominal voltage of 120/208, 277/480, 2400, 4160, 4800, 7200, 13,200 and 13,800 volts.

All voltages are not available in every area.

#### RATE PER MONTH

The Rate Per Month will be the sum of the applicable Customer, Demand and Energy Charges subject to the adjustments in this tariff.

#### Rates for Retail Delivery Service

Customer Charge

\$<del>92.27</del>92.99 per month.

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## **Distribution Demand Charge**

\$4.034.06 per kW of Peak Hours Demand per Month

## **Distribution Energy Charges**

Peak Hours Use 0.1330.134 cents per Kilowatt-hour

Off-Peak Hours Use 0.000 cents per Kilowatt-hour

Peak hours will be from 8:00 a.m. to 9:00 p.m. daily on Monday through Friday excluding holidays.

Off-Peak hours will be from 9:00 p.m. to 8:00 a.m. daily Monday through Friday, and all day on Saturdays, Sundays, and holidays.

The holidays will be: New Year's Day, President's Day, Memorial Day, Independence Day, Columbus Day, Labor Day, Veteran's Day, Thanksgiving Day and Christmas Day. All holidays will be the nationally observed day.

## TRANSMISSION SERVICE COST ADJUSTMENT

Transmission service is available to all retail Customers taking service under this rate. For those Customers, the Transmission Energy Charge shall be calculated in accordance with the Company's Transmission Service Cost Adjustment Provision as provided on Page 79 of the Tariff of which this rate is a part. A summary of energy charges in effect, with all adjustments, is provided on Page 84 of this Tariff.

#### STRANDED COST ADJUSTMENT

All energy billed under this rate is subject to a Stranded Cost Energy Charge which rate shall be adjusted from time to time in accordance with the Company's Stranded Cost Adjustment Provision as provided on Page 80 of the Tariff of which this rate is a part. A summary of energy charges in effect, with all adjustments, is provided on Page 84 of this Tariff.

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## GENERAL LONG HOUR SERVICE RATE G-2

#### AVAILABILITY

Retail Delivery Service under this rate is available for all purposes except resale, subject to the provisions of this section. A Customer will take delivery service on this rate if the Company estimates that its average use will be greater than or equal to 20 kW of Demand but is less than 200 kW of Demand. If electricity is delivered through more than one meter, except at the Company's option, the charge for electricity delivered through each meter shall be computed separately under this rate.

A customer may be transferred from rate G-2 at its request or at the option of the Company if the customer's twelve (12) month average monthly demand is less than 18 kW of demand for three consecutive months.

If any electricity is delivered hereunder at a given location, then all electricity delivered by the Company at such location shall be furnished hereunder, except such electricity as may be delivered under the provisions of the Limited Commercial Space Heating Rate V.

#### CHARACTER OF SERVICE

Service supplied under this rate will be 60 cycle, three-phase alternating current normally at a nominal voltage of 120/208, 277/480, 2400, 4160, 4800, 7200, 13,200 and 13,800 volts.

All voltages are not available in every area.

#### RATE PER MONTH

The Rate Per Month will be the sum of the applicable Customer, Demand and Energy Charges subject to the adjustments in this tariff.

## Rates for Retail Delivery Service

Customer Charge

\$24.7024.89 per month.

**Distribution Demand Charge** 

\$4.454.48 per kilowatt of Demand per Month

**Distribution Energy Charge** 

0.031 cents per kilowatt-hour

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#### GENERAL SERVICE RATE G-3

#### AVAILABILITY

Retail Delivery Service under this rate is available for all purposes except for resale. A Customer will take delivery service on this rate if the Company estimates that its average use will be less than 20 kW of demand. If electricity is delivered through more than one meter, except at the Company's option, the charge for electricity delivered through each meter shall be computed separately under this rate.

## CHARACTER OF SERVICE

Service supplied under this rate will be 60 cycle, alternating current either:

- (a) Single-phase normally three-wire at a nominal voltage of 120/240 volts.
- (b) Three-phase secondary normally at a nominal voltage of 120/208, or 277/480 volts.
- (c) Three-phase primary normally at a nominal voltage of 2400, 4160, 4800, 7200, 13,200 or 13,800 volts.
- All voltages are not available in every area.

## RATE PER MONTH

The rate per month will be the sum of the Customer and Energy Charges subject to the adjustments in this tariff:

#### Rates for Retail Delivery Service

Customer Charge

\$<u>5.475.51</u> per month.

**Distribution Energy Charge** 

3.0523.076 cents per kilowatt-hour.

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			Thomas B. King	
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## SYSTEM BENEFITS CHARGE ADJUSTMENT PROVISION

Customers taking service under this rate will be charged a System Benefits Charge as provided on Page 77 of the Tariff of which this rate is a part. A summary of energy charges in effect, with all adjustments, is provided on Page 84 of this Tariff.

#### MINIMUM CHARGE

\$5.475.51 per Month Customer Charge

However, if the KVA transformer capacity needed to serve a customer exceeds 25 KVA, the minimum charge will be increased by  $\frac{1.611.62}{1.62}$  for each KVA in excess of 25 KVA.

## **BIMONTHLY BILLING**

The Company reserves the right to read meters and render bills on a bimonthly basis. When bills are rendered bimonthly, the Customer Charge and the Minimum Charge shall be multiplied by two.

## TERMS OF PAYMENT

The above rate is net, billed monthly or bimonthly and payable upon presentation of the bill.

## TERM OF AGREEMENT

A Customer served under this rate must provide the Company with one-year prior written notice before installing additional on-site, non-emergency generation for its own use. This notice provision shall be waived with respect to the installation of on-site non-emergency generation from renewable energy resources. Renewable energy resources shall mean fuel cells (including natural gas powered fuel cells), and emerging power generation technologies that produce electricity from wind energy, solar energy, small-scale hydro power, ocean power, landfill gas, sustainably managed biomass, and future clean renewable technologies.

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## OUTDOOR LIGHTING SERVICE RATE M

#### AVAILABILITY

## Public Lighting

Available for Street or Highway lighting to any town, city or fire district.

Installations on limited access highways and the access and egress ramps thereto are subject to the Special Rate Conditions of this tariff.

### Private Lighting

Available to private customers for outdoor lighting where necessary fixtures can be supported on existing poles and where such service can be supplied from existing secondary distribution facilities.

In special circumstances outlined in the pole and accessory section below, the Company will install a wooden pole.

## RATE

Luminaire Charge			
Size of Street Light Lumens	Wattage	Lamp <u>Code</u>	Annual Distribution <u>Price Per Unit</u>
Sodium Vapor			
4,000	50	70	\$ <del>50.19</del> 50.58
9,600	100	72	\$ <del>60.84<u>61.32</u></del>
27,500	250	74	\$ <del>106.83</del> 107.67
50,000	400	75	\$ <del>139.20</del> 140.29
9,600(Post Top)	100	79	\$ <del>70.07</del> 70.62
27,500(Flood)	250	77	\$ <del>107.78</del> <u>108.63</u>
50,000(Flood)	400	78	\$ <del>148.79<u>149.96</u></del>
Incandescent			
1,000	103	10	\$ <del>67.00<u>67.52</u></del>

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(Issued in C	ompliance with Order No. 24,998	_ in Docket DE <del>09-094<u>10-</u></del> d	lated July 31, 2009	)

Size of Street Light Lumens	Lamp <u>Wattage</u>	<u>Code</u>	Annual Distribution <u>Price Per Unit</u>
Mercury Vapor			
4,000	100	03	\$4 <u>8.4948.87</u>
8,000	175	04	\$ <del>58.96<u>59.42</u></del>
22,000	400	05	\$ <del>111.50</del> <u>112.38</u>
63,000	1,000	06	\$ <del>211.55</del> 213.22
22,000(Flood)	400	23	\$ <del>123.31<u>124.28</u></del>
63,000(Flood)	1,000	24	\$ <del>212.93</del> 214.61

No further installation or relocation of Incandescent and Mercury Vapor lights will be made after the effective date of this rate, unless specific permission is received from the Commission's Chief Engineer.

#### POLE AND ACCESSORY CHARGE

An additional annual charge enumerated below will be applied where the Company is requested to furnish a suitable wood pole for the sole purpose of supporting a luminaire. If at a future date the pole is used for any purpose approved by the Company in addition to supporting a street and/or floodlight luminaire, the pole charge will be terminated. This pole may not be more than one (1) span from the existing secondary service located along a roadway or thoroughfare, and must be reachable for mechanized equipment.

Overhead Service	Code	Annual Price Per Unit
Wood Poles	Р	\$ <del>59.14<u>59.60</u></del>
Underground Service		
Non-Metallic		
Fiber glass wo/Base	R	\$ <del>61.24<u>61.72</u></del>
Fiber glass w/Base <25 ft.	С	\$ <del>103.85</del> 104.67
Fiber glass w/Base $\geq 25$ ft.	D	\$ <del>173.50<u>174.87</u></del>
Metal Poles wo/Base	F	\$ <del>123.84<u>124.81</u></del>
Metal Poles w/Base	Т	\$ <u>149.22</u> 150.39

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## N.H.P.U.C. No. 17 - ELECTRICITY GRANITE STATE ELECTRIC COMPANY

## RATE PER MONTH

The rate per month will be the sum of the applicable Customer and Energy Charges subject to the adjustments in this tariff.

Rates for Retail Delivery Service

Customer Charge

\$<u>5.59</u>5.63 per Month

**Distribution Energy Charge** 

1.9942.009 cents per kilowatt-hour

## INTERRUPTIBLE CREDITS

The Company will provide, own and maintain a suitable switch designed to control the operation of selected appliances so that the appliance may operate only during the hours chosen by the Company.

If the Customer has installed an electric water heater of a type approved by the Company, and permits the Company to control the operation of the water heater for the specified number of hours per day and during emergency situations, the Customer will receive the following credit each month:

	Control hrs./day	Credit
IC-1	6	\$ <u>4.814.84</u>
IC-2	16	\$ <del>6.42<u>6.47</u></del>

## TRANSMISSION SERVICE COST ADJUSTMENT

Transmission service is available to all retail Customers taking service under this rate. For those Customers, the Transmission Energy Charge shall be calculated in accordance with the Company's Transmission Service Cost Adjustment Provision as provided on Page 79 of the Tariff of which this rate is a part. A summary of energy charges in effect, with all adjustments, is provided on Page 84 of this Tariff.

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## N.H.P.U.C. No. 17 - ELECTRICITY GRANITE STATE ELECTRIC COMPANY

## ELECTRIC ASSISTANCE PROGRAM

Eligible customers taking service under this rate will receive a discount as provided on Page 86 of this Tariff of which this rate is a part. Eligibility shall be determined in accordance with the Electric Assistance Program Provision on Page 86 of this Tariff. A summary of energy charges in effect, with all adjustments, is provided on Page 84 of this Tariff.

## SYSTEM BENEFITS CHARGE ADJUSTMENT PROVISION

Customers taking service under this rate will be charged a System Benefits Charge as provided on Page 77 of the Tariff of which this rate is a part. A summary of energy charges in effect, with all adjustments, is provided on Page 84 of this Tariff.

#### MINIMUM CHARGE

\$5.595.63 per Month Customer Charge

#### **BIMONTHLY BILLING**

The Company reserves the right to read meters and render bills on a bimonthly basis. When bills are rendered bimonthly, the Minimum Charge shall be multiplied by two.

#### TERMS OF PAYMENT

The above rate is net, billed monthly or bimonthly and payable upon presentation of the bill. However, customers may elect in writing to pay on a Budget Billing Plan available on application to the Company.

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## LIMITED COMMERCIAL SPACE HEATING RATE V

#### AVAILABILITY

The availability of this rate is limited to the following customers: 1) those who immediately prior to the effective date of this rate were served under Commercial Space Heating Rate V, N.H.P.U.C. No. 8 - Electricity and are presently receiving service under this rate, and 2) those who requested service under this rate prior to May 1, 1982.

To such customers, delivery service under this Limited Commercial Space Heating Rate V is available for space heating in buildings other than residences, where the Customer's premises are heated exclusively by electricity.

Air conditioning used in addition to electric space heating at this same location may also be served under this rate, provided that electricity is the sole source of energy, and all the requirements for these purposes are metered hereunder.

Electric space heating equipment shall be permanently installed and be of a type and size approved by the Company.

Service under this rate will be metered separately.

Any other use of electricity must be taken under an applicable general service rate.

This rate is not available to seasonal customers, or for resale or auxiliary service.

## CHARACTER OF SERVICE

Service supplied under this rate will be single phase, 60 cycle, alternating current, normally three-wire service at a nominal voltage of 120/240 volts or three-wire 120/208 volts, whichever is available at the location, or other voltages where available by special arrangement with the Company.

## RATE PER MONTH

The rate per month will be the sum of the applicable Customer and Energy Charges subject to the adjustments in this tariff.

## Rates for Retail Delivery Service

Minimum Charge \$5.845.88 per Month

Distribution Energy Charge 2.8162.838 cents per kilowatt-hour

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## N.H.P.U.C. No. 17 - ELECTRICITY GRANITE STATE ELECTRIC COMPANY

## SYSTEM BENEFITS CHARGE ADJUSTMENT PROVISION

Customers taking service under this rate will be charged a System Benefits Charge as provided on Page 77 of the Tariff of which this rate is a part. A summary of energy charges in effect, with all adjustments, is provided on Page 84 of this Tariff.

#### MINIMUM CHARGE

\$5.84<u>5.88</u> per Month Customer Charge

## TERMS OF PAYMENT

The above rate is net, billed monthly and payable upon presentation of the bill. However, customers may elect in writing to pay on a Budget Billing Plan available on application to the Company.

## TERM OF AGREEMENT

A Customer served under this rate must provide the Company with one-year prior written notice before installing additional on-site, non-emergency generation for its own use. This notice provision shall be waived with respect to the installation of on-site non-emergency generation from renewable energy resources. Renewable energy resources shall mean fuel cells (including natural gas powered fuel cells), and emerging power generation technologies that produce electricity from wind energy, solar energy, small-scale hydro power, ocean power, landfill gas, sustainably managed biomass, and future clean renewable technologies.

## TERMS AND CONDITIONS

The Company's Terms and Conditions in effect from time to time, where not inconsistent with any specific provisions hereof, are a part of this rate.

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Thomas B. King

President

Title:

#### GRANITE STATE ELECTRIC COMPANY RATES EFFECTIVE JULY 1, 2010 FOR USAGE ON AND AFTER JULY 1, 2010

Rate	Blocks	Distribution Charge (1), (2), (3), (4)	Electricity Consumption Tax	Transmission Charge	Systems Benefits Charge	Stranded Cost Charge	Total Retail Delivery Services
D	Customer Charge 1st 250 kWh Excess 250 kWh Off Peak kWh Farm kWh D-6 kWh	\$4.35 \$0.01806 \$0.04440 \$0.01735 \$0.02718 \$0.01806	\$0.00055 \$0.00055 \$0.00055 \$0.00055 \$0.00055	\$0.01811 \$0.01811 \$0.01811 \$0.01811 \$0.01811	\$0.00330 \$0.00330 \$0.00330 \$0.00330 \$0.00330	\$0.00070 \$0.00070 \$0.00070 \$0.00070 \$0.00070	\$4.35 \$0.04072 \$0.06706 \$0.04001 \$0.04984 \$0.04072
D-10	Customer Charge On Peak kWh Off Peak kWh	\$7.47 \$0.04920 \$0.00174	\$0.00055 \$0.00055	\$0.01435 \$0.01435	\$0.00330 \$0.00330	\$0.00069 \$0.00069	\$7.47 \$0.06809 \$0.02063
G-1	Customer Charge Demand Charge On Peak kWh Off Peak kWh	\$92.99 \$4.06 \$0.00316 \$0.00182	\$0.00055 \$0.00055	\$0.01505 \$0.01505	\$0.00330 \$0.00330	\$0.00069 \$0.00069	\$92.99 \$4.06 \$0.02275 \$0.02141
G-2	Customer Charge Demand Charge All kWh	\$24.89 \$4.48 \$0.00213	\$0.00055	\$0.01622	\$0.00330	\$0.00070	\$24.89 \$4.48 \$0.02290
G-3	Customer Charge All kWh	\$5.51 \$0.03241	\$0.00055	\$0.01644	\$0.00330	\$0.00070	\$5.51 \$0.05340
М	All kWh see tariff for luminares &	\$0.00182 pole charges	\$0.00055	\$0.00990	\$0.00330	\$0.00071	\$0.01628
Т	Customer Charge All kWh	\$5.63 \$0.02184	\$0.00055	\$0.01696	\$0.00330	\$0.00070	\$5.63 \$0.04335
V	Minimum Charge All kWh	\$5.88 \$0.03011	\$0.00055	\$0.01797	\$0.00330	\$0.00071	\$5.88 \$0.05264

(1) Distribution Energy Charges include a Business Profits Tax Surcharge of \$0.00057 per kWh for usage on and after 8/1/01

(2) Distribution Energy Charges include the following credits per kWh in accordance with page 93 of the tariff for usage on and after 5/1/06 Rate Class Credit per kWh

reate Clubb	<u>Credit per k win</u>
D	(\$0.00017)
D-10	(\$0.00008)
G-3	(\$0.00017)
Т	(\$0.00007)
V	(\$0.00009)

(3) Distribution Energy Charges include a Reliability Enhancement Program and Vegetation Management Plan Adjustment Factor of \$0.00125 per kWh for usage on and after 7/1/10

System Benefits Charge-Energy Efficiency System Benefits Charge-Statewide Energy Assistance Program Total System Benefits Charge		Effective 1/15/10, usage on and after Effective 1/15/10, usage on and after
Transmission Cost Adjustment Factor	various	Effective 1/1/10, usage on and after
Stranded Cost Adjustment Factor	various	Effective 1/1/10, usage on and after
Default Service Charge		
Residential & Small Commercial (D, D-10, G-3, M, T, V)	\$0.07155	Effective 5/1/10, usage on and after
Medium / Large Commercial & Industrial (G-1, G-2)	\$0.07120	Effective 5/1/10, usage on and after
	\$0.06910	Effective 6/1/10, usage on and after
	\$0.07287	Effective 7/1/10, usage on and after
Electricity Consumption Tax	\$0.00055	Effective 5/1/01, usage on and after
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