

January 2011 Retail Rate Filing

Testimony and Schedules
of
Scott M. McCabe
and
James L. Loschiavo

November 19, 2010
Submitted to:
New Hampshire Public Utilities Commission Docket DE 10 -

Submitted by:
nationalgrid

# DIRECT TESTIMONY OF 

SCOTT M. MCCABE

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## I. Introduction and Qualifications

Q. Please state your full name and business address.
A. My name is Scott M. McCabe and my business address is 40 Sylvan Road, Waltham, Massachusetts 02451.
Q. Please state your position.
A. I am Principal Analyst in the Electric Pricing group of Regulation and Pricing Electricity Distribution and Generation for National Grid USA. This group provides rate-related services for Granite State Electric Company d/b/a National Grid ("National Grid" or "the Company").
Q. Please describe your educational background.
A. I graduated from Bowdoin College in Brunswick, Maine with a Bachelor of Arts degree in Economics and Government and Legal Studies in 1991.
Q. Please describe your professional experience and training.
A. From 1991 to 1999, I was employed by Bay State Gas Company ("Bay State Gas"), headquartered in Westborough, MA. At Bay State Gas I held several positions, beginning as an intern for the Marketing and Sales Group in September 1991 and promoted to Associate Planning Analyst for the same group in January 1993. In August 1993, I joined the Demand Side Management department as a program manager responsible for the implementation of Bay State Gas's commercial and multifamily DSM

Programs. In August 1996, I joined EnergyUSA, an unregulated affiliate of Bay State Gas, as a Senior Financial Analyst and in December 1997 was promoted to Manager of Product Support. In January 1999 I rejoined Bay State Gas as Revenue Control and Analysis Supervisor. From May 1999 through April 2001, I worked for the Massachusetts Technology Collaborative as Project Manager for the Massachusetts Renewable Energy Trust. I joined National Grid in April 2001 as Senior Analyst in the Energy Efficiency Services Group. I transferred to Regulation and Pricing in October 2002. In July of 2008 I was promoted to my current position.
Q. Have you previously testified before the New Hampshire Public Utilities Commission ("Commission")?
A. Yes.

## II. Purpose of Testimony

Q. What is the purpose of your testimony?
A. The purpose of my testimony is to present National Grid's proposed rate adjustments for 2011 in accordance with the Company's reconciliation and adjustment provisions of its tariff, and the Company's Amended Restructuring Settlement Agreement approved in Docket No. DR 98-012 ("Amended Settlement Agreement"). The reconciliations and adjustments I describe in my testimony relate to the Stranded Cost Charge and transmission charges.

The purpose of each reconciliation is to determine the difference between revenues collected under these mechanisms and the Company's actual expenses. For the Company’s Stranded Cost Charge and transmission charges, the Company calculates an adjustment factor based on the result of each of these reconciliations, which is used to determine whether a refund or further collection from customers is necessary. This filing also presents the final reconciliation of balances approved for refund or recovery through adjustment factors, the refund or recovery of which has been completed since the Company's last reconciliation filing on November 20, 2009, and proposes a disposition of any remaining balances relating to these adjustment factors. I will discuss each provision subject to reconciliation, its reconciliation, and its proposed adjustment factor separately.

My testimony also presents the proposed rate design for the Company's forecasted 2011 transmission expenses, as provided for in the Company's Transmission Service Cost Adjustment Provision, and changes in National Grid’s Stranded Cost Charge in accordance with the Company's Amended Settlement Agreement.
Q. Please summarize the results of the adjustments and reconciliations which National Grid proposes to implement in 2011.
A. As I describe in more detail later in my testimony, National Grid proposes to implement the following adjustments to its rates and charges beginning January 1, 2011, for usage on and after that date:

| Charge or Factor (\$/kWh) | $\underline{2010}$ | $\underline{2011}$ | Increase (Decrease) |
| :---: | :---: | :---: | :---: |
| Stranded Cost Charge (avg.) | 0.070¢ | $0.020 ¢$ | (0.050¢) |
| Transmission Service Charge (avg.) | $\underline{1.6334}$ | 1.5779 | (0.056¢) |
| Total | $1.703 ¢$ | 1.597 ¢ | (0.106\$) |

Schedule SMM-1 sets forth in detail the proposed adjustment factors as well as the proposed transmission rates and Stranded Cost Charge.

## III. Stranded Cost Charge

## Base Stranded Cost Charge

Q. Please discuss, in general terms, the Company's proposed adjustment and reconciliation of its Stranded Cost Charge.
A. National Grid’s Stranded Cost Charge consists of two components: (1) a uniform per kilowatt-hour charge the Company charges all customers, and which reflects the Contract Termination Charge ("CTC") assessed by New England Power Company ("NEP"); and (2) rate-class specific adjustment factors reflecting the reconciliation of any excess or deficiency in stranded cost recovery from that rate class in the prior year. The Company's Stranded Cost Adjustment Provision provides for changes to the Stranded Cost Charge as a result of a change in the CTC from NEP and the rate-class-specific reconciliation described above. The changes proposed by National Grid are in accordance with that provision of its tariff.
Q. Please describe the changes to the base portion of the Stranded Cost Charge resulting from the changes in the CTC assessed by NEP.
A. National Grid is proposing to decrease the uniform Stranded Cost Charge it assesses from $0.070 \$$ per kilowatt-hour (excluding Stranded Cost adjustment factors) to $0.020 \Phi$ per kilowatt-hour (excluding Stranded Cost adjustment factors) for the period beginning January 1, 2011. At the time of this filing, NEP has not finalized its 2011 CTC, but expects to do so on or before December 1, 2010, at which time it will provide the reconciliation report to the Commission and the signatories to the Amended Settlement Agreement in accordance with Section 3.5 of the Wholesale Settlement approved by the Federal Energy Regulatory Commission. The Company intends to update its proposed Stranded Cost Charge prior to the hearing in this proceeding if the final CTC is different than today's proposed value.

## Reconciliations

Q. Please describe the Stranded Cost adjustment factors and the reconciliation used to determine those factors.
A. In addition to establishing a revised uniform CTC applicable to all kilowatt-hour deliveries for the forthcoming year, the Company also performs an annual reconciliation of the Stranded Cost revenue it has billed to customers and recorded in its general ledger with the CTC expenses it has paid to NEP in order to develop rate-class specific adjustment factors. The adjustment factors are implemented to ensure that there is no over or under collection of stranded costs from any particular rate class. Details of this
reconciliation for the period October 2009 through September 2010 are included in Schedule SMM-2.
Q. Can you explain the adjustments to the Stranded Cost revenue on pages 3 and 4 of Schedule SMM-2, Column (c)?
A. The adjustments in Column (c) on pages 3 and 4 of Schedule SMM-2 is reflected in January 2010 for Rates D-10, G-2, G-3, V and Streetlights, and represent the final balance of the 2009 Stranded Cost adjustment factor reconciliation after completion of the refund of the reconciliation balance for the period October 2007 through September 2008 at the end of 2009. The reconciliation and remaining amount for each rate class are found in Schedule SMM-3. Reflecting these amounts as adjustments in the current period's reconciliation ends the 2009 Stranded Cost adjustment factor reconciliation and provides final resolution of the remaining balance.
Q. Can you explain the adjustments to the Stranded Cost revenue on page 5 of Schedule SMM-2?
A. Yes. Stranded Cost revenue consists of revenue billed by the Company and recorded in its general ledger for all retail delivery customers. This revenue is generated by both the base Stranded Cost Charge as set by NEP’s CTC and the Stranded Cost adjustment factors in effect during the period that is reflected in this year's reconciliation (October 2009 through September 2010). Any amounts attributable to the Stranded Cost adjustment factors must be removed from total Stranded Cost revenue to provide for a proper Stranded Cost reconciliation. This adjustment is presented on page 5 of Schedule SMM-2. Similar adjustments have been made to total billed transmission revenue for the transmission adjustment factors in effect during 2009 and 2010.
Q.

Has the Company prepared a reconciliation of the Stranded Cost adjustment factors that were implemented in 2009 and 2010?
A. Yes. Schedule SMM-3 presents the final reconciliation for the 2009 factor and Schedule SMM-4 presents the current status of the reconciliation for the 2010 factors. The 2009 Stranded Cost adjustment factors were intended to refund a net over collection of $\$ 3,964$, which was refunded to customers during 2009. By the end of 2009, the Company had under refunded customers by a net of $\$ 1,485$. This amount, as discussed above, is reflected in this year's reconciliation as an adjustment to credit to customers the net over collection balance. This final balance is reflected in January 2010, as the Company indicated would occur in its November 20, 2009 Retail Rate Filing.

The currently effective 2010 Stranded Cost adjustment factors are intended to refund a combined net over collection of $\$ 4,664$ to customers on rates $\mathrm{D}-10, \mathrm{G}-1, \mathrm{~V}$ and M , and this net amount is being reflected on customers' bills during 2010. By the end of October 2010, the status of the 2010 Stranded Cost adjustment factor reconciliation is a combined net over collection of $\$ 1,967$, which remains to be refunded to customers by the end of 2010. Any remaining balances after the end of the refund/recovery period will be reflected as adjustments in next year's reconciliation in January 2011.

## 2011 Adjustment Factors

Q. Has the Company calculated proposed Stranded Cost adjustment factors for 2011?
A. Yes. Schedule SMM-5 calculates a Stranded Cost adjustment factor per kilowatt-hour for each rate class to be applied to all retail delivery service customer bills in that rate class for the period January 2011 through December 2011. A Stranded Cost adjustment factor is indicated for classes $\mathrm{D}-10, \mathrm{~T}, \mathrm{~V}$ and M . The remaining rate classes (D, G-1, G-2 and, G-3) have balances so low that their calculated adjustment factor is zero. Therefore, the balances for these rate classes will be carried forward as the beginning balance in the next reconciliation period (October 2010 through September 2011). Consequently, there will be no Stranded Cost adjustment factors for these rate classes.
Q. How does the methodology used for the Company's Stranded Cost adjustment factor determination and reconciliation compare to the other reconciliations presented in your testimony?
A. As explained in prior filings, NEP continues to bill its CTC based on the number of kilowatt-hours delivered by the Company on a cycle-billed basis. This process eliminates the timing differences between cycle and calendar-month billing that is present for some of the Company's other reconciliations, such as the transmission reconciliation. Consequently, there is a more accurate matching of revenue and expense for stranded cost recovery than there is for the other reconciliations presented in this filing, resulting in correspondingly small Stranded Cost adjustment factors.
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## IV. Transmission Service

## Transmission Service Cost Adjustment Provision

Q. Please describe the Company’s Transmission Service Cost Adjustment Provision ("TSCA")?
A. The Company recovers its transmission-related expenses pursuant to the TSCA, which allows the Company to recover costs billed to it by ISO-New England and New England Power Company.

## Reconciliations

Q. Does the TSCA provide for a reconciliation of the Company's transmission revenue and transmission expense?
A. Yes. The Company's TSCA provides for the full reconciliation of transmission revenue and expense and rate adjustment for any over recovery or under recovery of transmission costs from the prior year.
Q. Has the Company prepared such a reconciliation?
A. Yes, it is contained in Schedule SMM-6. This reconciliation reflects actual transmission revenue for the period October 2009 through September 2010 and actual transmission expenses for the period October 2009 through August 2010 and estimated expenses for September 2010.
Q. Please explain the January 2010 adjustment on Schedule SMM-6, page 1, Column (c)?
A. As described in the November 20, 2009 Retail Rate Filing, the adjustment of $(\$ 153,733)$ is related to the final balance of the September 2008 under recovery of transmission costs recovered through the 2009 transmission service adjustment factor, which is discussed below.
Q. Why, on page 2 of Schedule SMM-6, does the month October 2010 appear to show only a partial month of transmission revenue?
A. The transmission service reconciliation involves a comparison of revenue billed on a cycle basis with expenses incurred on a calendar month basis. In order to match more accurately transmission service revenue with expenses, the reconciliation is designed to account for actual usage which occurs during the period covered by the reconciliation, regardless of the month in which such usage is billed. Thus, the September 2010 usage that was billed in October 2010 is reflected in this year's reconciliation.
Q. Has the Company prepared reconciliations for the 2009 and 2010 transmission service cost adjustment factors?
A. Yes. They are included as Schedule SMM-7 and Schedule SMM-8, respectively. As shown in Schedule SMM-7 for the 2009 transmission service adjustment factor, of the \$1,983,018 under collection from the October 2007 through September 2008 transmission service reconciliation, $\$ 1,829,285$ had been recovered through the end of

2009, resulting in the Company under recovering $\$ 153,733$ of what it was allowed to recover for that period. The Company has reflected this amount in this year's transmission service reconciliation in January 2010, which can be seen on Schedule SMM-6, page 1, Column (c). As shown in Schedule SMM-8 for the 2010 transmission service adjustment factor, of the $\$ 109,881$ under collection from the transmission service reconciliation for the period through September 2009, $\$ 84,248$ has been recovered through October 2010, and $\$ 25,633$ remains to be recovered through the end of the year. Any remaining balance, either positive or negative, will be reflected in next year's transmission service reconciliation in January 2011.

## 2011 Adjustment Factor

Q. Is the Company proposing a transmission service adjustment factor for 2011?
A. Yes. The Company is proposing a uniform transmission service adjustment factor credit of ( $0.019 \$$ ) per kWh as calculated in Schedule SMM-9.
Q. How was this adjustment factor derived?
A. This factor was calculated by dividing the under collection of transmission expense at September 2010 from Schedule SMM-6 by the forecasted kilowatt-hour deliveries for calendar year 2011.
Q. How would this factor be implemented?
A. The transmission service adjustment factor would become effective for usage on and
after January 1, 2011. The proposed adjustment factor would be applied to bills of all customers taking transmission service through the Company.

## 2011 Base Transmission Service Rates

Q. Why is the Company proposing new base transmission rates at this time?
A. The Company's TCA states that the base transmission rates shall be established annually based on a forecast of transmission costs incurred by the Company to provide transmission service to its retail delivery service customers. The rate at which these costs are collected is to be calculated separately for each of the Company's rate classes based on cost-incurrence.
Q. What is the forecast of 2011 transmission costs?
A. As discussed in the testimony of James L. Loschiavo included in this filing, the Company’s transmission costs are expected to be approximately \$14.5 million in 2011. This forecast of transmission expense yields an average rate of $1.596 \$$ per kWh , which compares to the currently effective average transmission rate of $1.621 \Phi$ per kWh , exclusive of the transmission service cost adjustment factor. Based on these estimates, the Company determined that it should propose new rates effective January 1, 2011 to better match the projected incurrence of transmission costs. The Company is including its proposed transmission service rate design based on this forecast of transmission expenses for 2011 in Schedule SMM-10.
Q. How does the Company propose to design the base transmission rates effective January 1, 2011?
A. Since base transmission rates are unique by rate class, the first step in designing the proposed base transmission rates is to allocate the forecast of transmission costs to each rate class. The determination of the class-specific expense allocation is based on each rate class's contribution to the system peak. This methodology has been described in the Company's prior annual Retail Rate Filings and has been accepted by the Commission. The analysis is set forth in Schedule SMM-10 on page 2.

## V. Effective Date and Bill Impact

Q. How and when is the Company proposing that these rate changes be implemented?
A. Consistent with the Commission's rules on the implementation of rate changes, the Company is proposing that all of the above rate changes be made effective for usage on and after January 1, 2011.
Q. Has the Company determined the impact of these rate changes on customer bills?
A. Yes. A bill comparison for a typical residential 500 kilowatt-hour customer receiving Default Service has been included in this filing on page 1 of Schedule SMM-11. The total bill impact of the rates proposed in this filing, as compared to rates in effect today, is a bill decrease of $\$ 1.17$ or $1.75 \%$, from $\$ 67.00$ to $\$ 65.83$. In addition, a bill comparison for a Default Service residential customer with an average kilowatt-hour usage of 669, which is the average monthly usage over the most recent twelve month
$\qquad$
period from November 2009 through October 2010, has also been included in this filing on page 2 of Schedule SMM-11. The total bill impact of the rates proposed in this filing, as compared to rates in effect today, is a bill decrease of $\$ 1.56$ or $1.73 \%$, from $\$ 90.36$ to $\$ 88.80$.
Q. Has the Company prepared a revised Summary of Rates tariff page reflecting the proposed rates?
A. Yes. It is included as Schedule SMM-12. The Summary of Rates reflects both the proposed rate changes contained in this filing and the currently effective distribution and default service rates, as well as the currently effective Electricity Consumption Tax and Systems Benefit Charge. Upon receiving an order from the Commission approving the Company's proposed rate changes in this proceeding, the Company will file a Sixty-ninth Revised Page 84, Summary of Rates tariff page reflecting the approved rates.

## VI. Conclusion

Q. Does this conclude your testimony?
A. Yes.

Schedules

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| Schedule SMM-1 | Summary of Proposed Rate Changes |
| :--- | :--- |
| Schedule SMM-2 | Stranded Cost Reconciliation |
| Schedule SMM-3 | 2009 Stranded Cost Adjustment Factor Reconciliation |
| Schedule SMM-4 | 2010 Stranded Cost Adjustment Factor Reconciliation |
| Schedule SMM-5 | Calculation of 2011 Stranded Cost Adjustment Factors |
| Schedule SMM-6 | Transmission Charge Reconciliation |
| Schedule SMM-7 | 2009 Transmission Service Adjustment Factor Reconciliation |
| Schedule SMM-8 | 2010 Transmission Service Adjustment Factor Reconciliation |
| Schedule SMM-9 | Calculation of 2011 Transmission Service Adjustment Factor |
| Schedule SMM-10 | 2011 Transmission Service Charges |
| Schedule SMM-11 | Typical Residential Bill |
| Schedule SMM-12 | Proposed Summary of Rates |

## Schedule SMM-1 Summary of Proposed Rate Changes

| National Grid |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Summary of Proposed Rates |  |  |  |  |  |  |
| Rate <br> Class | Stranded <br> Cost <br> Charge <br> (a) <br> Sch. 1 of CTC | Stranded <br> Cost <br> Adjustment <br> Factor <br> (b) <br> Sch. SMM-5 | Net Stranded Cost Charge (c) (a) + (b) | Transmission <br> Charge <br> (d) <br> Sch. SMM-10 | Transmission <br> Adjustment <br> Factor <br> (e) <br> Sch. SMM-9 | Net Transmission Charge (f) <br> (d) $+(\mathrm{e})$ |
| D | \$0.00020 | \$0.00000 | \$0.00020 | \$0.01647 | (\$0.00019) | \$0.01628 |
| D-10 | \$0.00020 | \$0.00001 | \$0.00021 | \$0.01437 | (\$0.00019) | \$0.01418 |
| T | \$0.00020 | \$0.00001 | \$0.00021 | \$0.01440 | (\$0.00019) | \$0.01421 |
| G-1 | \$0.00020 | \$0.00000 | \$0.00020 | \$0.01524 | (\$0.00019) | \$0.01505 |
| G-2 | \$0.00020 | \$0.00000 | \$0.00020 | \$0.01662 | (\$0.00019) | \$0.01643 |
| G-3 | \$0.00020 | \$0.00000 | \$0.00020 | \$0.01678 | (\$0.00019) | \$0.01659 |
| V | \$0.00020 | \$0.00001 | \$0.00021 | \$0.01741 | (\$0.00019) | \$0.01722 |
| Streetlights | \$0.00020 | (\$0.00001) | \$0.00019 | \$0.01048 | (\$0.00019) | \$0.01029 |

# Schedule SMM-2 <br> Stranded Cost Reconciliation <br> October 1, 2009 - September 30, 2010 

Docket DE 10-

National Grid Summary of Stranded Cost Over/(Under) Collection October 2009 - September 2010
\(\left.$$
\begin{array}{lc}\text { Rate Class } & \begin{array}{c}\text { Cumulative } \\
\text { Over/ } \\
\text { D }\end{array}
$$ <br>

D-10 \& (\$ 117\end{array}\right]\)| T |
| :--- |
| G-1 |
| G-2 |



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\begin{array}{ll}
\text { Rate Class } & \text { Customer } \\
\text { D } & \text { Base Stranded Cost Revenue } \\
\text { D-10 } & \text { Base Stranded Cost Revenue } \\
\text { T } & \\
\text { G-1 } & \text { Base Stranded Cost Revenue } \\
\text { G-2 } & \text { Base Stranded Cost Revenue } \\
\text { G-3 } & \text { Base Stranded Cost Revenue } \\
\text { V } & \text { Base Stranded Cost Revenue } \\
\text { Streetlights } & \text { Base Stranded Cost Revenue } \\
\text { Total Stranded Cost Revenue } \\
\hline \text { Source: } & \text { Page 5 }
\end{array}
$$
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R:2010 gel Reconciliations[44master10.x|s]SC-F
16-Nov-10

| Rate Class | Customer |
| :---: | :---: |
| D | (1) Total Stranded Cost Revenue <br> (2) 2009 Stranded Cost Adjustment Revenue (Refund) <br> (3) 2010 Stranded Cost Adjustment Revenue (Refund) <br> Stranded Cost Base Revenue |
| D-10 | (1) Total Stranded Cost Revenue <br> (2) 2009 Stranded Cost Adjustment Revenue (Refund) <br> (3) 2010 Stranded Cost Adjustment Revenue (Refund) <br> Stranded Cost Base Revenue |
| T | (1) Total Stranded Cost Revenue <br> (2) 2009 Stranded Cost Adjustment Revenue (Refund) <br> (3) 2010 Stranded Cost Adjustment Revenue (Refund) <br> Stranded Cost Base Revenue |
| G-1 | (1) Total Stranded Cost Revenue <br> (2) 2009 Stranded Cost Adjustment Revenue (Refund) <br> (3) 2010 Stranded Cost Adjustment Revenue (Refund) <br> Stranded Cost Base Revenue |
| G-2 | (1) Total Stranded Cost Revenue <br> (2) 2009 Stranded Cost Adjustment Revenue (Refund) <br> (3) 2010 Stranded Cost Adjustment Revenue (Refund) <br> Stranded Cost Base Revenue |
| G-3 | (1) Total Stranded Cost Revenue <br> (2) 2009 Stranded Cost Adjustment Revenue (Refund) <br> (3) 2010 Stranded Cost Adjustment Revenue (Refund) <br> Stranded Cost Base Revenue |
| V | (1) Total Stranded Cost Revenue <br> (2) 2009 Stranded Cost Adjustment Revenue (Refund) <br> (3) 2010 Stranded Cost Adjustment Revenue (Refund) <br> Stranded Cost Base Revenue |
| Streetlights | (1) Total Stranded Cost Revenue <br> (2) 2009 Stranded Cost Adjustment Revenue (Refund) <br> (3) 2010 Stranded Cost Adjustment Revenue (Refund) <br> Stranded Cost Base Revenue |
| Total Strand | d Cost Base Revenue |

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16－Nov－10
National Grid
Contract Termination Charge


Source：kWhs per Transition Revenue Report－CR97989A
（1）January expense reflects a rate change from（ 0.014 ）per kWh to $0.07 ¢$ per kWh for usage on or after January 1,2010

National Grid<br>Summary of Stranded Cost<br>Refund/Recovery Reconciliation<br>Incurred October 2007 - September 2008<br>Recovered/Refunded January 2009 - December 2009

|  | Original <br> Over (Under) <br> Recovery | Remaining <br> Over (Under) <br> Recovery |
| :--- | :---: | ---: |
| D | $\$ 0$ | $\$ 0$ |
| D-10 | $\$ 127$ | $\$ 7$ |
| T | $\$ 0$ | $\$ 0$ |
| G-1 | $\$ 0$ | $\$ 053$ |
| G-2 | $\$ 1,561$ | $\$ 650$ |
| G-3 | $\$ 18$ | $\$ 1$ |
| V | $\underline{(\$ 126)}$ | $\$ 27)$ |
| Streetlights | $\$ 3,964$ | $\$ 1,485$ |

Source: $\quad$ Pages 2 and 3


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 National Grid
Stranded Cost Reconciliation
Reconciliation of Refund／Recovery
Incurred October 2007－September 2008
Recovered／Refunded January 2009－December 2009




 Refund Remaining oें
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Rate D






 Refund Remaining



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Granite State Electric db/a National Grid
Docket DE $10--$
Schedule SMM-3
Page 3 of 4

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Rate G-2
(a) Beginning Balances: November 20, 2008 Retail Rate Filing in DE 08-149, Schedule SMM-5, Page 1; Prior Month Column (c) + Prior Month Column (f)
Rate G-1 balance at September 2008 was too small to warrant an adjustment factor and was therefore reflected in the beginning balance of the reconciliation in Schedule SMM-2 in DE 09-234

Column (a) + Column (b)
[Column (a) + Column (c)] $\div 2$
No interest is applied

Granite State Electric db/a National Grid
Docket DE 10--
Schedule SMM-3
Page 4 of 4














[^3]National Grid<br>Summary of Stranded Cost<br>Refund/Recovery Reconciliation<br>Incurred October 2008 - September 2009<br>Recovered/Refunded January 2010 - December 2010

| Rate Class | Original <br> Over (Under) <br> Recovery | Remaining <br> Over (Under) <br> Recovery |
| :--- | :---: | ---: |
| D | $\$ 0$ | $\$ 0$ |
| D-10 | $\$ 76$ | $\$ 30$ |
| T | $\$ 0$ | $\$ 0$ |
| G-1 | $\$ 4,654$ | $\$ 1,970$ |
| G-2 | $\$ 0$ | $\$ 0$ |
| G-3 | $(\$ 5)$ | $\$ 0$ |
| V | $\underline{(\$ 61)}$ |  |
| Streetlights | $\$ 4,664$ | $(\$ 30)$ |
| Total Over/(Under) |  | $\$ 1,967$ |

Source: $\quad$ Pages 2 and 3
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National Grid
Stranded Cost Reconciliation
Reconciliation of Refund/Recovery
Incurred October 2008 -September 2009
Recovered/Refunded January 2010 - December 2010


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\text { National Grid } \\
\text { Stranded Cost Reconciliation } \\
\text { Reconciliation of Refund/Recovery } \\
\text { Incurred October 2008 -September 2009 } \\
\text { Recovered/Refunded January 2010 - December } 2010
\end{gathered}
$$



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 National Grid
Stranded Cost Reconciliation
Reconciliation of Refund／Recovery
Incurred October 2008－September 2009
Recovered／Refunded January 2010－December 2010
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## National Grid

Calculation of Stranded Cost Adjustment Factor January 1, 2011 - December 31, 2011

|  |  | 2011 |
| :---: | :---: | :---: |
|  | Total | Stranded |
| Total | 2010 | Cost |
| Over/(Under) | Forecasted | Adj. Factor |
| $\frac{\text { Collection }}{\text { (a) }}$ | $\underline{\mathrm{kWhs}}$ | $\underline{\text { Charge/ }}$ |
|  | (b) | (c) |

275,746,922 \$0.00000

5,590,850

19,746,762

348,326,234

159,029,369

94,794,897

324,380

5,013,102

908,572,516
\$0.00001
\$0.00001
$\$ 0.00000$
\$0.00000
$\$ 0.00000$
\$0.00001
(\$0.00001)
$\$ 0.00000$
(a) Schedule SMM-2, Page 1
(b) Company forecast
(c) Column (a) $\div$ Column (b), truncated after 5 decimal places

# Schedule SMM-6 <br> Transmission Charge Reconciliation <br> October 1, 2009 - September 30, 2010 

|  | Over/(Under) |  |  |  |  | Over/(Under) | Balance |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| nth | Beginning <br> Balance | Transmission Revenue | Adjustments | Transmission <br> Expense | Monthly Over/(Under) | Ending <br> Balance | Subject <br> to Interest | Interest <br> Rate |  | Cumulative <br> Interest |
|  | (a) | (b) | (c) | (d) | $\frac{(e)}{\text { (e) }}$ | (f) | (g) | (h) | $\frac{\text { (i) }}{}$ | (j) |

Section 1:

| Oct-09 | \$0 | \$434,918 |  | \$1,022,925 | $(\$ 588,007)$ | $(\$ 588,007)$ | (\$294,003) | 0.00\% | \$0 | \$0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nov-09 | $(\$ 588,007)$ | \$924,622 |  | \$1,057,250 | $(\$ 132,628)$ | (\$720,635) | (\$654,321) | 0.00\% | \$0 | \$0 |
| Dec-09 | $(\$ 720,635)$ | \$989,934 |  | \$991,663 | $(\$ 1,728)$ | $(\$ 722,363)$ | $(\$ 721,499)$ | 0.00\% | \$0 | \$0 |
| Jan-10 | $(\$ 722,363)$ | \$1,232,672 | (\$153,733) | \$954,247 | \$124,692 | $(\$ 597,672)$ | $(\$ 660,018)$ | 0.00\% | \$0 | \$0 |
| Feb-10 | (\$597,672) | \$1,135,460 |  | \$1,111,475 | \$23,985 | $(\$ 573,687)$ | $(\$ 585,679)$ | 0.00\% | \$0 | \$0 |
| Mar-10 | $(\$ 573,687)$ | \$1,143,982 |  | \$969,997 | \$173,984 | $(\$ 399,702)$ | $(\$ 486,695)$ | 0.00\% | \$0 | \$0 |
| Apr-10 | $(\$ 399,702)$ | \$1,103,431 |  | \$934,597 | \$168,834 | $(\$ 230,868)$ | $(\$ 315,285)$ | 0.00\% | \$0 | \$0 |
| May-10 | (\$230,868) | \$1,038,085 |  | \$1,279,219 | (\$241,133) | $(\$ 472,002)$ | $(\$ 351,435)$ | 0.00\% | \$0 | \$0 |
| Jun-10 | $(\$ 472,002)$ | \$1,233,509 |  | \$1,199,428 | \$34,081 | (\$437,921) | (\$454,961) | 0.00\% | \$0 | \$0 |
| Jul-10 | (\$437,921) | \$1,440,663 |  | \$1,275,831 | \$164,832 | $(\$ 273,089)$ | $(\$ 355,505)$ | 0.00\% | \$0 | \$0 |
| Aug-10 | $(\$ 273,089)$ | \$1,353,374 |  | \$1,183,828 | \$169,546 | $(\$ 103,543)$ | $(\$ 188,316)$ | 0.00\% | \$0 | \$0 |
| Sep-10 | $(\$ 103,543)$ | \$1,236,414 |  | \$1,494,788 | $(\$ 258,374)$ | $(\$ 361,917)$ | (\$232,730) | 0.00\% | \$0 | \$0 |
| Oct-10 | $(\$ 361,917)$ | \$542,434 |  | \$0 | \$542,434 | \$180,517 | (\$90,700) | 0.00\% | \$0 | \$0 |
|  |  | \$13,809,498 |  | \$13,475,248 |  |  |  |  |  |  |

(a) Prior Month Column (f) + Prior Month Column (i)
(b) Page 2
(c) Jan 2010: Schedule SMM-7, Page 1
(d) Page 3
(e) Column (b) + Column (c) - Column (d)
(f) Column (a) + Column (e)
(g) $[$ Column (a) + Column (f) $] \div 2$
(h) No interest is applied
(i) Column (g) $\times[$ Column (h) $\div 12]$
(j) Column (i) + Prior Month Column (j)

National Grid
Total Transmission Charge Revenue

|  | 2009 | 2010 |  |
| :---: | :---: | :---: | :---: |
| Total | Transmission | Transmission | Net |
| Transmission | Adjustment | Adjustment | Transmission |
| $\frac{\text { Revenue }}{(1)}$ | $\underline{\text { Revenue }}$ |  | $\underline{\text { Revenue }}$ |
| $(3)$ |  | Revenue |  |
| $(4)$ |  |  |  |


| October 2009 | \$503,081 | \$68,163 |  | \$434,918 |
| :---: | :---: | :---: | :---: | :---: |
| November | \$1,069,806 | \$145,184 |  | \$924,622 |
| December | \$1,143,997 | \$154,062 |  | \$989,934 |
| January 2010 | \$1,331,140 | \$93,316 | \$5,152 | \$1,232,672 |
| February | \$1,144,539 |  | \$9,079 | \$1,135,460 |
| March | \$1,152,348 |  | \$8,366 | \$1,143,982 |
| April | \$1,111,604 |  | \$8,174 | \$1,103,431 |
| May | \$1,045,821 |  | \$7,736 | \$1,038,085 |
| June | \$1,242,709 |  | \$9,200 | \$1,233,509 |
| July | \$1,451,321 |  | \$10,658 | \$1,440,663 |
| August | \$1,363,344 |  | \$9,970 | \$1,353,374 |
| September | \$1,244,141 |  | \$7,727 | \$1,236,414 |
| October | \$546,477 |  | \$4,043 | \$542,434 |
| Total | \$14,350,327 | \$460,725 | \$80,104 | \$13,809,498 |

(1) Monthly Transmission Revenue Report - CR97793A
(2) Schedule SMM-7
(3) Schedule SMM-8
(4) Column (1) - Column (2) - Column (3)

Docket DE 10-

National Grid
Transmission Expense

| NEP | ISO-NE | ISO-NE | Load |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Transmission | Regional | Administrative | Response | Other | Transmission |
| Expense | $\underline{\text { Expense }}$ | Expense | Expense | Expense | Expense |


| October 2009 | $\$ 342,586$ | $\$ 666,230$ | $\$ 12,132$ | $\$ 1,643$ | $\$ 334$ | $\$ 1,022,925$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| November | $\$ 351,876$ | $\$ 690,710$ | $\$ 12,801$ | $\$ 1,518$ | $\$ 345$ | $\$ 1,057,250$ |
| December | $\$ 187,359$ | $\$ 784,664$ | $\$ 14,397$ | $(\$ 150)$ | $\$ 5,392$ | $\$ 991,663$ |
| January 2010 | $\$ 206,621$ | $\$ 728,631$ | $\$ 18,150$ | $\$ 78$ | $\$ 768$ | $\$ 954,247$ |
| February | $\$ 366,653$ | $\$ 725,458$ | $\$ 18,266$ | $\$ 334$ | $\$ 764$ | $\$ 1,111,475$ |
| March | $\$ 269,011$ | $\$ 682,304$ | $\$ 17,084$ | $\$ 882$ | $\$ 717$ | $\$ 969,997$ |
| April | $\$ 275,228$ | $\$ 641,787$ | $\$ 16,074$ | $\$ 335$ | $\$ 1,173$ | $\$ 934,597$ |
| May | $\$ 322,139$ | $\$ 929,138$ | $\$ 24,141$ | $\$ 2,818$ | $\$ 983$ | $\$ 1,279,219$ |
| June | $\$ 22,964$ | $\$ 942,406$ | $\$ 22,180$ | $\$ 10,954$ | $\$ 925$ | $\$ 1,199,428$ |
| July | $\$ 100,699$ | $\$ 1,110,655$ | $\$ 26,024$ | $\$ 37,377$ | $\$ 1,076$ | $\$ 1,275,831$ |
| August | $\$ 85,676$ | $\$ 1,050,862$ | $\$ 25,738$ | $\$ 21,552$ |  | $\$ 0$ |

Source: Monthly NEP, NEPOOL, and ISO Bills Estimate for September

## Schedule SMM-7 2009 Transmission Service Adjustment Factor Reconciliation

National Grid
Transmission Adjustment Reconciliation
Balance Incurred October 2007 - September 2008
Recovered January 2009 - December 2009

| Month | Beginning Under Recovery Balance <br> (a) | Transmission Adjustment Revenue <br> (b) | Ending Under Recovery Balance (c) | Balance <br> Subject to Interest <br> (d) | Interest <br> Rate <br> (e) | $\frac{\text { Interest }}{(\mathrm{f})}$ | Cumulative Interest <br> (g) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Jan-09 | (\$1,983,018) | \$75,339 | (\$1,907,680) | $(\$ 1,945,349)$ | 0.00\% | \$0 | \$0 |
| Feb-09 | (\$1,907,680) | \$157,860 | (\$1,749,819) | $(\$ 1,828,749)$ | 0.00\% | \$0 | \$0 |
| Mar-09 | (\$1,749,819) | \$141,750 | (\$1,608,070) | $(\$ 1,678,945)$ | 0.00\% | \$0 | \$0 |
| Apr-09 | (\$1,608,070) | \$156,308 | (\$1,451,762) | $(\$ 1,529,916)$ | 0.00\% | \$0 | \$0 |
| May-09 | (\$1,451,762) | \$137,303 | (\$1,314,458) | $(\$ 1,383,110)$ | 0.00\% | \$0 | \$0 |
| Jun-09 | (\$1,314,458) | \$145,807 | (\$1,168,652) | $(\$ 1,241,555)$ | 0.00\% | \$0 | \$0 |
| Jul-09 | (\$1,168,652) | \$156,703 | $(\$ 1,011,949)$ | $(\$ 1,090,300)$ | 0.00\% | \$0 | \$0 |
| Aug-09 | (\$1,011,949) | \$162,937 | $(\$ 849,012)$ | $(\$ 930,480)$ | 0.00\% | \$0 | \$0 |
| Sep-09 | $(\$ 849,012)$ | \$157,955 | (\$691,057) | (\$770,034) | 0.00\% | \$0 | \$0 |
| Oct-09 | $(\$ 691,057)$ | \$144,762 | $(\$ 546,295)$ | $(\$ 618,676)$ | 0.00\% | \$0 | \$0 |
| Nov-09 | $(\$ 546,295)$ | \$145,184 | $(\$ 401,112)$ | (\$473,704) | 0.00\% | \$0 | \$0 |
| Dec-09 | $(\$ 401,112)$ | \$154,062 | $(\$ 247,049)$ | (\$324,081) | 0.00\% | \$0 | \$0 |
| Jan-10 | $(\$ 247,049)$ | \$93,316 | (\$153,733) | (\$200,391) | 0.00\% | \$0 | \$0 |

\$1,829,285

Remaining Recovery
(\$153,733)
(a) Beginning balance per Schedule SMM-6 of the November 20, 2008 Retail Rate Filing in DE 08-149

Prior Month Column (c) + Prior Month Column (f)
(b) Company billing system report
(c) Column (a) + Column (b)
(d) [Column (a) + Column (c)] $\div 2$
(e) No interest is applied
(f) Column (d) x [Column (e) $\div 12$ ]
(g) Column (f) + Prior Month Column (g)

National Grid
Transmission Adjustment Reconciliation
Balance Incurred October 2008 - September 2009
Recovered January 2010 - December 2010

| Month | Beginning Under Recovery Balance <br> (a) | Transmission Adjustment Revenue <br> (b) | Ending Under Recovery Balance <br> (c) | Balance <br> Subject to Interest <br> (d) | Interest <br> Rate <br> (e) | Interest <br> (f) | Cumulative Interest <br> (g) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Jan-10 | (\$109,881) | \$5,152 | $(\$ 104,729)$ | (\$107,305) | 0.00\% | \$0 | \$0 |
| Feb-10 | (\$104,729) | \$9,079 | $(\$ 95,651)$ | $(\$ 100,190)$ | 0.00\% | \$0 | \$0 |
| Mar-10 | $(\$ 95,651)$ | \$8,366 | $(\$ 87,285)$ | $(\$ 91,468)$ | 0.00\% | \$0 | \$0 |
| Apr-10 | $(\$ 87,285)$ | \$8,174 | $(\$ 79,111)$ | $(\$ 83,198)$ | 0.00\% | \$0 | \$0 |
| May-10 | $(\$ 79,111)$ | \$7,736 | $(\$ 71,375)$ | $(\$ 75,243)$ | 0.00\% | \$0 | \$0 |
| Jun-10 | $(\$ 71,375)$ | \$9,200 | $(\$ 62,176)$ | $(\$ 66,775)$ | 0.00\% | \$0 | \$0 |
| Jul-10 | $(\$ 62,176)$ | \$10,658 | $(\$ 51,518)$ | $(\$ 56,847)$ | 0.00\% | \$0 | \$0 |
| Aug-10 | $(\$ 51,518)$ | \$9,970 | $(\$ 41,548)$ | $(\$ 46,533)$ | 0.00\% | \$0 | \$0 |
| Sep-10 | $(\$ 41,548)$ | \$7,727 | $(\$ 33,820)$ | $(\$ 37,684)$ | 0.00\% | \$0 | \$0 |
| Oct-10 | $(\$ 33,820)$ | \$8,187 | $(\$ 25,633)$ | $(\$ 29,727)$ | 0.00\% | \$0 | \$0 |
| Nov-10 | $(\$ 25,633)$ | \$0 | $(\$ 25,633)$ | $(\$ 25,633)$ | 0.00\% | \$0 | \$0 |
| Dec-10 | $(\$ 25,633)$ | \$0 | $(\$ 25,633)$ | $(\$ 25,633)$ | 0.00\% | \$0 | \$0 |
| Jan-11 | $(\$ 25,633)$ | \$0 | $(\$ 25,633)$ | $(\$ 25,633)$ | 0.00\% | \$0 | \$0 |

\$84,248

Remaining Recovery
$(\$ 25,633)$
(a) Beginning balance per Schedule SMM-6 of the November 20, 2009 Retail Rate Filing in DE 09-234

Prior Month Column (c) + Prior Month Column (f)
(b) Company billing system report
(c) Column (a) + Column (b)
(d) [Column (a) + Column (c)] $\div 2$
(e) No interest is applied
(f) Column (d) x [Column (e) $\div 12$ ]
(g) Column (f) + Prior Month Column (g)
Schedule SMM-9
Calculation of 2011 Transmission Service Adjustment Factor

# National Grid <br> Calculation of Transmission Service Adjustment Factor 

 Effective January 1, 2011 - December 31, 2011(1) Transmission Service Over Collection
(2) Forecast 2011 kWh Deliveries
(3) Transmission Service Adjustment Factor per kWh
(1) Schedule SMM-6, Page 1 of 3
(2) Per Company forecast
(3) Line (1) $\div$ Line (2), truncated after 5 decimal places

## Schedule SMM-10

## 2011 Base Transmission Service Charges


(1) Schedule JLL-1 Summary, Line (11)
(2) Page 2 of 2
(3) Line (2) as a percent of total Line (2)
(4) Line (1) x Line (3)
(5) Per Company Forecast
(6) Line (4) $\div$ Line (5), truncated after 5 decimal places
(7) Per Currently Effective Tariffs, excluding transmission adjustment factor of \$0.00012
(8) Line (6) - Line (7)

R:\2010 gse\Reconciliations\[41master10.xls]TRANS-A
17-Nov-10

Granite State Electric d/b/a National Grid
Docket DE 10-_ Schedule SMM-10

National Grid
2009 Coincident Peak Data

|  | $\underline{T o t a l}$ | $\underline{D}$ | $\underline{D}-10$ | $\underline{T}$ | $\underline{G-1}$ | $\underline{G-2}$ | $\underline{G-3}$ | $\underline{V}$ | $\underline{S t r e e t l i g h t s}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | ---: |
| January | 155,231 | 62,869 | 1,142 | 4,708 | 46,232 | 23,694 | 15,554 | 68 | 965 |
| February | 145,148 | 56,546 | 1,276 | 4,657 | 42,368 | 23,915 | 15,158 | 70 | 1,158 |
| March | 129,933 | 52,291 | 972 | 3,463 | 37,042 | 22,244 | 12,687 | 55 | 1,180 |
| April | 142,437 | 27,200 | 398 | 1,389 | 68,133 | 28,089 | 17,155 | 65 | 7 |
| May | 139,633 | 33,935 | 469 | 1,488 | 58,713 | 28,165 | 16,806 | 50 | 7 |
| June | 145,728 | 31,574 | 487 | 1,562 | 63,263 | 30,096 | 18,682 | 57 | 7 |
| July | 162,777 | 49,405 | 742 | 2,381 | 60,576 | 30,263 | 19,337 | 65 | 7 |
| August | 180,767 | 53,771 | 797 | 2,577 | 70,449 | 32,385 | 20,703 | 77 | 7 |
| September | 120,297 | 22,875 | 523 | 1,609 | 51,585 | 29,164 | 14,483 | 51 | 7 |
| October | 126,920 | 46,109 | 723 | 2,589 | 43,976 | 20,866 | 11,656 | 31 | 971 |
| November | 132,296 | 41,766 | 687 | 2,570 | 49,602 | 23,013 | 13,669 | 39 | 950 |
| December | $\underline{148,136}$ | $\underline{63,064}$ | $\underline{1,362}$ | $\underline{4,912}$ | $\underline{40,848}$ | $\underline{23,181}$ | $\underline{13,727}$ | $\underline{46}$ | $\underline{996}$ |
| Total | $1,729,302$ | 541,404 | 9,577 | 33,906 | 632,788 | 315,076 | 189,615 | 673 | 6,264 |

Source: Company Load Data

## Schedule SMM-11 <br> Typical Residential Bill

$\qquad$

National Grid
Typical Residential Customer
Bill Comparison

| Usage: 500 kWh |  | Amount |
| :--- | ---: | ---: |
| Proposed Rates: |  |  |
| Customer Charge | $\$ 4.35$ | $\$ 4.35$ |
| Distribution Charge |  |  |
| 1st 250 kWh |  |  |
| excess of 250 kWh | $\$ 0.01852$ | $\$ 4.63$ |
| Transmission Charge | $\$ 0.04486$ | $\$ 11.22$ |
| Stranded Cost Charge | $\$ 0.01628$ | $\$ 8.14$ |
| System Benefits Charge | $\$ 0.00020$ | $\$ 0.10$ |
| Electricity Consumption Tax | $\$ 0.00330$ | $\$ 1.65$ |
| Subtotal Retail Delivery Services | $\$ 0.00055$ | $\$ 0.28$ |
|  |  | $\$ 30.37$ |
| Default Service Charge | $\$ 0.07091$ | $\$ 35.46$ |
| Total Bill |  | $\$ 65.83$ |

Current Rates:

| Customer Charge | $\$ 4.35$ | $\$ 4.35$ |
| :--- | ---: | ---: |
| Distribution Charge |  |  |
| 1st 250 kWh |  |  |
| excess of 250 kWh | $\$ 0.01852$ | $\$ 4.63$ |
|  | $\$ 0.04486$ | $\$ 11.22$ |
| Transmission Charge | $\$ 0.01811$ | $\$ 9.06$ |
| Stranded Cost Charge | $\$ 0.00070$ | $\$ 0.35$ |
| System Benefits Charge | $\$ 0.00330$ | $\$ 1.65$ |
| Electricity Consumption Tax | $\$ 0.00055$ | $\$ 0.28$ |
| Subtotal Retail Delivery Services |  | $\$ 31.54$ |
| Default Service Charge | $\$ 0.07091$ | $\$ 35.46$ |
| Total Bill |  | $\$ 67.00$ |

\$ Decrease in 500 kWh Total Residential Bill
\% Decrease in 500 kWh Total Residential Bill
$\qquad$

National Grid
Average Residential Customer
Bill Comparison

| Usage: 669 kWh |  | Amount |
| :--- | ---: | ---: |
| Proposed Rates: |  |  |
| Customer Charge | $\$ 4.35$ | $\$ 4.35$ |
| Distribution Charge |  |  |
| 1st 250 kWh <br> excess of 250 kWh | $\$ 0.01852$ | $\$ 4.63$ |
|  | $\$ 0.04486$ | $\$ 18.79$ |
| Transmission Charge | $\$ 0.01628$ | $\$ 10.89$ |
| Stranded Cost Charge | $\$ 0.00020$ | $\$ 0.13$ |
| System Benefits Charge | $\$ 0.00330$ | $\$ 2.21$ |
| Electricity Consumption Tax | $\$ 0.00055$ | $\$ 0.37$ |
| Subtotal Retail Delivery Services |  | $\$ 41.37$ |
| Default Service Charge | $\$ 0.07091$ | $\$ 47.43$ |
| Total Bill |  | $\$ 88.80$ |

Current Rates:

| Customer Charge | \$4.35 | \$4.35 |
| :---: | :---: | :---: |
| Distribution Charge |  |  |
| 1st 250 kWh | \$0.01852 | \$4.63 |
| excess of 250 kWh | \$0.04486 | \$18.79 |
| Transmission Charge | \$0.01811 | \$12.11 |
| Stranded Cost Charge | \$0.00070 | \$0.47 |
| System Benefits Charge | \$0.00330 | \$2.21 |
| Electricity Consumption Tax | \$0.00055 | \$0.37 |
| Subtotal Retail Delivery Services |  | \$42.93 |
| Default Service Charge | \$0.07091 | \$47.43 |
| Total Bill |  | \$90.36 |

\$ Decrease in 669 kWh Total Residential Bill
\% Decrease in 669 kWh Total Residential Bill

GRANITE STATE ELECTRIC COMPANY
RATES EFFECTIVE JANUARY 1, 2011
FOR USAGE ON AND AFTER JANUARY 1, 2011

| Rate | Blocks | Distribution Charge (1), (2), (3), (4), (5) | Electricity Consumption Tax | Transmission Charge | Systems <br> Benefits <br> Charge | Stranded Cost Charge | Total <br> Retail <br> Delivery <br> Services |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D | Customer Charge 1st 250 kWh <br> Excess 250 kWh <br> Off Peak kWh <br> Farm kWh <br> D-6 kWh | $\quad \$ 4.35$ $\$ 0.01852$ $\$ 0.04486$ $\$ 0.01781$ $\$ 0.02764$ $\$ 0.01852$ | $\$ 0.00055$ $\$ 0.00055$ $\$ 0.00055$ $\$ 0.00055$ $\$ 0.00055$ | $\begin{aligned} & \$ 0.01628 \\ & \$ 0.01628 \\ & \$ 0.01628 \\ & \$ 0.01628 \\ & \$ 0.01628 \end{aligned}$ | $\$ 0.00330$ $\$ 0.00330$ $\$ 0.00330$ $\$ 0.00330$ $\$ 0.00330$ | $\begin{aligned} & \$ 0.00020 \\ & \$ 0.00020 \\ & \$ 0.00020 \\ & \$ 0.00020 \\ & \$ 0.00020 \end{aligned}$ | $\begin{array}{r} \$ 4.35 \\ \$ 0.03885 \\ \$ 0.06519 \\ \$ 0.03814 \\ \$ 0.04797 \\ \$ 0.03885 \end{array}$ |
| D-10 | Customer Charge On Peak kWh Off Peak kWh | $\begin{array}{r} \$ 7.47 \\ \$ 0.04966 \\ \$ 0.00220 \end{array}$ | $\begin{aligned} & \$ 0.00055 \\ & \$ 0.00055 \end{aligned}$ | $\begin{aligned} & \$ 0.01418 \\ & \$ 0.01418 \end{aligned}$ | $\begin{aligned} & \$ 0.00330 \\ & \$ 0.00330 \end{aligned}$ | $\begin{aligned} & \$ 0.00021 \\ & \$ 0.00021 \end{aligned}$ | \$7.47 <br> \$0.06790 $\$ 0.02044$ |
| G-1 | Customer Charge Demand Charge On Peak kWh Off Peak kWh | $\begin{array}{r} \$ 92.99 \\ \$ 4.06 \\ \$ 0.00362 \\ \$ 0.00228 \end{array}$ | $\begin{aligned} & \$ 0.00055 \\ & \$ 0.00055 \end{aligned}$ | $\begin{aligned} & \$ 0.01505 \\ & \$ 0.01505 \end{aligned}$ | $\begin{aligned} & \$ 0.00330 \\ & \$ 0.00330 \end{aligned}$ | $\begin{aligned} & \$ 0.00020 \\ & \$ 0.00020 \end{aligned}$ | $\$ 92.99$ $\$ 4.06$ $\$ 0.02272$ $\$ 0.02138$ |
| G-2 | Customer Charge Demand Charge All kWh | $\begin{array}{r} \$ 24.89 \\ \$ 4.48 \\ \$ 0.00259 \end{array}$ | \$0.00055 | \$0.01643 | \$0.00330 | \$0.00020 | $\begin{array}{r} \$ 24.89 \\ \$ 4.48 \\ \$ 0.02307 \end{array}$ |
| G-3 | Customer Charge All kWh | $\begin{array}{r} \$ 5.51 \\ \$ 0.03287 \end{array}$ | \$0.00055 | \$0.01659 | \$0.00330 | \$0.00020 | $\begin{array}{r} \$ 5.51 \\ \$ 0.05351 \end{array}$ |
| M | All kWh see tariff for lumin | $\begin{array}{\|l\|} \$ 0.00228 \\ \text { pole charges } \end{array}$ | \$0.00055 | \$0.01029 | \$0.00330 | \$0.00019 | \$0.01661 |
| T | Customer Charge All kWh | $\begin{array}{r} \$ 5.63 \\ \$ 0.02230 \end{array}$ | \$0.00055 | \$0.01421 | \$0.00330 | \$0.00021 | $\begin{array}{r} \$ 5.63 \\ \$ 0.04057 \end{array}$ |
| V | Minimum Charge All kWh | $\begin{array}{r} \$ 5.88 \\ \$ 0.03057 \end{array}$ | \$0.00055 | \$0.01722 | \$0.00330 | \$0.00021 | $\begin{array}{r} \$ 5.88 \\ \$ 0.05185 \end{array}$ |

(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 $5 / 1 / 10$

| Rate Class | Credit per kWh |
| :--- | ---: |
|  | $(\$ 0.00017)$ |
| D-10 | $(\$ 0.00008)$ |
| G-3 | $(\$ 0.00017)$ |
| T | $(\$ 0.00007)$ |
| 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
(4) Distribution Energy Charges include a Green Up Service Recovery Adjustment Factor of $\$ 0.00006$ per kWh for usage on and after 7/1/10 (5) Distribution Energy Charges include a Storm Fund Recovery Adjustment Factor of $\$ 0.00040$ 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

Transmission Cost Adjustment Factor
Stranded Cost Adjustment Factor
Default Service Charge
Residential \& Small Commercial (D, D-10, G-3, M, T, V)
Medium / Large Commercial \& Industrial (G-1, G-2)
$\$ 0.00150$ Effective $1 / 15 / 10$, usage on and after $\$ 0.00180$ Effective $1 / 15 / 10$, usage on and after $\$ 0.00330$
various Effective 1/1/11, usage on and after
various Effective 1/1/11, usage on and after
\$0.07091 Effective 11/1/10, usage on and after \$0.06681 Effective 11/1/10, usage on and after \$0.07154 Effective 12/1/10, usage on and after $\$ 0.07867$ Effective $1 / 1 / 11$, usage on and after
\$0.00055 Effective 5/1/01, usage on and after

Issued:
Effective: January 1, 2011

Issued by:/s/ Thomas B. King Title: President
(Issued in Compliance with Order No. $\qquad$ in Docket No. DE 10-___ dated $\qquad$ ()

## DIRECT TESTIMONY

OF

## JAMES L. LOSCHIAVO

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## I. Introduction and Qualifications

Q. Please state your name and business address.
A. My name is James L. Loschiavo. My business address is 40 Sylvan Road, Waltham, Massachusetts 02451.
Q. By whom are you employed and in what capacity?
A. I currently hold the position of Lead Analyst in Transmission Finance for National Grid USA Service Company, Inc. ("Service Co"). Service Co is a subsidiary of National Grid USA, which in turn is a subsidiary of National Grid plc My duties include performing rate-related services for Granite State Electric Company d/b/a National Grid ("Granite State" or "Company").
Q. Please describe your educational and professional background.
A. I graduated from Boston State University in Boston, Massachusetts with a Bachelor of Science degree in Business Administration and from Rider University in Lawrenceville, New Jersey with a Master of Science, also in Business Administration. I have been with National Grid USA for approximately three years. As Lead Analyst in the Transmission Finance Department, my primary responsibility is to support New England Power Company's ("NEP’s") transmission rates. Additionally, I am involved in most New England transmission-related pricing matters impacting Granite State, including supporting Granite State’s current Transmission Service Cost Adjustment before the New Hampshire Public Utilities Commission ("Commission").
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Q. Have you previously testified before the Commission?
A. Yes.

## II. Purpose of Testimony

Q. What is the purpose of your testimony?
A. My testimony addresses the estimated 2011 transmission expenses and ISO-NE expenses for Granite State. First, I will summarize the various transmission services provided to Granite State and how Granite State pays for such services. Second, I will provide testimony supporting the forecast of transmission expenses that Granite State is expected to incur in 2011. As described more fully in the second part of my testimony, the Company expects to see a decrease of $\$ 109,000$ in prospective transmission expenses compared to the forecast provided for calendar year 2010 in Docket No. DE 09-234.

## III. Summary of Transmission Services Provided to Granite State

Q. Please explain the history of Granite State's transmission service under rate schedules approved by the Federal Energy Regulatory Commission ("FERC").
A. Effective January 1, 1998, Granite State received transmission services, on behalf of its entire customer base, under two tariffs: NEPOOL’s FERC Electric Tariff No. 1 ("NEPOOL Tariff") and NEP’s FERC Electric Tariff No. 9 ("NEP T-9 Tariff"). Additionally, effective January 1, 1999, Granite State took service under ISO-NE’s FERC Electric Tariff No. 1 ("ISO-NE Tariff").
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Effective February 1, 2005, FERC issued an order authorizing ISO-NE to begin operating as a Regional Transmission Operator ("RTO") ("ISO as the RTO") and at that time, ISONE replaced NEPOOL as the transmission provider in New England. The new ISO-NE Transmission, Markets and Services Tariff ("ISO/RTO Tariff") replaced the three separate tariffs referred to above by aggregating them into a single, omnibus tariff. As a result, NEP and ISO as the RTO now charge Granite State under this superseding omnibus tariff.

The terms, conditions and rate schedules from these three separate tariffs have been transferred to the ISO/RTO Tariff as follows:

1. Schedule 21 and Schedule 21-NEP of the ISO/RTO Tariff capture the former NEP T-9 Tariff;
2. Section II (up through and including Schedule 19) of the ISO/RTO Tariff captures the former NEPOOL Tariff; and
3. Section IV.A of the ISO/RTO Tariff captures the former ISO-NE Tariff. The prospective charges to Granite State, therefore, are separately identified as (1) NEP local charges, (2) ISO-NE regional charges (formerly NEPOOL), and (3) ISO/RTO administrative charges.
Q. Please describe further the types of transmission services that are billed to Granite State under the ISO/RTO Tariff.
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A. New England's transmission rates utilize a highway/local pricing structure. That is, Granite State receives regional transmission service over "highway" transmission facilities under Section II of the ISO/RTO Tariff, and receives local transmission service over local transmission facilities under Schedule 21 of the ISO/RTO Tariff. Additionally, transmission scheduling and market administration services are provided by ISO-NE under Section IV.A of the ISO/RTO Tariff.

## Explanation of ISO/RTO Tariff Services, Rates \& Charges

Q. Please explain the services provided to Granite State under the ISO/RTO Tariff.
A. Section II of the ISO/RTO Tariff provides access over New England's looped transmission facilities, more commonly known as Pool Transmission Facilities ("PTF") or bulk transmission facilities. These facilities serve as New England's electric transmission "highway", and the service provided over these facilities is referred to as Regional Network Service ("RNS"). In addition, the ISO/RTO Tariff provides for Black Start, Reactive Power, and Scheduling, System Control and Dispatch Services, as described more fully later in this testimony.
Q. How are the costs for RNS recovered?
A. The ISO-NE RNS Rate ("RNS Rate") recovers the RNS costs, and is determined annually based on an aggregation of the transmission revenue requirements of each of the transmission owners in New England, calculated in accordance with a FERC-approved formula. Pursuant to a NEPOOL Settlement dated April 7, 1999, which was incorporated
$\qquad$
into the ISO/RTO Tariff, the RNS Rate has transitioned from zonal rates to a single, "postage stamp" rate in New England. The transition was completed on March 1, 2008.
Q. Please describe the ISO-NE Black Start, Reactive Power, and Scheduling, System Control and Dispatch Services that are included in the ISO/RTO Tariff.
A. ISO-NE Black Start Service, also known as System Restoration and Planning Service from Generators, is necessary to ensure the continued reliable operation of the New England transmission system. This service allows for the designation of generators with the capability of supplying load and ability to start without an outside electrical supply to re-energize the transmission system following a system-wide blackout.

Reactive Power Service, also known as Reactive Supply and Voltage Control from Generation Sources Service, is necessary to maintain transmission voltages on the ISONE transmission system within acceptable limits and requires that generation facilities be operated to produce or absorb reactive power. This service must be provided for each transaction on the ISO-NE transmission system. The amount of reactive power support that must be supplied for transactions is based on the support necessary to maintain transmission voltages within limits generally accepted and is consistently sustained in the region.

Lastly, Scheduling, System Control and Dispatch Service ("Scheduling \& Dispatch Service") consists of the services required to schedule the movement of power through,
$\qquad$
out of, within, or into the ISO-NE Control Area over the PTF and to maintain System Control. Scheduling \& Dispatch Service also provides for the recovery of certain charges that reflect expenses incurred in the operation of satellite dispatch centers.
Q. How are the ISO-NE charges for Black Start and Reactive Power assessed to Granite State?
A. ISO-NE assesses charges for Black Start and Reactive Power Services to Granite State each month based on Granite State's proportionate share of its network load to ISO-NE's total load.
Q. How are the charges for Scheduling \& Dispatch Services assessed to Granite State?
A. Charges for Scheduling \& Dispatch Service are based on the expenses incurred by ISONE and by the individual transmission owners in the operation of local control dispatch centers or otherwise to provide Scheduling \& Dispatch Service.

The expenses incurred by ISO-NE in providing these services are recovered under Section IV, Schedule 1 of the Transmission, Markets and Services Tariff. These costs are allocated to Granite State each month based on the FERC fixed rate for the month times Granite State’s monthly Network Load.

The costs incurred by the individual transmission owners in providing Scheduling \& Dispatch Service over PTF facilities, including the costs of operating local control
$\qquad$
centers, are recovered under Section II, Schedule 1 of the Open Access Transmission Tariff ("OATT"). These costs are allocated to Granite State each month based on a formula rate that is determined each year based on the prior year's costs incurred times Granite State’s monthly Network Load.

The costs of Scheduling \& Dispatch Service for transmission service over transmission facilities other than PTF are charged under Schedule 21 of the OATT. Thus, there are three types of Scheduling \& Dispatch costs that are similar, but are charged to Granite State through three different tariff mechanisms.
Q. Are there any other applicable ISO-NE charges which you have not mentioned previously in this testimony?
A. Yes. The ISO/RTO Tariff also charges for costs associated with its Load Response Program.
Q. Please describe the ISO-NE Load Response Program.
A. The Load Response Program is used to facilitate load response during periods of peak electricity demand by providing appropriate incentives. Load Response Program incentives are available to any Market Participant or Non-Market Participant which enrolls itself and/or one or more retail customers to provide a reduction in their electricity consumption in the New England Control Area during peak demand periods. Incentives are payments for reducing load during peak demand periods. However, if the participant
$\qquad$
fails to reduce consumption when scheduled, the Market/Non-Market Participant could end up owing money to ISO-NE.
Q. How are these Load Response Program costs allocated?
A. Any monthly charges or credits are allocated to the Network Load on a system-wide basis.
Q. What administrative services and/or charges flow through to Granite State under Section IV.A of the ISO/RTO Tariff?
A. There are three different charges that flow through to Granite State under Section IV.A of the ISO/RTO Tariff under Schedule 1, Schedule 4, and Schedule 5. First, Schedule 1 provides for one component of the administration of Scheduling \& Dispatch, as described on Page 6 lines 16 through 19 of my testimony. Second, Schedule 4 of the ISO/RTO Tariff provides for the collection of FERC Annual Charges, and third under the new Schedule 5, ISO-NE acts as the billing and collection agent for the New England States Committee on Electricity’s ("NESCOE") annual budget.
Q. Please explain the background behind the inclusion of the NESCOE charges under Schedule 5 of the ISO/RTO Tariff, Section IV.A.
A. NESCOE was established by a memorandum of understanding between ISO-NE and NEPOOL and approved by FERC in the fall of 2007. NESCOE created a formal role for the six New England states' participation on an ongoing basis in the decision-making
$\qquad$
process of the RTO. NESCOE represents the policy perspectives of the New England Governors and their collective interests in promoting a regional electric system that ensures the lowest reasonable long-term costs for customers while maintaining reliable service and environmental quality.
Q. How are the ISO/RTO Tariff charges assessed?
A. ISO-NE assesses the charges in Section IV.A, excluding Schedule 4, based upon stated rates pursuant to the ISO/RTO Tariff. These stated rates are adjusted annually when ISO-NE files a revised budget and cost allocation proposal to become effective January 1 each year. Granite State is charged the stated rate for these services as part of ISO-NE’s monthly billing process, based on its network load for Schedule 1 and Schedule 5 charges. Schedule 4 charges are based upon FERC's total assessment to the New England Control Area, and are directly assessed to NEP based on its proportion of total MWhs of transmission (including Granite State's) to the total of the New England Control Areas' total MWhs. NEP, in turn, allocates a portion of the charges received under Schedule 5 to Granite State through Schedule 21-NEP.

## Explanation of Schedule 21-NEP Tariff Services \& Charges

Q. What services are provided to Granite State under Schedule 21-NEP of the ISO/RTO Tariff?
A. Schedule 21-NEP provides service over NEP's local, non-highway transmission facilities, considered non-PTF facilities ("Non-PTF"). The service provided over the
$\qquad$

Non-PTF is referred to as Local Network Service ("LNS"). NEP also provides metering, transformation and certain ancillary services to Granite State to the extent such services are required by Granite State and not otherwise provided under the ISO/RTO Tariff.
Q. Please explain the metering and transformation services provided by NEP.
A. NEP separately surcharges the appropriate customers for these services. NEP provides metering service when a customer uses NEP-owned meter equipment to measure the delivery of transmission service. NEP provides transformation service when a customer uses NEP-owned transformation facilities to step down voltages from 69 kV or greater to a distribution voltage.
Q. Are there any other transmission services for which NEP assesses charges to Granite State?
A. Yes. Granite State relies upon the specific distribution facilities of NEP's affiliate, Massachusetts Electric Company ("Mass. Electric"), which provides for NEP's use of such facilities pursuant to the Integrated Facilities provision of NEP’s FERC Electric Tariff No. 1 service agreement with Mass. Electric. NEP, in turn, uses these specific distribution facilities to provide transmission service to Granite State. Therefore, Granite State is also subject to a Specific Distribution Surcharge for its use of these facilities.
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## IV. Estimate of Granite State's Transmission Expenses

Q. Was the forecast for Granite State's transmission and ISO expenses for 2011 done by you or under your supervision?
A. Yes. Based on our knowledge of the ISO-NE billing processes, the Company estimates the total transmission and ISO-NE expenses (including certain ancillary services) for 2011 to be approximately $\$ 14.5$ million, as shown in Schedule JLL-1, Summary Page 1. This equates to a decrease of \$109,000 over expenses embedded in Granite State’s retail rates in 2010.
Q. How have the ISO Charges shown on line 3 of Schedule JLL-1 been forecasted?
A. As indicated in Schedule JLL-3, the Company has applied an estimated rate increase to the total RNS rate currently in effect to reflect the forecast of PTF plant additions across New England, as estimated by the New England transmission owners, (see Schedule JLL7) to be included in the annual formula rate effective June 1, 2011. The estimated rate increase is calculated by multiplying the total New England estimated 2011 plant additions by the historic 2009 PTF Revenue Requirement to Plant ratio as calculated in the PTO Informational Filing with FERC on July 31, 2010 and dividing by the ISO-NE network load. The estimated 2011 RNS transmission charges to Granite State are then calculated by taking this forecasted RNS rate, divided by 12, multiplied by Granite State's monthly network load. The resulting calculation is shown in column 2 of Schedule JLL-2, page 1 of 2.
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Q. Schedule JLL-1 also includes estimated ISO-NE charges for Scheduling and Dispatch, Load Response, Black Start, and Reactive Power. How were these costs forecasted, as shown?
A. I will explain each below, out of sequence. The Black Start costs shown on line 6 of Schedule JLL-1 were derived in two steps. First, as shown in Section II of Schedule JLL4 (line 5), the Company estimated the cost for Black Start Service by combining the actual monthly ISO-NE Black Start expenses for the period January through August 2010 and the prior year's data from September through December 2009. This region-wide estimate is divided by ISO-NE’s 2009 Network Load to calculate an estimated annual rate, as shown on line 7. Granite State then calculated a monthly rate (annual rate divided by 12), as shown on line 8 . To obtain the estimate of Black Start costs that would be charged to Granite State, the Company multiplied the monthly rate by Granite State’s monthly network load, as shown for each month in column 1 of Schedule JLL-2, page 1. Using this methodology, the Company estimates \$79,498 to be allocated to it for 2011.
Q. How have you performed the estimate for Reactive Power costs for Granite State?
A. The estimated Reactive Power cost for the New England region was calculated by using the January through October 2010 actual ISO-NE settlement reports and the November and December 2009 settlement reports as shown in Section I of Schedule JLL-4 (line 1). The annual rate is determined by dividing the total Reactive Power costs charged in the region for that twelve month historic period by the ISO-NE's 2009 Network Load. The monthly rate (annual rate divided by 12) is then multiplied by Granite State's monthly
$\qquad$ network load to determine the estimated charges for Reactive Power Service. Using this methodology, the Company estimates \$172,036 to be allocated to it for 2011.
Q. How did you forecast the Scheduling and Dispatch costs shown on line 4 of Schedule JLL-1?
A. My estimate is shown in column (3) of Schedule JLL-2, page 1. This amount was derived by simply using the currently effective OATT Schedule 1 rate of $\$ 1.65477$ per kW -year, divided by 12 , and further multiplied by Granite State's network load as shown monthly in column (1) of Schedule JLL-2, page 1 of 2.
Q. Have you included any Reliability Must Run ("RMR") contract charges to Granite State for 2011?
A. No. Reliability Must Run Agreements guarantee payments to generators that are needed to ensure reliability. To obtain an agreement, a generator must receive verification from ISO-NE that it is needed for reliability and must demonstrate that it is unable to cover its operating costs with revenue from other sources. Granite State has not incurred any RMR contract charges as there have been no RMR contracts for the New Hampshire reliability region over the past year. Therefore, the Company has not forecasted any RMR contract costs for 2011.
Q. Have you included any Load Response Program charges to Granite State for 2011?
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A. Yes. My estimate for 2011 Load Response Program costs is shown on line 5 of Schedule JLL-1. For this estimate, actual costs incurred by Granite State for the periods January through August 2010 were used along with the actual 2009 historical data for September through December to complete the estimate. The monthly cost estimate is shown in column 5 of Schedule JLL-2 page 1of 2, totaling \$78,971.
Q. Can you please explain the forecast of the ISO-NE charges shown in line 8 and 9 of Schedule JLL-1?
A. Yes. The basis for these costs are previously described on Page 8, lines 10 through 16 of this testimony. Line 8 shows the 2011 forecast of charges to Granite State under Schedule 1, Scheduling and Load Dispatch Administrative schedules through Section IV.A of the ISO/RTO Tariff. The estimate is based on the ISO-NE revenue requirement for Schedule 1 filed each year with FERC. ISO-NE filed its proposed 2011 revenue requirement with FERC on October 29, 2010. To estimate Granite State’s 2011 ISO-NE charges, ISO-NE's actual costs for the period January through July 2010 as well as the monthly estimates for August through December 2009 are adjusted by an inflationary factor shown on line 16 of Schedule JLL-2, page 2. This inflationary factor is intended to recognize the increase or decrease in ISO-NE's revenue requirement and the associated components of that revenue requirement from the budget as filed for the previous year. Line 9 shows our estimated 2011 NESCOE charges under Schedule 5 of Section IV.A of the ISO/RTO Tariff. For calendar year 2011, each customer that is obligated to pay the RNS rate pays each month for the prior month's charges, an amount equal to the product
$\qquad$
of $\$ .00413 / \mathrm{kW}$-month times its monthly network load for that month. These charges are shown in Schedule JLL-2 on page 2. The total estimated amount of direct ISO/RTO Tariff charges under Section IV.A for the Company is estimated to be $\$ 249,963$. These estimates are taken from page 2 of Schedule JLL-2 and then reflected on lines 8 and 9 of Schedule JLL-1.
Q. What is the sub-total of transmission expenses attributable to charges from the ISO-NE?
A. The sub-total of ISO-NE charges is $\$ 11,066,445$, which is the sum of lines 3 through 9 on Schedule JLL-1 page 1 of 2.
Q. Have you estimated the charges to Granite State under Schedule 21 of the ISO/RTO Tariff?
A. Yes. Lines 1 and 2 of Schedule JLL-1 show the amount of forecasted charges from NEP pursuant to the Local Network Service ("LNS") tariff. The total amount of expenses is $\$ 3,442,608$ which represents a net decrease in the total revenue requirement of NEP allocated to Granite State of $\$ 677,997$ for 2011 (see Schedule JLL-1 Page 2 of 2, line 3). Schedule JLL-6 shows the calculation of the total NEP revenue requirement. NEP allocates Non-PTF expenses to Granite State's customers on a load ratio share basis, as shown in Schedule JLL-5, column (1). Metering, transformation, specific distribution, and ancillary service charges are based on current rates and are assessed to Granite State based on a per meter and peak load basis, respectively.
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## V. Explanation of Primary Changes from Last Year's Forecasted Expenses

Q. What is the effect on Granite State's 2011 transmission expenses?
A. As stated on Page 11, lines 6 and 7, of my testimony, the estimated 2011 Granite State transmission and ISO-NE expenses of $\$ 14.5$ million represents a net decrease of \$109,000 from the 2010 forecast of transmission expenses for Granite State. This total decrease is primarily due to a net decrease in the actual NEP LNS charges of \$678,000 due to two adjustments that lowered NEP's transmission revenue requirement and hence Granite State's LNS-related transmission costs. This reduction is partially offset by an increase in the actual RNS rates effective June 1, 2010 of $\$ 286,000$ and an estimated additional RNS rate increase effective June 1, 2011 based on the PTF transmission plant investment forecasted to go "in-service" in 2011 across New England, resulting in an additional $\$ 173,100$ increase in Granite State’s RNS PTF transmission charges. There is also a slight increase in charges of approximately $\$ 5,700$ due to the estimated increase of Granite State’s PTF load projected for 2011 of less than 1\% over previous year. Other ISO ancillary and administrative charges total to an increase year over year of \$103,500.
Q. What are the primary factors in the decrease of NEP’s Local Network Service Charges?
A. There are two main drivers to the forecasted decrease in Local Network Service charges to Granite State:

1) National Grid has changed its method of tax accounting for routine repair maintenance costs that are deductible under Internal Revenue Code Section 162 that had previously been capitalized and depreciated. This allows National Grid to take an increase in
$\qquad$
deductions to its current income tax payments, but also increases its deferred tax liability. This increase in the liability reduces NEP's investment base and revenue requirement calculation on a monthly basis.
2) Historically NEP has used an imputed debt rate of $7.87 \%$ for purposes of determining its Schedule 21- NEP revenue requirement. This was done in accordance with the terms of the Competitive Transition Charge ("CTC") settlement which provided for a pass-back of finance savings due to the divestiture of generation assets as a credit to CTC customers. Under the terms of the CTC settlement, the finance savings that NEP incurred as a part of the divestiture of its generation assets were used to benefit CTC customers and were not to be passed back to customers through transmission rates. That provision within the CTC settlement terminated as of December 31, 2009. Therefore under the terms of Schedule 21-NEP, NEP’s transmission debt rate has been reset at $0 \%$ until NEP issues new debt.
Q. What is causing the $\$ 286,000$ ISO-NE RNS rate increase from 2010 ?
A. There is an increase of approximately $\$ 286,000$ in expense for rate increases that went into effect June 2010. Because the RNS rates are updated effective June 1 of each year, the forecasted January through May 2010 expenses included in last year’s filing did not reflect the increase of $\$ 4.88$ per MW year to the RNS rate that became effective June 1, 2010. This was primarily driven by an estimated $\$ 778$ million of transmission plant investment expected to be placed in-service over the 2010 calendar year.
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Q. What PTF plant investment is driving the $\$ 173,000$ increase in the ISO-NE RNS charges to Granite State effective June 1, 2011?
A. The $\$ 173,000$ increase is due to a significant number of capital additions forecasted by the Transmission Owners to go into service in 2011. Schedule JLL-7 shows an estimated $\$ 766$ million of PTF plant additions for 2011 as provided by the Transmission Owners. This list has been created by the Transmission Owners in an effort to improve the ability to forecast the impact of capital investment on RNS rates. These estimates are intended to: 1 ) include the most current project cost forecasts; 2) refine phasing of when project spending is placed into service; and 3) capture any PTF capital expenditure not included in the ISO-NE Regional System Plan.
Q. What are the major projects driving the significant level of projected plant additions for 2011?
A. Based on our review of the ISO-NE Regional System Plan, the two largest transmission projects in New England where a portion of the project has an in-service date during 2011 are: (1) Central Maine Power’s Maine Power Reliability Program ("MPRP"); and (2) National Grid's Merrimack Valley/North Shore Reliability Project and Central/Western Massachusetts Upgrades.

## VI. Conclusion

Q. Does this conclude your testimony?
A. Yes.

## Schedules

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| Schedule JLL-1 | Summary of Transmission Expenses Estimated for 2011 |
| :--- | :--- |
| Schedule JLL-2 | Summary of ISO-NE Charges Estimated for 2011 |
| Schedule JLL-3 | PTF Rate Calculation Estimated for 2011 <br> Summary of Reactive Power \& Black Start Costs Estimated for <br> Schedule JLL-4 |
| 2011 |  |
| Schedule JLL-5 | Summary of New England Power Schedule No. 21 Charges <br> Estimated for 2011 |
| Schedule JLL-6 | Non-PTF Revenue Requirement Estimated for 2011 <br> Schedule JLL-7 |
| Forecasted PTF Capital Additions In Service - 2011 |  |

# Schedule JLL-1 Summary of Transmission Expenses Estimated for 2011 

# National Grid: Granite State Electric Company 

Summary of Transmission Expenses
Estimated For the Year 2011

| NEP Charges |  |  |
| :---: | :---: | :---: |
| Non-PTF | \$2,055,840 |  |
| Other NEP Charges | 1,386,768 |  |
| Sub-Total NEP Charges |  | \$3,442,608 |
| ISO Charges |  |  |
| PTF | \$10,239,628 |  |
| Scheduling \& Dispatch | 246,349 |  |
| Load Response | 78,971 |  |
| Black Start | 79,498 |  |
| Reactive Power | 172,036 |  |
| Sub-Total ISO Charges |  | \$10,816,482 |
| ISO-NE Charges |  |  |
| Schedule 1 - Scheduling \& Dispatch | \$242,585 |  |
| Schedule 5 - NESCOE | 7,378 |  |
| Sub-Total ISO-NE Charges |  | \$249,963 |
| Total Expenses Flowing Through Current Rates |  | \$14,509,054 |

Line 1 = JLL-5: Column (2), Line 13
Line 2 = JLL-5: Sum of Column (3) thru (6), Line 13
Line 3 = JLL-2, page 1: Column (2), Line 13
Line 4 = JLL-2, page 1: Column (3), Line 13
Line 5 = JLL-2, page 1: Column (5), Line 13
Line 6 = JLL-2, page 1: Column (6), Line 13
Line 7 = JLL-2, page 1: Column (7), Line 13
Line 8 = JLL-2, page 2: Column (1), Line 13
Line 9 = JLL-2, page 2: Column (2), Line 13
Line 10 = Sum of Line 1 thru Line 9

# Granite State Electric Company <br> Summary of Transmission Expenses <br> 2010 vs. 2011 Filing Years 

Granite State Electric Company d/b/a National Grid
Docket DE 10-
_ Schedule JLL-1

Summary
Page 2 of 2


# Schedule JLL-2 <br> Summary of ISO-NE Charges <br> Estimated for 2011 

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Schedule JLL-2
Summary of ISO Charges
Page 1 of 2
National Grid: Granite State Electric Company
Summary of ISO Charges
Estimated For the Year 2011


Line 1-12: Column (1) = NEPOOL Monthly Load Statements January - August 2010 and September - December 2009 actual used for estimates
Line 1-5: Column (2) = JLL-3, Line 1 * Column (1) / 12
Line 6-12: Column (2) = JLL-3, Line 6 * Column (1) / 12
Line 1-12: Column (3) = Current Rate * Column (1)/12 R $\mathbf{1 . 6 5 4 7 7} / \mathrm{kW}-\mathrm{Yr}$
Line 1-12: Column (4) $=0$ [No Reliability Must Run Contracts are currently in effect for New Hampshire]
Line 1-12: Column (5) = ISO Monthly Statements January-July 2010 and August-December 2009 actual used for estimates
Line 1-12: Column (6) = JLL-4, Line 8 * Column (1)
Line 1-12: Column (7) = JLL-4, Line 4 * Column (1)
Line 1-12: Column (8) = Sum of Columns (2) thru (7)
Line 13 = Sum of Line 1 thru Line 12

|  |  | (1) <br> Sch. 1 | (2) | (3) <br> Total |
| :---: | :--- | ---: | ---: | ---: |
|  |  | Scheduling <br> \& Dispatch | Sch. 5 <br> NESCOE | ISO-NE <br> Charges |
|  |  | $\$ 20,155$ |  |  |
| 1 | January | 20,284 | $\$ 572$ | $\$ 20,727$ |
| 2 | February | 18,971 | 570 | 20,853 |
| 3 | March | 17,849 | 535 | 19,506 |
| 4 | April | 26,807 | 501 | 18,351 |
| 5 | May | 24,630 | 732 | 27,539 |
| 6 | June | 28,898 | 689 | 25,319 |
| 7 | July | 27,443 | 802 | 29,700 |
| 8 | August | 13,874 | 764 | 28,207 |
| 9 | September | 13,472 | 536 | 14,410 |
| 10 | October | 14,215 | 519 | 13,991 |
| 11 | November | 15,987 | 541 | 14,756 |
| 12 | December |  | 616 | 16,604 |
| 13 | Totals | $\$ 242,585$ |  |  |
|  |  | $\$ 7,378$ | $\$ 249,963$ |  |
| 14 | 2010 Budget | $\$ 30,478,587$ |  |  |
| 15 | 2011 Budget | $\$ 33,845,044$ |  |  |
| 16 | \% Change | $11.05 \%$ |  |  |

Line 1-12: Columns (1) = Monthly ISO Bills for periods January-July 2010 and August-December 2009 for estimates * Line 16
Line 1-12: Column (2) = Estimates based on Monthly PTF load * 2011 charge of $\$ .00413$ per kW-mo from ISO NESCOE Budget Filing Line $13=$ Sum of Line 1 thru Line 12
Line 14 = ISO-NE Proposed Schedule 1 Operating Budget (Year 2010) based on the 10/29/09 FERC filing
Line 15 = ISO-NE Proposed Schedule 1 Operating Budget (Year 2011) based on the 10/29/10 FERC filing
Line 16 = Line 15 -Line 14 / Line 14

## Schedule JLL-3 <br> PTF Rate Calculation <br> Estimated for 2011

# New England Power Company <br> PTF Rate Calculation <br> Estimated For the Year 2011 

## Development of PTF Rate:

1 Total Regional Network Service Rate through May 31, 2011
ESTIMATED Increase in ISO Rate Effective June 1, 2011
2 Total ESTIMATED PTO Plant Additions

3

4
5 Additional Estimated ISO Regional Network Service Rate

6 Regional Network Service Rate in effect June 1, 2011 through May 31, 2012

## \$64.83/KW-YR

\$ 766,000,000
16.58\%

19,457,606
\$6.53 /KW-YR
\$71.36/KW-YR

Line $1=$ PTO Informational Filing dated 7/31/10
Line $2=$ PTO Forecast RWG Presentation 8/17/10
Line 3 = PTO Forecast RWG Presentation 8/17/10
Line $4=$ PTO Informational Filing dated 7/31/10
Line 5 = Line 2 * Line 3 / Line 4
Line 6 = Line 1 + Line 5

# National Grid: Granite State Electric Company 

 Summary of Reactive Power \& Black Start Costs Estimated For the Year 2011Section I: Development of Reactive Power Estimate

| 1 | Estimated Total ISO Reactive Power Costs | $\$ 22,479,530$ |
| :--- | :--- | ---: |
| 2 | 2009 ISO Network Load (KW) | $19,457,606$ |
| 3 | Estimated Rate / KW-Yr | $\$ 1.1553$ |
|  |  |  |
| 4 | Estimated Rate / KW-Mo | $\$ 0.0963$ |

Section II: Development of Black Start Costs

| 5 | Estimated Total ISO Black Start Costs | $\$ 10,399,906$ |
| :--- | :--- | ---: |
| 6 | 2009 ISO Network Load (KW) | $19,457,606$ |
| 7 | Estimated Rate / KW-Yr | $\$ 0.5345$ |
|  |  |  |
| 8 | Estimated Rate / KW-Mo | $\$ 0.0445$ |

Line 1 = ISO Schedule 2 Settlement Reports Jan - Oct 2010 and Nov - Dec 2009 for estimates
Line $2=12$ CP Network Loads from Informational Filing dated 07/31/10
Line 3 = Line $1 /$ Line 2
Line 4 = Line $3 / 12$
Line 5 = ISO Schedule 16 Settlement Reports for Jan - Aug 2010 and Sept - Dec 2009 for estimates
Line 6 = Line 2
Line 7 = Line $5 /$ Line 6
Line $8=$ Line $7 / 12$

# Schedule JLL-5 <br> Summary of New England Power Schedule No. 21 Charges Estimated for 2011 

National Grid: Granite State Electric Company Summary of New England Power - Schedule No. 21 Charges

Estimated For the Year 2011

|  |  | (1) <br> Non- PTF Load Ratio \% Share | (2) <br> Non-PTF <br> Demand Charge | (3) <br> Scheduling \& Dispatch | (4) <br> Specific Distribution Surcharge | (5) <br> Transformer Surcharge | (6) <br> Meter Surcharge | (7) <br> Total NEP Costs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | January-10 | 2.78\% | \$167,176 | \$7,022 | \$12,340 | \$92,382 | \$1,475 | \$280,395 |
| 2 | February | 2.85\% | 171,612 | 11,659 | \$12,340 | \$92,382 | \$1,475 | 289,468 |
| 3 | March | 2.81\% | 169,024 | 14,102 | \$12,340 | \$92,382 | \$1,475 | 289,324 |
| 4 | April | 2.94\% | 177,253 | 9,352 | \$12,340 | \$92,382 | \$1,475 | 292,803 |
| 5 | May | 3.05\% | 183,921 | 10,886 | \$12,340 | \$92,382 | \$1,475 | 301,004 |
| 6 | June | 2.64\% | 158,718 | 7,222 | \$12,340 | \$92,382 | \$1,475 | 272,137 |
| 7 | July | 2.78\% | 167,351 | 7,630 | \$12,340 | \$92,382 | \$1,475 | 281,178 |
| 8 | August | 2.79\% | 167,734 | 1,031 | \$12,340 | \$92,382 | \$1,475 | 274,962 |
| 9 | September | 2.77\% | 166,589 | 4,723 | \$12,340 | \$92,382 | \$1,475 | 277,509 |
| 10 | October | 2.94\% | 177,017 | 12,646 | \$12,340 | \$92,382 | \$1,475 | 295,861 |
| 11 | November | 2.93\% | 176,378 | 13,130 | \$12,340 | \$92,382 | \$1,475 | 295,705 |
| 12 | December | 2.87\% | 173,068 | 12,999 | \$12,340 | \$92,382 | \$1,475 | 292,265 |
| 13 | 12-Mo Tota |  | \$2,055,840 | \$112,401 | \$148,084 | \$1,108,586 | \$17,698 | \$3,442,608 |

Lines 1-12: Column (1) = Monthly Network Load Files for January-September 2010 and October-December 2009 actuals used for estima Lines 1-12: Column (2) = Column (1) * Schedule JLL-6, Line 3 / 12
Lines 1-12: Column (3) = Monthly Network Bills for periods January-September 2010 and October-December 2009 actuals used for estim Lines 1-12: Column (4), (5), \& (6) = Current rates as of June 2010
Lines 1-12: Column (7) = Sum of Column (2) thru (6)
Line 13 = Sum of Line 1 through Line 12

## Schedule JLL-6 Non-PTF Revenue Requirement Estimated for 2011

## New England Power Company Non-PTF Revenue Requirement Estimated For the Year 2011

## Section II:

| 1 | NEP's Schedule 21 Non-PTF Revenue Requirement (12 mos. Ended 08/31/10) | $\$ 66,805,482$ |
| :--- | :--- | :---: |
| 2 | Adjustment for Forecasted 2011 Capital Additions | $\$ 5,440,000$ |
| 3 | Estimated 2011 Non-PTF Revenue Requirement | $\$ 72,245,482$ |

## Adjustment for Year End 2011 Capital Additions

| 4 | Estimated 2011 Non-PTF Transmission Additions for Lines - In Service | $\$ 11,200,000$ |
| :--- | :--- | ---: |
| 5 | Estimated. 2011 Non-PTF Transmission Additions for Substations - In Service | $\$ 20,800,000$ |
| 6 | Estimated NEP 2011 Transmission Plant Additions | $\$ 32,000,000$ |
| 7 | Non-PTF Transmission Plant Carrying Charge | $17 \%$ |
|  |  |  |
| 8 | Adjustment for Forecasted 2011 Capital Additions | $\$ 5,440,000$ |

## Section III:

Transmission Plant Carrying Charge
9 NEP's Schedule 21 Revenue Requirement \$66,805,482
10 Total Revenue Credit (12 Mos. Ended 08/31/10)
\$233,326,841
11 Total Transmission Integrated Facilities Credit (12 Mos. Ended 08/31/10)
$(\$ 51,173,496)$
12 Sub-Total Revenue Requirement
\$248,958,827
13 Total Transmission Plant (as of 09/30/2010)
\$1,454,674,280
14 Non-PTF Transmission Plant Carrying Charge $\quad 17 \%$

Line 1 = NEP Schedule 21 Billing: January-August 2010 and September -December 2009 actuals
Line 2 = Line 8
Line 3 = Line $1+$ Line 2
Line 4 \& 5 = Estimated NEP In-Service Non-PTF additions for CY 2011 for Line and Substations
Line 6 = Line $4+$ Line 5
Line $7=$ Line 14
Line 8 = Line 6 * Line 7
Line 9 thru 11 = NEP Schedule 21 Billing: January-August 2010 and September-December 2009 actuals
Line $12=$ Sum of Lines 9 thru 11
Line 13 = NEP Schedule 21 Billing
Line 14 = Line 12 / Line 13

# Schedule JLL-7 <br> Forecasted PTF Capital Additions In Service - 2011 

# Participating Transmission Owners <br> Forecast of RNS Rate Impacts <br> For the Period CY11 

Estimated / Forecasted PTF Capital Additions In Service

| 1 | Bangor Hydro |  | $\mathbf{2 0 1 1}$ |
| :--- | :--- | ---: | ---: |
| 2 | Central Maine Power | $\$$ | $37,000,000$ |
| 3 | Florida Power \& Light-NED | $\$$ | $294,000,000$ |
| 4 | Holyoke Gas and Electric | $\$$ | $1,000,000$ |
| 5 | National Grid | $\$$ | - |
| 6 | NSTAR Electric Company | $\$$ | $213,000,000$ |
| 7 | Northeast Utilities | $\$$ | $63,000,000$ |
| 8 | United Ulluminating Company |  | $\$$ |
| 9 | VT Transco | $\$$ | $112,000,000$ |
| 10 | Total | $\$$ | $29,000,000$ |
|  |  | $\$$ | $\mathbf{7 6 6 , 0 0 0}, 000$ |


[^0]:    Prior Month Column (f) + Prior Month Column (i); Rates D and T have beginning balances per Schedule SMM-5 of the November 20, 2009 Retail Rate Filing in DE $09-234$ that were too small to warrant an adjustment factor. Therefore, the balances were brought forward to this year.
    Page 4
    Jan 2010: Schedule SMM-3, Page 1 Page 4
    Jan 2010: Schedule SMM-3, Page 1
    Page 6
    Column (b) + Column (c) - Column (d)

    Column (b) + Column (c) - Column (d)
    Column (a) + Column (e)
    (C)
    
    (i) $\quad$ Column (g) $\times[$ Column $(\mathrm{h}) \div 12]$
    (j) $\quad$ Column (i) + Prior Month Column (j)

[^1]:    

[^2]:    Source:
    (1) Total Monthly Revenue Report - CR97992A
    (2) Schedule SMM-3, Page 4

[^3]:    kWh Sales per Transition Revenue Report - CR97989A x appropriate adjustment factor

