Testimony of
James L. Loschiavo

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, a London-based international energy company. 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 two 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 Utility Commission ("Commission").

Q. Have you previously testified before the Commission?

A. No.

II. Purpose of Testimony

Q. What is the purpose of your testimony?

A. My testimony addresses the estimated 2010 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 2010. As described more fully in the second part of my testimony, the Company expects to see an increase of $1.9 million in prospective transmission expenses compared to the forecast provided for calendar year 2009 in Docket No. DE 08-149. The increase is caused primarily by the impact of additional transmission plant investment being completed across all of New England.

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").

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, ISO-NE 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.

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 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 ISO-NE 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, 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 ISO-NE 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 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 your load during peak demand periods. However, if the participant fails to reduce consumption when scheduled, such entity 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 13 through 21 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. The 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 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.

<u>Explanation of Schedule 21-NEP Tariff Services & Charges</u>

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 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.

IV. Estimate of Granite State's Transmission Expenses

Q. Was the forecast for Granite State's transmission and ISO expenses for 2010 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 2010 to be approximately $14.6 million, as shown in Schedule JLL-1, Summary Page 1. This equates to an increase of $1.9 million over expenses embedded in Granite State's retail rates in 2009.

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 JLL-7) to be included in the annual formula rate effective June 1, 2010. The estimated rate increase is calculated by multiplying the total New England estimated 2010 plant additions by the historic 2008 PTF Revenue Requirement to Plant ratio as calculated in the PTO Informational Filing with FERC on July 31, 2009 and dividing by the ISO-NE network load. The estimated 2010 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 1of 2.

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 JLL-4 (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 2009 and the prior year's historical data from September through December 2008. This region-wide estimate is divided by ISO-NE's 2008 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 JLL-2, page 1. Using this methodology, the Company estimates $75,340 to be allocated to it for 2010.

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 2009 actual ISO-NE settlement reports and the historical November and December 2008 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 2008 Network Load. The monthly rate (annual rate divided by 12) is then multiplied by Granite State's monthly network load to determine the estimated charges for Reactive Power Service. Using this methodology, the Company estimates $165,676 to be allocated to it for 2010.

Q. How did you forecast the Scheduling and Dispatch costs shown on line 4 of JLL-1?

A. My estimate is shown in column (3) of JLL-2, page 1. This amount was derived by simply using the currently effective OATT Schedule 1 rate of $1.5178448 per kW-year, divided by 12, and further multiplied by Granite State's network load as shown monthly in column (1) of JLL-2, page 1 of 2.

Q. Have you included any RMR contract charges to Granite State for 2010?

A. No. 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 2010.

Q. Have you included any Load Response Program charges to Granite State for 2010?

A. Yes. My estimate for 2010 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 2009 were used along with the actual 2008 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 $46,186.

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 2010 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 2010 revenue requirement with FERC on October 29, 2009. To estimate Granite State's 2010 ISO-NE charges, ISO-NE's actual costs for the period January through July 2009 as well as the monthly estimates for August through December 2009 are adjusted by an inflationary factor shown on line 16 of 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 2010 NESCOE charges under Schedule 5 of Section IV.A of the ISO/RTO Tariff. For calendar year 2010, 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 of $.00548/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 $210,330. These

estimates are taken from page 2 of 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 $10,287,767, which is the sum of lines 3 through 9 on Schedule JLL-1.

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 $4,120,606 which represents a net increase in the total revenue requirement of NEP allocated to Granite State of approximately $108,100 for 2010 (see 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.

V. <u>Explanation of Primary Changes from Last Year's Forecasted Expenses</u>

Q. What is the effect on Granite State's 2010 transmission expenses?

A. As stated on Page 11, lines 6 and 7, of my testimony, the estimated 2010 Granite State transmission and ISO-NE expenses of $14.6 million represents a net increase of $1.9 million from the 2009 forecast of transmission expenses for Granite State. This total increase is primarily due to 1) an increase in the actual RNS rates effective June 1, 2009 of $921,000 and 2) an estimated additional RNS rate increase effective June 1, 2010 based on the PTF transmission plant investment forecasted to go "in-service" in 2010 across New England, resulting in an additional $1.3 million increase in Granite State's RNS PTF transmission charges. These increases are slightly offset by an estimated impacted decrease in PTF load projected for 2010 of $122,000 for Granite State.

Q. What is causing the $921,000 ISO-NE RNS rate increase from 2009?

A. There is an increase of approximately $921,000 in expense for rate increases that went into effect June 2009. First, the RNS rates are updated effective June 1 of each year. The forecasted January through May 2009 expenses included in last year's filing do not reflect the increase of $16.08 per MW year to the RNS rate that became effective June 1, 2009 resulting primarily from an estimated $624 million of transmission plant investment expected to be placed in-service over the 2009 calendar year.

Q. What PTF plant investment is driving the $1.3 million increase in the ISO-NE RNS charges to Granite State effective June 1, 2010?

A. The $1.3 million increase is due to a significant number of capital additions forecasted by the Transmission Owners to go into service in 2010. Schedule JLL-7 is a schedule

showing an estimated $1.1 billion of PTF plant additions for 2010 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. In prior years, forecasts had been based on the figures as reported in the last ISO-NE approved Regional System Plan. These revised 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 2010?

A. Based on our review of the ISO-NE Regional System Plan, the two largest transmission projects in New England with a portion of the project projected with an in-service date during 2010 are: (1) Central Maine Power's Maine Power Reliability Program ("MPRP"); and (2) Vermont Electric Company's ("VELCO") Southern Loop Project.

Central Maine Power's MPRP involves the construction of 192 miles of new 345 kV transmission circuits, 75 miles of new 115 kV transmission circuits, and 20 substation projects. The project's proposed facilities are to be constructed in a number of different locations throughout the state of Maine and provide needed reliability improvements to the New England Transmission System. The scope of the project incorporates the addition of new 345 kV and 115 kV circuits coupled with the rebuilding, re-rating, and

reconfiguration of numerous existing facilities. The most significant system upgrades planned are for the addition of new 345 kV transmission lines which effectively create a new 345 kV path between the Orrington and Three Rivers stations. New autotransformers are planned at Albion Road, Larrabee Road, Raven Farm, South Gorham and Maguire Road. The project also includes a new 115 kV line between Orrington and Coopers Mills, a new 115 kV transmission line between the Coopers Mills and Highland Substations, a new line between Larrabee Road and Lewiston Lower, and in western Maine, a new 115 kV transmission line between Rumford IP and Larrabee Road Substation. The project has a proposed in-service date of late 2012.

VELCO's Southern Loop Project addresses several reliability issues of the regional bulk power transmission system that connects southern Vermont, southwestern New Hampshire, north-central Massachusetts and eastern New York. Of the greatest concern is the risk of voltage collapse or blackouts, at existing electrical demand levels, with increasing reliability risk as regional demand levels increase. The Southern Loop Project resolves these system reliability issues by constructing a new 345 kV parallel line to the existing 340 kV line, resolving the breaker failure issues at Coolidge and Vermont Yankee with substation improvements, adding a new 345/115 kV transformer to support the existing Vermont Yankee 345/115 kV transformer, and supporting the local Central Vermont Public Service 46 kV network with the Newfane substation. The project has a proposed in-service date of June 2011.

VI. Conclusion

Q. Does this conclude your testimony?

A. Yes.

Schedules of
James L. Loschiavo

Schedules

Schedule JLL-1	Summary of Transmission Expenses Estimated for 2010
Schedule JLL-2	Summary of ISO-NE Charges Estimated for 2010
Schedule JLL-3	PTF Rate Calculation Estimated for 2010
Schedule JLL-4	Summary of Reactive Power & Black Start Costs Estimated for 2010
Schedule JLL-5	Summary of New England Power Schedule No. 21 Charges Estimated for 2010
Schedule JLL-6	Non-PTF Revenue Requirement Estimated for 2010
Schedule JLL-7	Forecasted PTF Capital Additions In Service - 2010

Schedule JLL-1

Schedule JLL-1

Summary of Transmission Expenses Estimated for 2010

National Grid: Granite State Electric Company
Summary of Transmission Expenses
Estimated For the Year 2010

	NEP Charges		
1	Non-PTF	$2,853,751	
2	Other NEP Charges	1,266,855	
	Sub-Total NEP Charges		$4,120,606
	ISO Charges		
3	PTF	$9,774,747	
4	Scheduling & Dispatch	225,818	
5	Load Response	46,186	
6	Black Start	75,340	
7	Reactive Power	165,676	
	Sub-Total ISO Charges		$10,287,767
	ISO-NE Charges		
8	Schedule 1 - Scheduling & Dispatch	$200,547	
9	Schedule 5 - NESCOE	9,783	
	Sub-Total ISO-NE Charges		$210,330
10	**Total Expenses Flowing Through Current Rates**		**$14,618,703**

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
Summary of Transmission Expenses
2009 vs. 2010 Filing Years

Granite State Electric Company d/b/a National Grid
Docket DE_____
Schedule JLL-1
Summary

			January 2009 Retail Filing	January 2010 Retail Filing	Yr/Yr Incr/(Decr)
	NEP Charges				
1		Non-PTF	2,877,682	2,853,751	(23,931)
2		Other NEP Charges	1,134,788	1,266,855	132,067
3		***Subtotal***	**$ 4,012,470**	**$ 4,120,606**	**$ 108,136**
	ISO Charges				
4		PTF	7,636,238	9,774,747	2,138,509
5		Scheduling & Dispatch	184,940	225,818	40,877
6		Load Response	167,891	46,186	(121,705)
7		Black Start	72,715	75,340	2,625
8		Reactive Power	443,145	165,676	(277,469)
9		***Subtotal***	**$ 8,504,929**	**$ 10,287,767**	**$ 1,782,838**
	ISO Administrative				
10		Sched 1 Scheduling & Dispatch	179,149	200,547	21,398
11		Sched 5 NESCOE	4,745	9,783	5,038
12		***Subtotal***	**$ 183,894**	**$ 210,330**	**$ 26,436**
13		**Total Expenses**	**$ 12,701,293**	**$ 14,618,703**	**$ 1,917,410**

Schedule JLL-2

Schedule JLL-2

Summary of ISO-NE Charges Estimated for 2010

National Grid: Granite State Electric Company
Summary of ISO Charges
Estimated For the Year 2010

		(1) Monthly PTF kW Load	(2) PTF Demand Charge	(3) Scheduling & Dispatch	(4) Reliability Must Run	(5) Load Response	(6) Black Start	(7) Reactive Power	(8) Total ISO
1	January	135,403	$676,451	$17,127	$0	$4,325	$5,714	$12,565	$716,182
2	February	147,762	738,194	18,690	0	1,788	6,236	13,712	778,620
3	March	142,935	714,079	18,079	0	2,186	6,032	13,264	753,641
4	April	137,751	688,181	17,424	0	1,042	5,813	12,783	725,243
5	May	139,466	696,749	17,641	0	1,493	5,885	12,942	734,711
6	June	141,860	820,897	17,943	0	964	5,986	13,165	858,955
7	July	148,227	857,740	18,749	0	687	6,255	13,755	897,187
8	August	167,007	966,414	21,124	0	17,133	7,048	15,498	1,027,217
9	September	188,535	1,090,989	23,847	0	6,756	7,956	17,496	1,147,045
10	October	167,566	969,649	21,195	0	5,176	7,071	15,550	1,018,641
11	November	129,254	747,950	16,349	0	2,228	5,455	11,995	783,976
12	December	139,537	807,454	17,650	0	2,409	5,888	12,949	846,350
13	**12-Mo Total**	**1,785,303**	**$9,774,747**	**$225,818**	**$0**	**$46,186**	**$75,340**	**$165,676**	**$10,287,767**

Line 1-12: Column (1) = NEPOOL Monthly Statements January 2009 - September 2009 for actuals and October 2008 - December 2008 actuals 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 Rate = **1.5178448** /kW-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 2009 - August 2009 for actuals and September 2008 - December 2008 actuals 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

National Grid: Granite State Electric Company
Summary of ISO-NE Charges
Estimated For the Year 2010

		(1) Sch. 1 Scheduling & Dispatch	(2) Sch. 5 NESCOE	(3) Total ISO-NE Charges
1	January	$15,259	$742	$16,001
2	February	16,214	810	17,023
3	March	15,337	783	16,120
4	April	16,326	755	17,080
5	May	15,916	764	16,680
6	June	16,330	777	17,108
7	July	17,770	812	18,582
8	August	21,070	915	21,985
9	September	18,790	1,033	19,824
10	October	14,526	918	15,444
11	November	15,963	708	16,672
12	December	17,046	765	17,811
13	**Totals**	**$200,547**	**$9,783**	**$210,330**
14	2009 Budget	$26,424,505		
15	2010 Budget	$30,478,587		
16	% Change	15.34%		

Line 1-12: Columns (1) = Monthly ISO Bills for periods January 2009 - July 2009 and August 2008 - December 2008 for estimates
Line 1-12: Column (2) = Estimates based on Monthly PTF load * 2010 charge of $.00548 per kW-mo from ISO NESCOE Budget Filing 10/31/2009
Line 13 = Sum of Line 1 thru Line 12
Line 14 = ISO-NE Proposed Schedule 1 Operating Budget (Year 2009) based on the 10/31/08 FERC filing
Line 15 = ISO-NE Proposed Schedule 1 Operating Budget (Year 2010) based on the 10/29/09 FERC filing
Line 16 = Line 15-Line 14 / Line 14

Schedule JLL-3

PTF Rate Calculation Estimated for 2010

New England Power Company
PTF Rate Calculation
Estimated For the Year 2010

Development of PTF Rate:

1	Total Regional Network Service Rate through May 31, 2010	$59.95	/KW-YR
	ESTIMATED Increase in ISO Rate Effective June 1, 2010		
2	Total ESTIMATED PTO Plant Additions	$1,113,000,000	
3	* Revenue Requirement to Plant Ratio	17.43%	
4	/ 2008 ISO Network Load	20,432,922	
5	Additional Estimated ISO Regional Network Service Rate	$9.49	/KW-YR
6	Regional Network Service Rate in effect June 1, 2010 through May 31, 2011	$69.44	/KW-YR

Line 1 = PTO Informational Filing dated 7/31/09
Line 2 = PTO Forecast RWG Presentation 7/20/09
Line 3 = PTO Forecast RWG Presentation 7/20/09
Line 4 = PTO Informational Filing dated 7/31/09
Line 5 = Line 2 * Line 3 / Line 4
Line 6 = Line 1 + Line 5

Schedule JLL-4

Schedule JLL-4

Summary of Reactive Power & Black Start Costs Estimated for 2010

National Grid: Granite State Electric Company
Summary of Reactive Power & Black Start Costs
Estimated For the Year 2010

Section I: Development of Reactive Power Estimate

1	Estimated Total ISO Reactive Power Costs	$22,750,833
2	2008 ISO Network Load (KW)	20,432,922
3	Estimated Rate / KW-Yr	$1.1134
4	Estimated Rate / KW-Mo	$0.0928

Section II: Development of Black Start Costs

5	Estimated Total ISO Black Start Costs	$10,343,440
6	2008 ISO Network Load (KW)	20,432,922
7	Estimated Rate / KW-Yr	$0.5062
8	Estimated Rate / KW-Mo	$0.0422

Line 1 = Actual ISO Schedule 2 Settlement Reports for periods Jan-Oct 2009, Nov-Dec 2008 actuals for estimates
Line 2 = 12 CP Network Loads from Informational Filing dated 07/31/09
Line 3 = Line 1 / Line 2
Line 4 = Line 3 / 12
Line 5 = ISO Schedule 16 Settlement Reports for Jan 2009 - Aug 2009 for actuals and Sept 2008 - Dec 2008 for estimates
Line 6 = Line 2
Line 7 = Line 5 / Line 6
Line 8 = Line 7 / 12

Schedule JLL-5

Schedule JLL-5

Summary of New England Power Schedule No. 21 Charges Estimated for 2010

National Grid: Granite State Electric Company
Summary of New England Power - Schedule No. 21 Charges
Estimated For the Year 2010

		(1) Non- PTF Load Ratio % Share	(2) Non-PTF Demand Charge	(3) Scheduling & Dispatch	(4) Specific Distribution Surcharge	(5) Transformer Surcharge	(6) Meter Surcharge	(7) Total NEP Costs
1	January-09	2.86%	$229,525	$10,711	$13,225	$79,237	$1,519	$334,217
2	February	2.83%	227,101	14,707	$13,225	$79,237	$1,519	335,789
3	March	2.85%	228,182	29,817	$13,225	$79,237	$1,519	351,980
4	April	3.14%	251,323	12,868	$13,225	$79,237	$1,519	358,172
5	May	3.24%	259,716	12,910	$13,225	$79,237	$1,519	366,607
6	June	3.26%	261,169	12,816	$13,225	$79,237	$1,519	367,967
7	July	2.93%	234,515	6,789	$13,225	$79,237	$1,519	335,285
8	August	2.92%	234,077	6,182	$13,225	$79,237	$1,519	334,240
9	September	2.87%	229,924	4,015	$13,225	$79,237	$1,519	327,919
10	October	2.95%	236,616	8,686	$13,225	$79,237	$1,519	339,283
11	November	2.93%	234,873	9,960	$13,225	$79,237	$1,519	338,813
12	December	2.83%	226,731	9,623	$13,225	$79,237	$1,519	330,335
13	**12- Mo Total**		**$2,853,751**	**$139,083**	**$158,701**	**$950,841**	**$18,229**	**$4,120,606**

Lines 1-12: Column (1) = Monthly Network Load Files for January 2009 - September 2009 for actuals and October 2008 - December 2008 for estimates
Lines 1-12: Column (2) = Column (1) * Schedule JLL-6, Line 3 / 12
Lines 1-12: Column (3) = Monthly Network Bills for periods January 2009 - September 2009 for actuals and October 2008 - December 2008 for estimates
Lines 1-12: Column (4),(5) & (6) = Current rates as of June 2009
Lines 1-12: Column (7) = Sum of Column (2) thru (6)
Line 13 = Sum of Line 1 through Line 12

Schedule JLL-6

Schedule JLL-6

Non-PTF Revenue Requirement Estimated for 2010

New England Power Company
Non-PTF Revenue Requirement
Estimated For the Year 2010

Section II:

1	NEP's Schedule 21 Non-PTF Revenue Requirement (12 mos. Ended 12/31/09)	$81,436,071
2	Adjustment for Forecasted 2010 Capital Additions	$14,725,000
3	Estimated 2010 Non-PTF Revenue Requirement	$96,161,071
	Adjustment for Year End 2010 Capital Additions	
4	Estimated 2010 Non-PTF Transmission Additions for Lines - In Service	$27,125,000
5	Estimated. 2010 Non-PTF Transmission Additions for Substations - In Service	$50,375,000
6	Estimated NEP 2010 Transmission Plant Additions	$77,500,000
7	Non-PTF Transmission Plant Carrying Charge	19%
8	Adjustment for Forecasted 2010 Capital Additions	$14,725,000

Section III:

	Transmission Plant Carrying Charge	
9	NEP's Schedule 21 Revenue Requirement	81,436,071
10	Total Revenue Credit (12 Mos. Ended 12/31/09)	215,508,947
11	Total Transmission Integrated Facilities Credit (12 Mos. Ended 12/31/09)	(48,396,605)
12	Sub-Total Revenue Requirement	248,548,413
13	Total Transmission Plant (as of 8/31/09)	1,299,473,784
14	Non-PTF Transmission Plant Carrying Charge	19%

Line 1 = NEP Schedule 21 Billing - January - July 2009 for actuals, August-December 2008 for estimates
Line 2 = Line 8
Line 3 = Line 1 + Line 2
Line 4 & 5 = Estimated NEP In-Service Non-PTF additions for CY 2010 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 Billings January - July 2009 for actuals, Aug-December 2008 for estimates
Line 12 = Sum of Lines 9 thru 11
Line 13 = NEP Schedule 21 Billing
Line 14 = Line 12 / Line 13

Schedule JLL-7

Forecasted PTF Capital Additions In Service - 2010

Participating Transmission Owners
Forecast of RNS Rate Impacts
For the Period CY10

Estimated / Forecated PTF Capital Additions In Service

			2010
1	**Bangor Hydro**	$	37,000,000
2	**Central Maine Power**	$	517,000,000
3	**Florida Power & Light-NED**	$	3,000,000
4	**Holyoke Gas and Electric**	$	-
5	**National Grid**	$	111,000,000
6	**NSTAR Electric Company**	$	41,000,000
7	**Northeast Utilities**	$	161,000,000
8	**United Ulluminating Company**	$	18,000,000
9	**VT Transco**	$	225,000,000
10	**Total**	**$**	**1,113,000,000**

Source: Presented at the ISO-NE RC-TC Summer Meeting - July 20,2009