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").

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").

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 load during peak demand periods. However, if the participant

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

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

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 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 JLL-7) 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.

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 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

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?

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

of $.00413/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.

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

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.

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.