

Testimony of
James L. Loschiavo

DIRECT TESTIMONY
OF
JAMES L. LOSCHIAVO

Table of Contents

I.	<u>Introduction and Qualifications</u>	1
II.	<u>Purpose of Testimony</u>	2
III.	<u>Summary of Transmission Services Provided to Granite State</u>	2
	<u>Explanation of ISO/RTO Tariff Services, Rates & Charges</u>	4
	<u>Explanation of Schedule 21 Tariff Services & Charges</u>	10
IV.	<u>Estimate of Granite State’s Transmission Expenses</u>	11
V.	<u>Explanation of Primary Changes from Last Year’s Forecasted Expenses</u>	16
VI.	<u>Conclusion</u>	17

1 **I. Introduction and Qualifications**

2 Q. Please state your name and business address.

3 A. My name is James L. Loschiavo. My business address is 40 Sylvan Road, Waltham,
4 Massachusetts 02451.

5

6 Q. By whom are you employed and in what capacity?

7 A. I currently hold the position of Lead Analyst in Regulatory and Pricing for National Grid
8 USA Service Company, Inc. (“Service Co”). Service Co is a subsidiary of National Grid
9 USA, which in turn is a subsidiary of National Grid plc My duties include performing
10 rate-related services for Granite State Electric Company d/b/a National Grid (“Granite
11 State” or “Company”).

12

13 Q. Please describe your educational and professional background.

14 A. I graduated from Boston State University in Boston, Massachusetts with a Bachelor of
15 Science degree in Business Administration and from Rider University in Lawrenceville,
16 New Jersey with a Master of Science, also in Business Administration. I have been with
17 National Grid USA for approximately four years. As Lead Analyst in the Transmission
18 Finance Department, my primary responsibility is to support New England Power
19 Company’s (“NEP’s”) transmission rates. Additionally, I am involved in most New
20 England transmission-related pricing matters impacting Granite State, including
21 supporting Granite State’s current Transmission Service Cost Adjustment before the New
22 Hampshire Public Utilities Commission (“Commission”).

1 Q. Have you previously testified before the Commission?

2 A. Yes.

3

4 **II. Purpose of Testimony**

5 Q. What is the purpose of your testimony?

6 A. My testimony addresses the estimated 2012 transmission expenses and ISO-NE expenses
7 for Granite State. First, I will summarize the various transmission services provided to
8 Granite State and how Granite State pays for such services. Second, I will provide
9 testimony supporting the forecast of transmission expenses that Granite State is expected
10 to incur in 2012. As described more fully in the second part of my testimony, the
11 Company expects to see an increase of \$890,713 in prospective transmission expenses
12 compared to the forecast provided for calendar year 2011 in Docket No. DE 10-307.

13

14 **III. Summary of Transmission Services Provided to Granite State**

15 Q. Please explain the history of Granite State's transmission service under rate schedules
16 approved by the Federal Energy Regulatory Commission ("FERC").

17 A. Effective January 1, 1998, Granite State received transmission services, on behalf of its
18 entire customer base, under two tariffs: NEPOOL's FERC Electric Tariff No. 1
19 ("NEPOOL Tariff") and NEP's FERC Electric Tariff No. 9 ("NEP T-9 Tariff").
20 Additionally, effective January 1, 1999, Granite State took service under ISO-NE's
21 FERC Electric Tariff No. 1 ("ISO-NE Tariff").

22

1 Effective February 1, 2005, FERC issued an order authorizing ISO-NE to begin operating
2 as a Regional Transmission Operator (“RTO”) (“ISO as the RTO”) and at that time, ISO-
3 NE replaced NEPOOL as the transmission provider in New England. The new ISO-NE
4 Transmission, Markets and Services Tariff (“ISO/RTO Tariff”) replaced the three
5 separate tariffs referred to above by aggregating them into a single, omnibus tariff. As a
6 result, NEP and ISO as the RTO now charge Granite State under this superseding
7 omnibus tariff.

8
9 The terms, conditions and rate schedules from these three separate tariffs have been
10 transferred to the ISO/RTO Tariff as follows:

- 11 1. Schedule 21 and Schedule 21-NEP of the ISO/RTO Tariff capture the former
12 NEP T-9 Tariff;
- 13 2. Section II (up through and including Schedule 19) of the ISO/RTO Tariff captures
14 the former NEPOOL Tariff; and
- 15 3. Section IV.A of the ISO/RTO Tariff captures the former ISO-NE Tariff.

16 The prospective charges to Granite State, therefore, are separately identified as (1) NEP
17 local charges, (2) ISO-NE regional charges (formerly NEPOOL), and (3) ISO/RTO
18 administrative charges.

19
20 Q. Please describe further the types of transmission services that are billed to Granite State
21 under the ISO/RTO Tariff.

1 A. New England’s transmission rates utilize a highway/local pricing structure. That is,
2 Granite State receives regional transmission service over “highway” transmission
3 facilities under Section II of the ISO/RTO Tariff, and receives local transmission service
4 over local transmission facilities under Schedule 21 of the ISO/RTO Tariff. Additionally,
5 transmission scheduling and market administration services are provided by ISO-NE
6 under Section IV.A of the ISO/RTO Tariff.

7

8 **Explanation of ISO/RTO Tariff Services, Rates & Charges**

9 Q. Please explain the services provided to Granite State under the ISO/RTO Tariff.

10 A. Section II of the ISO/RTO Tariff provides access over New England’s looped
11 transmission facilities, more commonly known as Pool Transmission Facilities (“PTF”)
12 or bulk transmission facilities. These facilities serve as New England’s electric
13 transmission “highway”, and the service provided over these facilities is referred to as
14 Regional Network Service (“RNS”). In addition, the ISO/RTO Tariff provides for Black
15 Start, Reactive Power, and Scheduling, System Control and Dispatch Services, as
16 described more fully later in this testimony.

17

18 Q. How are the costs for RNS recovered?

19 A. The ISO-NE RNS Rate (“RNS Rate”) recovers the RNS costs, and is determined
20 annually based on an aggregation of the transmission revenue requirements of each of the
21 transmission owners in New England, calculated in accordance with a FERC-approved
22 formula. Pursuant to a NEPOOL Settlement dated April 7, 1999, which was incorporated

1 into the ISO/RTO Tariff, the RNS Rate has transitioned from zonal rates to a single,
2 “postage stamp” rate in New England. The transition was completed on March 1, 2008.

3
4 Q. Please describe the ISO-NE Black Start, Reactive Power, and Scheduling, System
5 Control and Dispatch Services that are included in the ISO/RTO Tariff.

6 A. ISO-NE Black Start Service, also known as System Restoration and Planning Service
7 from Generators, is necessary to ensure the continued reliable operation of the New
8 England transmission system. This service allows for the designation of generators with
9 the capability of supplying load and ability to start without an outside electrical supply to
10 re-energize the transmission system following a system-wide blackout.

11
12 Reactive Power Service, also known as Reactive Supply and Voltage Control from
13 Generation Sources Service, is necessary to maintain transmission voltages on the ISO-
14 NE transmission system within acceptable limits and requires that generation facilities be
15 operated to produce or absorb reactive power. This service must be provided for each
16 transaction on the ISO-NE transmission system. The amount of reactive power support
17 that must be supplied for transactions is based on the support necessary to maintain
18 transmission voltages within limits generally accepted and is consistently sustained in the
19 region.

20
21 Lastly, Scheduling, System Control and Dispatch Service (“Scheduling & Dispatch
22 Service”) consists of the services required to schedule the movement of power through,

1 out of, within, or into the ISO-NE Control Area over the PTF and to maintain System
2 Control. Scheduling & Dispatch Service also provides for the recovery of certain charges
3 that reflect expenses incurred in the operation of satellite dispatch centers.
4

5 Q. How are the ISO-NE charges for Black Start and Reactive Power assessed to Granite
6 State?

7 A. ISO-NE assesses charges for Black Start and Reactive Power Services to Granite State
8 each month based on Granite State's proportionate share of its network load to ISO-NE's
9 total load.
10

11 Q. How are the charges for Scheduling & Dispatch Services assessed to Granite State?

12 A. Charges for Scheduling & Dispatch Service are based on the expenses incurred by ISO-
13 NE and by the individual transmission owners in the operation of local control dispatch
14 centers or otherwise to provide Scheduling & Dispatch Service.
15

16 The expenses incurred by ISO-NE in providing these services are recovered under
17 Section IV, Schedule 1 of the Transmission, Markets and Services Tariff. These costs are
18 allocated to Granite State each month based on the FERC fixed rate for the month times
19 Granite State's monthly Network Load.
20

21 The costs incurred by the individual transmission owners in providing Scheduling &
22 Dispatch Service over PTF facilities, including the costs of operating local control

1 centers, are recovered under Section II, Schedule 1 of the Open Access Transmission
2 Tariff (“OATT”). These costs are allocated to Granite State each month based on a
3 formula rate that is determined each year based on the prior year’s costs incurred times
4 Granite State’s monthly Network Load.

5
6 The costs of Scheduling & Dispatch Service for transmission service over transmission
7 facilities other than PTF are charged under Schedule 21 of the OATT. Thus, there are
8 three types of Scheduling & Dispatch costs that are similar, but are charged to Granite
9 State through three different tariff mechanisms.

10
11 Q. Are there any other applicable ISO-NE charges which you have not mentioned previously
12 in this testimony?

13 A. Yes. The ISO/RTO Tariff also charges for costs associated with its Load Response
14 Program.

15
16 Q. Please describe the ISO-NE Load Response Program.

17 A. The Load Response Program is used to facilitate load response during periods of peak
18 electricity demand by providing appropriate incentives. Load Response Program
19 incentives are available to any Market Participant or Non-Market Participant which
20 enrolls itself and/or one or more retail customers to provide a reduction in their electricity
21 consumption in the New England Control Area during peak demand periods. Incentives
22 are payments for reducing load during peak demand periods. However, if the participant

1 fails to reduce consumption when scheduled, the Market/Non-Market Participant could
2 end up owing money to ISO-NE.

3
4 Q. How are these Load Response Program costs allocated?

5 A. Up to May 2012, any monthly charges or credits will be allocated to the Network Load
6 on a system-wide basis.

7 Beginning in June 2012, the existing Load Response Program will undergo changes. Per
8 FERC Order No. 745 and Docket #ER11-4336-000, the allocation of Load Response
9 Programs previously allocated to Regional Network Load on a system-wide basis, will
10 begin to be allocated to wholesale market participants such as default service suppliers
11 and competitive retail service providers. Schedule JLL-2, page 1, reflects this change on
12 lines 6-12.

13
14 Q. What administrative services and/or charges flow through to Granite State under Section
15 IV.A of the ISO/RTO Tariff?

16 A. There are three different charges that flow through to Granite State under Section IV.A of
17 the ISO/RTO Tariff under Schedule 1, Schedule 4, and Schedule 5. First, Schedule 1
18 provides for one component of the administration of Scheduling & Dispatch, as described
19 on Page 6 lines 16 through 19 of my testimony. Second, Schedule 4 of the ISO/RTO
20 Tariff provides for the collection of FERC Annual Charges, and third under the new
21 Schedule 5, ISO-NE acts as the billing and collection agent for the New England States
22 Committee on Electricity's ("NESCOE") annual budget.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

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.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

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

1 Tariff No. 1 service agreement with Mass. Electric. NEP, in turn, uses these specific
2 distribution facilities to provide transmission service to Granite State. Therefore, Granite
3 State is also subject to a Specific Distribution Surcharge for its use of these facilities.
4

5 **IV. Estimate of Granite State's Transmission Expenses**

6 Q. Was the forecast for Granite State's transmission and ISO expenses for 2012 done by you
7 or under your supervision?

8 A. Yes. Based on our knowledge of the ISO-NE billing processes, the Company estimates
9 the total transmission and ISO-NE expenses (including certain ancillary services) for
10 2012 to be approximately \$15.4 million, as shown in Schedule JLL-1, Summary Page 1.
11 This equates to an increase of \$890,713 over expenses embedded in Granite State's retail
12 rates in 2011.
13

14 Q. How have the ISO Charges shown on line 3 of Schedule JLL-1 been forecasted?

15 A. As indicated in Schedule JLL-3, the Company has applied an estimated rate increase to
16 the total RNS rate currently in effect to reflect the forecast of PTF plant additions across
17 New England, as estimated by the New England transmission owners, (see Schedule JLL-
18 7) to be included in the annual formula rate effective June 1, 2012. The estimated rate
19 increase is calculated by multiplying the total New England estimated 2012 plant
20 additions by the historic 2010 PTF Revenue Requirement to Plant ratio as calculated in
21 the PTO Informational Filing with FERC on July 29, 2011 and dividing by the ISO-NE
22 network load. The estimated 2012 RNS transmission charges to Granite State are then

1 calculated by taking this forecasted RNS rate, divided by 12, multiplied by Granite
2 State's monthly network load. The resulting calculation is shown in column 2 of
3 Schedule JLL-2, page 1 of 2.

4
5 Q. Schedule JLL-1 also includes estimated ISO-NE charges for Scheduling and Dispatch,
6 Load Response, Black Start, and Reactive Power. How were these costs forecasted, as
7 shown?

8 A. I will explain each below, out of sequence. The Black Start costs shown on line 6 of
9 Schedule JLL-1 were derived in two steps. First, as shown in Section II of Schedule JLL-
10 4 (line 5), the Company estimated the cost for Black Start Service by combining the
11 actual monthly ISO-NE Black Start expenses for the period September 2010 through
12 August 2011. This region-wide estimate is divided by ISO-NE's 2010 Network Load to
13 calculate an estimated annual rate, as shown on line 7. Granite State then calculated a
14 monthly rate (annual rate divided by 12), as shown on line 8. To obtain the estimate of
15 Black Start costs that would be charged to Granite State, the Company multiplied the
16 monthly rate by Granite State's monthly network load, as shown for each month in
17 column 1 of Schedule JLL-2, page 1. Using this methodology, the Company estimates
18 \$72,941 to be allocated to it for 2012.

19
20 Q. How have you estimated Reactive Power costs for Granite State?

21 A. The estimated Reactive Power cost for the New England region was calculated by using
22 the November 2010 through October 2011 actual ISO-NE settlement reports as shown in

1 Section I of Schedule JLL-4 (line 1). The annual rate is determined by dividing the total
2 Reactive Power costs charged in the region for that twelve month historic period by the
3 ISO-NE's 2010 Network Load. The monthly rate (annual rate divided by 12) is then
4 multiplied by Granite State's monthly network load to determine the estimated charges
5 for Reactive Power Service. Using this methodology, the Company estimates \$168,325
6 to be allocated to it for 2012.

7
8 Q. How did you forecast the Scheduling and Dispatch costs shown on line 4 of Schedule
9 JLL-1?

10 A. My estimate is shown in column (3) of Schedule JLL-2, page 1. This amount was
11 derived by simply using the currently effective OATT Schedule 1 rate of \$1.58211 per
12 kW-year, divided by 12, and further multiplied by Granite State's network load as shown
13 monthly in column (1) of Schedule JLL-2, page 1 of 2.

14
15 Q. Have you included any Reliability Must Run ("RMR") contract charges to Granite State
16 for 2012?

17 A. No. Reliability Must Run Agreements guarantee payments to generators that are needed
18 to ensure reliability. To obtain an agreement, a generator must receive verification from
19 ISO-NE that it is needed for reliability and must demonstrate that it is unable to cover its
20 operating costs with revenue from other sources. Granite State has not incurred any
21 RMR contract charges as there have been no RMR contracts for the New Hampshire

1 reliability region over the past year. Therefore, the Company has not forecasted any
2 RMR contract costs for 2012.

3
4 Q. Have you included any Load Response Program charges to Granite State for 2012?

5 A. Yes. My estimate for 2012 Load Response Program costs is shown on line 5 of Schedule
6 JLL-1. For this estimate, actual costs incurred by Granite State for the periods January
7 through May 2011 were used. Please refer to page 8 lines 4-11 of this testimony which
8 explains forthcoming changes to the ISO-NE load response programs effective June 1,
9 2012. The monthly cost estimate is shown in column 5 of Schedule JLL-2 page 1 of 2,
10 totaling \$16,195 for the period of January through May 2012.

11
12 Q. Can you please explain the forecast of the ISO-NE charges shown in line 8 and 9 of
13 Schedule JLL-1?

14 A. Yes. The basis for these costs are previously described on Page 8, lines 10 through 16 of
15 this testimony. Line 8 shows the 2012 forecast of charges to Granite State under
16 Schedule 1, Scheduling and Load Dispatch Administrative schedules through Section
17 IV.A of the ISO/RTO Tariff. The estimate is based on the ISO-NE revenue requirement
18 for Schedule 1 filed each year with FERC. ISO-NE filed its proposed 2012 revenue
19 requirement with FERC on October 26, 2011. To estimate Granite State's 2012 ISO-NE
20 charges, ISO-NE's actual costs for the period September 2010 through August 2011 are
21 adjusted by an inflationary factor shown on line 16 of Schedule JLL-2, page 2. This
22 inflationary factor is intended to recognize the increase or decrease in ISO-NE's revenue

1 requirement and the associated components of that revenue requirement from the budget
2 as filed for the previous year. Line 9 shows our estimated 2012 NESCOE charges under
3 Schedule 5 of Section IV.A of the ISO/RTO Tariff. For calendar year 2012, each
4 customer that is obligated to pay the RNS rate pays each month for the prior month's
5 charges, an amount equal to the product of \$.00842/kW-month times its monthly network
6 load for that month. These charges are shown in Schedule JLL-2 on page 2. The total
7 estimated amount of direct ISO/RTO Tariff charges under Section IV.A for the Company
8 is estimated to be \$261,748. These estimates are taken from page 2 of Schedule JLL-2
9 and then reflected on lines 8 and 9 of Schedule JLL-1.

10
11 Q. What is the sub-total of transmission expenses attributable to charges from the ISO-NE?

12 A. The sub-total of ISO-NE charges is \$11,825,901, which is the sum of lines 3 through 9 on
13 Schedule JLL-1 page 1 of 2.

14
15 Q. Have you estimated the charges to Granite State under Schedule 21 of the
16 ISO/RTO Tariff?

17 A. Yes. Lines 1 and 2 of Schedule JLL-1 show the amount of forecasted charges from NEP
18 pursuant to the Local Network Service ("LNS") tariff. The total amount of expenses is
19 \$3,573,865 which represents a net increase in the total revenue requirement of NEP
20 allocated to Granite State of \$131,257 for 2012 (see Schedule JLL-1 Page 2 of 2, line 3).
21 Schedule JLL-6 shows the calculation of the total NEP revenue requirement. NEP
22 allocates Non-PTF expenses to Granite State's customers on a load ratio share basis, as

1 shown in Schedule JLL-5, column (1). Metering, transformation, specific distribution,
2 and ancillary service charges are based on current rates and are assessed to Granite State
3 based on a per meter and peak load basis, respectively.
4

5 **V. Explanation of Primary Changes from Last Year's Forecasted Expenses**

6 Q. What is the effect of the foregoing estimated charges on Granite State's 2012
7 transmission expenses?

8 A. As stated on Page 11, lines 8 through 12, of my testimony, the estimated 2012 Granite
9 State transmission and ISO-NE expenses of \$15.4 million represents a net increase of
10 \$890,713 from the 2011 forecast of transmission expenses for Granite State. This total
11 increase is in part due to a net increase in the forecasted NEP LNS charges of \$131,257
12 due to increased expenses to NEP's overall revenue requirement and hence Granite
13 State's LNS-related transmission costs. Granite State's PTF transmission charges
14 increased \$828,435 as indicated on line 4 of Schedule JLL-1 page 2 of 2. This is due to
15 a slight decrease in the actual RNS rates effective June 1, 2011 of (\$57,277) compared to
16 the estimated rate for that period in last year's filing and an estimated additional RNS rate
17 increase effective June 1, 2012 based on the PTF transmission plant investment
18 forecasted to go "in-service" in 2012 across New England, resulting in an additional
19 \$751,207 increase in Granite State's RNS PTF transmission charges. There is also an
20 increase in charges of approximately \$134,482 due to the estimated increase of Granite
21 State's PTF load projected for 2012. Decreases to Other ISO ancillary and administrative
22 charges total (\$68,956). The sum of these variances equals \$890,713.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

Q. What PTF plant investment is driving the \$751,207 increase in the ISO-NE RNS charges to Granite State effective June 1, 2012?

A. The \$751,207 increase is due to a significant number of capital additions forecasted by the Transmission Owners to go into service in 2012. Schedule JLL-7 shows an estimated \$1.994 billion of PTF plant additions for 2012 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 2012?

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 2012 are: (1) Central Maine Power’s Maine Power Reliability Program (“MPRP”); and (2) National Grid’s and Northeast Utilities’ New England East-West Solution (“NEEWS”).

1 VI. **Conclusion**

2 Q. Does this conclude your testimony?

3 A. Yes.