

DIRECT TESTIMONY

OF

JOHN D. WARSHAW

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1 **I. Introduction and Qualifications**

2 Q. Please state your name and business address.

3 A. My name is John D. Warshaw, and my business address is 11 Northeastern Blvd., Salem,
4 NH 03079.

5

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

7 A. I am the Manager, Electric Supply for Liberty Energy Utilities (New Hampshire) Corp.
8 (“Liberty Energy NH”) which is the sole shareholder of Granite State Electric Company
9 (“Granite State” or the “Company”) and provides services to Granite State. I oversee the
10 procurement of power for Default Service for Granite State as well as the procurement of
11 renewable energy certificates (“RECs”). I am also responsible for monitoring costs and
12 activities relative to the Company’s transmission service.

13

14 Q. Please describe your educational background.

15 A. I graduated from the State University of New York Maritime College in 1977 with a
16 Bachelor of Science in Nuclear Science. I received a Master’s in Business
17 Administration from Northeastern University in 1986. In 1992, I earned a Master of Arts
18 in Energy and Environmental Management from Boston University.

19

20 Q. What is your professional background?

21 A. In November of 2011, I joined Liberty Energy NH as Manager, Electric Supply for
22 Granite State. Prior to my employment at Liberty Energy NH, I was employed by

1 National Grid USA Service Company (“National Grid”) as a Principal Analyst in Energy
2 Supply – New England from 2000 to 2010. In that position I conducted a number of
3 solicitations for wholesale power to meet the needs of National Grid’s New England
4 distribution companies. I also administered both short-term and long-term power
5 purchase agreements for National Grid’s New England distribution companies. Prior to
6 my employment at National Grid, I was employed at COM/Energy (now NSTAR) from
7 1992 to 2000. From 1992 to 1997, I was a Rate Analyst in Regulatory Affairs at
8 COM/Energy responsible for supporting state and federal rate filings. In 1997, I
9 transferred to COM/Electric to work in Power Supply Administration.

10
11 Q. Have you previously testified before the New Hampshire Public Utilities Commission
12 (“Commission”)?

13 A. Yes. I most recently provided written and oral testimony before the Commission in
14 Docket DE12-023 in September, 2012.

15
16 Q. Have you testified before any other state regulatory agencies?

17 A. Yes. I have testified before both the Massachusetts Department of Public Utilities and
18 the Rhode Island Public Utilities Commission regarding electric supply and renewable
19 portfolio procurement activities.

20
21 **II. Purpose of Testimony**

22 Q. What is the purpose of your testimony?

1 A. My testimony addresses the estimated 2013 transmission expenses for Granite State.

2 First, I will summarize the various transmission services provided to Granite State and

3 describe how Granite State pays for such services. Second, I will provide testimony

4 supporting the forecast of transmission expenses that Granite State expects to incur in

5 2013. Third, I will discuss the treatment of Granite State's expected portion of the ISO-

6 New England Disgorgement Fund credit¹. As described more fully in the second part of

7 my testimony, the Company forecasts an increase of \$1,610,230 in prospective

8 transmission expenses compared to the forecast provided for calendar year 2012 in

9 Docket No. DE 11-254.

10
11 **III. Summary of Transmission Services Provided to Granite State**

12 Q. Please summarize what transmission services Granite State receives from ISO New
13 England Inc. (the "ISO" or "ISO-NE") under rate schedules approved by the Federal
14 Energy Regulatory Commission ("FERC").

15 A. Granite State receives transmission services under the ISO New England Inc.
16 Transmission, Markets and Services Tariff ("ISO Tariff") as follows:

17 1. Section II, Schedule 21 of the ISO Tariff provides for Local Network Service
18 ("LNS") from the New England Power Company ("NEP");

19 2. Section II (Schedules 1, 2, 9 and 16) of the ISO Tariff provides for Regional
20 Network Service ("RNS"); and

¹ On March 8, 2012, the FERC's Office of Enforcement (OE) and Constellation Energy Commodities Group (CCG) entered into a Stipulation and Consent Agreement (Consent Agreement) which resolved an investigation conducted under Part 1b of the Commission's regulations, 18 C.F.R. Part 1b (2011). FERC approved the Consent Agreement on March 9, 2012. The Consent Agreement created a disgorgement fund for the benefit of electric energy consumers in the affected states of the NYISO, ISO-NE, and PJM markets.

1 3. Section IV.A – ISO Funding Mechanisms provides for the recovery of ISO’s
2 Administrative Services.

3
4 Q. Please describe further the types of transmission services that are billed to Granite State
5 under the ISO Tariff.

6 A. New England’s transmission rates utilize a highway/local pricing structure. That is,
7 Granite State receives regional transmission service over “highway” transmission
8 facilities under Section II of the ISO Tariff (also known as RNS), and receives local
9 transmission service over local transmission facilities under Schedule 21 of the ISO
10 Tariff (also known as LNS). Additionally, a number of administration services are
11 provided by ISO-NE under Section IV.A of the ISO Tariff.

12

13 **Explanation of ISO Tariff Services, Rates & Charges**

14 Q. Please explain the services provided to Granite State under the ISO Tariff.

15 A. Section II of the ISO Tariff provides access over New England’s looped transmission
16 facilities, more commonly known as Pool Transmission Facilities (“PTF”) or bulk
17 transmission facilities. In addition, the ISO Tariff provides for Ancillary Services (Black
18 Start, Reactive Power, and Scheduling, System Control and Dispatch Services) as
19 described more fully later in this testimony.

20

1 Q. How are the costs for RNS recovered?

2 A. The ISO Tariff RNS Rate (“RNS Rate”) (Section II - Schedule 9 of the ISO Tariff)
3 recovers the RNS costs, and is determined annually based on an aggregation of the
4 transmission revenue requirements of each of the Participating Transmission Owners
5 (“PTO”) in New England, calculated in accordance with a FERC approved formula in a
6 single, “postage stamp” rate in New England.

7

8 Q. Please describe the ISO-NE System Restoration and Planning Service, Reactive Supply
9 and Voltage Control, and Scheduling, System Control and Dispatch Services that are
10 included in the ISO Tariff.

11 A. ISO-NE System Restoration and Planning Service (Section II - Schedule 16 of the ISO
12 Tariff), also known as Black Start Service, is necessary to ensure the continued reliable
13 operation of the New England transmission system. This service allows for the payment
14 to generators who have the capability of supplying load and the ability to re-start without
15 an outside electrical supply to re-energize the transmission system following a system-
16 wide blackout.

17

18 Reactive Supply and Voltage Control (Section II - Schedule 2 of the ISO Tariff), also
19 known as Reactive Power Service, is necessary to maintain transmission voltages within
20 acceptable limits on the ISO-NE transmission system and allows for the payment to
21 generators or other facilities that have the capability to produce or absorb reactive power.

22

1 Lastly, Scheduling, System Control and Dispatch Service (“Scheduling & Dispatch
2 Service”) consists of the services required to schedule the movement of power through,
3 out of, within, or into the ISO-NE Control Area over the PTF and to maintain System
4 Control. Scheduling & Dispatch Service also provides for the recovery of certain charges
5 that reflect expenses incurred in the operation of satellite dispatch centers.
6

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

9 A. ISO-NE assesses charges for Black Start and Reactive Power Services to Granite State
10 each month based on Granite State’s proportionate share of its network load to ISO-NE’s
11 total network load.
12

13 Q. How are the charges for Scheduling & Dispatch Service assessed to Granite State?

14 A. Charges for Scheduling & Dispatch Service are assessed to Granite State through three
15 separately charged tariffed services.
16

17 The first is the expenses incurred by ISO-NE in providing these services and is recovered
18 under Schedule 1 of Section IV.A of the ISO Tariff. These costs are allocated to Granite
19 State each month based on an annually filed FERC fixed rate times Granite State’s
20 monthly Network Load.
21

1 The second charge is the costs incurred by the individual transmission owners in
2 providing Scheduling & Dispatch Service over PTF facilities, including the costs of
3 operating local control centers, are recovered under Section II, Schedule 1 of the ISO
4 Tariff. These costs are allocated to Granite State each month based on a formula rate that
5 is determined each year based on the prior year's costs incurred times Granite State's
6 monthly Network Load.

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

12
13 Q. Please describe the change to the Load Response Program that was implemented in 2012.

14 A. Beginning in June 2012, the previous Load Response Program ended and was replaced
15 with the Price Responsive Demand market product. Per FERC Order No. 745 and
16 Docket ER11-4336-000, the Load Response Program costs previously allocated to
17 Regional Network Load on a system-wide basis were replaced with a market product
18 allowing such assets to bid their service into the energy and capacity markets. Thus these
19 costs are now incurred by wholesale market participants such as default service suppliers
20 and competitive retail service providers. This change allows Price Responsive assets to
21 be treated similarly to generation assets in meeting the region's load requirements.

22

1 Q. What additional administrative services and/or charges flow through to Granite State
2 under Section IV.A of the ISO Tariff?

3 A. Granite State also incurs charges pursuant to Section IV.A Schedule 5, of the ISO Tariff.
4 Schedule 5 provides for the collection of the New England States Committee on
5 Electricity's ("NESCOE") annual budget.

6
7 Q. How are the ISO Tariff Administrative Services charges assessed?

8 A. ISO-NE assesses the charges in Section IV.A based upon stated rates pursuant to the ISO
9 Tariff. These stated rates are adjusted annually when ISO-NE files a revised budget and
10 cost allocation proposal to become effective January 1 each year. Granite State is
11 charged the stated rate for these services as part of ISO-NE's monthly billing process,
12 based on its Network Load for Section IV.A Schedule 1 and Schedule 5 charges.

13

14 **Explanation of Schedule 21 NEP Tariff Services, Charges and Credits**

15 Q. What services are provided to Granite State under Schedule 21 of the ISO Tariff?

16 A. Schedule 21 provides service over NEP's local, non-highway transmission facilities,
17 considered non-PTF facilities ("Non-PTF"). The service provided over the Non-PTF is
18 referred to as LNS. NEP also provides metering, transformation and certain ancillary
19 services to Granite State to the extent such services are required by Granite State and not
20 otherwise provided under the ISO Tariff.

21

1 Q. Please explain the metering and transformation services provided by NEP.

2 A. NEP separately surcharges the appropriate customers for these services. NEP provides
3 metering service when a customer uses NEP-owned meter equipment to measure the
4 delivery of transmission service. NEP provides transformation service when a customer
5 uses NEP-owned transformation facilities to step down voltages from 69 kV or greater to
6 a distribution voltage.

7

8 Q. Are there any other transmission services for which NEP assesses charges to Granite
9 State?

10 A. Yes. Granite State relies upon the specific distribution facilities of NEP's affiliate,
11 Massachusetts Electric Company ("Mass Electric"), which provides for NEP's use of
12 such facilities pursuant to the Integrated Facilities provision of NEP's FERC Electric
13 Tariff No. 1 service agreement with Mass Electric. NEP, in turn, uses these specific
14 distribution facilities to provide transmission service to Granite State. Therefore, Granite
15 State is also subject to a Specific Distribution Surcharge for its use of these facilities.

16

17 Q. What is the new credit in Schedule 21 charges that NEP provides to Granite State in its
18 monthly invoice?

19 A. As a result the sale of Granite State to Liberty Energy NH, NEP uses certain distribution
20 facilities of Granite State to provide service to generation customers of NEP. An
21 Integrated Facilities Supplement to Schedule 21 of the ISO Tariff provides Granite State

1 with a credit in exchange for the continued use by NEP of Granite State's facilities to
2 serve NEP's generation customers.
3

4 **Granite State's Expected ISO-NE Disgorgement Fund Credit**

5 Q. Please explain why Granite State expects to receive a Disgorgement Fund Credit.

6 A. As a result of the Stipulation and Consent Agreement entered into between Constellation
7 Energy Commodities Group and the FERC's Office of Enforcement², a Disgorgement
8 Fund was created for the benefit of electric customers in the affected markets. On
9 October 18, 2012 the FERC approved a Joint Stipulation filed by the regulatory agencies
10 in the six New England states that proposed an allocation and distribution plan for the
11 Disgorgement Fund. In this plan Granite State is to receive a one-time credit as its
12 expected portion of the Disgorgement Fund.
13

14 Q. Has Granite State received its Disgorgement Fund Credit?

15 A. No. Granite State expects to receive this credit in the near future.
16

17 Q. Why is Granite State including its Disgorgement Fund Credit in this filing?

18 A. Since the Joint Stipulation requires Granite State to distribute this credit in an efficient
19 and timely manner, Granite State is proposing to include the Disgorgement Fund Credit
20 as part of this filing. As a result, the credit will be distributed to all of Granite State's
21 customers in an efficient and timely manner and will be fully reconcilable should the
22 actual Disgorgement Fund Credit be different from that expected.

² *Constellation Energy Commodities Group, Inc.*, 138 FERC ¶61,168 (2012).

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

2 Q. Was the forecast for Granite State's transmission and ISO expenses for 2013 done by you
3 or under your supervision?

4 A. Yes. Granite State estimates the total transmission and ISO-NE expenses (including
5 certain ancillary services) for 2013 to be approximately \$17.0 million, as shown in
6 Schedule JDW-1, Summary Page 1. This equates to an increase of \$1.6 million over
7 expenses embedded in Granite State's retail rates in 2012.

8
9 Q. How have the ISO Tariff charges shown on line 3 of Schedule JDW-1 been forecasted?

10 A. The Company has applied an estimated rate increase to the total RNS rate currently in
11 effect to reflect the forecast of PTF plant additions across New England, as estimated by
12 the New England transmission owners, (see Schedule JDW-6) to be included in the
13 annual formula rate effective June 1, 2013. The estimated rate increase was provided by
14 the PTO Rates Group presentation during the 2012 NEPOOL Reliability and
15 Transmission Committees' Summer Meeting. The estimated increase of \$9.74 per kW-
16 year in 2013 to the RNS Rate is added to the current RNS Rate to get an estimated rate of
17 \$84.99 per kW-year. The resulting calculation is shown in column 2 of Schedule JDW-2,
18 page 1 of 2.

19

1 Q. Schedule JDW-1 also includes estimated ISO-NE charges for Black Start, Reactive
2 Power, and Scheduling and Dispatch. How were these costs forecasted?

3 A. The Black Start costs shown on line 6 of Schedule JDW-1 were derived in two steps.
4 First, as shown in Section II of Schedule JDW-3 (line 5); the Company estimated the cost
5 for Black Start Service by combining the actual monthly ISO-NE Black Start expenses
6 for the period October 2011 through September 2012. This region-wide estimate is
7 divided by ISO-NE's 2011 Network Load to calculate an estimated annual rate, as shown
8 on line 7. Granite State then calculated a monthly rate (annual rate divided by 12), as
9 shown on line 8. To obtain the estimate of Black Start costs that would be charged to
10 Granite State, the Company multiplied the monthly rate by Granite State's monthly
11 network load, as shown for each month in column 1 of Schedule JDW-2, page 1. Using
12 this methodology, the Company estimates an allocation of \$74,305 for 2013.

13
14 Q. How have you estimated Reactive Power costs for Granite State?

15 A. The estimated Reactive Power cost for Granite State was calculated by using the
16 September 2011 through August 2012 actual Granite State cost reports as shown in
17 Section I of Schedule JDW-3 (line 1). The annual rate is determined by dividing the total
18 Reactive Power costs charged to Granite State by Granite State's peak 2012 Network
19 Load. The monthly rate (annual rate divided by 12) is then multiplied by Granite State's
20 monthly network load to determine the estimated charges for Reactive Power Service.
21 Using this methodology, the Company estimates an allocation of \$204,339 for 2013.

1 Q. How did you forecast the Scheduling and Dispatch costs shown on line 4 of Schedule
2 JDW-1, page 1?

3 A. My estimate is shown in column (3) of Schedule JDW-2, page 1. This amount was
4 derived by using the currently effective OATT Schedule 1 rate of \$1.79005 per kW-year,
5 divided by 12, and further multiplied by Granite State's forecasted monthly network load
6 as shown in column (1) of Schedule JDW-2, page 1 of 2.

7
8 Q. Have you included any Reliability Must Run ("RMR") contract charges to Granite State
9 for 2013?

10 A. No. Reliability Must Run Agreements guarantee payments to generators that are needed
11 to ensure reliability. To obtain an agreement, a generator must receive verification from
12 ISO-NE that it is needed for reliability and must demonstrate that it is unable to cover its
13 operating costs with revenue from other sources. Granite State has not incurred any
14 RMR contract charges as there have been no RMR contracts for the New Hampshire
15 reliability region over the past year. Therefore, the Company has not forecasted any
16 RMR contract costs for 2013.

17
18 Q. Have you included any Load Response Program charges to Granite State for 2013?

19 A. No. As stated previously, the Load Response Program ended on May 31, 2012.
20

1 Q. Can you please explain the forecast of the ISO-NE charges shown in line 8 and 9 of
2 Schedule JDW-1 page 1?

3 A. Yes. Lines 8 and 9 include ISO-NE Administrative charges for Schedule & Dispatch and
4 NESCOE respectively, and are derived in Schedule JDW-2. Line 8 shows the 2013
5 forecast of charges to Granite State under Schedule 1, Scheduling and Load Dispatch
6 Administrative schedules through Section IV.A of the ISO Tariff. The estimate is based
7 on the ISO-NE revenue requirement for Schedule 1 filed each year with FERC. ISO-NE
8 filed its proposed 2013 revenue requirement with FERC on October 25, 2012. To
9 estimate Granite State's 2013 ISO-NE charges, ISO-NE's actual costs for the period
10 September 2011 through August 2012 are adjusted by an inflationary factor shown on
11 line 16 of Schedule JDW-2, page 2. This inflationary factor is intended to recognize the
12 increase in ISO-NE's revenue requirement and the associated components of that revenue
13 requirement from the budget as filed for the previous year.

14
15 Line 9 on page 1 of Schedule JDW-1 shows the estimated 2013 NESCOE charges under
16 Schedule 5 of Section IV.A of the ISO Tariff. ISO-NE filed its proposed 2013 recovery
17 of NESCOE costs with FERC on November 2, 2012. For calendar year 2013, the
18 Schedule 5 NESCOE charges were estimated using the proposed rate of \$0.00855/kW-
19 month times Granite State's monthly network load. These charges are shown in Schedule
20 JDW-2 on page 2. The total estimated amount of direct ISO Tariff charges under Section
21 IV.A for the Company is estimated to be \$272,739. These estimates are taken from page
22 2 of Schedule JDW-2 and then reflected on lines 8 and 9 of Schedule JDW-1.

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

2 A. The sub-total of ISO-NE charges is \$13,159,664 which is the sum of lines 3 through 9 on
3 Schedule JDW-1 page 1.

4
5 Q. Have you estimated the charges to Granite State under Schedule 21 of the ISO Tariff?

6 A. Yes. Lines 1 and 2 of Schedule JDW-1 show the amount of forecasted charges from
7 NEP pursuant to the Local Network Service (“LNS”) tariff. The total amount of
8 expenses is \$3,995,800 which represents a net increase in the total revenue requirement
9 of NEP allocated to Granite State of \$421,935 for 2013 (see Schedule JDW-1, page 2,
10 line 3). NEP allocates Non-PTF expenses to Granite State’s customers on a load ratio
11 share basis, as shown in Schedule JDW-5, column (1). Granite State estimated the non-
12 PTF expenses based on NEP’s September 2012 revenue requirement. Metering,
13 transformation, specific distribution, and ancillary service charges are based on current
14 rates and are assessed to Granite State based on a per meter and peak load basis,
15 respectively. Granite State also included an estimate of the incremental Schedule 21
16 costs associated with operation of a new substation under construction in Charlestown,
17 NH. A maintenance service credit, as discussed previously, was also included in the
18 estimate.

19
20 Q. What is the amount of the Disgorgement Fund Credit that Granite State expects to
21 receive?

1 A. Granite State expects its allocated portion of the Disgorgement Fund Credit to be a one-
2 time credit of \$144,563.03. Granite State includes this credit on Line 11 on pages 1 and 2
3 of Schedule JDW-1.

4
5 **V. Explanation of Primary Changes from Last Year's Forecasted Expenses**

6 Q. What are the primary causes of the estimated increase in Granite State's 2013
7 transmission expenses?

8 A. The estimated 2013 Granite State transmission and ISO-NE expenses of \$17 million
9 represent a net increase of \$1,610,230 from the 2012 forecast of transmission expenses
10 for Granite State. The largest increase is to Granite State's RNS transmission charges,
11 estimated to increase \$1,268,548 as indicated on line 3 of Schedule JDW-1 at page 2.
12 This is due to the estimated RNS rate increase effective June 1, 2013 based on the PTF
13 transmission plant investment forecasted by the PTO to be "in-service" in 2013 across
14 New England. Granite State's LNS transmission charges are estimated to increase by
15 \$421,935, due to the forecasted increase in NEP's overall revenue requirement.

16
17 Q. What PTF plant investment is driving the \$1,268,548 increase in the ISO-NE RNS
18 charges to Granite State effective June 1, 2013?

19 A. The \$1,268,548 increase stems from a significant number of capital additions forecasted
20 by the PTO to go into service in 2013. Schedule JDW-5 shows an estimated \$1.172
21 billion of PTF plant additions for 2013 as provided by the PTO. This list has been
22 created by the PTO in an effort to improve the ability to forecast the impact of capital

1 investment on RNS rates. These estimates are intended to: 1) include the most current
2 project cost forecasts; 2) refine phasing of when project spending is placed into service;
3 and 3) capture any PTF capital expenditure not included in the ISO-NE Regional System
4 Plan.

5

6 Q. What are the major projects driving the significant level of projected plant additions for
7 2013?

8 A. Based on our review of the ISO-NE Regional System Plan, the two largest transmission
9 projects in New England where a portion of the project has an in-service date during
10 2013 are: (1) Central Maine Power's Maine Power Reliability Program ("MPRP"); and
11 (2) National Grid's and Northeast Utilities' New England East-West Solution
12 ("NEEWS"). In fact, the PTO is forecasting this similar level of annual investment in
13 transmission projects through 2016.

14

15 **VI. Conclusion**

16 Q. Does this conclude your testimony?

17 A. Yes.