

STATE OF NEW HAMPSHIRE
BEFORE THE PUBLIC UTILITIES COMMISSION

Public Service Company of New Hampshire
d/b/a Eversource Energy
A proposal for an extended ISO New England market-based procurement approach

DIRECT TESTIMONY OF
PARKER LITTLEHALE AND YI-AN CHEN

1 **I. INTRODUCTION**

2 **Q. Mr. Littlehale, please state your name, business address, and title.**

3 A. My name is Parker Littlehale. My business address is 247 Station Drive, Westwood,
4 Massachusetts. I am a Manager, Wholesale Power Supply in the Electric Supply
5 department of Eversource Energy Service Company.

6 **Q. Mr. Littlehale, please describe your power procurement responsibilities at
7 Eversource Energy.**

8 A. I oversee the process required to fulfill the power supply requirement obligations of
9 Public Service Company of New Hampshire d/b/a Eversource Energy (the
10 “Company”), including overseeing solicitations for the competitive procurement of
11 power for Energy Service (“ES”), and supervising the fulfillment of Renewable
12 Portfolio Standard (“RPS”) obligations. I also manage this process for Eversource
13 Energy affiliate NSTAR of Massachusetts.

14

15 **Q. Ms. Chen, please state your name, business address, and position with
16 Eversource.**

17 A. My name is Yi-An Chen. My business address is 780 North Commercial Street,
18 Manchester, New Hampshire. I am employed by Eversource Energy Service

1 Company as the Director of Revenue Requirements for New Hampshire, and in that
2 position, I support the Company regarding revenue and rate-related matters.

3 **Q. What are your responsibilities in your current position?**

4 A. I am currently responsible for the coordination and implementation of revenue
5 requirement calculations and regulatory filings for the Company, as well as the
6 specific filings associated with the Company’s ES rates, Stranded Cost Recovery
7 Charge (“SCRC”), Transmission Cost Adjustment Mechanism (“TCAM”), System
8 Benefits Charge (“SBC”), Regulatory Reconciliation Adjustment (“RRA”)
9 mechanism, Pole Plant Adjustment Mechanism (“PPAM”), and Base Distribution
10 Rates.

11 **Q. Ms. Chen, have you previously testified before the New Hampshire Public**
12 **Utilities Commission (the “Commission”)?**

13 A. Yes, I provided testimony before the Commission in this proceeding and also in
14 support of the Company’s Lost Base Revenue (“LBR”) component filing of the
15 SBC submitted in Docket No. DE 23-080, the SCRC adjustment proceeding in
16 Docket No. DE 23-091, and most recently in the request for change in Distribution
17 Rates in Docket No. DE 24-070.

18

19 **II. PURPOSE**

20

21 **Q. What is the purpose of your testimony?**

22 A. Our testimony is in response to Order No. 27,022 , which directed the Company to
23
24 file with the Commission, no later than August 1, 2024, an extended proposal for an
25 ISO-New England [ISO-NE] market-based procurement of at least 30 percent, with
26 no upper bound, for the Small Customer Group load, and 100 percent of the Large
27 Customer Group load for the Company’s upcoming February 2025-July 2025
28 energy service period, to be assessed by the Commission in a future phase of this
29 proceeding.
30

1 Our testimony describes the Company’s proposal to procure power supply for both
2 Small Customer Group and Large Customer Groups customers’ load in the ISO-NE
3 day ahead market; set the Energy Service rate for those customers during the same
4 period; and allow recovery and reconciliation of the Company’s Energy Service
5 costs in relation to the expanded alternative procurement plan.

6

7 **III. PROPOSAL FOR AN EXPANDED ISO-NE MARKET-BASED SELF-**
8 **SUPPLY PROCUREMENT APPROACH**

9

10 **Q. How does the Company propose to continue an ISO-NE market-based**
11 **procurement for 30 percent of the load for its Small Customer Group and 100**
12 **percent for its Large Customer Group?**

13

14 A. The Company proposes to continue its market-based procurement to “self-supply”
15 all or a portion of both Customer Groups’ load by having the Company assume
16 responsibility for managing the relevant load assets in the ISO-NE wholesale power
17 market. These responsibilities will include scheduling the Energy Service load in
18 the ISO-NE Day Ahead Energy Market, as it is the Company’s understanding that
19 ISO-NE prefers load assets with significant load to be scheduled in the Day Ahead
20 Market. The Company will engage in direct market-based procurement to “self-
21 supply” for a 30 percent tranche of its Small Customer Group load and for 100
22 percent of its Large Customer Group load, with suppliers selected through a
23 competitive solicitation process managing the other 70 percent of the Small
24 Customer Group load. In summary, this approach means that the Company is
25 buying energy, capacity, and other wholesale market products and related services
26 from the ISO-NE markets, including the hourly Day-Ahead Energy Market.

27

28

29

1 **Q. What is the ISO-NE Day Ahead Energy Market?**

2 A. The ISO-NE Day Ahead Energy Market allows market participants to commit to
3 buy wholesale electricity one day before the operating day. The market produces a
4 daily financial settlement that refers to the Load Zone Price (\$/MWh) that is
5 assigned to load submitted in the Day Ahead Market by the market participant with
6 the corresponding registered load asset.

7

8 **Q. What is the process for load zone pricing in the ISO-NE Day Ahead Energy**
9 **Market?**

10

11 A. The following process will be used for each Customer Group. For next day load
12 zone pricing, the forecasted load is submitted through the ISO-NE “eMarket”
13 software, which is used by all market participants to submit their expected load
14 values for each hour to the ISO-NE Day Ahead Market by 10:30 a.m. By 1:00 p.m.
15 that same day, ISO-NE publishes the Day Ahead hourly prices that are associated
16 with the submitted load. That load is subject to pricing at the applicable load zone
17 for New Hampshire rather than at individual nodes on the regional transmission
18 network.

19

20 **Q. What is the process for load forecasting by the Company?**

21 A. The load submitted to ISO-NE will be modeled by a third-party load forecasting
22 service. The forecast models are built using (1) historical Small Customer Energy
23 Service customer load data and accounting for near-term weather forecasts, and (2)
24 historical Large Customer Energy Service customer load data and accounting for
25 near-term weather forecasts.

26 **Q. How will the Company manage the market-based procurements process?**

27 A. The following process will be used for each Customer Group. Each day during the
28 six-month service period, the Company will purchase energy and other wholesale

1 power products in the ISO-NE spot markets. The energy price will vary day by
2 day. Specifically, the Company will use the following two steps each day to notify
3 ISO-NE of its expected next day load for each hour: (1) the load forecast is obtained
4 from the Company’s third-party load forecasting software that uses historical load
5 data and local weather forecasts in its algorithm to produce the next day load
6 forecast; and (2) the next day load forecast is then submitted to ISO-NE through its
7 “eMarket” system. The Company is not proposing to make any forward energy
8 purchases or implement any other “hedging” strategies to mitigate price or load
9 volatility, but instead will be a “price-taker” at whatever price level the ISO-NE
10 market settles.

11
12 **Q. What types of wholesale load costs will the Company incur in executing the**
13 **expanded self-supply plan?**

14
15 A. The wholesale energy market costs of serving 30% of the Small Customer Group
16 load and 100% of the Large Customer Group load through direct market-based
17 procurement will be the daily submitted load quantities times the zonal price
18 assigned to that load. Other charges for the related load asset will be identified in
19 the ISO-NE monthly bill and, in addition to Energy (based on actual versus
20 submitted load with differences settled at Real-Time Energy prices), will also
21 include Forward Capacity, Ancillary Services, and other ISO-NE Charges such as
22 Net Commitment Period Compensation and Inventoried Energy Program (IEP)
23 costs. Lastly, there is an annual fee associated with obtaining the services of the
24 third-party load forecasting service and possibly additional internal staffing
25 requirements.

26 **Q. Does ISO-NE market-based procurement effectively shift risk from wholesale**
27 **suppliers to the Small or Large Customer Energy Service customers?**
28

1 A. Yes. Historical comparisons of accepted wholesale bid prices versus market-based
2 costs to serve load in New Hampshire demonstrate that market-based costs have
3 been lower since the Company began procuring Energy Service supply through
4 competitive solicitation in 2018.¹ However, the future is highly unpredictable and
5 energy markets may be quite volatile, therefore, should future market-based costs
6 come in higher than wholesale supplier bid prices, it would result in an under-
7 collection, and that would necessitate cost recovery from customers in a successive
8 rate period(s) as described below. This unpredictability in market-based costs
9 effectively shifts the corresponding risks from wholesale suppliers to the Small and
10 Large Customer Group Energy Service customers.

11
12 **Q. What led the Company to propose ISO-NE market-based procurement for just**
13 **30 percent of the Small Customer Group load?**

14
15 A. The Company is proposing ISO-NE market-based procurement for 30% of the
16 Small Customer Group load because (1) 30% complies with Order No. 27,022, and
17 (2) as mentioned in the previous question, ISO-NE market-based procurements
18 shifts risk from wholesale suppliers to customers. In addition, the initial change to
19 serving 12.5% of Small Customer Group load through direct ISO-NE market
20 participation has not yet begun and the impacts of that change are not yet known.
21 Additionally, serving a significant amount of load in the ISO-NE Day Ahead
22 Energy Market may result in either large over- or under-recoveries, since rates for
23 the market-based procurements would be forecasted based on a combination of
24 historical and forward prices and not known costs. Accordingly, the Company
25 believes that it is appropriate to increase the share of ISO-NE market-based

¹ Report on New Hampshire Energy Commodity Procurement; Dr. Rizwana Alamgir-Arif and Alexander Speidel, Esq, Senior Advisors, State of New Hampshire Public Utilities Commission, May 8, 2023.

1 procurement in a prudent manner, allowing additional time and data points to
2 accumulate that will enable stakeholders to understand the benefits and costs more
3 fully. Moving to ISO-NE market-based procurements of 12.5 percent of Small
4 Customer Group load for the August 2024 – January 2025 rate period followed by
5 30 percent for the February 2025 – July 2025 rate period achieves that prudent and
6 incremental objective. The remaining 70% of Small Customer Group load will be
7 supplied by wholesale suppliers selected through a competitive solicitation process
8 for five tranches of 14% each.

9 **IV. ENERGY SERVICE RATES**

10

11 **Q. Under the proposal for an expanded direct ISO-NE market-based**
12 **procurement approach, what is the Company’s proposal for setting the Small**
13 **Customer Energy Service rates during the six-month service period?**

14

15 A. Under the approved full-requirements competitive procurement process, the
16 Wholesale Contract Price has been based on the average price of the eight lowest-
17 cost bids received for the Small Customer Group during the solicitation process.
18 Line losses, RPS obligations, reconciliations, and A&G Adjustment Factors are
19 then added to the Wholesale Contract Price to calculate the Small Customer Energy
20 Service rate for the applicable service period. Under the alternative direct market-
21 based procurement proposal, the Company proposes that the five lowest-cost bids
22 received during the competitive solicitation process for the five tranches of 14%
23 each would be selected. The Company would then calculate a proxy price for the
24 30% market-based procurement tranche as the average of (a) the four-year rolling
25 weighted average of ISO-NE market prices in the New Hampshire load zone, and
26 (b) the NYMEX futures prices for the upcoming six-month energy service period
27 for ISO-NE. The six monthly proxy prices so determined would then be averaged

1 on a load-weighted basis to calculate a single proxy price for use in developing the
2 flat price component for the Small Customer Group ES rate for the six-month
3 period. That approach is compliant with the Commission’s directive in Order No.
4 27,022.

5
6 **Q. And what is the Company’s proposal for setting the Large Customer Energy**
7 **Service rates during the six-month service period?**

8
9 A. Similar to the above approach for the Small Customer Group, the Large Customer
10 Group proxy prices would be calculated as the average of (a) the four-year rolling
11 weighted average of ISO-NE market prices in the New Hampshire load zone, and
12 (b) the NYMEX futures prices for the upcoming six-month energy service period
13 for ISO-NE, for each month of the six-month rate period. The six monthly proxy
14 prices so determined would then be used to develop the monthly price components
15 for the Large Customer Group ES rate for each month during the six-month period.
16 That approach is compliant with the Commission’s directive in Order No. 27,022.

17
18 **V. COST RECOVERY AND RECONCILIATION**

19 **Q. What is the Company’s proposal for cost recovery?**

20
21 A. The Company does not propose any modifications in this filing to the currently
22 effective cost recovery methods for Energy Service. Under the current method, the
23 Company recovers the cost of providing Energy Service by charging customers a rate
24 reflective of the cost of procurement as approved by the Commission. To the extent
25 that the Energy Service revenue collected is over or under the cost of procurement, the
26 over- or under-recovered balance is collected through the Company’s Reconciliation
27 Adjustment Factors for Small and Large Customers. In Order No. 27,002, the
28 Commission directed the Company to prepare a proposal for the integration of the ES
29 Reconciliation Adjustment Factor charges into collection through the SCRC to be filed

1 in advance of the Company's next SCRC petition filing; however, that change in
2 recovery has not yet been approved or even developed yet.

3
4 **Q. How will the reconciliation process work?**

5
6 A The reconciliations for the Small and Large Customer groups currently are completed
7 as part of the Company's annual Reconciliation Adjustment Factor filing made in June
8 of each year. The Company reconciles its total cost of purchased power procured for
9 ES supply from all sources (whether from wholesale suppliers or self-supply) against
10 its total ES revenue. The excess or deficiency, including interest, is refunded to or
11 collected from customers on a per kilowatt-hour basis over the following twelve-month
12 period (August to July), as filed with and approved by the Commission. Interest is
13 calculated on the average monthly over- or under-recovered balance using the Prime
14 rate. The reconciliation also includes uncollected prior period balances.

15
16 **Q. Would reconciliation apply to both the Small Customer group and the Large
17 Customer group?**

18
19 A. Consistent with the current ES Reconciliation Adjustment method, the Small and Large
20 Customer groups are reconciled separately. Accordingly, even though both Customer
21 Groups will be self-supplied in whole or in part, each Customer Group will be subject
22 to a full reconciliation including self-supply related costs.

23
24 **Q. Would reconciliation including self-supply procurement for both the Small
25 Customer group and the Large Customer Group likely result in additional
26 administrative costs?**

27
28 A. Yes, however, the Company does not expect administrative costs related to self-supply
29 procurement, whether for internal or external resources, to have a significant impact on
30 either the Small Customer Group or the Large Customer Group Reconciliation
31 Adjustment. For example, the third-party vendor that assists with forecasting the
32 Company's loads would cost approximately \$20,000. But with the implementation of
33 an increased percentage for self-supply of the Small Customer Group load, and for

1 100% of the Large Customer Group load, these administrative costs could become
2 more of a factor for the next ES rate service period from February 2025 through July
3 2025.

4

5 **Q. Will the proposed limited direct market participation have a material impact**
6 **on the Company's cash flow and working capital requirements?**

7

8 A. To the extent that the Company serves a portion of its Small Customer Group load
9 directly, and all of its Large Customer Group load directly, there will be an impact
10 on its working capital requirements, because the billing lag would decrease from
11 approximately 45 days to around 5 days, reflecting the more frequent ISO-NE
12 market settlement schedule. This will create some upward pressure on the
13 Company's working capital requirements and related interest expense. If the
14 Company's expanded direct market procurement proposal is approved, the
15 Company will update its lead-lag study in its next ES rate adjustment filing to
16 reflect the change in working capital requirements. The overall impact of these
17 changes may not be substantial, but with an increase for both Customer Groups the
18 impact should be considered in connection with the next relevant filing.

19 **Q. How and when will the Company reconcile actual market participation costs**
20 **with estimated market costs?**

21

22 A. The actual costs of expanded direct market participation may not be finally known
23 until several months after the conclusion of the next ES service period. This lag is
24 due to ISO-NE hourly market pricing, market settlement lag, and the resettlement
25 process for load volumes. The difference between actual market costs resulting
26 from direct market participation and the estimated market costs incorporated into
27 the ES rate will become part of the Company's ES under- or over-collection. As
28 such, any variation in those costs will be treated through the normal annual

1 reconciliation process as outlined above, as that process may be modified by future
2 Commission order.

3

4 **Q. Would there be tariff changes required if the Commission approves the**
5 **Company’s proposal as described in this testimony?**

6

7 A. The Company has not identified any tariff changes required to implement the
8 expanded self-supply procurement through direct market participation as described
9 in this testimony. However, if any such tariff changes are necessary, those changes
10 can be provided in this proceeding as requested, in a compliance filing, or in
11 connection with the Company’s next ES rate adjustment filing.

12 **VI. CONCLUSION**

13

14 **Q. Is the Company’s proposal a reasonable and appropriate plan to self-supply a**
15 **larger portion of the Small Customer Group load, and all of the Large**
16 **Customer Group load, through direct ISO-NE wholesale market**
17 **participation?**

18

19 A. Yes, the expanded direct wholesale market participation proposal described in this
20 testimony represents a reasonable and appropriate approach to meeting the
21 Commission’s directives in Order No. 27,022. Although the Company’s Small and
22 Large Customers will be exposed to some additional market volatility risks as a
23 result of its implementation, those risks must be balanced against avoidance, in
24 whole or in part, of the so-called “risk premiums” included by third party wholesale
25 suppliers in their competitive bids to provide ES supply. In order to afford the
26 Company sufficient time to prepare to implement the proposed expanded direct
27 market participation, in conjunction with the competitive solicitation of third-party
28 wholesale supply for the remaining tranches of its Small Customer Group load for
29 the next upcoming ES rate period, the Company respectfully requests that the

1 Commission review and approve this proposal, through a further phase of the
2 proceeding, in a timely manner and with a decision issued not later than October 15,
3 2024.

4

5 **Q. Does that conclude your testimony?**

6 **A.** Yes, it does.