

STATE OF NEW HAMPSHIRE
BEFORE THE PUBLIC UTILITIES COMMISSION

Public Service Company of New Hampshire
d/b/a Eversource Energy

Docket No. DE 23-043

A proposal for an 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
19 Company as the Director of Revenue Requirements for New Hampshire, and in that
20 position, I support the “Company regarding revenue and rate-related matters.

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

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

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

11 A. Yes, I provided testimony before the Commission in this proceeding and also in
12 support of the Company’s Lost Base Revenue (“LBR”) component filing of the
13 SBC submitted in Docket No. DE 23-080, and most recently in the SCRC
14 adjustment proceeding in Docket No. DE 23-091.

15

16 **II. PURPOSE**

17

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

19 A. Our testimony is in response to Order No. 26,920, which directs the Company to
20 “file with the Commission, no later than February 5, 2024, a proposal for an ISO-
21 New England [ISO-NE] market-based procurement approach for 10 to 20 percent of
22 the load, through whatever combination of direct Day-Ahead and Real-Time ISO-
23 New England market acquisitions the Company finds advisable, for the Company’s
24 upcoming August 2024-January 2025 energy service period for its Small Customer
25 Group, to be assessed by the Commission in a future phase of this proceeding.”

26

27 Our testimony describes the Company’s proposal to procure power supply for a
28 portion of the Small Customer Group customers’ load in the ISO-NE day ahead
29 market; set the Energy Service rate for those customers during the same period; and
30 allow recovery and reconciliation of the Company’s Energy Service costs in
31 relation to the alternative procurement plan.

1 **III. PROPOSAL FOR AN ISO-NE MARKET-BASED SELF-SUPPLY**
2 **PROCUREMENT APPROACH**

3
4 **Q. How does the Company propose to implement an ISO-NE market-based**
5 **procurement approach for 10 to 20 percent of the load for its Small Customer**
6 **Group?**

7 **A.** The Company proposes to implement market-based procurement to “self-supply” a
8 portion of its Small Customer Group load by having the Company assume
9 responsibility for managing the relevant load asset in the ISO-NE wholesale power
10 market. These responsibilities will include scheduling the Energy Service load in
11 the ISO-NE Day Ahead Energy Market, as it is the Company’s understanding that
12 ISO-NE prefers load assets with significant load to be scheduled in the Day Ahead
13 Market. Because Order No. 26,920 requires such market-based procurement for 10
14 to 20 percent of the Small Customer Group load, the Company will engage in direct
15 market-based procurement to “self-supply” for one 12.5 percent tranche of such
16 customer load, with suppliers managing the other 87.5 percent of load. In
17 summary, this approach means that the Company is buying energy, capacity, and
18 other wholesale market products and related services from the ISO-NE markets,
19 including the hourly Day-Ahead Energy Market.

20
21 **Q. What is the ISO-NE Day Ahead Energy Market?**

22 **A.** The ISO-NE Day Ahead Energy Market allows market participants to commit to
23 buy wholesale electricity one day before the operating day. The market produces a
24 daily financial settlement that refers to the Load Zone Price (\$/MWh) that is
25 assigned to load submitted in the Day Ahead Market by the market participant with
26 the corresponding registered load asset. Any variation between a market
27 participant’s Day Ahead Market load obligation and its actual load during the
28 operating day is settled in the Real Time Market at real-time prices, which may be
29 higher or lower than the Day Ahead Market prices for the relevant time period.

30
31 **Q. What is the process for load zone pricing in the ISO-NE Day Ahead Energy**
32 **Market?**

33 **A.** For next day load zone pricing, the forecasted load is submitted through the ISO-
34 NE “eMarket” software, which is used by all market participants to submit their

1 expected load values for each hour to the ISO-NE Day Ahead Market by 10:30 a.m.
2 By 1:00 p.m. that same day, ISO-NE publishes the Day Ahead hourly prices that are
3 associated with the submitted load. That load is subject to pricing at the applicable
4 load zone for New Hampshire rather than at individual nodes on the regional
5 transmission network.

6

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

8 **A.** The load submitted to ISO-NE will be modeled by a third-party load forecasting
9 service. The forecast model is built using historical Small Customer Energy
10 Service customer load data and accounts for near-term weather forecasts.

11

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

13 **A.** Each day during the six-month service period, the Company will purchase energy
14 and other wholesale power products in the ISO-NE spot markets. The energy price
15 will vary day by day. Specifically, the Company will use the following two steps
16 each day to notify ISO-NE of its expected next day load for each hour: (1) the load
17 forecast is obtained from the Company's third-party load forecasting software that
18 uses historical load data and local weather forecasts in its algorithm to produce the
19 next day load forecast; and (2) the next day load forecast is then submitted to ISO-
20 NE through its eMarket system. The Company is not proposing to make any
21 forward energy purchases or implement any other "hedging" strategies to mitigate
22 price or load volatility, but instead will be a "price-taker" at whatever price level the
23 ISO-NE market settles at.

24

25 **Q. What types of wholesale load costs will the Company incur in executing its
26 limited self-supply plan?**

27 **A.** The wholesale energy market costs of serving a portion of the Small Customer
28 Group load through direct market-based procurement will be the daily submitted
29 load times the zonal price assigned to that load. Other charges for the related load
30 asset will be identified in the ISO-NE monthly bill and, in addition to Energy (based
31 on actual versus submitted load), will also include Forward Capacity, Ancillary
32 Services, and other ISO-NE Charges such as Net Commitment Period
33 Compensation and new Inventoried Energy Program (IEP) costs. Lastly, there is an

1 annual fee associated with obtaining the services of the third-party load forecasting
2 service and possibly additional internal staffing requirements.

3
4 **Q. Does ISO-NE market-based procurement effectively shift risk from wholesale
5 suppliers to Small Energy Service customers?**

6 **A.** Yes. Historical comparisons of accepted wholesale bid prices versus market-based
7 costs to serve load in New Hampshire demonstrate that market-based costs have
8 been lower since the Company began procuring Energy Service supply through
9 competitive solicitation in 2018.¹

10
11 However, the future is highly unpredictable and energy markets may be quite
12 volatile, therefore, should future market-based costs come in higher than wholesale
13 supplier bid prices, it would result in an under-collection, and that would necessitate
14 cost recovery from customers in a successive rate period(s) as described below.
15 This unpredictability in market-based costs effectively shifts the corresponding
16 risks from wholesale suppliers to the Small Energy Service customers.

17 **IV. ENERGY SERVICE RATES**

18
19 **Q. Under the proposal for a limited direct ISO-NE market-based procurement
20 approach, what is the Company’s proposal for setting the Small Customer
21 Energy Service rates during the six-month service period?**

22 **A.** Under the approved full-requirements competitive procurement process, the
23 Wholesale Contract Price has been based on the average price of the eight lowest-
24 cost bids received for the Small Customer Group during the solicitation process.
25 Line losses, RPS obligations, reconciliations, and A&G Adjustment Factors are
26 then added to the Wholesale Contract Price to calculate the Small Customer Energy
27 Service rate for the applicable service period. Under this alternative direct market-
28 based procurement proposal, the Company proposes that the seven lowest-cost bids
29 received during the competitive solicitation process would be selected. The single
30 lowest-cost bid would then be replicated as “self-supply tranche A” and the average
31 of these eight tranches would now serve as the foundational Wholesale Contract

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 Price for calculating the applicable Small Customer Energy Service rate for the
2 relevant period.

3
4 **Q. Has the Company prepared an exhibit demonstrating how the proposed Small
5 Customer Energy Service rate would be calculated?**

6 **A.** Yes, please refer to Attachment PL/YC-1. The Wholesale Contract Price under a
7 hypothetical traditional competitive solicitation process would be \$127.83/MWh as
8 shown in that attachment. Under a hypothetical direct market-based self-supply
9 procurement as proposed, the Wholesale Contract Price would be \$123.46/MWh as
10 shown in the attachment.

11

12 **V. COST RECOVERY AND RECONCILIATION**

13 **Q. What is the Company's proposal for cost recovery?**

14

15 **A.** The Company does not propose any modifications to the currently effective cost
16 recovery methods for Energy Service. Under the current method, the Company
17 recovers the cost of providing Energy Service by charging customers a rate
18 reflective of the cost of procurement as approved by the Commission. To the extent
19 that the Energy Service revenue collected is over or under the cost of procurement,
20 the over- or under-recovered balance is collected through the Company's
21 Reconciliation Adjustment Factors for Small and Large Customers.

22

23 **Q. How will the reconciliation process work?**

24

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

34

1 **Q. Would reconciliation apply only to the Small Customer group, or would it**
2 **apply to the Large Customer group as well?**

3
4 A. Consistent with the current ES Reconciliation Adjustment method, the Small and
5 Large Customer groups are reconciled separately. Therefore, if self-supply
6 procurement applies only to the Small Customer group, the reconciliation including
7 self-supply related costs would apply to the Small Customer group only.

8
9 **Q. Would reconciliation including a self-supply procurement option for the Small**
10 **Customer group likely result in additional administrative costs?**

11 A Yes, however, the Company does not expect self-supply procurement related
12 administrative costs, whether for internal or external resources, to have a significant
13 impact on the Small Customer Reconciliation Adjustment. For example, the third-
14 party vendor that assists with forecasting our loads would cost approximately
15 \$20,000.

16
17 **Q. Will the proposed limited direct market participation have a material impact**
18 **on the Company's cash flow and working capital requirements?**

19 A. To the extent that the Company serves a portion of its Small Customer group load
20 directly, there will be an impact on its working capital requirements, because the
21 billing lag would decrease from approximately 45 days to around 5 days, reflecting
22 the more frequent ISO-NE market settlement schedule. This will create some
23 upward pressure on the Company's working capital requirements and related
24 interest expense. If the Company's procurement proposal is approved, the
25 Company will update its lead-lag study in the June 2025 lead-lag study (i.e., the
26 first lead-lag study that will reflect the impacts of self-supply market payments
27 made during 2024), to reflect the changes in working capital requirements. The
28 overall impact of these changes is not expected to be substantial, because only
29 12.5% of the Small Customer group load will be involved.

30
31 **Q. How and when will the Company reconcile actual market participation costs**
32 **with estimated market costs?**

33 A. The actual costs of limited direct market participation may not be finally known
34 until several months after the conclusion of the ES service period. This lag is due to

1 ISO-NE hourly market pricing, market settlement lag, and the resettlement process
2 for load volumes. The difference between actual market costs resulting from direct
3 market participation and the estimated market costs incorporated into the ES rate
4 will become part of the Company's ES under- or over-collection. As such, any
5 variation in those costs will be treated through the normal annual reconciliation
6 process as outlined above. The Company does not expect any such delay in final
7 reconciliation to have a material impact on future period ES rates because direct
8 market purchases will represent only 12.5% of the cost of serving the Small
9 Customer group load.

10
11 **Q. Would there be tariff changes required if the Commission approves the**
12 **Company's proposal as described in this testimony?**

13 A. The Company has not identified any tariff changes required to implement limited
14 self-supply through direct market participation as described in this testimony.
15 However, if any such tariff changes are necessary, those changes can be provided in
16 this proceeding as requested, in a compliance filing, or in connection with the
17 Company's next ES rate adjustment filing.

18 **VI. CONCLUSION**

19
20 **Q. Is the Company's proposal a reasonable and appropriate plan to self-supply a**
21 **limited portion of the Small Customer Group load through direct ISO-NE**
22 **wholesale market participation?**

23 A. Yes, the limited direct wholesale market participation proposal described in this
24 testimony represents a reasonable and appropriate approach to meeting the
25 Commission's directive in Order No. 26,920. Although the Company's Small
26 Customers will be exposed to some additional market volatility risks as a result of
27 its implementation, those risks must be balanced against partial avoidance of the so-
28 called "risk premiums" included by third party wholesale suppliers in their
29 competitive bids to provide ES supply. In order to afford the Company sufficient
30 time to prepare to implement the proposed limited direct market participation, in
31 conjunction with the competitive solicitation of third-party wholesale supply for the
32 remaining tranches of its customer load for the upcoming ES rate period, the
33 Company respectfully requests that the Commission review and approve this

1 proposal, through a further phase of the proceeding, in a timely manner and with a
2 decision issued not later than April 15, 2024.

3
4 **Q. Does that conclude your testimony?**

5 **A. Yes, it does.**

Public Service Company of
New Hampshire, d/b/a
Eversource Energy
Docket No. DE 23-043
Attachment PL/YC-1
February 5, 2024
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	Aug	Sep	Oct	Nov	Dec	Jan	Period
Small Customer Group Load (MWh)	280,000	220,000	210,000	230,000	270,000	290,000	1,500,000
1st lowest Supplier bid (\$/MWh)	100	100	90	90	120	150	\$110.33
2nd lowest Supplier bid (\$/MWh)	105	105	95	95	125	155	\$115.33
3rd lowest Supplier bid (\$/MWh)	110	110	100	100	130	160	\$120.33
4th lowest Supplier bid (\$/MWh)	115	115	105	105	135	165	\$125.33
5th lowest Supplier bid (\$/MWh)	120	120	110	110	140	170	\$130.33
6th lowest Supplier bid (\$/MWh)	125	125	115	115	145	175	\$135.33
7th lowest Supplier bid (\$/MWh)	130	130	120	120	150	180	\$140.33
8th lowest Supplier bid (\$/MWh)	135	135	125	125	155	185	\$145.33
Wholesale Contract price (\$/MWh)							\$127.83

	Aug	Sep	Oct	Nov	Dec	Jan	Period
Small Customer Group Load (MWh)	280,000	220,000	210,000	230,000	270,000	290,000	1,500,000
1st lowest Supplier bid (\$/MWh)	100	100	90	90	120	150	\$110.33
2nd lowest Supplier bid (\$/MWh)	105	105	95	95	125	155	\$115.33
3rd lowest Supplier bid (\$/MWh)	110	110	100	100	130	160	\$120.33
4th lowest Supplier bid (\$/MWh)	115	115	105	105	135	165	\$125.33
5th lowest Supplier bid (\$/MWh)	120	120	110	110	140	170	\$130.33
6th lowest Supplier bid (\$/MWh)	125	125	115	115	145	175	\$135.33
7th lowest Supplier bid (\$/MWh)	130	130	120	120	150	180	\$140.33
Self-Supply tranche A (equals 1st lowest Supplier bid)	100	100	90	90	120	150	\$110.33
Wholesale Contract price (\$/MWh)							\$123.46