May 8, 2023

REPORT ON NEW HAMPSHIRE ENERGY COMMODITY PROCUREMENT

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Executive Summary

Staff of the New Hampshire Public Utilities Commission (NHPUC) has prepared this Report pursuant to the order of Chairman Daniel Goldner, issued on April 24, 2023, "...requesting that the staff of the NHPUC produce a report summarizing input from participants in the [Docket No. IR 22-053] investigation for the NHPUC's consideration." The Order of Notice of the IR 22-053 investigation (Investigation), issued by the NHPUC on September 6, 2022, stated that the NHPUC would "...examine all pertinent aspects of RPS [Renewable Portfolio Standard], Default Service, and COG [Cost of Gas] procurements in New Hampshire, and related NHPUC processes. This investigation will aid the NHPUC in its role of examining related utility petitions to ensure just, reasonable, and accurate rates...".

During the pendency of the Investigation, New Hampshire's Electric and Gas regulated utilities, as mandatory participants, provided wide-ranging technical input and perspectives regarding the current process, challenges faced in their provision of energy commodities to their customers in New Hampshire, and potential solutions to these challenges. Several non-utility participants provided input to the NHPUC regarding these matters of their own volition, resulting in a large volume of material to summarize. It is the hope that this Report will give the NHPUC and other interested persons, in a succinct and accessible format, a useful overview of the range of perspectives presented by participants. Interested persons are encouraged to reference the full submissions by participants, and related NHPUC inquiries at: https://www.puc.nh.gov/Regulatory/Docketbk/2022/22-053.html

This report is structured to separate matters pertaining to Electric service from those pertaining to Gas service. (Where comments of Electric and Gas utilities under a common ownership structure were combined, this Report will summarize matters relating to Electric service in the sections for the Electric utilities, and matters relating to Gas service in the sections for the Gas utilities. Further, in an abundance of caution, Dr. Rizwana Alamgir-Arif did not participate in preparing the summary relating to Gas service).

For each respective service, the report will first present the summarized input of each of New Hampshire's utilities. With respect to Default Electric service, staff compiled¹ the technical information and charts that utilities presented to identify a general trend in Default Service rates relative to ISO-New England (ISO-NE) market prices over the past five years. For Electric service, this Report will present in alphabetical order the summarized input of the other non-utility participants, including the New Hampshire Department of Energy, the Office of the Consumer Advocate, New Hampshire's municipal and cooperative utilities, and other stakeholders.

The summaries provided will not address questions regarding procedural matters pertaining to the Investigation, but rather, issues relating to, and potential improvements to energy procurement programs overseen by the NHPUC. As indicated in Chairman Goldner's April 24 order, Investigation participants and all other interested persons are invited to file responses to this Report <u>by Thursday, May 18, 2023</u>, into NHPUC Docket No. IR 22-053.

¹NHPUC staff aimed to preserve, to the extent possible, participants' preferred format to represent data tables.

I. ELECTRIC SERVICE

A. SUMMARY OF ELECTRIC UTILITY INPUT

1. Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty (Liberty Electric)

Liberty Electric provided an initial overview of its position regarding the Investigation on September 26, 2022. In that response, Liberty Electric stated that it had no substantive influence over the prevailing market conditions and resultant prices that are largely driven by exogenous factors including global events. Through the Default Service Request for Proposals (RFP) process, these effects have translated into the full-requirement six-month energy contracts. Liberty Electric stated that its process for procurement of Renewable Energy Credits (RECs) was well-established, though facing difficulties in recent years due to changes in REC requirements, sometimes at the end of a REC compliance period. Liberty Electric further noted that it did not foresee scope for cross-solicitations involving its other corporate affiliates across the United States, due to differences in jurisdictional requirements and local conditions.

In response to a NHPUC procedural order issued on October 11, 2022, seeking further technical input from the Electric utilities, Liberty Electric provided a Technical Statement for consideration on November 18, 2022. In this Technical Statement, Liberty Electric reiterated that its RFP-based, full-requirements contract approach to Default Service solicitations met the requirements of the restructuring principles of RSA Chapter 374-F, and the relevant NHPUC Orders and related settlement agreements governing Liberty Electric Default Service procurements.

Together with an overview of Liberty Electric's current Default Service procurement process, Liberty Electric discussed two potential reforms of the Default Service RFP structure: (1) a centralized procurement, administered by the State of New Hampshire for all of the investor-owned electric utilities regulated by the NHPUC, on the model of Basic Generation Service in New Jersey or Generation Service in Maine, to potentially benefit from greater bidder participation and lower costs arising from consolidated obligations; and (2) the introduction of a "laddered" Default Service solicitation process through RFPs soliciting supply on more than a single date to reduce price volatility. Liberty Electric opined that, while a single statewide procurement structure for New Hampshire could have advantages due to economies of scale, "laddering" could be counter-productive for the Company due to the small size of Liberty's load (making further subdivision of load unwise in terms of attracting bidders), and the lack of quantifiable benefits, as observed by Liberty Electric among their Massachusetts utilities, in reducing price volatility through laddering.

Liberty Electric did note in its November 18 Technical Statement that it has the capability of serving its Default Service load from spot purchases in ISO-NE Real-Time or Day-Ahead markets, applicable within the context of a failed RFP solicitation process. Liberty Electric elaborated that initial retail pricing for a given rate period could be developed based on market futures at the time of the failed solicitation, with the risk that such retail prices

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would not reflect the actual cost of meeting the Default Service supply. Liberty Electric stated that such additional costs (or savings if the market prices were lower than projected) would be collected (or returned) through a subsequent Default Service rate reconciliation. Liberty Electric further addressed the prospects of reducing rate volatility through a pre-approved "hedging" program or fixed-priced, long-term contracts for serving Default Service load, with Liberty Electric taking the view that such measures could pose downside risks related to migration of customers, adverse competitive impacts on Competitive Energy Suppliers, and higher risk premiums.

Liberty Electric provided further technical data in response to NHPUC inquiries on February 17, March 30 (providing migration metrics), and jointly, together with the other New Hampshire Electric Utilities, on April 11, 2023. In its February 17 response, Liberty Electric indicated that it sees direct electric purchases from the ISO-NE market to be an existing option to accommodate extraordinary events during a procurement. In response to an NHPUC inquiry on RPS requirements, Liberty Electric also provided a breakdown of its Default Service prices for small customers by RPS and Administrative and General Expenses since 2018, as well as the percentage of RPS met through Alternative Compliance Payments. The breakdown of Liberty Electric's Default Service rates is provided below:

Table 1: Breakdown of Liberty's Residential and Small Customer Default Service Price

		Renewable Portfolio	
	Residential DS Rate	Standard Adder	Administrative & General
Timeframe	(\$/kWh)	(\$/kWh)	(\$/kWh)
Feb 2023 - July 2023	\$0.22007	\$0.00781	\$0.00061
Aug 2022 - Jan 2023	\$0.22228	\$0.00781	\$0.00061
Feb 2022 - July 2022	\$0.11119	\$0.00684	(\$0.00048)
Aug 2021 - Jan 2022	\$0.08396	\$0.00684	(\$0.00048)
Feb 2021 - Jul 2021	\$0.06426	\$0.00743	\$0.00037
Aug 2020- Jan 2021	\$0.06825	\$0.00743	\$0.00037
Feb 2020 - Jul 2020	\$0.07127	\$0.00711	\$0.00127
Aug 2019 - Jan 2020	\$0.07710	\$0.00539	\$0.00127
Feb 2019 - Jul 2019	\$0.08299	\$0.00290	(\$0.00124)
Aug 2018 - Jan 2019	\$0.08299	\$0.00462	(\$0.00124)

In its sub-component of the Electric Utilities' Joint Response made on April 11, Liberty Electric provided data since 2018, and a supporting chart, representing the load volume changes as well as differences between the ISO-NE average monthly Real-Time market prices and its residential/small customer Default Service prices.

Table 2: Differential Between Liberty Electric De	fault Service (DS) Price	rices and Market Prices for Same Load
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	(a)	(b)	(c)	
Rate Period	Small Customer Default Service Base Price (\$/kWh)	Average Monthly Market Price (\$/kWh)	Semi-annual Small Customer Volume (kWhs)	Delta of DS Price (a) and Market Price (b) (\$/kWh)
Feb-18 thru Jul-18	0.08079	0.04666	168,839,071	0.03413
Aug-18 thru Jan-19	0.08913	0.05934	184,981,405	0.02979
Feb-19 thru Jul-19	0.09103	0.04271	171,807,669	0.04832
Aug-19 thru Jan-20	0.07862	0.03992	175,920,911	0.03870
Feb-20 thru Jul-20	0.07177	0.03021	181,113,914	0.04156
Aug-20 thru Jan-21	0.06423	0.04032	189,343,181	0.02391
Feb-21 thru Jul-21	0.06024	0.04763	184,988,428	0.01261
Aug-21 thru Jan-22	0.07614	0.08114	195,927,281	(0.00500)
Feb-22 thru Jul-22	0.10337	0.09145	183,123,966	0.01192
Aug-22 thru Jan-23	0.21290	0.09098	176,461,401	0.12192
Feb-23 thru Jul-23	0.21069			

^{*}Source: Response to Record Request 1, April 11, 2023

Figure 1: Liberty Utilities Trendline Representing Default Service Price Differential to Market Prices



*Source: Response to Record Request 2 (a;c), April 11, 2023

With the exception of the last six-month contract in 2021 where the trend was reversed, Liberty's residential and small customer Default Service price between 2018 and 2022 ranged roughly 1.1 cents to 4.8 cents higher than the ISO-NE wholesale market prices that were available for the same load. Load served ranged from roughly 169 million kWhs to about 196 million kWhs for that same period. Any migration of customers, to or from Competitive Energy Suppliers, can be reflected through the change in load, as seen from the grey dots in the chart above.

2. Public Service Company of New Hampshire d/b/a Eversource Energy (Eversource)

Eversource provided its initial input for this Investigation in a comment filing made on September 26, 2022. In this filing, Eversource stated that, while adjustments to procurement

practices could provide some mitigation of price volatility related to matters such as natural gas price escalation for Default Service² customers, the effects of such measures would be limited. Eversource, in its September 26 statement, advocated in favor of a more abbreviated RFP review period by the NHPUC, pointing to the track record of such abbreviated review structures in Massachusetts and Connecticut as offering potentially better (lower cost) RFP outcomes in default service, through the mitigation of risk premiums. Eversource also indicated that, in its view, "laddering" could offer price-smoothing benefits for Default Service outcomes, especially if policy priorities favored such smoothing over reflection of true market prices.

Regarding REC purchases to comply with the RPS, Eversource argued in its September 26 statement in favor of shifting the burden of RPS compliance to the competitive wholesale electricity supply market, where, Eversource contended, market participants could be better situated to hedge against shifts in the RPS landscape. Eversource recommended against a regional default service procurement process, among its affiliated companies in Massachusetts, Connecticut, and New Hampshire, due to differences among the three states in specific policies and laws for matters such as RPS. (It was implied by Eversource that its New Hampshire Default Service processes were tailored to comply with the requirements of New Hampshire laws and policies).

In its November 18, 2022 response to NHPUC inquiries, Eversource provided further data regarding its experiences with "laddering" in its Southern New England jurisdictions, without taking a position regarding "laddering" being implemented in New Hampshire, and an attachment presenting its affiliated utility's Power Procurement Plan for Standard Service (Default Service) reviewed by the Connecticut Public Utilities Regulatory Authority.

Eversource also stated in its November 18 input that, in its view, a State of New Hampshire-run Default Service procurement process for all investor-owned utilities, or a regionalized/multi-state procurement process operated among the various New England states, would not offer benefits for Default Service customers in New Hampshire, nor be viable based on the different requirements among the various utilities and states.

In a February 17 record request response, Eversource noted that the ISO-NE day-ahead energy prices that are available on an hourly basis cannot be compared with monthly bid prices secured through RFP processes. Eversource asserted that ISO-NE prices did not include additional components such as capacity, ancillary services, and net commitment period compensation, which are included in monthly prices secured through current RFP processes. In that same filing, and in response to an additional NHPUC inquiry on RPS requirements, Eversource provided a breakdown of its residential customer default service prices by RPS and A&G since 2018, as well as the percentage of RPS met through Alternative Compliance Payments. The breakdown of Eversource's Default Service rates summarized in Table 3.

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² Eversource terms its Default Service electric energy offering as "Energy Service." For clarity, this Report will refer to the offering of all three investor-owned Electric utilities in New Hampshire, including Eversource, as "Default Service."

Table 3: Breakdown of Eversource's Residential and Small Customer Default Service Price

Timeframe	Average Rate	RPS Adder	A&G
April 2018	\$0.07903	\$0.00537	\$0.00127
August 2018	\$0.09412	\$0.00369	\$0.00114
February 2019	\$0.09985	\$0.00275	\$0.00098
August 2019	\$0.08825	\$0.00566	\$0.00107
February 2020	\$0.08306	\$0.00779	\$0.00095
August 2020	\$0.07068	\$0.00740	\$0.00076
February 2021	\$0.06627	\$0.00748	\$0.00061
August 2021	\$0.08826	\$0.00770	\$0.00065
February 2022	\$0.10669	\$0.00794	\$0.00063
August 2022	\$0.22566	\$0.00800	\$0.00058
February 2023	\$0.20221	\$0.00811	\$0.00063

Eversource participated in the Electric Utilities' Joint Response, on April 11, 2023. In its April 11 sub-component of the Electric Utilities' Joint Response, Eversource provided data since 2018, and a supporting chart, representing the load volume changes, as well as differences between the ISO-NE average monthly Real-Time market prices and the residential/small customer Default Service prices offered by Eversource.

Table 4: Differential Between Eversource Default Service (DS/ES) Prices and Market Prices for Same Load

Year	Rate Period	Base Small Customer* Energy Service (ES) Rate (\$/kWh) (a)	Market Price (\$/kWh) (b)	Semi-Annual Small* Customer Volume (kWh) (c)	Delta of Base ES rate (a) and Market Price (b) (\$/kWh)	
2018	Apr-18 thru Jul-18**	\$0.07158	\$0.04649	953,164,662	\$0.02509	
2018	Aug-18 thru Jan-19	\$0.08957	\$0.05916	1,642,407,992	\$0.03040	
2010	Feb-19 thru Jul-19	\$0.09612	\$0.04249	1,551,389,119	\$0.05363	
2019	Aug-19 thru Jan-20	\$0.08124	\$0.03960	1,625,691,352	\$0.04163	
2020	Feb-20 thru Jul-20	\$0.07404	\$0.03020	1,662,919,173	\$0.04384	
	Aug-20 thru Jan-21	\$0.06491	\$0.03994	1,768,125,012	\$0.02497	
2021	Feb-21 thru Jul-21	\$0.06057	\$0.04703	1,728,226,737	\$0.01354	
2021	Aug-21 thru Jan-22	\$0.08383	\$0.07985	1,841,319,726	\$0.00398	
2022	Feb-22 thru Jul-22	\$0.10203	\$0.09073	1,820,408,205	\$0.01130	
	Aug-22 thru Jan-23	\$0.21986	\$0.09079	1,752,563,881	\$0.12907	
2023	Feb-23 thru Jul-23	\$0.19773				
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Source: Response to Record Request 1, April 11, 2023

^{*}Small customer, not just residential

^{**} After generation divestiture, initial RFP for 4 months

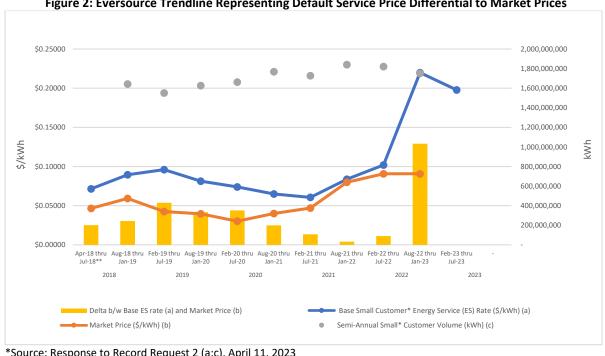


Figure 2: Eversource Trendline Representing Default Service Price Differential to Market Prices

*Source: Response to Record Request 2 (a;c), April 11, 2023

Following a similar trend to Liberty Electric's last six-month contract in 2021, Eversource's residential and small customer Default Service price for that period was only about 0.4 cents higher than the market price. For the remaining periods between 2018 and 2022, this difference ranged 1.1 cents to 13 cents higher than the ISO-NE wholesale market prices that were available for the same load.

Eversource's load served ranged from roughly 953 million kWhs in 2018 (noting that Default Service was three months short and only offered from April rather than February, as was the case with Liberty Electric) to 1,841 million kWhs for that same period. Any migration of customers, to or from Competitive Energy Suppliers, can be reflected through the change in load, as seen from the grey dots in the chart provided.

3. Unitil Energy Systems, Inc. (Unitil Electric)

Unitil Electric, in common with its investor-owned peers in New Hampshire (Liberty Electric and Eversource), expressed an initial view in its September 26, 2022 comments regarding this Investigation that, while some benefits could accrue to Default Service customers from procurement reforms in New Hampshire, no changes in procurement structure could completely divorce retail Default Service prices from the influence of prevailing wholesale ISO-NE electricity prices. Unitil Electric pointed to high natural gas prices in the New England region as ultimately driving high electricity pricing outcomes for its own customers, through the prevalence of natural gas being used as fuel for electricity generation in New England.

In common with its peer Electric utilities, Unitil Electric stated that its current processes were in full compliance with New Hampshire legal requirements and expressed skepticism in its September 26 input regarding the efficacy of regionalized procurement processes due to the challenges of coordinating local load needs and legal and/or compliance requirements. Unitil Electric also noted that "laddering" could somewhat help mitigate the risk of volatility in Default Service prices, although at the cost of resulting prices that are less reflective of the existing market. Unitil Electric further pointed to difficulties in shifting REC requirements to wholesale power suppliers in New Hampshire as potentially introducing uncertainty and risk into the REC procurement process.

Unitil Electric expanded on these points in its November 18, 2022 response to NHPUC inquiries, provided as a Technical Statement. Unitil Electric's November 18 Technical Statement indicated the utility's flexibility in responding to a New Hampshire statewide Default Service procurement, based on the experience of Maine, with the proviso that New Hampshire state regulators focus on transaction oversight, meaning whether the Electric utilities appropriately implemented a given procurement process, rather than actual execution of electricity market transactions.

Unitil Electric further elaborated in its November 18 Technical Statement regarding how it would handle a potentially failed RFP solicitation process for Default Service. As elaborated on by Liberty Electric, Unitil Electric would propose to self-supply its Default Service customers by purchasing power supply, capacity, and ancillary services directly from the ISO-NE markets, using estimates future wholesale market conditions to establish initial Default Service rates, subject to a reconciliation mechanism to cover over- or underrecoveries as market conditions developed over the rate period.

Specifically, Unitil Electric pointed to the recent experience of its Massachusetts corporate affiliate, Fitchburg Gas and Electric Light Company (FG&E), which experienced a failed Default Service RFP solicitation in its August 2022 procurement solicited for the December 2022 through July 2023 rate period. FG&E, pursuant to its approved procurement plan, acquires electric power in the ISO-NE markets, with a fixed Default Service retail rate offered to customers to maintain price stability for customers. FG&E may seek an adjustment of the fixed retail rate if the projected wholesale (i.e., ISO-NE) power supply costs for the balance of the period vary by more than twenty percent (20%) from the wholesale power supply costs projected over the same period at the time retail rates were set.

In a further response submitted on February 17, 2023, Unitil Electric stated that the NHPUC should authorize Electric utilities to self-supply via direct purchases from the ISO-NE markets in the event of a failed solicitation without further administrative or regulatory process beyond what is currently undertaken for approval of Default Service rates, with a standardized approach to retail ratemaking. Unitil Electric further opined that the prospect of New Hampshire Electric utilities being able to self-supply directly from the ISO-NE markets may encourage more competitive pricing from wholesale suppliers (participating in RFP Default Service solicitations).

In a response to NHPUC questioning also as part of its February 17, 2023 submission, Unitil Electric also provided a breakdown of its residential default service prices by RPS and Administrative and General Expenses since December 2017, as well as the percentage of RPS

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met through Alternative Compliance Payments. The breakdown of Unitil Electric's Default Service rates is provided below:

Table 5: Breakdown of Unitil Electric's Residential Class Fixed Default Service (DS) Charge

				Supply	Provision	Internal		Consulting	DS Portion	Fixed	
			GIS	Related	for	Company		Outside	of Annual	Power	
		DS Supplier	Support	Working	Uncollected	Administrative	Legal	Service	PUC	Supply	
(\$/kWh)	Reconciliation	Charges	Payments	Capital	Accounts	Costs	Charges	Charges	Assessment	Charge	RPS
Dec 2017 - May 2018	\$0.00021	\$0.09493	\$0.00001	\$0.00029	\$0.00060	\$0.00006	\$0.00000	\$0.00000	\$0.00002	\$0.09612	\$0.00422
June 2018 - Nov 2018	(\$0.00090)	\$0.08026	\$0.00001	\$0.00026	\$0.00096	\$0.00006	\$0.00000	\$0.00000	\$0.00002	\$0.08067	\$0.00171
Dec 2018 - May 2019	(\$0.00084)	\$0.11579	\$0.00001	\$0.00043	\$0.00061	\$0.00006	\$0.00000	\$0.00000	\$0.00001	\$0.11607	\$0.00082
June 2019 - Nov 2019	(\$0.00160)	\$0.07751	\$0.00001	\$0.00031	\$0.00097	\$0.00006	\$0.00000	\$0.00000	\$0.00001	\$0.07727	(\$0.00013)
Dec 2019 - May 2020	(\$0.00160)	\$0.10050	\$0.00001	\$0.00036	\$0.00055	\$0.00006	\$0.00000	\$0.00000	\$0.00001	\$0.09989	\$0.00341
June 2020 - Nov 2020	(\$0.00031)	\$0.05917	\$0.00001	\$0.00011	\$0.00101	\$0.00006	\$0.00000	\$0.00000	\$0.00001	\$0.06006	\$0.00981
Dec 2020 - May 2021	(\$0.00031)	\$0.08198	\$0.00001	\$0.00016	\$0.00096	\$0.00006	\$0.00000	\$0.00000	\$0.00001	\$0.08287	\$0.01028
June 2021 - Nov 2021	(\$0.00186)	\$0.06389	\$0.00001	\$0.00012	\$0.00108	\$0.00006	\$0.00000	\$0.00000	\$0.00002	\$0.06332	\$0.00759
Dec 2021 - May 2022	(\$0.00187)	\$0.16811	\$0.00001	\$0.00033	\$0.00076	\$0.00006	\$0.00000	\$0.00000	\$0.00002	\$0.16742	\$0.00776
June 2022 - Nov 2022	(\$0.00166)	\$0.09737	\$0.00001	\$0.00020	\$0.00080	\$0.00006	\$0.00000	\$0.00000	\$0.00001	\$0.09679	\$0.00438

In its April 11 sub-component of the Electric Utilities' Joint Response, Unitil Electric provided data since 2018 and a supporting chart representing the load volume changes, as well as differences between the ISO-NE average monthly Real-Time market prices and the residential/small customer Default Service prices offered by Unitil Electric.

Table 6: Differential Between Unitil Electric (UES) Default Service (DS) and Market Prices for Same Load

		(a)	(b)	(c)	(d)	
Year	Rate Period	Residential DS Price (\$/kWh)	Market Price (\$/kWh)	UES Residential Load Volumes (kWh)	Delta of DS Price (a) and Market Price (b) (\$/kWh)	
2018	June-18 to Nov-18	\$0.07534	\$0.05411	240,846,024	\$0.02123	
2018	Dec-18 to May-19	\$0.10657	\$0.05074	222,144,232	\$0.05582	
2019	June-19 to Nov-19	\$0.07271	\$0.03688	227,978,471	\$0.03584	
	Dec-19 to May-20	\$0.09199	\$0.03544	228,126,705	\$0.05655	
2020	June-20 to Nov-20	\$0.05579	\$0.03268	253,450,696	\$0.02311	
2020	Dec-20 to May-21	\$0.07627	\$0.04967	236,314,991	\$0.02661	
2021	June-21 to Nov-21	\$0.06053	\$0.05503	252,722,135	\$0.00550	
	Dec-21 to May-22	\$0.14912	\$0.09680	242,248,195	\$0.05231	
2022	June-22 to Nov-22	\$0.09136	\$0.09026	246,695,991	\$0.00110	
	Dec-22 to Jul-23	\$0.23826	-	-	=	

*Source: Response to Record Request 1, April 11, 2023

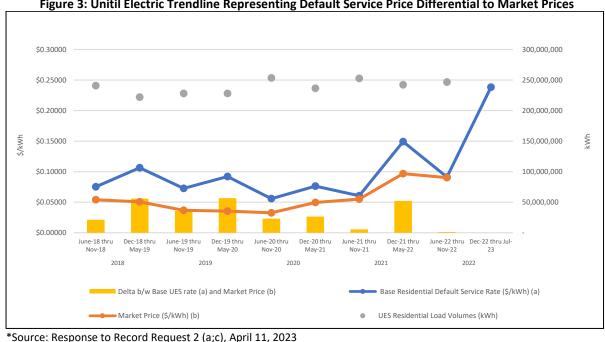


Figure 3: Unitil Electric Trendline Representing Default Service Price Differential to Market Prices

Unitil Electric's residential customer Default Service price secured through the second set of RFPs in 2021 was only about 0.6 cents higher, and that for the first set of 2022 RFPs was only about 0.1 cents higher, than the ISO-NE wholesale market price. For the remaining periods between 2018 and May 2022, this difference ranged 2.1 cents to 5.7 cents higher than the ISO-NE wholesale market prices that were available for the same load.

Load served ranged from roughly 953 million kWhs in 2018 (noting that Default Service was three months short and only offered from April rather than February, as was the case with Liberty) to 1,841 million kWhs for that same period. Any migration of customers, to or from Competitive Energy Suppliers, can be reflected through the change in load, as seen from the grey dots in the chart above.

In conclusion of this section, the April 11, 2023 joint response by all three Electric utilities underscored the need to recognize that the bids generating Default Service prices are made in advance of the relevant Default Service period. The difference in this time perspective impresses the need for the wholesale supplier to include a "premium" that factors in risks they assume two months in advance of providing a NHPUC-approved sixmonth unconditional full requirement obligation. These risks were listed as: (i) market volatility; (ii) weather; (iii) fuel availability; (iv) retail load migration; and, (v) other "unhedgeable" factors such as the Mystic Generating Station cost-of service pass-through costs and geopolitical events.

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³ In response to an NHPUC inquiry on March 17, 2023, each utility provided an elaborate dataset for their respective retail load migration. While this data is not presented in this report due to space limitations, NHPUC staff considers that migration trends can be broadly interpreted from Figures 1-3 provided earlier.

B. Summary of Other Participant Input

A number of entities filed for their participation in this Investigation, but did not provide input statements for the consideration of the NHPUC. The following entities provided Electric-related input, which is summarized below.

1. Colonial Power Group (Colonial)

Colonial, an energy consulting entity active in New Hampshire, Massachusetts, and Rhode Island in the field of community power aggregation, filed comments and responses to NHPUC inquiries on September 27, 2022 and February 17, 2023. Colonial's September 27 comments centered on their perspective of Default Service being properly viewed as "last resort" service for New Hampshire's electricity consumers, with community aggregation being a superior choice. Colonial stated, without further elaboration, that care should be taken not to create procurement constructs that unintentionally create incentives for New Hampshire customers to remain on Default Service. Colonial further advocated against overemphasis on rate stability and in favor of transparent Default Service procurement processes that produce price signals that are flexible, adaptive and reflective of the market, and incent changes in consumption behavior (e.g., conservation). In its February 17 response, Colonial cautioned against granting each utility flexibility to elect the approach to take for every procurement. Colonial expressed lack of confidence in utilities' abilities to appropriately use this flexibility, and that utilities do not possess actionable insights into future forward market trends to correctly determine whether to proceed with a full requirements procurement, or smaller procurements.

2. Community Power Coalition (CPC)

CPC, a New Hampshire non-profit entity serving as a coordinator of community aggregation efforts among certain municipalities and counties in New Hampshire, filed comments with the NHPUC on September 26, 2022 indicating general concurrence with the comments of the Office of the Consumer Advocate (see below) regarding Electric utility matters. CPC brought forward its own discrete issue to the NHPUC's attention. The matter raised was regarding RSA 362-A:9, XXI(a). This statute relates to whether exports to the electric grid by customer-generators taking default service should be accounted for as a reduction to what otherwise would be the wholesale load obligation of the load serving entity providing Default Service (absent such exports to the grid). This statute specifies a date for the conclusion of a NHPUC adjudication regarding this issue of June 15, 2022, which according to CPC, had not been addressed. CPC argued that any evaluation of Default Service reform should incorporate this question, as it could result in a reduction in projected Default Service load requirements, and by extension, Default Service costs.

3. Constellation NewEnergy, Inc. and Constellation Energy Generation, LLC (Constellation Companies)

The Constellation Companies, a group of affiliated wholesale and retail electricity supply, management, and marketing entities, filed a letter with the NHPUC on February 17,

2023, indicating that it had no comments regarding the Investigation, beyond the Constellation Companies' appreciation for the NHPUC's attention to the issues presented and to the goal of improving outcomes for New Hampshire consumers.

4. CRA International, Inc. and Northeastern University

On January 18, 2023, Dr. Margarita Patria, Ph.D. of CRA International d/b/a Charles River Associates, Inc., and of the Economics Department of Northeastern University in Boston, Massachusetts, filed comments indicating her expertise with Default Service RFP processes, including one-shot sealed-bid and descending-price clock auction formats, and her availability to respond to NHPUC inquiries regarding these issues.

5. Granite State Hydropower Association (GSHA)

GSHA, a trade association for the small-scale hydropower generation industry in New Hampshire, filed comments with the NHPUC on January 12, 2023. GSHA advocated that Electric utilities, and not wholesale suppliers providing service for Default Service contracts in New Hampshire, should continue to be responsible for REC/RPS compliance obligations, and should receive certainty on each year's compliance obligations as early as possible. GSHA also recommended that the NHPUC consider allowing the Electric utilities to blend medium- or long-term Power Purchase Agreements (PPA) to meet load obligations. They argued that PPAs protect against price volatility for both customers and generators, and that PPA solicitations can be bundled with REC procurement efforts.

6. Littleton Water and Light (Littleton)

Littleton, a municipal Electric utility not regulated by the NHPUC, provided responses to NHPUC inquiries on a voluntary basis on April 6, 2023 regarding its provision of Electric service to its customers. Littleton indicated that its service was procured largely through a blend of short-, medium-, and long-term contracts for requirements, with a limited amount of ISO-NE spot market purchases.

7. New Hampshire Department of Energy (DOE)

The DOE provided comments and a Technical Statement on February 1, 2023 in response to NHPUC inquiries, data responses on February 14, 2023, and a position statement on February 17, 2023. In its February 1 comments, the DOE indicated that it did not support a harmonized, or statewide, approach to energy procurement in New Hampshire, as the DOE expected that such an approach would be administratively inefficient. The DOE endorsed the concept of staggering RFP solicitations for Electric utilities' Default Service procurements to improve efficiencies under RFP time constraints and encouraged exploration of using procurement approaches such as descending-clock auctions. The DOE also highlighted the need for energy prices to reflect actual market realities, and accordingly did not support the implementation of a "laddering" framework that would mitigate market volatility as the expense of generating market signals.

Regarding "self-supply" through the ISO-NE spot market, the DOE viewed this to be properly viewed as a last option in any instance, only after two rounds of failed RFP-based Default Service solicitation by an Electric utility. The DOE also stated that RPS compliance should be the responsibility of the Electric utilities, not the wholesale suppliers of Default Service, as tying RPS more directly to Default Service management by third-party suppliers could result in inferior cost outcomes. Also with respect to RPS compliance, the DOE recommended maintaining the current June 15 timing for Class III REC obligation reviews.

8. New Hampshire Electric Cooperative (NHEC)

NHEC, a cooperative Electric utility not regulated by the NHPUC, provided responses to NHPUC inquiries on a voluntary basis on April 6, 2023 regarding its provision of Electric service to its customers. NHEC indicated that its service was procured largely through a blend of short-, medium-, and long-term contracts for requirements, with a limited amount of ISO-NE spot market purchases, with rate adjustments every 6 months.

9. NRG Retail Companies and Retail Energy Supply Association (RESA)

The NRG Retail Companies, a group of retail competitive electricity marketers, and RESA, a trade association for competitive electricity marketers, filed joint comments on January 23, 2023 regarding the Investigation. The joint commenters cautioned against the NHPUC implementing policy changes based on recent market outcomes, as the influence of such reforms on overall energy market conditions would be limited and could result in unintended consequences. These participants also advocated in favor of RFP-acquired, full requirements contracts for Default Service load as offering the best means for serving this class of customers, as properly transmitting market pricing signals, avoiding the shifting of risk to Default Service customers and/or the Electric utilities, and other benefits. The joint commenters pointed to a 2013 empirical study commissioned by the Rhode Island Public Utilities Commission in support of these contentions.

The joint commenters provided arguments against potential reforms such as laddering, "managed portfolio" approaches, long-term contracting, and the like, based on their perceived likelihood of risk-shifting to either the Electric utilities (in the form of potential stranded costs) or to the Default Service consumers themselves. The joint commenters did encourage the NHPUC to consider the potential for "sunsetting" Default Service in its current form, as, they contended, its continued dominance of the retail electricity market for small consumers presented an anti-competitive market distortion that Electricity Restructuring was designed to eliminate. The joint commenters did recommend shorter RFP review proceedings (under the conventional requirements contracts paradigm), RFP solicitations closer in time to actual service dates, and staggered procurements, as offering more accurate pricing data, and lower risk premiums charged by wholesale electric supplier RFP counterparties.

10. Office of the Consumer Advocate (OCA)

The OCA provided comments on September 26, 2022, and a position statement on February 17, 2023. In the initial September 26 comments, the OCA recommended that the NHPUC proceed with extreme caution in any approach to potentially reforming the Electric

Default Service approaches of New Hampshire utilities, to guard against potential unintended consequences. The OCA did point to the advent of community aggregation as offering the most hope for New Hampshire electricity consumers in terms of positive outcomes. In the interim, the OCA urged wide-ranging exploration of potential Default Service procurement reforms, and integration of Default Service planning requirements with Least-Cost Integrated Resource Planning for the Electric Utilities.

In its February 17, 2023 filing, the OCA presented a memorandum, or white paper, from its consultant, Synapse Energy Economics (Synapse), together with a summary of its latest positions. The OCA indicated that there was an urgent need for the NHPUC to address potential Default Service reform, through an adjudicative proceeding, due to highly unsatisfactory ("unconscionable") rate outcomes for residential consumers on Default Service. The OCA noted that, for instance, 81 percent of Eversource's residential customers relied on Default Service, with the high rates prevailing. The OCA indicated the potential that it would advocate for an "active portfolio management" approach such as that used by the NHEC (see above), and/or a statewide procurement approach for Default Service, with the state government as buying agent for the Electric utilities, as in Maine.

The Synapse white paper provided a wide-ranging overview of potential reforms to Default Service in New Hampshire.

It can be read here: https://www.puc.nh.gov/Regulatory/Docketbk/2022/22-053/LETTERS-MEMOS-TARIFFS/22-053 2023-02-17 OCA POSITION-STATEMENT.PDF

11. Wolfeboro Municipal Electric Department (Wolfeboro)

Wolfeboro, a municipal Electric utility not regulated by the NHPUC, provided responses to NHPUC inquiries on a voluntary basis on April 6, 2023, and indicated that it procures 100 percent of its load requirements for its customers with a single-supplier, load-following energy purchase contract.

II. GAS SERVICE

1. Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty (Liberty Gas)

In its September 26, 2022 initial comments, subsequent November 18, 2022 Technical Statement, and February 17, 2023 technical responses, Liberty Gas provided both a general overview of its current Cost of Gas (COG) procurement practices, which Liberty Gas stated were in compliance with all New Hampshire legal requirements, and its perspectives on the NHPUC inquiries regarding possible modifications to these practices. Liberty Gas stated that a regional or State-wide (New Hampshire) approach to gas procurement is not viable. Liberty Gas argued that each Gas distribution utility holds a unique portfolio of capacity contracts it must use to reliably deliver gas to its customers, with the capacity right of one utility of no likely use to another utility, based on specific geographic access points limited to each Gas utility.

Liberty Gas did express some confidence in the possibility that gas procurement timing could be adjusted to improve COG market outcomes for its customers. In a February 17, 2023 response to NHPUC inquiries, Liberty Gas stated that its physical hedging program to lock-in gas costs, as compared to the prevailing spot market prices at its primary interstate pipeline city-gate (Dracut), "netted a cost of approximately \$4.5 million over the 2019-2022 period." NHPUC staff interprets this statement to refer to a savings figure accrued to Liberty Gas customers from the physical hedge program. Also during the same period, Liberty Gas received approximately \$9.8 million in Asset Management Agreement fees through management of its Gas portfolio.

2. Northern Utilities, Inc. (Unitil Gas)

As an initial position, Unitil Gas stated in its September 26, 2022 comments that it did not identify any need to adjust its COG procurement structure or process, and that these processes complied with all New Hampshire legal requirements. In its November 18, 2022 Technical Statement, Unitil Gas cautioned against the NHPUC mandating a regional, multistate, or Statewide procurement process for COG, based on the specific geographic and load-planning attributes of the Unitil Gas system, and the lack of feasibility of combining these with other utilities, whether affiliated or unaffiliated. (Regarding the Unitil Gas affiliate in Maine, which is combined with the New Hampshire system, Unitil Gas urged caution on the part of the NHPUC in implementing reforms, to guard against unforeseen consequences on the management of the neighboring Maine system).

In its February 17, 2023 response to NHPUC inquiries, Unitil Gas stated that its current structure for Asset Management Agreements to be very successful. Unitil Gas also noted that while its hedging of winter gas supply (75% target) was ongoing, using methods such as underground gas storage and baseload pipeline purchases with futures-price locks, the utility was also exploring the possibility and appropriateness of hedging summer COG period supplies.

3. Department of Energy (DOE)

In its February 1, 2023 Technical Statement regarding Gas issues, the DOE stated that it generally agreed with the positions taken by Liberty Gas and Unitil Gas regarding COG matters, and expressed the DOE's willingness to explore potential technical enhancements to the COG process with the Gas utilities.

4. Office of the Consumer Advocate (OCA)

The OCA, in the COG context in its September 26 initial comments, recommended elimination of the fixed-price option in Gas utilities' COG rate offerings, as representing an inequitable shifting of risk between classes of Gas customers.