**CONNECTICUT PUBLIC UTILITIES REGULATORY AUTHORITY**

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| Application of the Connecticut Light and Power Company d/b/a Eversource Energy to Amend its Rate Schedules | Docket No. 26-05-10 |

# DIRECT TESTIMONY

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**DIRECT TESTIMONY**

**EBEN PERKINS**

## I. INTRODUCTION

**Q. Please state your name, position, and business address.**

A. My name is Eben Perkins. My business address is 148 Middle Street, Portland, ME 04101.

Q. **By whom are you employed and in what position?**

A. I am the Chief Strategy Officer of Competitive Energy Services, LLC.

**Q. Please describe Competitive Energy Services, LLC.**

A. Competitive Energy Services, LLC ("CES") is a full-service energy consulting company founded in 2000 and based in Portland, Maine. CES provides strategic energy procurement and advisory services to a wide range of end users across the commercial, industrial, and public sectors. Our clients, many of whom have been with CES since the company's inception, include colleges and universities, manufacturers, state agencies, cities and towns, healthcare providers, technology firms, and real estate management companies.

CES works with our customers to develop, execute, and manage energy purchasing strategies that help end users hedge market risk, manage operational costs, and meet sustainability goals across a range of energy sources and environmental attributes. We help customers evaluate and pursue onsite and offsite energy project opportunities, including onsite generation, energy efficiency measures, and energy storage; we support customers navigating the journey to reduce their greenhouse gas emissions through renewable electricity and alternative fuel procurement; and we assist end users in developing strategic investment plans to implement

efficient, affordable, low-carbon energy systems for facilities and campuses. Additional information about CES can be found on our website at www.competitive-energy.com.

**Q. Mr. Perkins, please describe your educational and professional experience.**

A. I received my B.A. from Pomona College. I have worked in the energy industry for the last 15 years in a variety of roles, holding positions in regulated and deregulated areas of the electric sector. My professional experience includes consulting for electric utilities across the U.S. on energy efficiency program development, evaluation, and optimization with Energy Market Innovations, based in Seattle, WA; advising electric utilities and public entities on high-speed telecommunications and networking solutions to support smart grid and broadband infrastructure deployment with Tilson, based in Portland, ME; planning and managing smart grid initiatives across Iberdrola's regulated electric utilities in the Northeast U.S., based in Augusta, ME; and helping end users across the U.S. navigate energy markets, emerging technology opportunities, and strategic energy investment planning in my current role with CES.

Prior to joining CES, I served as Manager of Smart Grid Planning and Programs for Iberdrola USA from 2014 to 2016. In this role I worked with team members at Central Maine Power Company, New York State Electric & Gas Company, and Rochester Gas & Electric Company to develop, implement, and evaluate initiatives to leverage high-speed telecom, advanced metering infrastructure, and IT solutions to improve the utilities' grid planning and operations functions and to maximize the value of ratepayer investment in smart grid technologies. My work primarily focused on non-wires alternatives ("NWAs"), including assessment of Central Maine Power Company's NWA pilot project in Boothbay, Maine and NWA development in New York as part of the state's Reforming the Energy Vision initiative.

I currently serve as Chief Strategy Officer on CES's executive management team. In this role I manage CES's consulting practice, spearhead planning for the company's continued growth, and oversee the firm's efforts to expand service offerings to our customers. My resume is included in Exhibit UCONN-1.

**Q. Have you testified before the Connecticut Public Utilities Regulatory Authority or other regulatory bodies in New England?**

A. I have not previously testified before the Connecticut Public Utilities Regulatory Authority ("PURA"). In Massachusetts, I testified before the Massachusetts Department of Public Utilities ("DPU") in Docket No. 22-22, *Petition of NSTAR Electric Company for Approval of a General Increase in Base Distribution Rates for Electric Service and a Performance-Based Ratemaking Plan*. I provided testimony in this proceeding on behalf of the University of Massachusetts System.

In Maine, I testified before the Maine Public Utilities Commission in a number of rate cases and rate design proceedings including Docket No. 2021-00325 *Commission Initiated Investigation Into Transmission and Utility Rate Design To Promote State Policies*; Docket No. 2022-00152, *Request for Approval of a Rate Change Pertaining to Central Maine Power Company*; and Docket No. 2024-00137, *Commission Initiated Investigation into Stranded Cost Rate Design*. I provided testimony in these proceedings on behalf of CES.

In New Hampshire, I testified before the New Hampshire Public Utilities Commission ("NHPUC") in Docket No. DE 23-039, *Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Request for Change in Distribution Rates*, and Docket No. DE 24-070, *Public Service Company of New Hampshire d/b/a Eversource Energy Request for Change in Rates*. In Docket No. DE 23-039, I provided testimony on behalf of Dartmouth College. In Docket No. DE 24-070, I provided testimony on behalf of a consortium of large customers in New Hampshire including

the University System of New Hampshire, Pike Industries, Inc., and Monadnock Paper Mills, Inc., who intervened in Eversource's distribution rate case to advocate for rate design modernization for large customer classes.

**Q. On whose behalf are you submitting testimony in this proceeding?**

A. I am submitting testimony on behalf of the University of Connecticut and the UConn Health System.

**Q. Please provide an overview of the University of Connecticut and the UConn Health System.**

A. The University of Connecticut ("UConn") is a public land-grant research university system that operates five academic campuses across Connecticut, serves more than 34,000 students, and is a critical economic engine and healthcare provider for the state. UConn is dedicated to excellence, and through its focus on teaching and learning, the University helps every student grow intellectually and become a contributing member of the state, national, and world communities. As Connecticut's flagship public university, UConn promotes the health and well-being of Connecticut's citizens through enhancing the social, economic, cultural, and natural environments of the state and beyond.

UConn's academic campuses encompass nearly 17 million square feet of facilities across more than 4,200 acres of property. UConn's flagship campus is in Storrs, and the University operates regional campuses in Avery Point, Hartford, Stamford, and Waterbury. UConn Health in Farmington hosts the Schools of Medicine and Dental Medicine, graduate programs, clinics, and John Dempsey Hospital. UConn Health's statewide presence recently expanded through the addition of UConn Health Waterbury Hospital to the UConn Health Community Network. This nonprofit network connects community-based healthcare providers with the clinical, academic,

research, and educational capabilities of the state's public academic medical center, while preserving the hospital's local identity and community-focused operations.

UConn's facilities management team operates and maintains the University's and UConn Health's footprint across the state, with a focus on delivering efficient, cost-effective, and sustainable campus operations. UConn maintains an array of campus energy infrastructure to heat, cool, and power its facilities, including highly efficient combined heat and power, fuel cells, and onsite solar photovoltaics. UConn is constantly evaluating new energy technologies and management strategies to support its core mission and help Connecticut advance its decarbonization goals.

**Q. Please summarize your testimony.**

A. My testimony is organized into five sections, as described below:

- Section I provides an introduction.
- Section II summarizes the concerns that I have with the rate design proposal submitted by Connecticut Light and Power ("Eversource" or the "Company") in this proceeding and recommends two actions to address these concerns. The Company's proposal to maintain its status quo transmission rate design and distribution rate design for large customers in the Rate 55, Rate 56, Rate 57, and Rate 58 classes contradicts the analysis and testimony provided by Eversource's expert rate design witness, Ms. Amparo Nieto. To have Eversource's rate design for large customers support the major ratemaking objectives and key principles articulated by Ms. Nieto, PURA should require the Company to: 1) introduce a voluntary, opt-in coincident peak transmission ("CPT") rate option for large customers, which is an established transmission rate design solution that has been implemented by a

number of other electric utilities in New England including Eversource in its service territories outside Connecticut, and 2) direct Eversource to examine time-of-day and seasonal differentiation of distribution demand charges for large customers and propose a tariff supported by class -specific evidence.

- Section III explains how Eversource's transmission rate design for its large customers is outdated, disconnected from the Company's underlying cost of providing transmission service to its customers, and contradicts principles of efficiency, fairness, and simplicity. Section III details the proposed terms for a voluntary, opt-in CPT rate option that would address these shortcomings and send a price signal that incentivizes large customers to reduce their grid demand during periods of coincident peak demand on Eversource's transmission system that drives the need for system expansion.
- Section IV reviews the various examples of electric utilities in New England that have implemented the recommended CPT rate option for large customers, including Eversource in Massachusetts, National Grid in Massachusetts, Central Maine Power Company in Maine, and Liberty Utilities in New Hampshire. Section IV also provides an overview of the proposal currently being reviewed by the NHPUC which would have Eversource implement a CPT rate option in New Hampshire for a limited number of large customers including the University System of New Hampshire.
- Section V describes Eversource's current distribution rate design for the Company's large customers and explains why core components of the rate design do not support the major ratemaking objectives and principles articulated by Ms. Nieto. Section V calls for an evidence-based review of Eversource's distribution demand charges for large customers

that aligns with Ms. Nieto's findings and would support beneficial electrification measures among Eversource's large customers in the coming years.

**Q. Are you sponsoring any exhibits in addition to your testimony?**

A. Yes, in addition to this testimony, we are sponsoring the following exhibits:

- Exhibit UCONN-1, Mr. Perkins' Resume.
- Exhibit UCONN-2, Rate Terms and Conditions of Existing Rate CPT Options in Massachusetts, Maine, and New Hampshire:
  - Eversource Energy Western Massachusetts Extra Large General Service: Rate T-5;
  - Eversource Energy Cambridge Service Area Large General Service: Rate G-3;
  - Eversource Energy Eastern Massachusetts Greater Boston Service Area Large General Service: Rate G-3;
  - Eversource Energy Eastern Massachusetts South Shore, Cape Cod & Martha's Vineyard Service Area Large General Service: Rate G-3;
  - Eversource Energy Western Massachusetts Large General Service: Rate G-3;
  - Massachusetts Electric Company General Service Time-of-Use: Rate G-3;
  - Central Maine Power Company Optional Targeted Service Rate: B-CPT General Service Coincident Peak;
  - Liberty Utilities Rate G-1 General Service Time-of-Use.
- Exhibit UCONN-3, Eversource Rate LG CPT Proposed Tariff Terms, August 21, 2026, NHPUC Docket No. DE 26-042.

## II. PURPOSE OF TESTIMONY: CONCLUSIONS & RECOMMENDATIONS

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

A. The purpose of this testimony is two-fold: 1) to explain why Eversource's proposal to maintain its existing rate design for large customers is unacceptable and ignores key findings of the Company's expert rate design witness, Ms. Amparo Nieto, and 2) to propose two improvements that would help modernize the Company's rate design for its large customers in a manner that supports ratemaking principles of efficiency, equity, and simplicity and would help preserve electricity affordability for all Eversource customers as Connecticut works to transition to a decarbonized economy in the coming years.

**Q. Please explain what you mean by Ms. Amparo Nieto's key findings.**

A. In her testimony, Ms. Nieto describes a Marginal Cost of Distribution Service study that she performed and details how rate designs that use marginal cost information and follow marginal cost principles are best suited to support three major ratemaking objectives:[1] 1) fostering economically-efficient energy usage decisions, 2) ensuring equitable rates or mitigating intra-class cross-subsidies over time, and 3) preserving customer affordability in the transition to a decarbonized sector.

On the first objective, Ms. Nieto argues that customers are able to make more informed decisions that align with the provision of reliable service at the lowest possible cost when the corresponding rates signal the true underlying cost impact from incremental usage.[2] On the second objective, Ms. Nieto argues that marginal-cost based tariffs help prevent increases in inter and intra-class cross subsidies as individual customers change their consumption because these rates

[1] Exhibit CLP-MCOS-1, page 3, lines 8-9.
[2] Exhibit CLP-MCOS-1, page 3, lines 11-14.

generally help track ongoing changes in the incremental cost to serve, particularly when differentiating by season.[3] On the third objective, Ms. Nieto argues that when utility charges are set well above marginal unit costs, customers that add usage will tend to experience disproportionally higher bills that exceed the cost of incremental service.[4]

**Q. Do you agree with Ms. Nieto?**

A. Yes and no. I agree that these three major ratemaking objectives are critical and should guide Eversource's rate design for all customer classes. The problem is that these objectives are not sufficiently reflected in the Company's existing rate design for large customers in Connecticut. In her testimony, Ms. Nieto concludes "I have reviewed the Company's rate proposals and in my opinion the direction of changes proposed aligns with what the MCOS suggests."[5] "The proposals recognize that rates should gradually be rebalanced to seek improved economic efficiency and equity."[6] Here, Ms. Nieto misses the mark. For large customers, there is no gradual rebalancing of rate design. There is simply status quo, which, as we detail in the coming sections, includes blatant examples of contradiction to the three major ratemaking objectives described by Ms. Nieto.

**Q. How does Eversource's existing transmission rate design for its large customers not support the three major ratemaking objectives articulated by Ms. Nieto?**

A. Eversource assesses a monthly transmission demand charge to each large customer in a manner that is disconnected from the cost that the Company incurs to provide transmission service to its large customers. ISO New England ("ISO-NE") allocates regional transmission costs and

[3] Exhibit CLP-MCOS-1, page 3, lines 17-20.
[4] Exhibit CLP-MCOS-1, page 4, lines 1-4.
[5] Exhibit CLP-MCOS-1, page 17, lines 3-4.
[6] Exhibit CLP-MCOS-1, page 17, lines 5-7.

associated reliability costs to Eversource and the other transmission owners throughout the region based on each transmission owner's monthly coincident peak load.

Eversource then recovers and reconciles this wholesale transmission cost through its retail rates.[7] The Company uses a 12 coincident peak ("12CP") allocation factor to assign transmission revenue requirements to each rate class. According to Eversource, this methodology is designed to reflect the methodology used in the development of the ISO-NE Open Access Transmission Tariff ("OATT") revenue requirement and the resulting charges billed to the Company for transmission service under the OATT.[8]

Rather than charging large customers for what they contribute to grid demand during Eversource's 12CP hours in a year, which determines the transmission cost that ISO-NE allocates to Eversource for these customers, the Company bills each large customer based on its maximum 30-minute grid demand measured across nearly 25% of hours in a monthly billing cycle. Contrary to Ms. Nieto's first major ratemaking objective, the existing rate design does not foster economically efficient energy usage decisions by customers. Rather than incentivizing targeted demand management efforts by customers during periods that could set Eversource's CP load hour in a month, Eversource's transmission rate design requires a large customer to manage its grid demand across a broad window on every weekday.

In addition to diluting the price signal for large customers to reduce grid demand during Eversource's 12CP hours, the Company's existing transmission rate design results in cost shifting within each large customer class. Large customers that have lower grid demand during Eversource's 12CP hours, compared to their billed kilovolt-ampere ("kVA") demand that

[7] Eversource's most recent RAM filing was made in PURA Docket No. 26-01-03.
[8] See Eversource response to UCONN-024.

Eversource captures from a customer's maximum 30-minute on-peak grid demand, subsidize other large customers by enabling Eversource to lower the effective transmission rate for all customers in the class. This disparity should be examined under Ms. Nieto's second major ratemaking objective: to ensure equitable rates and mitigate intra-class cross-subsidies over time.

If, despite Eversource's current transmission rate design, a large customer reduces its grid demand during Eversource's peak load hour in a month through onsite generation, efficiency measures, manual load curtailment, and/or behind-the-meter energy storage (*i.e.*, load shifting), the customer may realize little retail transmission savings unless the reduction coincidentally lowers the customer's maximum 30-minute grid demand measured across all on-peak hours in the month. Separate distributed energy resource ("DER") incentives may be used to support investment in these demand management measures, but their costs are recovered through public-benefit charges which impacts total electricity rates. Jumping to a DER incentive offering without first optimizing price signals sent through existing rates is a recipe for inefficiency and higher-than-necessesary public-benefit charges over time.

Eversource's existing transmission rate design has been in place since 2006.[9] The rate design is out of date, especially considering the widespread development of distributed solar generation throughout Connecticut over the last 20 years. The rate design does not support investment by large customers in modern forms of onsite generation and load shifting technologies, nor does it incentivize operational changes that enable large customers to strategically reduce their contribution to peak demand on Eversource's transmission system. Because Eversource's transmission rate design does not create the appropriate incentive for large

[9] See Eversource's response to UCONN-001.

customers to help themselves reduce the Company's coincident peak demand, over time Eversource's peak demand will be higher than it otherwise should be, driving the need for earlier or more significant transmission system expansion and resulting in higher transmission costs for all ratepayers. This outcome is contrary to Ms. Nieto's third major ratemaking objective: to preserve customer affordability in the transition to a decarbonized sector.

**Q. How does Eversource's distribution rate design for its large customers not support the three major ratemaking objectives articulated by Ms. Nieto?**

A. Eversource assesses a monthly distribution demand charge to each large customer based on a trailing 11-month ratchet formula that lacks time-of-use differentiation and seasonal differentiation. Eversource is proposing to maintain this rate design without modification.

Ms. Nieto concludes that time-differentiated distribution rates must keep in mind the system-wide distribution hourly marginal cost patterns.[10] Eversource contends that this finding is irrelevant to distribution rate design for large customers.[11] The lack of time-of-use periods in Eversource's distribution demand charges to large customers severs the price signal in distribution rates from the true underlying cost impact from incremental usage.

Ms. Nieto also concludes that seasonal differentiation is necessary to improve price signals in rate design.[12] She argues that continuing with year-round distribution time-of-use periods would not support efficient adoption of heat pump rates.[13] The lack of seasonality in the design and assessment of distribution demand charges for large customers contradicts cost causation principles and Eversource's stated goal to support beneficial electrification through rate design.

[10] Exhibit CLP-MCOS-1, page 17, lines 10-11.
[11] See Eversource response to UCONN-002.
[12] Exhibit CLP-MCOS-1, page 18, lines 4-6.
[13] Exhibit CLP-MCOS-1, page 18, lines 13-14.

Eversource makes no mention of how large customers can contribute to beneficial electrification, focusing its rate design updates solely on residential heat pumps. This disconnect is at odds with Connecticut's goal to advance economywide decarbonization in the coming years.

**Q. How do you recommend that PURA address these issues?**

A. I have two recommendations that would help improve Eversource's rate design for large customers and would support the three major ratemaking objectives articulated by Ms. Nieto.

My first recommendation is that PURA requires Eversource to introduce a CPT rate option for the Company's large customers in Connecticut. This transmission rate design solution has been offered to Eversource's large customers in Western Massachusetts since 2014, has been offered to Eversource's large customers in Eastern Massachusetts since 2023, and is expected to be introduced in Eversource's New Hampshire service territory in 2027. The next two sections of my testimony detail the merits of the CPT rate option, the proposed terms for implementing the CPT rate option in Eversource's Connecticut service territory, and the precedent for offering this rate option to large customers elsewhere in New England.

My second recommendation is that PURA directs Eversource to examine time-of-day differentiation and seasonal differentiation in the Company's distribution rate design for its large customers and to propose necessary changes across its non-residential customer classes. One option is for PURA to initiate a follow-up investigation following this proceeding that examines whether each electric utility's rate design supports and advances Connecticut's policies related to beneficial electrification and decarbonization. In Maine, this type of effort was recently conducted by the Maine Public Utilities Commission as part of Docket No. 2021-00325, *Commission Initiated Investigation into Transmission and Distribution Utility Rate Design to Promote State Policies.* The final section of our testimony details our concerns with Eversource only focusing on

distribution rate design modernization for its residential class, and how this ignores the potential to support beneficial electrification measures that may be considered by larger customers.

**Q. Do you anticipate that Eversource will oppose your recommendations?**

A. Yes. Based on the Company's response to UCONN-014 that Eversource does not support a CPT rate design, I expect that Eversource will likely oppose my recommendations. In DPU Docket No. 22-22, Eversource opposed the expansion of the CPT rate option to its large customers in Eastern Massachusetts. In NHPUC Docket No. DE 24-070, Eversource opposed the implementation of the CPT rate option to its large customers in New Hampshire.

**Q. Is a distribution rate case like this proceeding the appropriate venue for transmission rate design to be considered and debated?**

A. Absolutely. The rate design analysis and testimony provided by Ms. Nieto is comprehensive. Unlike the Company's annual rate reconciliation filing, in which PURA reviews the prudency of incurred and forecasted costs for inclusion in formula rates, the rate design testimony included in Eversource's initial filing includes a detailed examination of ratemaking principles, an updated marginal cost of service study, and significant new rate offerings.

Furthermore, in presenting its case on the affordability challenge and options to tackle the issue, Eversource's leadership panel makes it clear that the full customer bill must be considered. If Eversource is allowed to use a distribution rate case as a venue to advocate for expanded utility-ownership of generation assets, as the Company has done in its initial filing,[14] transmission rate design should certainly not be off the table for consideration. This proceeding is the appropriate time and place to consider modernizing Eversource's transmission rate design.

[14] Exhibit CLP-ELP-1, page 21, lines 14-20.

## III. EVERSOURCE TRANSMISSION RATE DESIGN

**Q. Please explain which Eversource customer classes you believe should be considered "large customers" for the purpose of introducing the CPT rate option.**

A. Eversource's Rate 55, Rate 56, Rate 57, and Rate 58 customer classes include non-residential ratepayers that should be considered large customers for the purpose of introducing the CPT rate option detailed in this section. These four customer classes cover non-residential customers of Eversource with grid demand of at least 350 kW and share a common distribution and transmission rate design. Furthermore, these rate classes are active and open to new customers, unlike Eversource's Rate 39 for large interruptible service and Rate 41 for large church and school electric service. CPT eligibility for these legacy rate classes should be considered separately.

Eversource's Rate 55 provides for intermediate time-of-day electric service to manufacturers that have grid demand equal to or greater than 350 kW, but less than 1,000 kW, and that meet certain other service requirements.[15] Eversource's Rate 56 provides for intermediate time-of-day electric service to non-manufacturers that have grid demand equal to or greater than 350 kW but less than 1,000 kW. For either rate, a customer whose maximum demand does not exceed 350 kW for 12 consecutive months, or whose prospective maximum demand shall not exceed 350 kW due to demonstrable conservation and load management measures may elect to take service under Rate 35 or Rate 37.

[15] Rate 55 is applicable to customers (1) who are manufacturers, as defined by Connecticut General Statute 12-412 (3) (A) (ii) and (iii), or who are engaged in manufacturing as defined in PA 92-193 amending Subsections 12-81(72) and 12-94c, or who are classified as supermarkets located in distressed municipalities, as defined by Connecticut General Statute Section 32-9p (b), and have an annual load factor of 65 percent or greater and agree to participate or have participated in the Company's conservation programs, and (2) are taking service on the effective date of this rate whose demand equaled or exceeded in the last twelve months, or shall equal or exceed in the next twelve months, 350 kW but less than 1,000 kW.

Eversource's Rate 57 provides for large time-of-day electric service to manufacturers whose demand has previously equaled or exceeded 1,000 kW and who meet certain other service requirements.[16] Eversource's Rate 58 provides for large time-of-day electric service to non-manufacturers whose demand has previously equaled or exceeded 1,000 kW. For either rate, if a customer's prospective maximum demand is below 1,000 kW due to demonstrable conservation and load management measures, then the customer may take service immediately under the appropriate general service rate.

**Q. How does Eversource currently assess transmission charges to these large customers?**

A. The monthly transmission demand charge for large customers, which Eversource refers to as production/transmission demand in its service tariff and on customer bills, is based on a customer's highest average 30-minute kVA demand recorded during the billing month during the Company's "on-peak" hours. Eversource's on-peak hours include the hours of 1 P.M. to 9 P.M. on weekdays during Daylight Saving Time and the hours of 12 P.M. to 8 P.M. on weekdays during Eastern Standard Time. For 2026, these on-peak hours cover approximately 24% of total hours in each calendar month on average.

Rate 55 customers currently pay $12.00 per kVA of billed production/transmission demand. Rate 56 customers currently pay $14.93 per kVA of billed production/transmission demand. Rate

[16] Rate 57 is applicable to customers (1) who are manufacturers, as defined by Connecticut General Statute 12-412 (3) (A) (ii) and (iii), or who are engaged in manufacturing as defined in PA 92-193 amending Subsections 12-81 (72) and 12-94c, or who are classified as supermarkets located in distressed municipalities, as defined by Connecticut General Statute Section 32-9p (b), and have an annual load factor of 65 percent or greater and agree to participate or have participated in the Company's conservation programs, and (2) are taking service on the effective date of this rate whose demand has previously equaled or exceeded 1,000 kW. Customers whose projected demand is expected to exceed 1,000 kW must demonstrate that this level of demand is not transitory.

57 customers currently pay $13.13 per kVA of billed production/transmission demand. Rate 58 customers currently pay $17.04 per kVA of billed production/transmission demand.

**Q. Please explain the components of Eversource's transmission costs to serve customers.**

A. Eversource's transmission costs are regulated and authorized by the Federal Energy Regulatory Commission ("FERC"). Charges that may enter the Company's transmission-related revenue requirement include several separately tariffed services under the ISO-NE OATT, including Regional Network Service ("RNS") costs, Scheduling and Dispatch ("S&D") costs, Reliability costs, and Local Network Service ("LNS") costs.

RNS costs reflect the cost for the provision of regional transmission service across all ISO-NE participating states and cover the cost of specific facilities referred to as Pool Transmission Facilities ("PTFs"). RNS costs are billed to all entities in the region that have RNS load responsibility, such as Eversource's Connecticut operating company, The Connecticut Light and Power Company ("CL&P"). The applicable RNS charge equals the annually set rate, expressed in dollars per kW-month, multiplied by the relevant Monthly Regional Network Load. Eversource's response to UCONN-005 includes the monthly peak load and timestamp of Eversource's 12CP hours in 2023, 2024, and 2025 that the Company reported to ISO-NE for the purpose of RNS cost allocation.

S&D costs are associated with services provided by ISO-NE related to scheduling, system control, and dispatch services. LNS costs reflect the cost for provision of local transmission service. Reliability costs include costs, such as black start and volt-ampere reactive ("VAR") support, that are related to electric system reliability. These reliability costs are billed to all entities in the region that have RNS load responsibility based on their monthly peak load.

LNS costs cover the cost of non-PTF transmission facilities. Each Eversource operating company's LNS costs are billed to customers on a state-by-state basis. Eversource's LNS costs for CL&P are only billed to the Company's customers in Connecticut.

**Q. Does Eversource have a fixed cost for providing transmission service to customers?**

A. No. Eversource's costs of providing transmission service are not fixed due to the manner in which ISO-NE charges Eversource for its share of regional RNS costs, S&D costs, and Reliability costs each year. If an Eversource customer does not impose grid demand on Eversource's system during one or more of Eversource's 12CP hours in a year, Eversource's share of regional RNS costs, S&D costs, and Reliability costs are directly impacted.

In other words, if a customer reduces or eliminates its grid demand during one or more of Eversource's 12 CP hours in a year through energy efficiency measures, manual load curtailment actions, the installation and operation of onsite behind-the-meter generation, and/or the installation and discharging of behind-the-meter energy storage (i.e., load shifting), Eversource's Monthly Regional Network Load used in ISO-NE's 12CP allocation formula will be reduced, all else being equal.

**Q. If a large customer reduces or eliminates its grid demand during one or more of Eversource's 12CP hours, does the customer see a corresponding reduction in its transmission demand charge(s) from Eversource?**

A. No. Eversource's current transmission rate design for large customers fails to create a strong, direct connection to the Company's underlying cost of providing transmission service. As previously discussed, the monthly transmission demand charge that Eversource assesses to a large customer is based on a single 30-minute demand reading that is measured across nearly 25% of total hours in the month. This on-peak period is far broader than the single peak load hour each

month that dictates ISO-NE's allocation of regional transmission costs to Eversource. This billing methodology has been in place since 2006, and, according to Ms. Nieto, is out of date.[17]

Eversource charges large customers for transmission service based on kVA demand units rather than kilowatt ("kW") demand units, which is what is used to measure the hourly Regional Network Load underlying the RNS charge. This billing methodology is disconnected from what drives transmission costs for Eversource: a customer's average 60-minute grid demand measured in kW during the Company's 12 CP hours. Examining Eversource's tariffs for smaller non-residential customers, it is notable that Eversource's transmission demand charges for Rate 27 customers and Rate 37 customers are based on a customer's maximum 30-minute on-peak kW demand, not kVA readings.

**Q. Is Eversource's transmission rate design for large customers easy to understand?**

A. No. In CES's experience, the one-hour shift in the on-peak period around Daylight Saving Time is particularly confusing for large customers. It is puzzling that Eversource maintains a different on-peak period for residential time-of-use customers compared to the Company's on-peak period for nonresidential customers. The on-peak period for Rate 7 residential time-of-use customers includes the weekday hours of 12 P.M. to 8 P.M. Eastern Prevailing Time, whereas the on-peak period for non-residential time-of-use customers under Rates 27, 27A, 37, 39, 41, 55, 56, 57, 58, EV-M, EV-L, and EV-MHD includes the hours of 12 P.M. to 8 P.M. on weekdays during Eastern Standard Time but changes to the hours of 1 P.M. to 9 P.M. on weekdays during Daylight Saving Time. The basis for having different on-peak periods by customer type does not align with the facts presented and contradicts sound ratemaking principles.

[17] Exhibit CLP-MCOS-1, page 17, lines 10-17.

**Q. What are the consequences of these shortcomings?**

A. The three major ratemaking objectives articulated by Ms. Nieto are not achieved. Eversource's transmission rate design does not foster economically efficient energy usage decisions by large customers, does not ensure equitable rates and mitigation of intra-class cross-subsidies within the large customer classes, and does not help preserve customer affordability in the transition to a decarbonized sector. Eversource's customers receive a suboptimal price signal that does not properly incentivize reductions in customer grid demand during the Company's 12 CP hours. Without such an incentive, Eversource's service pricing does not reflect its actual costs and the Company's transmission system could need to be expanded earlier and less efficiently as electric loads and peak demand grow over time due to beneficial electrification measures driven by Connecticut's push towards economywide decarbonization.

**Q. Please expand on how transmission rate design can support the preservation of customer affordability in the transition to a decarbonized Connecticut.**

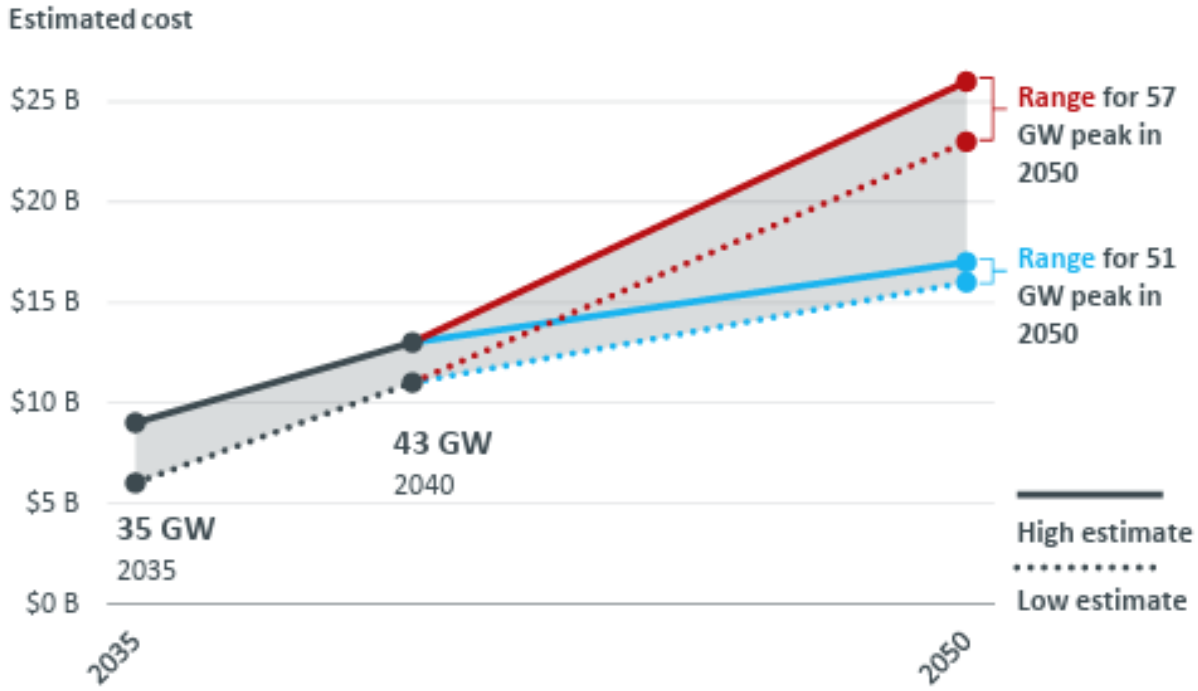
A. ISO-NE's 2050 Transmission Study concludes that reducing peak load in the coming years can reduce regional transmission expansion needs by billions of dollars:

> Increases in load become significantly more expensive (with regard to transmission costs) as peak load levels increase. This is especially true at levels above ~51 GW of load. Increases in load at peak load levels below 51 GW do increase costs (roughly $0.75 billion per GW of load added from 28 GW to 51 GW), but these increases are small when compared to the increase in costs above 51 GW of load (roughly $1.5 billion per GW of load added from 51 GW to 57 GW).[18]

Figure 1 below presents the projected cost required for regional transmission expansion to reliably serve load in each year studied by ISO-NE:

[18] ISO New England, "2050 Transmission Study" (February 12, 2024) at 16 https://www.iso-ne.com/system-planning/transmission-planning/longer-term-transmission-studies.

Figure 1. ISO-NE 2050 Transmission Study: Forecasted Benefit of Reducing Future Peak Load




In the 2050 Transmission Study, ISO-NE directly calls out demand response and peak shaving programs as primary solutions that can help reduce future transmission costs for ratepayers across New England. ISO-NE concludes that demand response and peak shaving can shift customer load to times of lower demand, which can help maintain a lower peak load level on the regional transmission system and reduce future build out of the system:

> Alternately, more aggressive demand response (when customers reduce their electrical consumption for compensation) and peak shaving programs (e.g., smart thermostats that reduce the set temperature during a winter peak time) that could shift load to times of lower demand may also help maintain a 51 GW peak load level, thereby reducing transmission costs.
>
> Public education and involvement may be an important factor in modifying consumer behavior to reduce electricity demand at key times. Consumer awareness of the nature and timing of peak load may help consumers participate in the reduction of peak loads to more manageable levels, which could save billions of dollars in transmission system upgrade costs.[19]

[19] ISO New England, "2050 Transmission Study" (February 12, 2024) at 17 https://www.iso-ne.com/system-planning/transmission-planning/longer-term-transmission-studies.

**Q. Does Eversource acknowledge that demand management actions by customers to reduce Eversource's peak load can benefit other ratepayers?**

A. Yes. In response to UCONN-026, Eversource states "The longer-term benefit to other customers is clearly associated with load reductions that coincide with transmission system's annual peak since this lower peak load may defer investment planned on the transmission to meet annual peak load growth, i.e., long-term capacity expansion needs."

**Q. How can a large customer like UConn contribute to this effort to shift customer load to times of lower demand and defer expansion of Eversource's transmission system?**

A. In addition to behind-the-meter generation, there are a range of energy storage technologies, including lithium-ion batteries and thermal storage systems, that large customers can install and operate to shift their grid demand to off-peak periods and to reduce their contribution to transmission loads when Eversource's system experiences peak demand. The battery storage market in New England has advanced rapidly over the last decade and large customers now have access to a range of behind-the-meter battery storage technology offerings and operations services. This market continues to mature.

**Q. How could thermal storage be used in a district energy system to shift campus load?**

A. Chilled water storage is an option that is increasingly being adopted by large universities across the country. In 2025, the University of Massachusetts ("UMass") Amherst completed and commissioned a thermal energy storage ("TES") system on its campus in Amherst, MA that can store chilled water in a 2.2 million-gallon above ground tank. In the same year, the University of

New Hampshire ("UNH") also completed and commissioned a TES system with 1.4 million gallons of chilled water storage capacity at its flagship campus in Durham, NH.[20]

Each institution installed a TES to satisfy increasing cooling needs in lieu of constructing new chiller capacity on campus. Similar to the non-wires alternatives that enable electric utilities to maximize the use of existing grid capacity rather than pursue capacity expansion, TES technology allows campuses with district cooling to more efficiently use existing campus energy infrastructure while reducing grid demand on Eversource's transmission system on hot summer afternoons that drive capacity expansion needs.

A TES is designed to operate as a "water battery"; instead of installing a new chiller plant to produce additional energy for space cooling, the TES tank will store chilled water produced by the existing chiller plants during off-peak nighttime hours, when it is more efficient to cool water. The chilled water can then be released for use in campus air conditioning during the following day, reducing campus grid demand when Eversource's transmission system is most constrained on peak summer days. The TES technology is flexible; it can be adapted to also provide hot water storage in the future during the winter months as large campuses transition their district heating systems from steam to lower-temperature hot water to be compatible with air-source and/or ground-source heat pumps.

**Q. How does Eversource's existing transmission rate design affect the viability of using behind-the-meter energy storage to implement load shifting to off-peak periods?**

A. If a large customer wants to use an energy storage system to try to reduce its transmission charges, the necessary storage duration depends on the customer's load shape across Eversource's

[20] For additional information on UNH's TES project, see https://www.unh.edu/news/what-mysterious-cylinder-campus-get-know-unhs-thermal-energy-storage-tank.

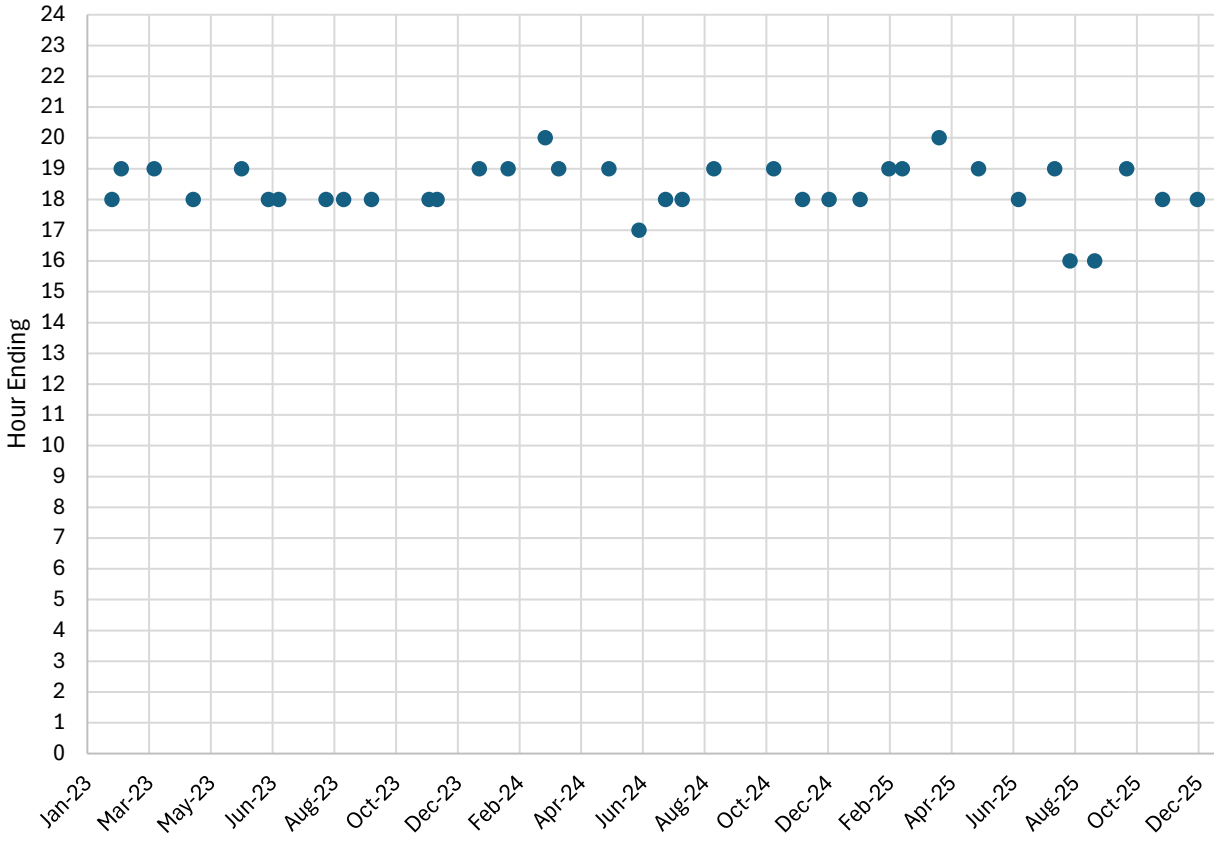
on-peak period. The system needs to have sufficient storage capacity to enable discharging across the full eight-hour window on weekdays where a transmission demand charge can be assessed. Eversource's eight-hour on-peak period each weekday (12 P.M. to 8 P.M. during Eastern Standard Time and 1 P.M. to 9 P.M. during Eastern Daylight Time) means that failing to reduce the interval that sets the customer's monthly billing maximum can substantially limit retail transmission savings. More importantly, a customer does not realize direct retail savings when its behind-the-meter energy storage system is discharged during Eversource's monthly peak load hour, unless that reduction also coincidentally lowers the account's on-peak billing maximum.

Sizing an energy storage system to be able to discharge over eight hours significantly increases implementation cost for end users. The installed cost of an energy storage system is driven by the system's nameplate energy storage capacity (i.e., discharge duration) rather than nameplate power capacity (i.e., instantaneous discharging or charging capability).

In response to UCONN-005, Eversource provided the timestamp of its 12CP hours in 2023, 2024, and 2025. Figure 2 below presents this data and shows that Eversource's monthly peak load hour was highly concentrated between 5 P.M. and 7 P.M., occurring during this window in 31 of the 36 months. Figure 2 shows that an eight-hour energy storage system would be significantly oversized for an end user that aims to load shift its grid demand outside the period where Eversource's monthly peak load hour will likely occur. The 36 monthly peak load hours shown in Figure 2 include three weekend hours. These observations support measuring the customer during Eversource's 12CP hours, rather than treating a general retail window change as equivalent.[21]

[21] Eversource's response to UCONN-005 Attachment 1.

Figure 2: Timestamp of Eversource's Monthly Peak Load Hour: January 2023 – December 2025




**Q. What do you propose as a solution for Eversource to modernize its transmission rate design and to address your concerns?**

A. PURA should require Eversource to introduce a CPT rate option for Rate 55, Rate 56, Rate 57, and Rate 58 customers in Connecticut through a compliance tariff established in this proceeding, with billing implementation tied to verified meter data and incremental billing costs. The rate option should be structured to be voluntary, allowing large customers to opt into the CPT rate design for transmission charges only. Existing kVA distribution and ESI demand charges, public benefit charges, and supply charges would retain their existing billing determinants for participating accounts.

Following an account's enrollment in the CPT rate option, a participating customer's monthly transmission demand charge would be based on the customer's average 60-minute grid demand measured in kW during Eversource's monthly peak load hour in the prior month as determined for the purposes of reporting RNS loads to ISO-NE. For example, the Eversource bill that is issued to a participating customer in October 2027 would be based on the customer's average 60-minute grid demand measured in kW during Eversource's monthly peak load hour in September 2027.

To enroll in the CPT rate option, the customer would send a written e-mail notification to its Eversource key account manager, or to a specific Eversource Billing team member designated by the Company. The enrollment request should specify the account number(s) that the customer wants to enroll in the CPT rate option, and Eversource would enroll the account(s) in the next monthly billing cycle, assuming that notice is received at least 14 days prior to the start of the billing cycle. Any additional billing fee should be limited to documented incremental CPT billing costs.

**Q. Why do you recommend that Eversource implement the CPT rate option for large customers on a voluntary, opt-in basis?**

A. Implementing the CPT rate option on a voluntary, opt-in basis is a prudent, measured first step in moving Eversource's transmission rate design for large customers towards the Company's actual cost of providing transmission service. By allowing large customers to opt into the CPT rate design, Eversource would be removing a key obstacle for customers interested in proceeding with demand management measures immediately, while providing its other large customers with time to review the CPT rate option in more detail. Furthermore, we expect voluntary enrollment will

initially limit Eversource's need for manual billing and will provide time for the Company to assess and implement an automated billing solution for CPT demand charges.

In addition, Eversource does not currently share its hourly RNS load data with its customers. To help large customers evaluate the utility's RNS load profile and consider the effectiveness of various solutions to help reduce grid demand during the probable peak window, Central Maine Power Company ("CMP") voluntarily posts its hourly RNS load data publicly on the company's website.[22] CMP provides an RNS load measurement in near real time, which is updated every five minutes, and also uploads an hourly RNS dataset to its website after each operating day. While CMP's large customers cannot exactly predict the utility's monthly peak load hour in advance, the availability of this data enables customers to study RNS load patterns and make an educated guess of when CMP's monthly peak load hour will likely occur.

Until Eversource provides its RNS data publicly like CMP does, which helps large customers fully evaluate historical RNS load patterns and track RNS data in near real-time, it makes sense for the CPT rate option to remain voluntary opt-in.

**Q. Is it unduly burdensome for Eversource to administer billing for a CPT rate option?**

A. No. Eversource already manually bills some Rates 55–58 accounts. Eversource has been billing the CPT rate option in Western Massachusetts for over a decade without major issues and has been billing the CPT rate option in Eastern Massachusetts for several years.

**Q. What are you proposing as the incremental billing fee for participating customers?**

A. The present record does not establish the incremental cost of CPT billing or justify a fixed fee amount. Eversource's response to UCONN-016 describes the cost of existing manual

[22] See CMP's website: https://www.cmpco.com/w/rns-downloads

billing practices, not the incremental cost of administering the CPT rate option. In response to UCONN-016, Eversource states that it takes approximately three full-time employees to manually enter billing data each month for 348 manually billed accounts on Rates 55–58. Eversource states that the labor cost to manually perform this work is approximately $195,600 per year. That equals about $47 in average manual-billing labor per bill across those accounts, not the incremental cost of a CPT calculation. It is not clear that adding a CPT charge to a customer bill would necessitate additional manual billing labor. That being said, CPT customers should be responsible for true incremental effort and manual billing practices required by Eversource's billing team.

**Q. How does this proposed fee compare to other utilities' comparable billing fees?**

A. In Western Massachusetts, Eversource does not charge its T-5 customers an incremental fixed charge for CPT billing. In Maine, CMP similarly does not charge an incremental billing fee for its customers that enroll in the CPT rate option. In New Hampshire, the proposed Rate LG CPT pilot rate option in Eversource's service territory does not include an incremental billing fee for participating customers.

In Massachusetts, Eversource assesses a $500 bill preparation fee for its large customers in Eastern Massachusetts that enroll in CPT rate option. The $500, which is added to Eversource's fixed monthly service charge, will remain in place until Eversource has transitioned to its new billing system that allows automated CPT billing. National Grid assesses a monthly $155 bill preparation fee for its large customers in Massachusetts that enroll in the CPT rate option. In New Hampshire, Liberty assesses a $250 monthly billing fee for Rate G-1 customers that enroll in the CPT rate option.

## IV. PRECEDENT FOR THE COINCIDENT PEAK TRANSMISSION RATE OPTION

**Q. Is there precedent for the CPT rate option being adopted by electric utilities in New England, including Eversource in its other service territories outside Connecticut?**

A. Yes. The CPT rate option has been approved and implemented for large customers in Massachusetts, Maine, and New Hampshire across several different utility service territories. There is an established track record of large customers taking service under this rate design for nearly 15 years, with high levels of satisfaction, and of large customers advocating for the expansion of the CPT rate option across Massachusetts' New England footprint.

In Western Massachusetts, Eversource has used a CPT rate design to assess transmission charges to its large customers since 2014. The CPT rate design is automatically applied to all customers in Eversource's T-5 rate class, which includes customers with maximum demand greater than 2,500 kW. Each T-5 customer is assessed a transmission demand charge each month based on the customer's average 60-minute grid demand (measured in kW) during Eversource's peak load hour in the prior month as measured across the Company's legacy Northeast Utilities service territory.[23] This rate design was approved by the Massachusetts DPU for all T-5 customers in DPU 10-70-B. A copy of Eversource's Rate T-5 service tariff is provided for reference in Exhibit UCONN-2.

In November 2022, the DPU approved an expansion of the CPT rate design to Eversource's service territory in Eastern Massachusetts. This expansion was driven by a variety of large customers throughout Eastern Massachusetts, including the University of Massachusetts System

[23] The Rate T-5 tariff defines the legacy Northeast Utilities service territory as including Eversource's service territories in Western Massachusetts (Western Massachusetts Electric Company), New Hampshire (Eversource), and Connecticut (Connecticut Light & Power).

and The Energy Consortium,[24] strongly advocating for the adoption of a CPT rate option as part of Eversource's electric distribution rate case in DPU 22-22.

Since January 2023, all Eversource Rate G-3 customers across Massachusetts have had the option to utilize the CPT rate option on a voluntary opt-in basis. In Western Massachusetts, Eversource's Rate G-3 class includes customers whose maximum demand equaled or exceeded 350 kW but less than 2,500 kW at any time in the most recent 12 months. In Eastern Massachusetts, Eversource's Rate G-3 class includes customers in the Company's Cambridge service area whose metered load exceeds or is estimated to exceed an average of 100 kilowatts for 12 consecutive billing months and the service voltage is 13,800 volts or higher; customers in the Company's Greater Boston service area that take service that is supplied and metered at 14,000 volts nominal or greater;[25] and customers in the Company's South Shore, Cape Cod & Martha's Vineyard service area who establish demands in excess of an average of 500 kilowatts for 12 consecutive months.

Rate G-3 customers in Western Massachusetts that opt into Eversource's CPT rate option are assessed a transmission demand charge each month based on a customer's average 60-minute grid demand (measured in kW) during Eversource's peak load hour in the prior month as measured across the Company's legacy Northeast Utilities system. A copy of Eversource's Rate G-3 tariff for Western Massachusetts, which details eligibility and billing methodology, is provided in Exhibit UCONN-2.

[24] The Energy Consortium's members include Harvard University, Mass General Brigham, Brandeis University, Massachusetts Water Resources Authority, Tufts University, Acushnet Company, Massachusetts Institute of Technology, UMass Chan Medical School, Procter & Gamble, and Beth Israel Lahey Health. Additional information on The Energy Consortium and its members can be found online at https://www.tec-ma.org/.

[25] Rate G-3 customers in Greater Boston must also furnish, install, own and maintain all protective devices, transformers and other equipment required by the Company at the customer's expense.

Rate G-3 customers in Eastern Massachusetts that opt into Eversource's CPT rate option are assessed a transmission demand charge each month based on a customer's average 60-minute grid demand (measured in kW) during Eversource's peak load hour in the prior month as measured across the Company's legacy NSTAR Electric system.[26] A copy of Eversource's Rate G-3 tariff for the utility's three service footprints in Eastern Massachusetts (Greater Boston, Cambridge, and South Shore) is provided in Exhibit UCONN-2.

In September 2022, the Maine Public Utilities Commission approved a CPT rate option for all non-residential rate classes served by CMP. While CMP's sub-transmission and transmission level customers that are network service customers pursuant to CMP's Schedule 21 have had a CPT rate design for decades, any distribution-level customer (i.e., below 34.5 kV) can now utilize the CPT rate option. This decision was made in Docket No. 2021-00325, a rate design proceeding called for by the Maine Legislature to examine whether transmission and distribution rate designs in Maine fully support the state's electrification goals. CMP voluntarily agreed to implement the CPT rate option, unlike the other electric utilities in New England that have implemented CPT rate options as a result of distribution rate cases.

Since July 2023, any non-residential CMP customer has been able to opt into the CPT rate option known as Rate B-CPT.[27] Participating customers are assessed a monthly transmission demand charge based on their average 60-minute grid demand (measured in kW) during CMP's

[26] The legacy NSTAR Electric system includes Eversource's service territories in Greater Boston, Cambridge, and the South Shore.

[27] CMP's non-residential distribution customers with maximum demand over 20 kW fall into one of three rate classes: Medium General Service (maximum on-peak demand between 20 kW and 400 kW), Intermediate General Service (maximum on-peak demand between 400 kW and 1,000 kW), or Large General Service (maximum on-peak demand over 1,000 kW).

peak load hour in the prior month as measured across the utility's service territory across much of Maine. A copy of CMP's Rate B-CPT tariff is included in Exhibit UCONN-2.

In September 2024, the DPU approved a CPT rate option for National Grid's large customers in Massachusetts that take service under Rate G-3. The approval of the CPT rate option was made in DPU Docket No. 23-150, National Grid's most recent electric distribution rate case, following strong advocacy from a consortium of National Grid's large customers. National Grid's Rate G-3 generally applies when a new customer's estimated average demand exceeds 200 kW; an existing G-3 customer may transfer out if its 12-month average monthly demand falls below 180 kW for three consecutive months. Since April 2025, any Rate G-3 customer in National Grid's Massachusetts service territory has been able to opt into the CPT rate option. Participating G-3 customers are assessed a transmission demand charge each month based on a customer's average 60-minute grid demand (measured in kW) during National Grid's peak load hour in the prior month as measured across the utility's Massachusetts service territory. A copy of National Grid Rate G-3 tariff, which details the terms of the CPT rate option, is included in Exhibit UCONN-2.

In New Hampshire, Liberty Utilities has offered a CPT rate option to its large customers since July 2025. Liberty's Rate G-1, which includes customers whose average grid demand is greater than or equal to 200 kW, was modified to include a voluntary, opt-in CPT rate option as part of a settlement agreement in Liberty's most recent distribution rate case, NHPUC Docket No. DE 23-039. Liberty's Rate G-1 CPT is unique because it includes a distribution rate design overhaul in addition to the CPT rate option for transmission. A copy of Liberty's Rate G-1 tariff, which details the terms of the CPT rate option, is included in Exhibit UCONN-2.

**Q. In approving the CPT rate option in Massachusetts, did the Massachusetts DPU detail its reasoning on adoption benefits?**

A. Yes. In its 2012 order approving the CPT rate design for all T-5 customers in Western Massachusetts, the DPU recognized that the CPT rate design follows cost causation principles and incentivizes efficient customer behavior that can benefit all ratepayers by reducing customer contributions to coincident peak demand and flattening load profiles on the system:

> As WMECO's transmission rates are currently configured, cross-subsidization of transmission costs within rate classes can occur between those customers whose peak demand occurs coincident within the system peaks and those customers whose peak demand occurs in off-peak hours. WMIG's rate design proposal eliminates this inequity by charging customers based on their individual consumption at the time of system peak. The incentives provided by cost-based transmission rates can also help reduce congestion on the Company's system during peak hours, lower locational marginal prices, and lead to flatter load profiles.[28]
>
> As a principle, pricing transmission service based on a customer's consumption at the time of system peak rather than based on the customer's peak, which may not coincide with the system peak, provides a more equitable assignment of cost responsibility. However, converting the principle into a workable rate redesign requires that the transmission costs assigned to an individual customer are clearly identifiable. In this case, the interval billing meter required for service under Rate T-2 and Rate T-5 would identify these costs because the meter measures and records electrical use each half hour.[29]
>
> The Department finds that introduction of a new transmission rate redesign, mandatory for the 20 Rate T-5 customers only, would provide an opportunity for those customers to achieve lower transmission costs, would result in minimal, if any, shifting of transmission costs to other electric utilities, would not be unduly burdensome for the Company to administer, and would provide useful data for the Department to evaluate whether implementing a rate redesign for all interval-metered customers statewide is in the public interest. Further, this transmission rate design would be consistent with the ratemaking principle of cost causation (i.e., rates for service reflect the costs that are actually "caused" or imposed by the customers who must pay the rates).[30]

In DPU Docket No. 22-22, the DPU required Eversource to expand the CPT rate option to all Rate G-3 customers across Massachusetts, making a similar finding that a CPT rate design for

[28] Order on Western Massachusetts Electric Company's Compliance Filing on Transmission Service Pricing; September 19, 2012; D.P.U. 10-70-B, page 5.

[29] Order on Western Massachusetts Electric Company's Compliance Filing on Transmission Service Pricing; September 19, 2012; D.P.U. 10-70-B, page 6.

[30] Order on Western Massachusetts Electric Company's Compliance Filing on Transmission Service Pricing; September 19, 2012; D.P.U. 10-70-B, page 7.

transmission charges creates a price signal that could help support rate affordability by leading to more efficient expansion of the transmission system over time:

> The Department has previously stated that pricing transmission service based on a customer's use at the time of system peak rather than based on the customer's peak, which may not coincide with the system peak, provides a more equitable assignment of cost responsibility. The 12 CP billing for Rate T-5 is one method of efficiently assigning accurate costs to those customers who utilize the transmission system during peak periods. While customer behavior benefits from 12 CP may not result in lower system costs immediately, lower system peak usage will eventually be reflected in transmission system peak forecasts, lowering costs for all customers.[31]

The DPU also concluded that the CPT rate option creates a price signal that meets rate design goals of efficiency, fairness, and simplicity:

> In the Company's last base distribution rate case, the Department directed the Company to evaluate the further expansion of coincident peak transmission billing to NSTAR Electric customers; however, the Company did not undertake any such evaluation that could assist the Department in weighing the merits of the proposed use of 12 CP transmission billing for all large customers. As the Company has made and continues to make efforts toward rate alignment, and as 12 CP billing supports numerous rate-making goals such as simplicity and efficiency, the Department finds that it is reasonable and appropriate for the Company to expand optional 12 CP transmission billing to all large general service customers.[32]

In DPU Docket No. 23-150, the DPU required National Grid to make the CPT rate option available to its large customers throughout Massachusetts due to the benefits of the rate design in improving efficiency and fairness:

> In NSTAR Electric's most recent base distribution rate case, the Department approved the expansion of coincident peak transmission billing for large C&I customers. The Department determined that pricing transmission service based on a customer's use at the time of system peak rather than based on the customer's peak, which may not coincide with the system peak, provides a more equitable assignment of cost responsibility. In the instant case, the Department is persuaded that an opt-in coincident peak billing rate for transmission can help accelerate storage adoption and deliver load reductions during peak times. Therefore, such a rate design meets the goal of efficiency and helps supports the Commonwealth's decarbonization policies.

[31] Order on NSTAR Electric Company's Petition for Approval of a General Increase in Base Distribution Rates for Electric Service and a Performance Based Ratemaking Plan; November 30, 2022, D.P.U. 22-22, page 460.

[32] Order on NSTAR Electric Company's Petition for Approval of a General Increase in Base Distribution Rates for Electric Service and a Performance Based Ratemaking Plan; November 30, 2022, D.P.U. 22-22, pages 460-461.

> Accordingly, the Department directs the Company to implement a coincident peak billing option for transmission service on an opt-in basis for large C&I customers.[33]

**Q. Has the CPT rate design been proposed for large customers in Eversource's New Hampshire service territory?**

A. Yes. In NHPUC Docket No. DE 24-070, Eversource's most recent distribution rate case in New Hampshire, a consortium of large customers, including the University System of New Hampshire, Pike Industries, Inc., and Monadnock Paper Mills, Inc. (the "Large Customer Consortium" or "LCC"), intervened and advocated for the adoption of a CPT rate option for Eversource's Large General Delivery Service Rate LG class. Rate LG includes eligible Eversource customers in New Hampshire whose maximum demand exceeds 1,000 kW.

In response to the LCC's proposal to introduce the CPT rate option in New Hampshire, Eversource argued that a distribution rate case is not the appropriate venue for transmission rate design to be considered. Following a motion by Eversource to have the LCC's testimony struck from the record of the proceeding and a rebuttal response from the LCC, NHPUC determined that the LCC proposal for Eversource to implement a CPT rate option should first be considered in an investigative docket.

In May 2025, NHPUC opened Docket No. IR 25-035, *Investigation Into Eversource Rate LG\Rate B Transmission Rate Design*, for consideration and discussion of the CPT rate design for Rate LG customers. After filing written comments, technical sessions, and holding a series of discussions, the participants in the investigation were able to find sufficient common ground to

[33] Order on Massachusetts Electric Company's and Nantucket Electric Company's Petition for Approval of a General Increase in Base Distribution Rates for Electric Service, a Performance-Based Ratemaking Plan, and a Capital Recovery Mechanism; September 30, 2024, D.P.U. 23-150, page 517.

satisfactorily resolve all issues to the point where the investigation could be closed and an adjudication could be opened for the consideration and approval of a Rate LG CPT pilot proposal. The participants drafted a joint stipulation reflecting the resolution of the open issues in the investigation and filed it with NHPUC in June 2026.

On June 30, 2026, the LCC submitted a petition to NHPUC along with a detailed pilot proposal for Rate LG CPT and requested that the Commission open a new adjudicative docket to review and consider the pilot proposal. The proposal, which has been filed under Docket No. DE 26-042, includes a CPT rate design for a maximum of five Rate LG customers, which would be available on a first-come, first-served opt-in basis. The pilot would be offered by Eversource until September 30 of the year Eversource files its next base distribution rate case. NHPUC has scheduled a final hearing for the proceeding in December 2026. A copy of Eversource's proposed tariff terms for Rate LG CPT is provided in Exhibit UCONN-3.

On October 16, 2026, a Comprehensive Settlement Agreement Regarding the Large Customer Consortium's Rate LG CPT Pilot Proposal was filed in NHPUC Docket No. 26-042, which recommends that the Rate LG CPT pilot be approved. The parties to the Settlement Agreement include Public Service Company of New Hampshire d/b/a Eversource Energy, the Large Customer Consortium, the New Hampshire Department of Energy, the New Hampshire Office of the Consumer Advocate, and the Community Power Coalition of New Hampshire. NHPUC has scheduled a final hearing in the proceeding for December 1, 2026, and is expected to issue a final order on the Settlement Agreement shortly thereafter.

## V. EVERSOURCE DISTRIBUTION RATE DESIGN

**Q. How does Eversource assess distribution charges to its large customers?**

A. Eversource charges distribution service rates to Rate 55, Rate 56, Rate 57, and Rate 58 customers using a fixed service charge and distribution demand charge. Rate 55 customers currently pay a $350 per month service charge and a $6.65 per kilovolt-ampere ("kVA") monthly distribution demand charge. Rate 56 customers currently pay a $350 per month service charge and a $7.91 per kVA monthly distribution demand charge. Rate 57 customers currently pay a service charge ranging from $1,100 per month to $4,200 per month, depending on customer size,[34] and a $5.45 per kVA monthly distribution demand charge. Rate 58 customers pay the same service charge rates as Rate 57 customers and currently pay a $7.53 per kVA monthly distribution demand charge.[35]

A large customer's distribution demand charge is based on a customer's highest average 30-minute kVA grid demand measured by Eversource in the current month or the preceding eleven months. A customer may, upon not less than three months' prior written notice to the Company, decrease the distribution demand solely to reflect lower load levels from demonstrable conservation and load management.

Eversource's Distributed Generation Rider is applicable to customers with load associated with new base load distributed generation projects ("DG Load") who receive electric service under a firm service rate that includes a distribution demand ratchet. The Rider waives the distribution demand-ratchet provision of such rates for the customer's DG Load served under those rates.

[34] For Rate 57 and Rate 58, Eversource currently charges $1,100 per month for less than 2,000 kW demand, $2,200 per month for between 2,000 kW and 4,999 kW demand, and $4,200 per month for 5,000 kW demand or more.

[35] These figures describe the base distribution demand charge; separately billed ESI demand charges also appear in Eversource's response to UCONN-009 Attachment 1 and must be included when comparing a customer's total delivery bill.

**Q. Is the distribution demand charge that Eversource assesses to each large customer designed to be time differentiated?**

A. No. Ms. Nieto concludes that time-differentiated distribution rates must keep in mind the system-wide distribution hourly marginal cost patterns.[36] However, Eversource has not adopted this recommendation when considering how to apply the findings from its marginal cost of service study to the rate design for each customer class. In response to UCONN-026, Eversource acknowledges that "the Company decided not to use TOU distribution rates for the intermediate and large commercial customers, and in this regard, it is not strictly following the system-wide marginal cost responsibility across hours of the day."

**Q. Does Eversource provide an evidence-based rationale for applying time-of-use rate differentiation to residential and small commercial classes but not to large customers?**

A. No. Eversource argues that its large customers tend to be the dominant load on the circuit and transformer and therefore drive local capacity needs or the expansion of the distribution facilities serving them.[37] Eversource provides no analysis or evidence supporting this statement.

This is an important gap in Eversource's rate design proposal. Based on Ms. Nieto's analysis and Eversource's responses to interrogatories, it is clear that load profiles on Eversource's distribution system have changed significantly since the Company last implemented a major update to its time-of-use periods in 2006. In response to UCONN-007, Eversource states that total installed behind-the-meter solar photovoltaic generation in its Connecticut service territory has increased from 21 MW in 2010 to 979 MW in 2025. Ms. Nieto acknowledges that this sharp

[36] Exhibit CLP-MCOS-1, page 17, lines 10-17.
[37] See Eversource's response to UCONN-026(c).

growth in distributed generation, in particular solar photovoltaics, has changed when peak load occurs on Eversource's distribution system:

> Current peak period is defined as noon to 8 P.M., year-round. There is significantly lower probability of peak from noon to 3 pm relative to hours 3 pm to 8 pm, which recognizes the impact of solar PV penetration in early to mid-afternoon. This suggests that a modification to introduce a shorter peak period that starts at 4 pm and ends at 9 pm would increase the cost-reflectiveness of the distribution rate. This revision would align with the prevailing marginal unit cost profile.[38]

Eversource has not conducted an up-to-date examination of how its large customers utilize its distribution system and contribute to marginal investment needs despite the fact that Eversource's current distribution system looks very different today compared to historical usage patterns. Indeed, this point is reinforced by Eversource's supplemental response in CIEC-03, confirming that "the Company has not prepared a forecast of coincident or non-coincident peaks by month and by rate class."

**Q. How does Eversource's distribution demand ratchet for large customers potentially impact efforts to incentivize large customers to shift load to off-peak hours?**

A. For large customers that install behind-the-meter energy storage, the demand ratchet can increase a customer's distribution demand charge if grid charging is not managed extremely carefully. If a customer charges its energy storage system from the grid during midday hours when solar generation is at its peak on Eversource's distribution system, the storage system may absorb local solar output when the affected circuit's conditions support that result. However, if charging sets the customer's highest 30-minute kVA demand in the current month or preceding eleven months, the charging load can set the customer's demand ratchet. If this occurs, the rate design would penalize the customer for trying to help address a well-documented problem in New

[38] Exhibit CLP-MCOS-1, page 17, lines 10-17.

England: excess solar generation that causes daytime minimum loads to fall and produces a sharp "duck curve" in net regional grid demand.

**Q. Shifting the focus from time-of-use rate differentiation to seasonal rate differentiation, what does Ms. Nieto conclude regarding seasonality in distribution rates?**

A. According to Ms. Nieto, seasonal differentiation is necessary to improve signals in rate design.[39] Ms. Nieto draws a direct connection between seasonal rate differentiation and incentivizing beneficial electrification adoption by Eversource's customers:

> A decision to keep the same time-of-day charges year-round does not strictly align with the underlying seasonality in peak-related costs. About 80 percent of the annual probability of peak falls in two months, July and August, and the remaining 19.5 percent falls in the months of June and September, with less than 1 percent falling in the coldest winter months of December through January. Only a very small number of bulk substations experience a peak load in the winter months of December or January, and even then, there is higher substation load-carrying capability in the winter relative to the summer. Continuing with year-round distribution TOU periods would not support efficient adoption of heat pump rates, and therefore I recommend the Company's proposal to set seasonal rates for heat pump use. TOU rates that are also seasonally-differentiated would be advisable eventually, particularly when considering growth of DERs and impact on the distribution station load profile in the future.[40]

**Q. How does Eversource apply this finding to its rate design for large customers?**

A. Eversource applies this finding to justify the design of a seasonal heat pump rate for residential customers, but chooses to take no action related to its distribution rate design for large customers. Eversource argues that the reason that the Company's proposed heat pump rate improves system economics and affordability for the residential customer, is that the rate is designed to promote the use of the system during the winter months when there is relatively lower consumption on the electric system.[41] Eversource acknowledges that the Company did not conduct

[39] Exhibit CLP-MCOS-1, page 18, lines 4-6.
[40] Exhibit CLP-MCOS-1, page 18, lines 6-15, and page 19, lines 1-3.
[41] See Eversource's response to UCONN-011.

any analysis that contemplates the impact of greater usage in the winter season by intermediate or large commercial customers.[42]

There is a clear pattern to Eversource's use of Ms. Nieto's analysis and recommendations. The Company applies Ms. Nieto's findings to residential rate design but has not presented an equivalent class-specific assessment for large-customer distribution demand charges.

**Q. What do you recommend to address these concerns?**

A. First, PURA should direct Eversource to study whether a time-differentiated distribution demand charge would improve cost causation for Rates 55–58, including a 4–9 P.M. weekday on-peak period that aligns with Ms. Nieto's recommendation to update the Company's existing time-of-use periods.

Second, PURA should direct Eversource to study its eleven-month distribution demand ratchet and alternatives that reflect the relevant local equipment capacity commitments and the months and hours when constrained facilities peak. This examination should consider whether the existing ratchet accurately reflects Ms. Nieto's recommendation to incorporate seasonal differentiation in Eversource's distribution rates.

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

A. Yes.

[42] See Eversource's response to UCONN-010.