STATE OF CONNECTICUT
PUBLIC UTILITIES REGULATORY AUTHORITY

Docket No. 26-07-XX

APPLICATION OF THE CONNECTICUT LIGHT AND POWER COMPANY D/B/A EVERSOURCE ENERGY

PROPOSED PLAN FOR IMPLEMENTATION OF ADVANCED METERING INFRASTRUCTURE

JOINT DIRECT TESTIMONY OF

JARED A. LAWRENCE AND DOUGLAS P. HORTON

On behalf of

The Connecticut Light and Power Company
d/b/a Eversource Energy

July 21, 2026

STATE OF CONNECTICUT
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I. INTRODUCTION

Q. Mr. Lawrence, please state your name and business address.

A. My name is Jared A. Lawrence. My business address is 107 Selden Street, Berlin, Connecticut.

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

I am Senior Vice President of Customer Operations and Digital Strategy and Chief Customer Officer for Eversource Energy Service Company ("ESC"). ESC provides centralized services to the natural gas and electric operating subsidiaries of Eversource Energy, including The Connecticut Light & Power Company ("CL&P" or "Eversource" or the "Company").

Q. What are your principal responsibilities in this position?

A. I am responsible for customer contact operations, billing, payment, credit and collections, customer assistance programs, electric meter operations, customer digital channel strategy and execution, customer satisfaction and Voice of the Customer programs, and customer experience design for ESC and Eversource Energy affiliated entities, including CL&P and Yankee. I also oversee the business project management offices for the Company's

customer information system replacement, NSTAR Electric's AMI project, and CL&P's AMI proposal. In this proceeding, I am testifying on behalf of CL&P.

Q. Please describe your educational background and professional experience.

A. I joined Eversource Energy in my current role on January 3, 2022. Prior to joining Eversource Energy, I was with Duke Energy for more than 19 years, during which time I served in a broad range of commercial and utility operations roles. From 2010 to 2022, I led multiple functions within customer operations, including my last assignment as vice president of meter-to-cash operations for Duke Energy's utility jurisdictions across seven states. I also managed day-to-day customer service functions and sponsored customer information system projects during my time at Duke Energy.

In 1996, I graduated from Johns Hopkins University in Baltimore, Maryland, with a Bachelor of Science degree in Civil Engineering, and in 2002, I earned a Master of Business Administration degree from Duke University in Durham, North Carolina.

Q. Have you previously testified in formal hearings before a regulatory body?

A. Yes. I have previously testified in proceedings before Connecticut Public Utilities Regulatory Authority ("PURA"). I recently testified in Yankee's general rate case, Docket No. 24-12-01, Application of Yankee Gas Services Company d/b/a Eversource Energy to Amend its Rate Schedules, and in CL&P's AMI cost recovery reconsideration within Docket No. 17-10-46RE04, Application of The Connecticut Light and Power Company dba Eversource Energy to Amend Its Rate Schedule – AMI Cost Recovery. I have sponsored testimony before the Massachusetts Department of Public Utilities ("MDPU")

in connection with NSTAR Electric's base distribution rate proceeding in Massachusetts, D.P.U. 22-22, and the NSTAR Gas performance-based ratemaking ("PBR") metrics update proceeding, D.P.U. 24-134. I also participated in the MDPU's technical workshop on AMI. I have provided testimony to the New Hampshire Public Utilities Commission in a proceeding pertaining to billing regulations. I have participated in technical workshops before PURA pertaining to AMI and performance-based regulation. I have appeared as a witness in AMI cost recovery proceedings in Ohio and participated in technical workshops on resource planning and customer operations topics in North Carolina and South Carolina.

Q. Mr. Horton, please state your name and business address.

A. My name is Douglas P. Horton. My business address is 107 Selden Street, Berlin, Connecticut.

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

A. I am the Senior Vice President, Regulatory and Strategic Financial Planning, for ESC.

Q. Please summarize your education and professional experience.

A. I graduated from Bentley College (now Bentley University) in Waltham, Massachusetts in 2003 with a Bachelor of Science degree. In 2007, I graduated from Bentley University McCallum Graduate School of Business with a Master of Business Administration. I joined NSTAR Electric Company as a Senior Financial Planning Analyst in August 2007 and have taken on roles of increasing responsibility over time, culminating in my current role as Senior Vice President, Regulatory and Strategic Financial Planning, in August 2025.

Q. Have you previously testified before PURA or elsewhere on regulatory matters?

A. Yes. I have testified numerous times in PURA proceedings on ratemaking and regulatory issues. I have also testified on multiple occasions before the Massachusetts Department of Public Utilities and the New Hampshire Public Utilities Commission.

Q. What areas does your testimony cover?

A. Mr. Lawrence provides testimony regarding the technology and implementation of advanced metering infrastructure on an accelerated basis using previously selected technologies, while Mr. Horton provides testimony regarding the need for regulatory support and the interaction between this proceeding and the Company's request for a new AMI cost recovery framework in Docket No. 26-05-10, Application of The Connecticut Light and Power Company d/b/a Eversource Energy to Amend its Rate Schedules.

Q. What is the purpose of your testimony?

A. Our testimony discusses the reasons that the Company is seeking review and approval of its AMI Implementation Plan from PURA in a separate docket, outside of Docket No. 26-05-10, so that the Company can proceed with AMI implementation on an accelerated basis using the technologies that were procured by Eversource as part of a request for proposals ("RFP") process that it most recently conducted in 2023 for both its Massachusetts and Connecticut electric distribution systems. If approved by PURA, the Company's AMI Implementation Plan would commence with the development of the back-office systems that are necessary to support AMI implementation, followed by AMI meter installations once all of the prerequisite groundwork is completed. The first tranche of back-office

system upgrades that would be necessitated would be the implementation of a new Customer Information System ("CIS") and the Meter Data Management System ("MDMS"), which are necessary prerequisites to utilize AMI technology. After that, the AMI communications network and AMI meters would be deployed in a geographically phased approach.

In addition, our testimony describes other proposals that the Company is making in relation to AMI implementation, as well as the basis for the Company's request for approval of the AMI Implementation Plan from PURA.

Q. What is the Company requesting from PURA in this proceeding?

A. The Company is requesting that PURA undertake the following examinations: (1) review the benefit cost analysis submitted herewith and find that it provides a reasonable benchmark for adoption of the accelerated implementation plan; and (2) review and approve the proposed AMI Implementation Plan in order to allow for the accelerated installation of AMI throughout the Company's service territory over a six-year period, using the technology solution implemented for Massachusetts and extended to Connecticut on a cost-effective basis. The Company is respectfully requesting that PURA conduct its examination and issue a determination no later than mid-November 2026, to enable the Company to work with its existing technology vendors to negotiate pricing for primary technology elements selected under the competitive solicitation process. The willingness of the Company's vendors to extend favorable pricing is, in part, a function of their awareness of the regulatory framework and the certainty that the Company has in

proceeding forward with the accelerated implementation.

The Company is making this request to begin undertaking an accelerated AMI implementation in Connecticut starting in 2027 because it seeks a consensus-based, regulatory adoption of the AMI Implementation Plan that will require substantial coordination and collaboration over the six-year implementation period. Without the requested approval, it is difficult, if not prohibitive, for the Company to move forward on an accelerated basis starting January 2027. Without regulatory adoption of the AMI Implementation Plan by mid-November 2026, the Company may be forced to conduct a new competitive solicitation process for the primary technology elements, which will likely lead to higher pricing structures for those primary technology elements.

In conjunction with this application, the Company has submitted a proposal for a regulatory framework to support the incremental costs of both the capital and O&M necessary to support the AMI Implementation Plan in its rate case, Docket No. 26-05-10, Application of the Connecticut Light and Power Company d/b/a Eversource Energy to Amend its Rate Schedules, which will be adjudicated in a year-long contested proceeding.

Q. Please explain the difference between the Company's AMI proposals in this proceeding and those submitted in Docket No. 26-05-10, occurring in parallel.

A. In Docket No. 26-05-10, the Company is requesting that PURA approve a cost-recovery framework that will enable AMI deployment on an accelerated basis without a dedicated cost recovery mechanism, but with adequate ratemaking support to support the accelerated workstreams. This is consistent with PURA's directives in its July 1, 2026 Decision in

Docket No. 17-10-46RE04, Application of the Connecticut Light and Power Company d/b/a Eversource Energy to Amend Its Rate Schedules – AMI Cost Recovery. The Company's proposed cost-recovery framework would allow: (1) recovery of AMI-related capital costs through the Company's proposed Performance-Based Multi-Year Rate Plan; and (2) deferral of incremental AMI-related operating expense and retired meter costs to be securitized in the future, which will minimize bill impacts for customers. The rate proceeding will conclude with a decision on cost recovery in June 2027.

This sequencing is acceptable to the Company because if PURA provides regulatory support for accelerated deployment in this proceeding, the Company can begin planning activities in the first half of 2027 and hold more substantial capital investment and O&M activities until after a cost-recovery framework is in place after June 2027.

If PURA exercises its discretion to decline to provide regulatory support for AMI in either docket, the Company is prepared to undertake a slower, non-accelerated deployment schedule.

Q. Are you presenting any exhibits in support of this joint testimony?

A. Yes. We are presenting the following exhibits in support of this joint testimony:

Exhibit CLP-AMI-1	Testimony of Jared A. Lawrence and Douglas P. Horton
Exhibit CLP-AMI-2	Eversource AMI Implementation Plan
Exhibit CLP-AMI-2, Appendix (CONFIDENTIAL)	Competitive Solicitation Documents
Exhibit CLP-AMI-3	Eversource AMI BCA Report

Q. How is this joint testimony organized?

A. Section I of this testimony is the Introduction. Section II describes the necessity and purpose of reviewing the Company's AMI Implementation Plan on a timely basis outside of the Company's pending distribution rate case. Section III describes the Company's AMI Implementation Plan. Section IV is the conclusion.

II. PURA REVIEW OF AMI IMPLEMENTATION PLAN

Q. Why is the Company requesting PURA approval of the AMI Implementation Plan outside of Docket No. 26-05-10?

A. The Company is requesting that PURA review and approve the Company's AMI Implementation Plan because the opportunity to leverage existing technology selections and maximize efficiencies from the ongoing AMI implementation in Massachusetts is fading with the passage of time. If PURA were to review the AMI Implementation Plan in the context of Docket No. 26-05-10, the Company could not expect a determination until end of June 2027, due to the statutory review period of 350 days from the filing date. From there, it is not clear that the Company could continue to leverage the results of the prior RFP, given the passage of time. Therefore, to move forward with the AMI Implementation Plan, the Company seeks to have consensus on a regulatory adoption of the accelerated implementation plan, including review of the benefit-cost analysis and agreement on moving forward with the results of the joint RFP for Massachusetts and Connecticut. Based on the Company's current experience in Massachusetts, this is necessary because the implementation of AMI on an accelerated basis will be a complicated and involved

process, requiring substantial coordination and collaboration within a stakeholder group, including the PURA, OCC and EOE.

In that regard, the AMI Implementation Plan assumes project initiation in January 2027. To that end, the Company has obtained Letters of Intent ("LOI") from two primary vendors and a pricing proposal from the third primary vendor, Two of the offers extend the availability of pricing structures from the Massachusetts AMI implementation into first quarter 2027, while the third letter expires in June 2027. To keep the advantageous pricing,, negotiations on these complex agreements need to commence by December 2026. Thus, waiting for a late June 2027 determination by PURA in Docket No. 26-05-10 would impair the Company's ability to attempt to leverage the advantageous pricing structures applicable in Massachusetts.

Q. Are there any other reasons the AMI Implementation Plan should be reviewed by PURA outside of Docket No. 26-05-10?

A. Yes. As a preliminary matter, as the Company has tracked potential for AMI implementation in Connecticut over the last several years, costs for AMI have only risen due to inflationary economic pressures. Thus, in addition to concerns around the availability of advantageous pricing structures, the Company anticipates that postponing the review of the Company's AMI Implementation to Docket No. 26-05-10 will increase costs merely through the passage of time and ongoing economy-wide inflation. It is also important to note that global supply chains, particularly for key components for electrical equipment, are becoming increasingly constrained. In the Company's experience, the LOI

from the AMI meter and communications vendor reflects a current view that the vendors have the supply chain capacity to satisfy the Connecticut AMI project assuming a commitment to proceed is secured by early 2027. As time elapses, there is the potential for this supply chain availability to reduce as the vendor will continue to seek other business partners, thereby jeopardizing the pricing and availability of meter and network equipment if Eversource is not able to commit to extending the work from Massachusetts to Connecticut in the proposed timeframe. Further, it is Eversource's experience from the Massachusetts AMI implementation that collaborative stakeholder participation and engagement is a productive tool for solving implementation issues that may arise in-flight as the multi-year program moves forward. Establishing an uncontested proceeding outside of the distribution rate case will allow for that more collaborative ongoing approach to be adopted from the outset. PURA may wish to establish a working group or other informal stakeholder processes where interested parties can engage with one another, and continue to keep PURA informed as to AMI implementation issues and solutions. A rate case is a more formal contested process where participants are expected to default to litigation positions as opposed to collective solutions.

Q. What type of proceeding is the Company requesting?

A. The Company is requesting an uncontested proceeding, pursuant to R.C.S.A. § 16-1-134(a), which allows PURA to hold an uncontested proceeding "in response to a request,

petition or application that is not a contested case for purposes of section 4-166 of the Connecticut General Statutes."[1]

Q. What timeline is the Company requesting for review in this proceeding?

A. In order to move forward with the current AMI Implementation Plan, the Company is requesting that PURA issue a determination on its AMI Implementation Plan by mid-November 2026. This timeline provides PURA with time to review the AMI Implementation Plan and provide feedback as to the cost-benefit analysis, the features and timeline of the accelerated implementation plan and the technology solution, while allowing the AMI Implementation Plan to move forward in advance of the rate-case decision in mid-2027.

III. AMI IMPLEMENTATION PLAN

Q. What is the importance of moving forward with the AMI Implementation Plan?

A. AMI implementation is an important next step for CL&P's customers and for the CL&P distribution system because the Company is entering a period of profound technological transformation in relation to the electric distribution system. Advances in technology, combined with policy support for clean energy solutions, are driving fundamental changes in how power is generated, distributed, and consumed. The proliferation of intermittent solar generation and other distributed energy resources ("DER") is increasing the

[1] Under Conn. Gen. Stat. § 4-166(4), a "contested case" is defined to mean a proceeding, "including but not restricted to rate-making, price fixing and licensing, in which the legal rights, duties or privileges of a party are required by state statute or regulation to be determined by an agency after an opportunity for hearing or in which a hearing is in fact held." Connecticut's existing statute relating to advanced metering system plans, Conn. Gen. Stat. § 16-243w, does not require a hearing.

prevalence of two-way power flow. Growing penetration of electric vehicles ("EVs") and other electrification initiatives are further changing the nature of supply and demand and will continue to do so for many years to come. Deployment of automated devices will greatly amplify the complexity and dynamic nature of grid operations. Looking forward to a future defined by increased penetration of DER, EVs, energy efficiency and other beneficial electrification, the electric distribution system is at an inflection point. Strategic, cost-effective investments in grid modernization – including advanced metering infrastructure – will create opportunities to reduce peak demand, increase system efficiency, improve reliability, and support overall resiliency of the grid. Absent this concerted effort to support optimization, risks associated with power quality events, reliability degradation and higher costs associated with increasing peak demand will grow over time.

At the same time, CL&P, along with the industry, is experiencing pressure to meet customer expectations that are being formed by customer experiences with other goods and services increasingly supported by digital technology allowing for quick and easy customer-service interfaces, among other advancements. The Company's preferred AMI implementation approach and schedule, established in the AMI Implementation Plan, is designed to meet the changing industry landscape and evolving customer expectations to substantially contribute to Connecticut's energy and environmental goals. The implementation of AMI has become the next step in the natural progression of the operating platform.

Conversely, there are significant open policy questions around AMI implementation in Connecticut, particularly regarding the desire to undertake accelerated deployment with its associated burdens and benefits, and with regard to how the costs of an accelerated deployment should be recovered. From the Company's perspective, there can be no accelerated deployment without an appropriate regulatory framework that provides adequate revenue support for the costs the Company will incur due to implementation on an accelerated basis. This is particularly true because many of the benefits of AMI deployment accrue to the benefit of customers and do not directly offset Company costs. Indeed, optionality in taking advantage of AMI benefits will be largely within the customer's control, while the costs of an accelerated plan will increase the delivery portion of the bill. The Company seeks regulatory adoption of the concept of pursuing an accelerated deployment because it requires elevated burdens to achieve elevated benefits, i.e., the benefits to customers are greater and nearer in time with acceleration, but that acceleration requires a scale of investment beyond the Company's normal operating ability, as well as necessitating a complex implementation path that requires engagement and interaction with stakeholders. Slower paths can also benefit customers – and would lessen the burden for capital support – but will take longer to achieve the maximum benefit to customers.

Therefore, CL&P's request in this proceeding is narrowly focused on finding agreement that the AMI Implementation Plan, installing AMI on an accelerated basis over six years and using technology selections resulting from the joint RFP (Massachusetts and

Connecticut), is the solution adopted for regulatory purposes. The Company is requesting that PURA undertake the following examinations: (1) review the benefit cost analysis submitted herewith and find that it provides a reasonable benchmark for adoption of the accelerated implementation plan; and (2) review and approve the proposed AMI Implementation Plan in order to allow for the accelerated installation of AMI throughout the Company's service territory over a six-year period, using the technology solution implemented for Massachusetts and extended to Connecticut on a cost-effective basis.

Q. Will AMI Implementation help to advance Connecticut's energy and environmental goals?

A. Yes, AMI implementation will help to advance Connecticut's energy and environmental goals for several reasons.

First, the deployment of AMI will aid the State in meeting carbon emissions goals codified in Conn. Gen. Stat. § 22a-200a. Connecticut has passed climate change and energy legislation relating to electric energy and reducing greenhouse gas ("GHG") emissions. This legislation requires economy-wide reductions to the level of GHG emissions, with targets of at least 45 percent below 2001 levels by 2030, 65 percent below 2001 levels by 2040, and for 2050 an economy-wide net-zero level, provided direct and indirect emissions of greenhouse gases are at least eighty per cent below the level emitted in 2001 by 2050. The legislation also requires all electricity supplied to customers in Connecticut to come from zero-carbon sources by 2040. AMI supports the continued integration of distributed energy resources, including solar generation, battery storage, electric vehicles, and other

electrification technologies that are central to Connecticut's decarbonization strategy. A modernized grid equipped with advanced metering capabilities is better positioned to manage increasingly dynamic energy flows, support renewable energy adoption, and maintain system reliability as the State transitions to a lower-carbon economy.

Second, AMI will help advance fundamental principles of energy policy in Connecticut, codified in Conn. Gen. Stat. § 16-244, namely that "[t]he provision of affordable, safe and reliable electricity is key to the continuing growth of this state and to the health, safety and general welfare of its residents" and "[i]t is in the best interest of the state for all customers to use electricity as efficiently as possible." Conservation Voltage Reduction/Volt-VAR Optimization capabilities enabled by AMI will allow the grid to operate more energy-efficiently. Customer AMI usage data will provide enhanced opportunities to target customers with beneficial EE/DR programs. Usage insights and alerts will help customers to better understand and act on opportunities to increase their efficiency and reduce their energy costs, all else equal.

Third, AMI, and its ability to measure customer usage by the hour (or potentially even smaller increments), is a prerequisite to implementing time-varying rates as envisioned by Public Act No. 25-173, as codified in Conn. Gen. Stat. §§ 16-19f and 16-243n.[2]

Lastly, Connecticut has long envisioned AMI to be a policy goal, as evidenced by Conn. Gen. Stat. § 16-243w, which required consideration of implementing AMI as early as 2007. While PURA has not previously authorized a large-scale deployment of AMI within the CL&P service territory, the Company's current AMI Implementation Plan provides the opportunity to advance this goal.

Q. What are the technology selections used in the AMI Implementation Plan?

A. The technology is the same technology that Eversource selected for Connecticut and Massachusetts through a series of AMI-related requests for proposals conducted in 2020 and 2023. At that time, Massachusetts AMI policy was more mature, and therefore Massachusetts advanced to AMI implementation using the selected technologies. Eversource has leveraged the relationships built within the Massachusetts deployment to secure letters of intent from two primary vendors and a pricing proposal from the third primary vendor that are integral to the implementation of AMI. These letters of intent, or

[2] The Company must first implement AMI and gain baseline information and learning on its customers use before the advanced TVR as imagined by Conn. Gen. Stat. §§ 16-19f and 16-243n can be implemented. CL&P plans to undertake a TVR review and analysis once AMI meters are deployed and the Company has been able to collect requisite information, consistent with the requirement in § 16-243n(b) that the design of such rates, including the price differential between on-peak and off-peak time-varying rates, shall be consistent with empirical research conducted by the electric distribution company. Until then, existing TVR and any proposed interim TVR options submitted to be compliant with the October 1, 2027, deadline in § 16-243n will be bridge solutions only. Advanced TVR offerings require the functionalities of AMI. Therefore, the Company anticipates that the ultimate AMI meter deployment schedule will dictate the Company's ability to request approval for advanced TVR offerings for all customers as imagined by Conn. Gen. Stat. §§ 16-19f and 16-243n.

"LOIs," and associated pricing proposals extend the availability of advantageous pricing structures from the Massachusetts AMI implementation into early 2027. The major technology providers and components are:

- **Itron** for the headend system, electric meters, and network communications equipment.
- **Siemens** for the Meter Data Management System (MDMS).
- **SAP** for the Customer Information System (CIS).

The LOIs and associated pricing proposals that extend pricing from 2020-2023 bids will yield overall cost savings for Connecticut customers, in comparison to a scenario where new RFPs must be conducted in 2027. CL&P is confident the prior technology selections are the least-cost solution for Connecticut because the Company has monitored economy-wide inflationary pressures since the early 2020s and the pricing of AMI technologies. Additionally, approval to leverage the Massachusetts technology selections ensures that CL&P customers will benefit from system integrations that have already been built and are performing well, resulting in AMI capabilities and benefits being delivered up to three years sooner than if different technologies are evaluated and adopted.

Beyond the three primary technology providers, a number of other technology selections and service providers for other aspects of AMI implementation will be subject to a new competitive solicitation process, because, as discussed in Exhibit CLP-AMI-2, at Section VIII, these remaining technologies and services provide fewer economies of scale across jurisdictions. Of course, vendors that have performed well during the Massachusetts AMI deployment and are already familiar with the deployed technologies will likely offer

advantages to Connecticut customers, and those advantages will be considered in the evaluation of bidders.

Q. Please provide a description of the Company's AMI Implementation Plan and its accelerated schedule.

A. The Company's AMI Implementation Plan establishes a six-year implementation strategy for deployment of advanced metering technology, supporting communications infrastructure, and associated operational systems, using technology selections previously selected for Connecticut and Massachusetts and actually implemented in Massachusetts. In addition to meters, AMI is a complete system comprised of multiple applications and integrations that collectively realize the full benefit of the technology. A comprehensive AMI program will include a modern meter data management system ("MDMS"), a modern customer information system ("CIS"), a new customer engagement platform, and integrations into the Company's existing outage management system ("OMS") as well as platforms to enable engineering analytics.

Collectively, these AMI investments represent a critical component of the Company's long-term grid modernization strategy and are designed to deliver meaningful customer, operational, environmental, and societal benefits while supporting the evolving needs of the electric system. AMI provides several benefits and capabilities that allow customers to better understand and control their relationship with energy. AMI provides near real-time usage information that can be accessed via multiple channels, provides near real-time usage insight, and enables Time-Varying Rate ("TVR") choices that can give customers

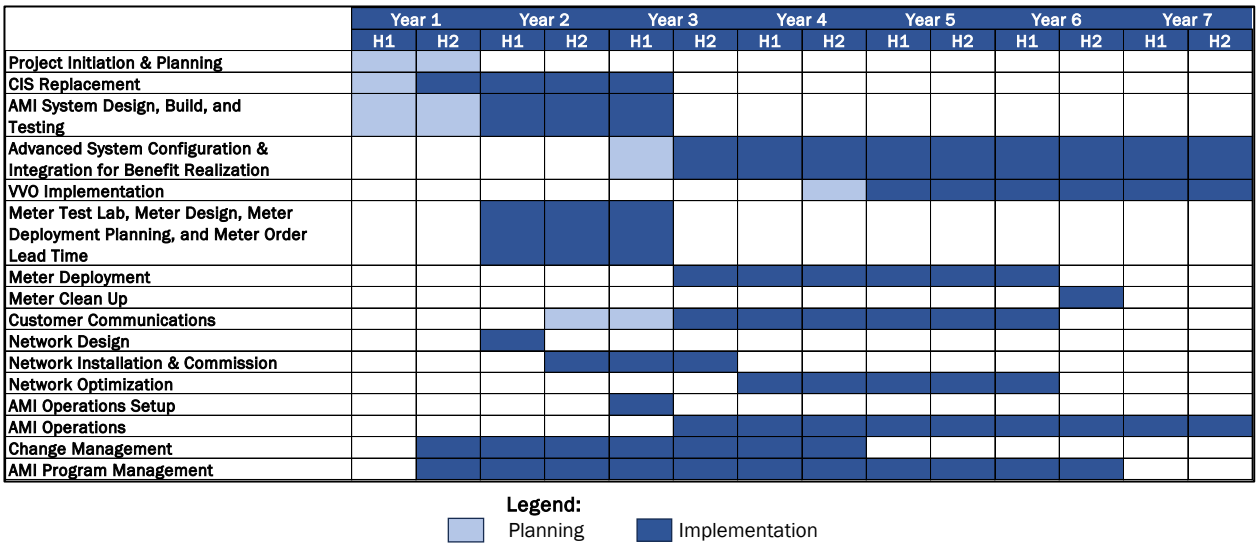
more control over their energy bills. AMI provides improved accuracy and frequency of communications during outages and storm restorations, enabled by real-time AMI meter alerts. Additionally, customers will benefit from reduced times for meter transactions, facilitated by AMI data and capabilities to remotely manage service.

The suite of customer benefits associated with AMI will be fully realized only when nearly all customers have their AMR meter replaced with an AMI meter, and when enabling AMI technological platforms (e.g., MDMS, CIS, and other integrations) are in service. Thus, an accelerated meter deployment allows for accelerated benefit realization. Accelerated meter deployment also reduces operational costs, especially those costs associated with running two metering systems as meters are deployed. Accordingly, the Company's AMI Implementation Plan proposes a deployment schedule that accelerates investments to achieve complete transition to an AMI system as quickly as possible, i.e., within six years.

Project planning would be initiated early in Year 1 (2027), followed by implementation of essential back-office systems and the communication network from the 2nd half of Year 1 through Year 3 (2029). Communications infrastructure and supporting back-office systems must be in service in advance of meter deployment to eliminate the potential for any disruption in the collection, validation, and storage of meter data required for customer billing in the transition from AMR to AMI. Back-office implementations will be complete by the start of the 3-year AMI meter deployment, which will commence from the second half of Year 3 (2029) through to Year 6 (2032). Internal and external resources will be used to exchange approximately 1.35 million meters in this 3-year period. The Company

proposes a preliminary geographical deployment sequence (see Exhibit CLP-AMI-2, Section II), but that sequence may be adjusted prior to meter deployment based on stakeholder feedback and communications network design and installation considerations. Lastly, advanced system configurations and integrations for benefit realization will commence from the second half of Year 3 (2029) through Year 6 (2032), enabling most benefits to begin concurrently with AMI meter deployment and be fully realized by Year 6.[3] Figure 1 below provides a summary of the six-year implementation and deployment timeline.

Figure 1 – Deployment Summary



Full detail on deployment strategy is provided in the AMI Implementation Plan, provided as Exhibit CLP-AMI-2, at Section II.

[3] Note that benefits of VVO and carbon reduction accrue over time and will not be fully realized until Year 10 (2036).

Q. Does the AMI Implementation Plan meet the requirements of Docket No. 17-12-03RE02?

A. Yes. The AMI Implementation Plan and the BCA meet the requirements of Docket No. 17-12-03RE02 as described in the table below.

Table 1 – Compliance with Docket No. 17-12-03RE02

Order #	Page #	Compliance Description	AMI Implementation Plan Compliance
3	58	At any time prior to, but no later than 60 days in advance of, any AMI meter deployment authorized pursuant to this Decision, or coincident with the EDC filing its next general rate proceeding, whichever occurs earlier, Eversource and UI shall file their respective Final AMI Plans in this proceeding. UI and Eversource shall develop AMI-specific business case plans that are consistent with the cost and benefit categories and associated requirements as outlined in Section III.B.4.b., Targets and Metrics for AMI Benefits, and Section III.B.4.c., Targets and Metrics for AMI Costs, and other requirements outlined in this Decision. The plans shall also meet the following additional requirements:	AMI Implementation Plan and BCA filed in this proceeding, Docket No. 26-05-10, and Docket No. 17-12-03RE02.
3	58	3a. cover a 20-year planning horizon;	Exhibit CLP-AMI-2 Exhibit CLP-AMI-3
3	58	3b. include in the BCA the value of avoided carbon reductions, and, in a supplemental BCA exclude the value of avoided carbon reductions;	Exhibit CLP-AMI-3, at sec. IV
3	58	3c. recalculate the BCAs as outlined in Section III.B.4.e., BCA Framework;	Exhibit CLP-AMI-2, at sec. IV Exhibit CLP-AMI-3, at sec. III
3	58	3d. the reporting information outlined in Section III.B.5., AMI Competitive Solicitations; and	Exhibit CLP-AMI-2, at sec. VIII Exhibit CLP-AMI-3, at sec. VII
3	58	3e. a timeline outlining the implementation and certification of Green Button Connect functionality as described in Section III.C.2.b., Green Button Connect	Exhibit CLP-AMI-2, at sec. II Exhibit CLP-AMI-3, at sec. III.D.5
	21	Discusses detail required for implementation and deployment plans, including need for: "significant project management effort, including corporate governance, project management (planning, execution, closeout), and coordination and integration with other business functions." Further, "the implementation and deployment plans must capture the above process and include milestone dates for key elements of the process, including, at a minimum 1. Project initiation date; 2. Project internal governance approval (e.g., detailed	Exhibit CLP-AMI-2, at sec. II

Order #	Page #	Compliance Description	AMI Implementation Plan Compliance
		internal approval processes and procedures); 3. Project planning (initiation and completion); 4. Project execution (initiation and completion) (e.g., deploying of field infrastructure); 5. Project testing and verification (e.g., First Article Testing); and 6. Project completion and closeout.	
	22	For the geographic deployment of meters and supporting communications infrastructure, Eversource needs to provide the timing of deployment by geographical area.	Exhibit CLP-AMI-2, at sec. II Exhibit CLP-AMI-3, at sec. III.D.1
	33	"In addition, the Authority directs each EDC to include in its Final AMI Plan a timeline for the development of an advanced TOU or TVR rate, such that a TOU rate design can be evaluated no later than during the Company's next general rate case." … "Further, the TOU pricing analysis that is required above should work in conjunction with the TOU rate design filed no later than during each EDC's next general rate case."	Exhibit CLP-AMI-2, at sec. VII
	30-33	The EDCs are required to include an advanced rate design proposal in the Final AMI Plan so that there is sufficient time to evaluate proposals, finalize rate design, and offer the rate to customers. See Section III.B.6., Advanced Rate Design, generally for additional requirements. The AMI Plan must also include analysis of opt-in or opt-out, and a timeline for development of a more advanced TOU/TVR rate. The AMI Plan must also include various analyses listed on page 33.	Exhibit CLP-AMI-2, at sec. VII
	35	For customer outreach and engagement: "The Authority directs each EDC to include in its Final AMI Plan the above objectives, coupled with a target for measuring each objective and supporting data collection requirements, a detailed description of channels of communication, a description of the intended audience, and a timeline for each objective." Final AMI Plan needs to include discussion on various aspects of Customer Outreach and Engagement Plan.	Exhibit CLP-AMI-2, at sec. VI
	45	For third-party onboarding and registration process, "The Final AMI Plans must include a timeline to finalize the onboarding process prior to installation of AMI meters authorized pursuant to this Decision. The Authority directs the EDCs to develop and submit final onboarding processes to the Authority prior to meter installation." Additionally, "All costs for implementing onboarding processes for vendors, and associated Green Button Connect implementation costs, must be included in the Final AMI Plans."	Exhibit CLP-AMI-2, at sec. II Exhibit CLP-AMI-3, at sec. III.A.3

Order #	Page #	Compliance Description	AMI Implementation Plan Compliance
	50-53	Section III.D., Deployment and Implementation Scorecards and its subsections. Decision says that the targets must be established in the Final AMI Plan.	Exhibit CLP-AMI-2, at sec. IX

Q. Is there a preliminary budget for the Company's AMI Implementation Plan?

A. Yes. As shown in Exhibit CLP-AMI-3, Section III.A.5, Figure 6, the total AMI build-out cost from 2027 through 2033 is estimated at $1.253 billion. This is comprised of $970.3 million in capital expenditure and $282.8 million in O&M over the 6-year deployment schedule.

Q. Did the Company evaluate the cost and benefits of implementing the selected AMI technologies in Connecticut under the AMI Implementation Plan?

A. Yes. Eversource hired West Monroe to conduct a benefit-cost analysis ("BCA") on implementing AMI in Connecticut using the same technology selection utilized in Massachusetts under the six-year implementation timeline outlined in the AMI Implementation Plan. This analysis is provided in Exhibit CLP-AMI-3. The BCA compared the anticipated costs with the expected benefits over a 20-year horizon and calculated a benefit-cost ratio. As shown in Exhibit CLP-AMI-3, the nominal benefits accrued over the 20-year horizon exceed the nominal costs, providing a net benefit to customers on a nominal basis. However, adjusting for the time value of money (i.e., applying the appropriate cost of capital discount rate) results in a net present value ("NPV") benefit-cost ratio ("BCR") of less than 1.0, or 0.77, to be exact. This figure results from the fact that the costs of the AMI program largely occur in the early years of the 20-year

analysis horizon, while the quantifiable customer benefits materialize after most of the expenses have been incurred. This is not unusual for an IT/infrastructure upgrade on the scale of the AMI implementation, i.e., customers are gaining a benefit of an entirely new operating platform, which does require up-front investment to make it happen.

Q. Should AMI deployment be pursued even though the NPV BCR is less than 1.0?

A. Yes. As an initial matter, many utility investments are pursued absent a BCR greater than one, or even absent the completion of a BCA. Utilities have an obligation to serve customers safely and reliably and to provide service at rates that are just and reasonable. In this framework, utility investments for safe and reliable service are required every day even if the investment has a BCR less than one.

As it relates to AMI, as part of its obligation to serve customers, the Company must also be able to accurately and timely bill customers for that service, and metering infrastructure is necessary to that end. The fact of the matter is that the Company's existing metering fleet of AMR meters will eventually need to be replaced as the meters reach and exceed their useful lives. Given that AMI is the current technology of choice in the industry, the Company's full expectation is that it will migrate to AMI at some point in the future, regardless of the BCR of such migration. The question really comes down to timing and pace of the transition, and there are multiple prudent paths forward on the journey. This is an important consideration because the costs of AMI will be incorporated into the delivery portion of a customer's bill, but many of the benefits of AMI will not, and optionality in taking advantage of many AMI benefits will be within the customer's control. From a

customer's perspective, AMI will lead to higher delivery rates, all else equal, and therefore it is appropriate for PURA to consider if a slower implementation path with lower levels of benefits and burdens as compared to an accelerated implementation provides a more optimal outcome for customers.

At this juncture, the Company's proposed AMI deployment using previously selected technologies and a six-year implementation has the best BCR of currently available options, and it offers the most equitable deployment schedule to ensure customers have equal access to the benefits of the system they are paying for. Given the scale and scope of the customer commitment to this technology, the Company is therefore requesting regulatory adoption of the concept of pursuing this proposed accelerated deployment with its elevated benefits and burdens, as a slower deployment offers a different balance.

Q. Are there qualitative (non-quantifiable) benefits that PURA should consider in relation to its determination that AMI implementation is in the public interest?

A. Yes. As it relates to the Company's preferred AMI implementation timeline, the BCR only considers quantifiable benefits. However, there are several important qualitative benefits that provide significant value to customers, constituents, and operations, that should also be considered when evaluating the initiation of AMI deployment. These qualitative benefits include the following:

- Enhanced customer satisfaction through outage restoration notifications
- Empowering customers and optimizing system utilization through more accurate load profiles
- Enhanced satisfaction through new reliability measures and resiliency validations
- Proactive operations management via integrated AMI data with the system operations center
- Increased public safety through new alerts
- Efficiency gains through shared AMI systems across affiliates
- Proactive customer engagement through AMI enabled notifications, detailed billing data, and load disaggregation
- Electric AMI efficiency gains that benefit any future gas AMI deployment

Details on these qualitative benefits are provided in Exhibit CLP-AMI-2, at Section V.

Q. Has the Company evaluated the benefits of an accelerated AMI deployment under the AMI Implementation Plan?

A. Yes. The Company compared the accelerated six-year deployment under the AMI Implementation Plan to a non-accelerated end-of-life replacement case. In the end-of-life replacement case, high-level directional analysis indicates that there is a 41% erosion of realized benefit value compared to the accelerated plan, equating to a loss of $490.4 million in benefits. Conversely, on the cost side, the end-of-life replacement case has a 19% cost savings, or $291.6 million reduction in cost. Costs are lower because supporting system investments and related O&M are delayed, but benefits are reduced further because most benefit calculations depend on the number of installed AMI meters. The end-of-life replacement case results in a BCR that is 27% lower than the accelerated deployment case. The BCR for end-of-life replacement using the same technology selections is 0.56.

Q. Does the Company recommend pursuing an end-of-life replacement case?

A. As outlined above, the Company's primary recommendation is to implement AMI on an accelerated basis due to the suite of benefits the program will provide directly to our customers. However, if PURA decides against adopting a concept of accelerated deployment with its elevated benefits and burdens or does not support a ratemaking framework that would enable AMI implementation on an accelerated basis, the Company will need to implement AMI at a slower pace. Although end-of-life replacement is not the Company's primary recommendation, the reality is that, at some point in the future, the Company will eventually experience difficulty in sourcing AMR meters due to technological advancements and industry trends in producing and utilizing AMI meters. Therefore, the "business as usual" case will result in AMI implementation, just on a slower pace with less bulky investment requirements and fewer operational challenges that will drive the need for stakeholder engagement. Customers will benefit from the implementation of AMI meters, regardless of the implementation pace and the Company's implementation of AMI meters will be a "prudent" investment decision regardless of the pace that is undertaken for replacement. It is the precise balance of costs and benefits that changes with each scenario.

Q. What is the alternative to the Company's AMI Implementation Plan?

A. If PURA does not support the Company's proposal to proceed on its AMI Implementation Plan, leveraging the same AMI technology as utilized in Massachusetts, then the Company will need to start a new AMI technology solicitation and evaluate an implementation plan

based on that technology selection and any revised guidance from PURA on an accelerated deployment case versus end-of-life deployment case, once those new procurement details are known. The timeframe for implementing an alternative technology selection will remain contingent on the availability of a ratemaking framework that aligns with accelerated AMI deployment. In other words, it may be feasible to implement an alternative technology selection on an accelerated basis if PURA were to approve an appropriate AMI ratemaking framework in the rate proceeding (without approving the AMI Implementation Plan presented in this proceeding).

Absent approval of an acceptable AMI ratemaking framework, the Company plans to implement AMI on a business-as-usual basis, which would take approximately ten years or more to conduct the meter rollout as AMR meters naturally reach the end of their useful lives. Investments to modernize the foundational systems will still need to be made, and their timing will be determined by when critical mass of AMI meter installations is eventually achieved. Additional investments may need to be made to make AMI meters backwardly compatible with the legacy head-end and MDMS systems as well.

A business-as-usual AMI implementation will delay some AMI costs (and therefore impacts to the delivery portion of the bill), but it will also substantially delay the availability of AMI benefits to customers. That tradeoff is a policy choice that should be considered by PURA, and it is why the Company is submitting to PURA a petition for a separate uncontested proceeding requesting PURA's support to: (1) review the benefit cost analysis and find that it provides a reasonable benchmark for adoption of the accelerated

implementation plan; and (2) review and approve the proposed AMI Implementation Plan in order to allow for the accelerated installation of AMI throughout the Company's service territory over a six-year period commencing January 1, 2027, using the technology solution implemented for Massachusetts and extended to Connecticut on a cost-effective basis. If PURA supports an accelerated deployment, then commensurate regulatory support through a tailored cost recovery framework likewise needs to be established so that the Company is financially able to support accelerated deployment and so that bill impacts for customers can be more closely aligned with benefit realization through the use of securitization. Additional investments may need to be made to make AMI meters backwardly compatible with the legacy head-end and MDMS systems as well.

Q. What if PURA adopts the AMI Implementation Plan without adopting the AMI cost recovery framework proposed in the Company's base distribution rate case?

A. Fundamentally, the implementation of AMI on an accelerated basis is a very significant undertaking, involving the installation and upgrades of several major back-office information systems and meter installations at every customer premise across a base of 1.3 million electric customers, along with substantial stakeholder education and outreach efforts to make it a success. The Company's experience is that there needs to be regulatory engagement in the process from PURA and other stakeholders at every step of the process. If PURA's determination is that it cannot support the process for some reason, the Company will need to evaluate that reasoning and incorporate it into its project decision-making. For example, if PURA decides against approval of a dedicated ratemaking framework to support the AMI Implementation Plan (i.e., an accelerated plan) because it

is not affordable for customers, then the Company would need to revisit its plan and make changes to incorporate that consideration. This would be necessary because, if PURA were to determine that the ratemaking framework is not reasonably affordable or is not sufficiently beneficial to customers, then the Company could not proceed to simply implement AMI and then come back to PURA with a recovery request after already incurring the full cost. The accelerated implementation of AMI is a big decision that requires the input of all stakeholders and a reasoned, deliberate approach for execution.

In this context, the Company is attempting to deal with the fact that PURA will not consider a cost-recovery framework outside of the rate proceeding, while opportunities to leverage the Massachusetts technology and joint RFP are dissipating with the passage of time. Accordingly, the Company's plan is a two-step process where: (1) it is requesting that PURA review and approve the implementation plan in a separate, uncontested proceeding that can be concluded by mid-November and allow for vendor negotiation through the end of first quarter 2027; and (2) it is requesting that PURA approve a ratemaking framework to support accelerated AMI implementation in its June 2027 rate decision. With a decision from PURA establishing a reasonable ratemaking framework in hand, the Company will be positioned to launch the AMI implementation on an accelerated basis, upon the issuance of the final decision in the rate proceeding. If PURA does not grant that approval, then the Company will be positioned to implement other plans, running coincident with a rate-case interval.

IV. CONCLUSION

Q. Do you have any concluding remarks?

A. There are substantial quantitative and qualitative benefits that will result from the introduction of AMI to CL&P customers and the Company's recommendation is to implement AMI on an accelerated time frame for that reason. However, implementation comes with costs and operational challenges. Eversource has built an experienced team and a network of engaged partners that are executing an AMI plan successfully in Massachusetts and Eversource seeks to extend this success to Connecticut. With PURA's support and approval of the Company's established AMI technology strategy and a reasonable cost-recovery framework, Connecticut customers will enjoy the customer experience benefits, enhanced reliability, and operational efficiencies of AMI cost-effectively on an expedited timeline.

Q. Does this conclude your testimony?

A. Yes, it does.