EVERSOURCE

Connecticut Electric

AMI Deployment and Implementation Plan

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I. Executive Summary

Eversource Energy ("Eversource" or the "Company") is at a critical inflection point in Connecticut, with drive-by automated meter reading ("AMR") technology that is rapidly approaching its end of useful life. The Company endeavors to be a catalyst for Connecticut's clean energy goals and actively seeks out opportunities to engage customers in capturing the benefits of an electric grid that enables equitable access to affordable energy, energy efficiency, clean transportation, and renewable energy resources. Were the Company to reinvest in AMR meters, it would significantly detract from the Company's ability to continue to make substantial progress in modernizing the distribution system and enabling a cleaner energy future.

Rather than invest in a metering system that cannot support grid- and customer-facing advancements, Eversource recognizes that advanced meter infrastructure ("AMI") is the preferred replacement solution to ensure that the Company is able to manage its distribution system effectively and safely for its customers while providing the advanced capabilities that are necessary to achieve Connecticut's energy, environmental, and affordability goals. Eversource has developed this comprehensive plan outlining our proposed approach to the deployment and implementation of advanced metering infrastructure.

The Connecticut AMI Deployment and Implementation Plan (the "Plan") details 10 components of our comprehensive deployment strategy, designed to maximize customer value and strategic benefit for each dollar invested. Each section is summarized as follows:

Deployment Schedule

The AMI technology deployment plan outlines a six-year implementation strategy to modernize the electric distribution system through the deployment of advanced metering technology, supporting communications infrastructure, and associated operational systems. Project planning shall be initiated early in Year 1, followed by implementation of essential back-office systems and the communication network from the 2nd half of Year 1 through Year 3. Back-office implementations shall be complete by the start of the 3-year AMI meter deployment, which will commence from the second half of Year 3 through to Year 6. Lastly, advanced system configurations and integrations for benefit realization will commence from the second half of Year 3 through Year 6, enabling benefits to begin concurrently with AMI meter deployment.

Capabilities Roadmap

The sequencing of new AMI capability deployment is based upon inter-dependencies that exist between AMI technology infrastructure and functionalities, and the timing is further dependent upon testing requirements to ensure the underlying equipment and systems are producing the desired results. The capability timeline assumes that the systems and equipment standards deployed in Massachusetts can be fully leveraged for Connecticut customers. Several capabilities can be realized with the commencement of AMI meter deployment, including power outage restoration, bulk data sharing, energy efficiency and demand management analytics, load research, transformer load management analytics, unbilled usage detection, VVO

analytics, and remote connect/disconnect functionality. Other capabilities can only be fully realized after the full deployment of AMI, including advanced billing capabilities, VVO, and comprehensive TLM.

Financial Summary

The AMI program costs, for Years 1-6, roll up into eight cost categories including meters, communications, back office systems, labor and standard operating plan, supporting services and platforms, VVO, customer experience, and data. The total nominal AMI build cost from Years 1-6 is $1.253 billion, of which 77% is capital investments and 23% is O&M. Conversely AMI data and technology facilitate a wide range of quantifiable new benefits roll up into five categories including avoided costs, operational savings, customer savings, environmental benefit, and other.

A separate Benefit Cost Analysis ("BCA") report was created by West Monroe under the supervision of Eversource. When evaluating the 20-year value and costs of AMI on a nominal basis, the analysis resulted in a nominal benefit cost ratio ("BCR") of 1.06, and an 20-year NPV value of 0.77. This result is due to the fact that AMI program costs largely occur in the first 6 years of the analysis horizon, while the quantifiable customer benefits materialize after most of the expenses have been incurred. The heavy upfront investment results in maximum equity and benefit realization to Connecticut customers.

Qualitative Benefits

The BCA report identified 8 additional non-quantifiable benefits that will result in measurable value, but cannot be reliably modelled prior to the deployment of AMI. These non-quantifiable benefits include:

- Enhanced customer satisfaction through new outage restoration notifications
- Empowering customers with insights on optimizing their electricity usage through more accurate load profiles
- Reduced customer impact and enhanced satisfaction through new reliability measures and resiliency validations, decreasing disruptions
- Proactive operations management via integrated AMI data with the system operations center, down to the circuit segment level of the system
- Increased public safety through new safety alerts, including hot sockets and voltage measures
- Efficiency gains through shared AMI systems across affiliates
- Proactive customer engagement through new AMI enabled notifications, detailed billing data and alerts, and load disaggregation to drive consumer behavior
- Deployment cost efficiencies for CT AMI Gas, whereby electric AMI infrastructure can also support AMI Gas technology.

Customer Outreach and Engagement

The Company proposes to guide and educate its customers about smart-meters and the benefits and capabilities they enable pursuant to the same framework as outlined by our successful Massachusetts AMI Implementation Plan. The phases of the Plan are:

- Awareness
- Deployment
- New Energy Insight and Ways to Save
- Time-Varying Rates

This approach will support customers in first understanding what the technology can provide, then explain how the change will happen, and finally how they may benefit by enrolling in new AMI programs.

Time-Varying Rates

Time-varying rates rely on interval usage data, advanced billing system functionality, customer access to timely consumption information, and robust customer education and engagement programs. AMI provides the technological foundation necessary to support future time-varying rate offerings, including time-of-use, critical peak pricing, and other demand-responsive rate designs. However, these capabilities cannot be fully, equitably realized until AMI meters have been installed and activated for the majority of customers and the supporting data management, communications, and billing systems have been fully integrated and tested. Eversource recommends that each customer have at least a year of interval usage data history that can be processed by the planned rate comparison tool to help them navigate their TVR options. Therefore time-varying rate designs will be implemented following AMI meter deployment.

Competitive Solicitation Summaries

Eversource underwent a rigorous competitive solicitation process for Massachusetts AMI Deployment, with the strategic intention of utilizing the largest technology venders for the major elements of Connecticut AMI Deployment, namely the meters and communications network, CIS, and MDMS. Leveraging the already-completed processes from Massachusetts will ensure that Connecticut customers will benefit from the shorter project timeline, economies of scale, and the extension of pricing options negotiated in the original contracts. The Company's competitive solicitation process, followed for the MA deployment and which shall be applied to all other CT AMI deployment vendors, includes a requirements planning stage, RFP development, publication and potential vendor outreach, and evaluation and selection from a cross-functional evaluation committee.

Performance Metrics

Eversource embraces accountability for executing the AMI program effectively and delivering upon the expected benefits to customers. Accordingly, Eversource proposes a performance metrics framework to provide transparency into both the success of the AMI deployment and

the realization of benefits. The Company has put forth a series of proposed deployment success measures, and operational success measures that would be reported annually.

Customer Opt-Out

Eversource customers will have the opportunity to decline the installation of an AMI meter by participating in the opt-out program. The customer will receive a new non-communicating meter to replace the eventually unsupported AMR meter. The Company will speak with customers directly to understand their concerns, educate and inform about the benefits of AMI, and then explain the opt-out program and associated fees including the monthly manual meter reading surcharge. In specific circumstances where the opt out exchange occurs after an AMI meter is already installed, or after the customer's designated AMI deployment schedule, a onetime opt-out exchange fee will be assessed. Customers will receive multiple communications including letters, bill inserts, and outbound calls prior to any changes taking effect.

AMI Path to Achieve Connecticut's Energy Future

The greatest advantage of the proposed AMI Plan is accelerating benefit realization by rapidly and efficiently deploying AMI and the foundational systems. The result is the delivery of the maximum possible value to Connecticut customers over the useful life of the AMI meters. The accelerated deployment of AMI technology is a required foundation for Eversource to deploy the modern grid capabilities needed to meet Connecticut's clean energy, environmental, and affordability goals. If AMI technology is delayed until AMR meters reach their end of useful life, there is a 41% erosion of realized benefit value compared to the accelerated plan, equating to a loss of $490.4 million in benefits. On the cost side, the end-of-life scenario has only 19% cost savings, or a $261.6 million reduction in cost. Costs are lower due to the delay of supporting system investments and related cost reductions, but benefits are reduced further as benefit calculations depend upon the number of meters installed. The result is a Benefit Cost Ratio that is 27% lower than the accelerated case, at 0.56.

II. Deployment Schedule

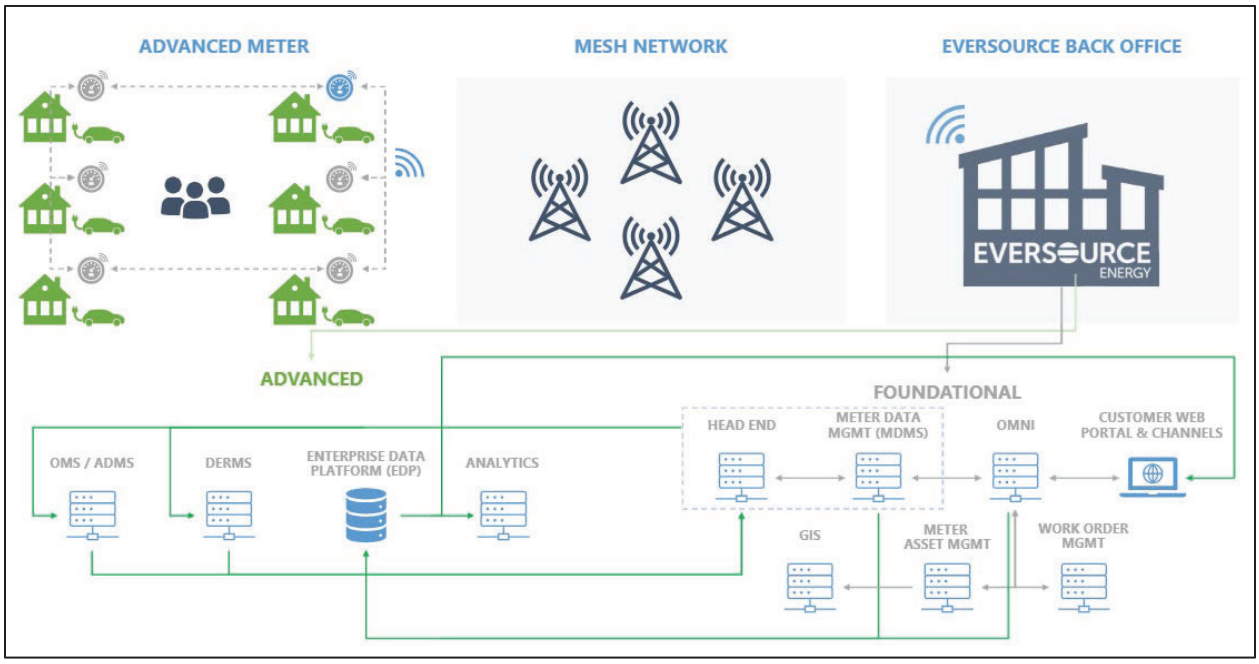
Eversource is committed to helping Connecticut achieve its vision of a clean energy future, characterized by strategic investments in clean energy and grid modernization initiatives that yield a dynamic, efficient, and customer-centric electric system. AMI represents a critical step in realizing these goals by addressing the challenges that currently hold Connecticut back: limited visibility and control at the grid edge. AMI is the foundational technology that enables the visibility required and supports the optimization of distribution system operations in real time. Where current automated meter reading technology ("AMR") only captures a single monthly usage value, AMI enables interval data collection in 15-minute increments (or less), two-way communication, and near-real time system visibility. The expanded AMI capabilities support an even wider set of use cases, in addition to Connecticut's clean energy goals, that help to control energy costs, increase transparency, and improve customer experience.

The Company's current AMR technology is rapidly reaching its end of life. Rather than investing in an old AMR metering system that will act as a hindrance, the Company is looking to accelerate investments in an AMI technology that will be an asset to achieving Connecticut's energy and environmental goals.

A modern AMI deployment requires more than just meters and communications infrastructure. Advanced metering infrastructure 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.

The following diagram illustrates the interaction of the main components that enable AMI, and serves as a reference for subsequent deployment descriptions.

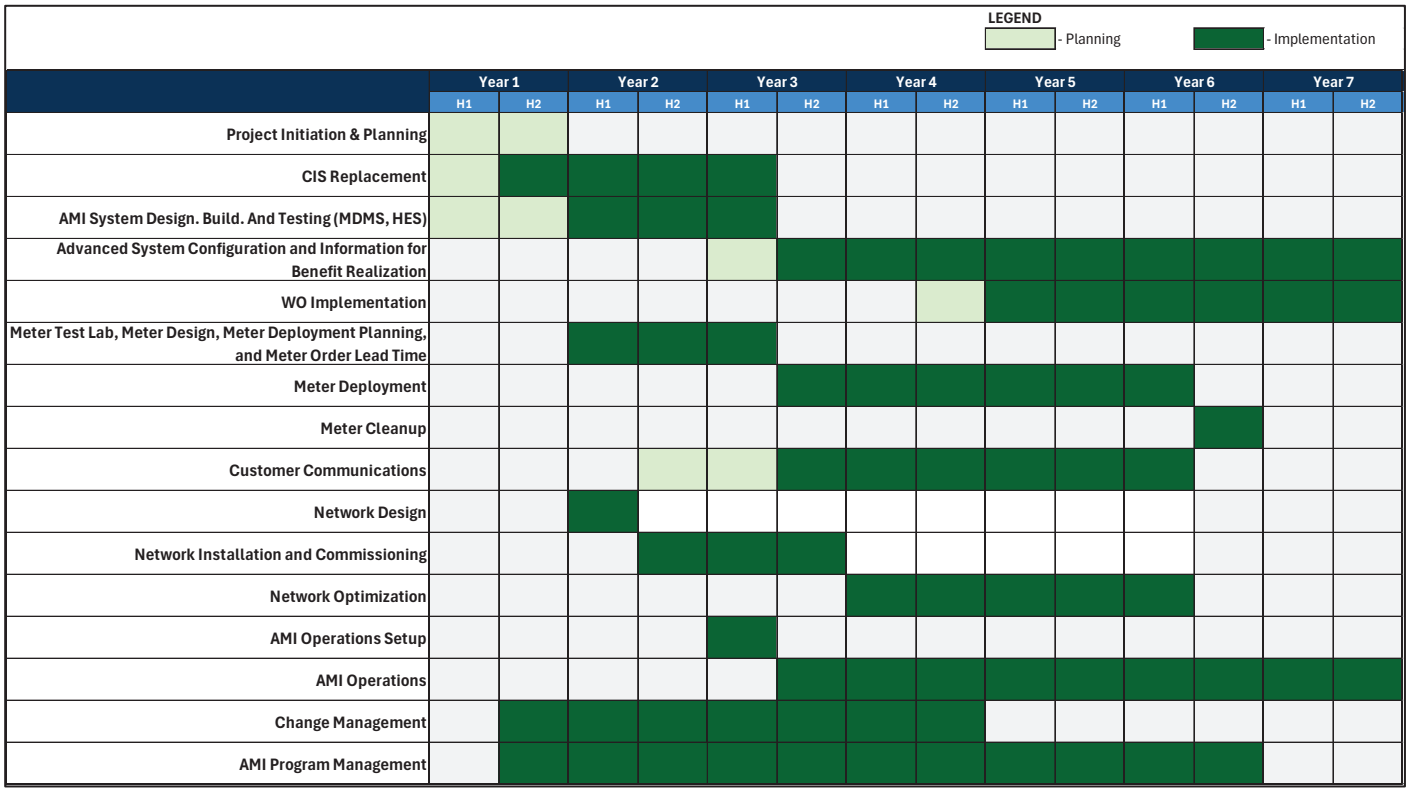
Figure 1 – Components of AMI Technology



Value-Driven Implementation

This Connecticut AMI Deployment and Implementation Plan outlines steps required to accelerate the realization of the broad potential of AMI to provide value-added outcomes for our customers. Project planning shall be initiated early in Year 1, followed by implementation of essential back-office systems and the communication network from the 2nd half of Year 1 through Year 3. Back-office implementations shall be complete by the start of the 3-year AMI meter deployment, which will commence from the second half of Year 3 through to Year 6. Lastly, advanced system configurations and integrations for benefit realization will commence from the second half of Year 3 through Year 6, enabling benefits to begin concurrently with AMI meter deployment (refer to Figure 2).

Figure 2 – CT AMI Deployment Summary



Many of the benefits enabled by AMI will accrue directly to customers. Access to new granular usage information, insights, alerts, and availability of optional time-varying rates will provide customers with new opportunities to manage their energy consumption and lower bills. Another customer benefit is 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.

Meter Deployment Strategy

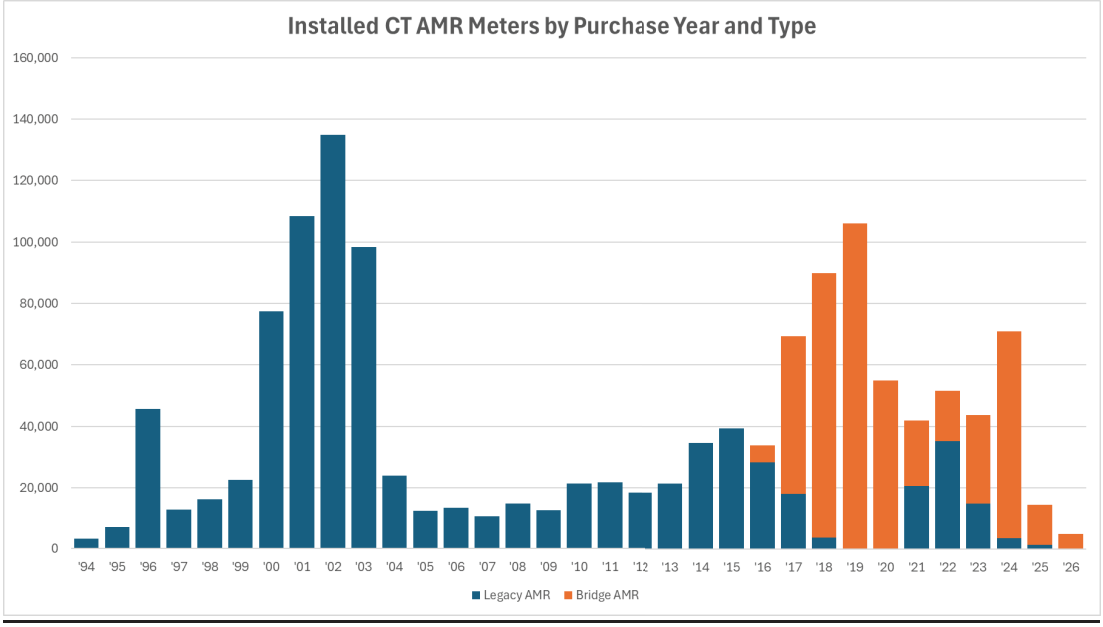
The current AMR metering technology measures and transmits total usage for a single month at the point in time the meter is read each month. This single value is collected via an AMR drive-by system and stored in the Company's back-office systems for billing purposes. Although AMR meters are efficient and effective in collecting accurate usage data for billing a single volumetric rate, these meters provide no insight into usage throughout the day in granular intervals, and

thus there is no opportunity to provide information or incentives for customers to reduce peak demand.

AMR meters were first deployed by the Company, in Connecticut, between 2000 and 2003. AMR meters have an approximately 20-year useful life on average. Currently, 50% of AMR meters in Connecticut are 15 years old or older, rapidly approaching their expected end of useful life (Figure 3). The Company replaces approximately 50,000 AMR meters a year due to damage and meters reaching their end of useful life. The AMI meter deployment plan accelerate investments to achieve a complete transition to AMI meters upfront, which will allow for accelerated benefit realization and significant reduction in operational costs to exchange meters in the next 20 years.

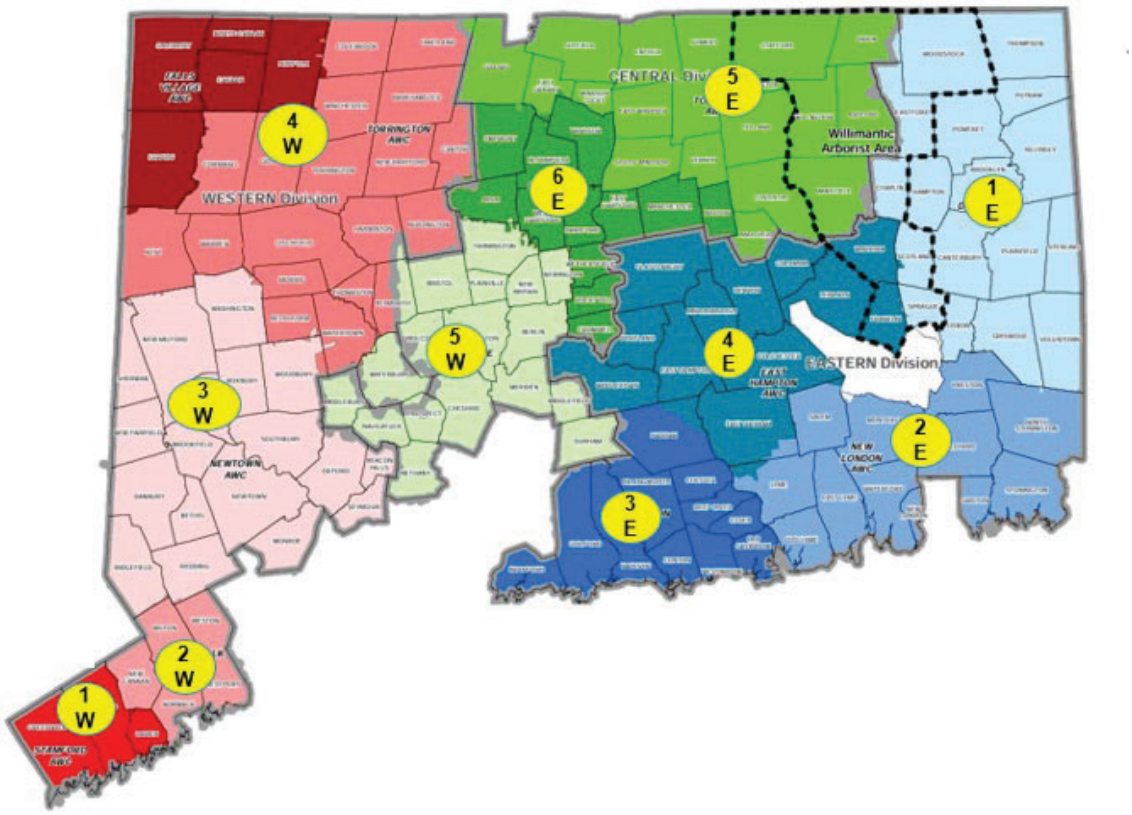
In 2016, the Company began utilizing bridge meters for some AMR meter replacements and new installations with the expectation that the capability of switching them from AMR to AMI would offer cost advantages to the eventual AMI plan. In the intervening years, AMI technology has advanced substantially with the introduction of new features, including distributed intelligence ("DI") capabilities that will offer both grid-facing benefits and customer experience enhancements. Additionally, the DI app environment in the next-generation AMI meters accommodates the development of future applications that will better ensure that the meters remain technologically relevant throughout their functional lives. The Company has adopted a "no second-class AMI citizens" philosophy, meaning that it intends for all customers to have access to the full range of current and future functionality. Accordingly, the Company will replace all bridge meters with next-generation AMI meters and anticipates credits from the meter provider to help partially offset the bridge meter costs (subject to negotiation).

Figure 3 – CT AMR Meters by Purchase Year and Type



The Company's implementation plan includes using internal and external resources to exchange approximately 1.35 million meters in a 3-year period. While the detailed deployment sequence will be finalized once vendors are onboarded, Figure 4 below illustrates a proposed AMI deployment approach. It assumes an initial ramp-up in Region 1E for Meter Installation Vendor ("MIV") hiring, training, and system validation, followed by parallel East/West deployment teams to balance rural and metro work and maintain steady progress over the three-year rollout. A post-deployment period for optimization and remediation will follow.

Figure 4 – CT AMI Proposed Deployment Sequence

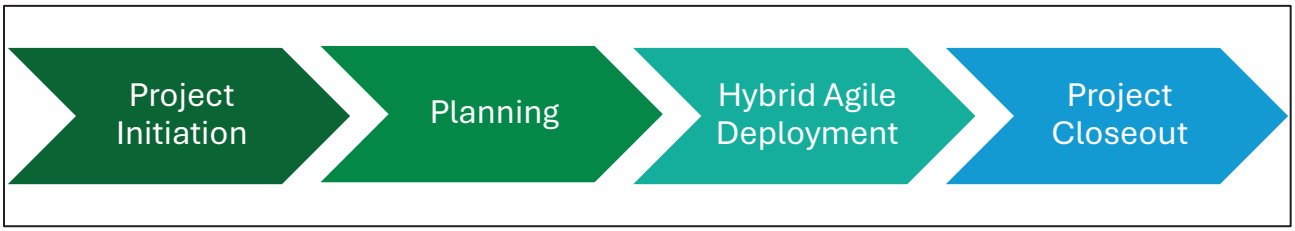


In the following sections, the Company provides information regarding the approach it will take in the implementation of AMI project following approval by PURA. This plan represents the best information available at this time, and will be adjusted and revised as more information and details are known.

Implementation Process – Program Management

The program and project management processes that the Company utilizes are scalable and will be utilized to match the size, complexity, regulatory obligations, stakeholder exposure, and risks of the AMI program. Implementation of the AMI program will proceed through the following four phases: Initiation, Planning, Hybrid Agile Deployment, and Closeout (Figure 5). Certain deliverables are related to each phase. The Company is highly experienced in managing programs and projects of varying size and complexity and will draw upon Company experience in Massachusetts and industry best practices for the AMI implementation.

Figure 5 – Program Management Stages



Project Initiation

The first step is to obtain internal funding authorization consistent with the Company's Project Authorization Policy and procedures. Initial funding will be required to develop a process for which the larger AMI program will be layered into the Company's existing business practices and leverage the existing capabilities, processes, procedures, departments, and personnel within the Company.

Once funding is approved, a program management approach based upon industry and Company best practices will be established. The organizational design will include a Program Management Office ("PMO"), executive steering, and operational management structure. The company will identify resource needs and acquire PMO resources as appropriate.

As the AMI program is developed, the Company will utilize internal guidelines to identify and initiate individual projects that will constitute the larger AMI portfolio. The individual projects will be unique in nature, in the sense that their duration, team resource needs, complexity, and budget will vary. The AMI PMO will coordinate and oversee the comprehensive AMI program and individual projects so that they are efficiently and effectively implemented.

Planning Phase

The planning phase builds on the preliminary schedule created for project approvals and further defines who and how work will be performed. Project requirements are defined with supporting details regarding how project objectives will be met, identification of required resources to complete, and outreach to key stakeholders. Throughout the planning phase, the Company will draw upon existing frameworks, templates, and communication channels.

A program plan will be created to lay out the project strategy, project scope, risks, constraints, assumptions, control mechanisms, and success criteria. The project schedule will be the basis for progress reporting and will define support activities,

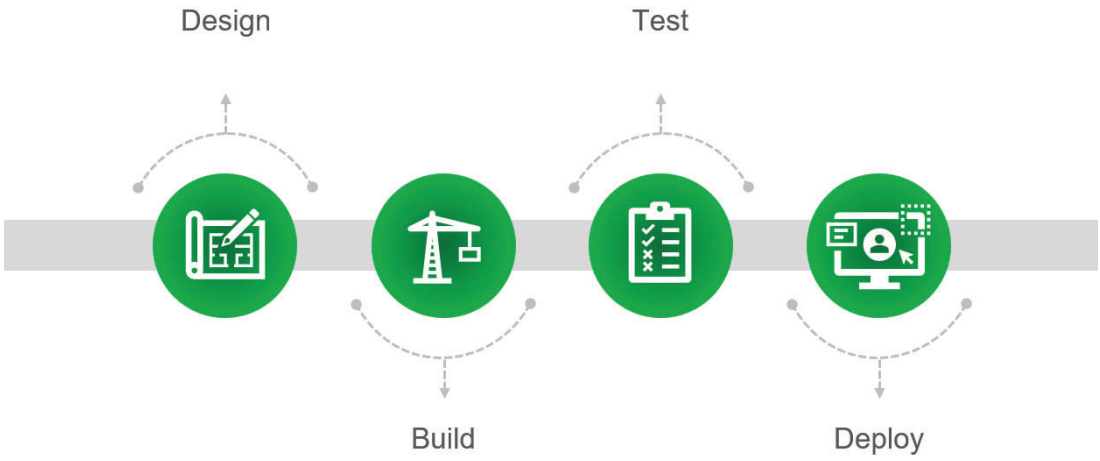
resource allocation, conflicts, and delays. Risk management is performed to identify and plan for items that may impact the project and will also include the mitigation plan for existing and potential project risks.

An internal communication plan will be developed to determine how project issues, status, and other relevant information will be communicated among the PMO, project managers, other team members, and to senior management. Appropriate outreach and communications with project stakeholders will be coordinated closely with the project activities.

Hybrid Agile Deployment

This phase includes Eversource's Agile tools, ceremonies, and principles in conjunction with waterfall best practices and documentation to drive collaborative, cross-functional implementation of AMI technologies across the program. Activities across multiple application and operational streams are tracked using Agile tools such as Jira, which visualize the backlog and completion process of work activities. Projects will follow an iterative Design-Build-Test-Deploy framework (Figure 6). Work across program projects are coordinated across quarterly epics, with functional increments of work pre-planned and cross functional dependencies identified and tracked.

Figure 6 – Eversource Deployment Framework



The PMO will be responsible for program level updates and reporting, including variances in scope, schedule, and budget. Program updates are provided to stakeholders on a weekly basis, including high level program status and project level

updates. Cost controls are reported and reviewed monthly with an Executive Steering Committee.

Any scope, schedule, and budget deviations will be addressed through Project Change Requests that must be approved by both the AMI Governance Board and the Change Control Board and/or recovery plans. Any deviations from the original project plan will be managed by the PMO and in accordance with project authorization policies. If there are any large deviations from the original plan that requires supplemental funding, the Project Authorization Policy requirements will be followed.

The project tracking plan will include lessons learned to assess, learn, and share project experiences to benefit the execution of the project. Relevant project tracking metrics will be leveraged to improve project continuity and inform decision making. Project documentation and decisions will be saved in the appropriate records storage system and shall provide a written history of the project.

Project Closeout

Project closeout occurs on two paths: financial closeout and administrative closeout. The financial closeout work involves accounting processes to close project work orders and completing the company's financial records. The normal life-cycle of a capital project results in the need for the timely declaration of the in-service date.

The classification of work orders as "in-service" results in the classification of costs to rate base, begins depreciation and inclusion in the basis used for property taxes. A target timeframe for work orders to be placed in a completed status is within 90 days of the work order going into service.

The purpose of the project administration closeout is to officially close the project, declaring that all project deliverables and organizational hand-offs are complete. The work involves verifying that project documentation is complete and properly archived. Administrative activities also include project records, equipment turnover, and project lessons learned. Some key areas include reconciling and developing variance reporting. Variance reporting reflects and explains deltas between baseline and actuals.



Communications & Network Installation

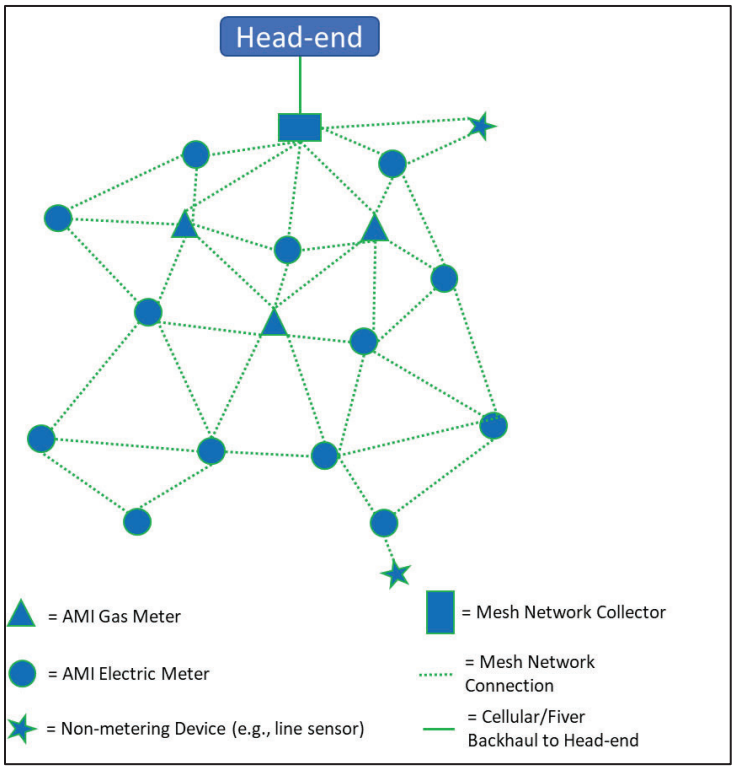
The communications network is the backbone that enables remote two-way communication between meters and supporting back-office applications. The communications

network design will incorporate several technologies working to ensure secure reliable, resilient, and timely data transmission. The network will be designed to meet Company-specified requirements in the following areas:

- SECURITY: the network must be protected with physical and cybersecurity measures that ensure data privacy and minimize the risk of unintended system access.
- RESILIENCY: the network must include sufficient redundancy and backup to protect against disruption due to weather or other events on the system.
- RELIABILITY: Data transmission must be reliable and consistent to support the Company's requirements for billing and usage presentment to customers.
- COST-EFFECTIVE: Recognizing the varied features across the service territory, the network design should reflect a cost-effective design overall, while employing local cost-optimizing network strategies where practicable.
- OPTIONALITY: The network should be designed to enable flexibility to incorporate data transmission for non-mission critical devices such as line sensors and be scalable to support data transmission from gas and water meters.

In recent years the Company has undertaken several initiatives to understand the costs and benefits of communications network technologies. In 2021, as decisions were being made for the foundation of the enterprise-wide AMI program, the Company refreshed its strategic assessment of available telecommunication options for various field area network use cases including AMI distribution automation, mobile voice, and field device data. Technologies assessed included private radio, private cellular, public carrier cellular, private mesh, and point-to-multi-point wireless networks As depicted in Figure 7, based on these and other efforts, the Company concluded that a hybrid approach, utilizing a private wireless "mesh" network coupled with public carrier cellular networks, is the most effective technology for its electric AMI telecommunications network needs. Subsequently, Eversource developed an innovative enhancement to this strategy by working with its selected AMI vendor to develop multi-carrier SIM technology for its communications access point devices. This first-in-the-industry strategy has alleviated the reliance on a single cellular vendor, thereby improving reliability, resiliency and commercial flexibility.

Figure 7 – Illustrative AMI Mesh Network Architecture



The latest generation AMI mesh networks enable powerful smart meters with enhanced processing and memory capabilities to run applications and securely share data among peer meters. These enhanced capabilities allow the meters to interpret the scope of a network outage, rapidly sample and interrogate voltage quality, and provide insight into the general health of the electric network. This new AMI architecture has enabled multiple new use cases and enhanced existing ones.

Communications Implementation Plan – Procurement of Products and Services

Eversource conducted a rigorous procurement selection process in Massachusetts, outlined in Chapter 8, which resulted in the selection of Itron as the Communications Implementation vendor. Eversource is requesting that PURA waive the obligation to conduct a blank-slate technology selection process, and permit the Company to move forward with Itron as the Communication technology vendor. By moving forward with Itron the Company can quickly mobilize into design and implementation, taking advantage of the scale and jointly developed features (see multi-carrier SIM description above) offered by the established partnership. However, if the Company is required to

conduct its technology selection anew, then there will be a roughly 12-month process as outlined below.

First, the Company will develop an extensive set of requirements for an AMI communications network that will meet business needs for a secure, resilient, reliable, flexible solution. All consideration and opportunity will be given to lower the total cost of ownership over the asset life cycle. The inclusion of clear and accurate requirements in the request for proposal ("RFP") is critical for evaluating, testing, and selecting the vendor for each component of the AMI system. The development of the RFP requirements will also include the evaluation and testing criteria, which the Company will use for final vendor selection.

Please refer to Section VIII. Competitive Solicitation Summaries for a full overview of the Company's RFP Process.

Immediately following the development of requirements, the Company will put a bid out for a program advisor company to assist with overseeing the RFP process for all vendors for all technical solutions, and system integrators. For the MA implementation, vendor Z2 was selected through its own competitive RFP process to help with overall program advisement. Z2 was able to create a comprehensive framework which included internal Eversource stakeholder management, identifying critical components within the evaluation process to identify appropriate scoring measures, and overseeing the RFP process for all vendors in totality. The utilization of a third-party company like Z2 enables the Company to stay at arm's length throughout the selection process, which yields the most competitive results.

Once the program advisement vendor is selected, the Company expects to issue a single comprehensive RFP for AMI meter equipment, meter installation, communications network, headend system, and meter data management system. This strategy will provide a diversity of responses in recognition of the potential synergies of a single-vendor solution for complementary technologies while enabling specialized vendors to offer responses for a sub-set of requirements.

The Company will follow its established competitive procurement process as it does with all purchases of services and equipment as required by Eversource policies. The Company will evaluate vendors for each of the components of the AMI system. Vendor evaluations will consist of their network solution's performance in different locations (e.g., urban environments, meters in basements). Proposed technologies will be tested on several criteria, including but not limited to their bandwidth, latency, and outage recovery capabilities. In addition, the vendor's proposed technology will be tested and

evaluated following the Company's procurement process to ensure Company and customer data are secure.

The Company will make its vendor selection based on performance against the testing and evaluation criteria and the overall cost of the solution. Once the Company makes a final vendor selection, it will begin contract negotiations. Contract language and statements of work will be crafted with clear requirements and accountability for specified milestones and deliverables over the course of the project implementation and warranty periods.

Communications Implementation Plan – Planning Activities

The Company will develop a cost-effective equipment installation strategy for the telecommunications network that will utilize internal and outsourced labor resources. Dedicated labor resources will be required to install, test, and commission communications network equipment in the field. This work will include required upgrades and reconfiguration of communications backhaul equipment. Following the installation period, labor resources will be necessary to monitor the AMI network and associated repair and maintenance activities.

The Company will work with the selected vendor(s) on a cost-effective materials storage strategy. Materials for the communications network that will require storage vary depending on the communications technology that is ultimately selected, but it can include access points, collectors, relays, routers, and base stations. The Company will evaluate storage solutions through the RFP as part of the overall vendor evaluation process.

In the planning phase of implementation, the Company will finalize a detailed deployment schedule and budget for the entire AMI system, including the communications network, following completion of the RFP process. The Company expects to deploy the communications network and the accompanying head-end and MDMS approximately six months before the first AMI meter deployment. The exact deployment schedule for the communications network will depend in part on the selected vendor(s) equipment availability. The Program Management section of this report provides details on project management activities.

In the planning phase, the Company will also develop metrics for the deployment of the communications network. Examples of these metrics include: the number of routers deployed per day or week, geographical coverage percentages, and the number of

meters experiencing communications issues. The Company will utilize these metrics to track the progress of the network equipment deployment, ensuring that the deployment of the network is within budget and on time. Adherence to these metrics will be part of the contract between the selected vendor and the Company.

The Company will also develop network operations metrics that will ensure the network is optimized and issues are resolved and mitigated quickly once the communications network is deployed. The Company will continuously track network disruptions, especially during inclement weather events. Tracking these metrics will allow the Company to optimize the network further, identify potential vulnerabilities in the network, and mitigate these areas to increase resiliency and dependability. Example tracking metrics associated with the network include, but are not limited to, meter read rates; meter loss of communications; bandwidth of network routers and collectors; and latency statistics.

Communications Implementation Plan –Deployment, Operations, and Maintenance Activities

Planning, deployment, testing, and commissioning of communication equipment will take place over a three-year period. As described above, the deployment schedule will ensure that communications infrastructure will 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. Also, during the deployment phase, the Company will either establish an internally staffed AMI network operations center ("NOC") or contract for a vendor-managed NOC. This centralized team of AMI operators will be responsible for monitoring the AMI meters and communications equipment 24 hours a day, seven days a week, 365 days a year. This team will be closely coordinating with the technical support team in the field and initiating actions to resolve any issues. The Company will, through the RFP, procure the required software that enables the monitoring of the AMI network end-to-end, from the meter to the head-end system. The AMI NOC will perform remote troubleshooting and coordinate with the technical support team to initiate change orders, investigate network and meter connectivity issues, and support the Company during outage events.



Meter Equipment & Installation

AMI meters are the foundational investment required to enable all the associated use cases in the Company's AMI proposal. The first AMI meters were deployed in the United States in 2006, with a significant surge in deployment starting in 2009, as part of a $3.4 billion-dollar Smart Grid Investment Grant ("SGIG") program funded by the American Recovery and Reinvestment Act ("ARRA") through the federal government. The SGIG program concluded in 2015, with 70 AMI deployment projects totaling over 16.3 million AMI meters. Due to limitations in the hardware capabilities of the meters at that time, business cases for these projects focused primarily on providing benefits by reducing meter reading costs, enhanced outage detection, and shifting demand via time-varying rates. AMI deployments have continued to date, and currently, *over 84%* of homes in the United States have AMI meters.

In the recent years, advances in the industry have enabled additional capabilities in AMI meters and the supporting communications infrastructure. For example, the new generation of AMI meters share data with other nearby devices and are also capable of processing and storing large amounts of data. The industry typically refers to these new capabilities as "distributed intelligence." In addition, more powerful processors and expanded memory are increasing the capabilities of each meter, enabling advanced on-meter applications with capabilities like connectivity model verification. Figure 8 below provides a description of meter functionalities. Because these advanced capabilities can add cybersecurity and data privacy risks, the Company will implement a robust, industry best-practice cybersecurity process to evaluate and implement these technologies. The Cybersecurity section, below, provides additional details on the Company's AMI cybersecurity and data privacy plan.

Current AMI meters are capable of grid-edge computation, processing millions of data points captured by each AMI meter and distilling that data into actionable insights for customers and the grid. The Company is proposing to convert the approximately 1.35 million AMR meters in Connecticut to next-generation AMI meters to maximize the benefits enabled by AMI. As described above, this includes approximately 436,246 bridge meters to ensure those customers benefit from the full capabilities of next-generation AMI technology.

Figure 8 – Next Generation AMI Meter Functionality

Functionality	Associated Benefit
Distributed Intelligence (Peer-to-Peer)	Optimizing Power Flow Proactive Outage Planning Early Outage Detection Energy theft and write-off reduction
Advanced On-Meter Applications (Load Disaggregation, Advanced Alerts)	Market Participation/rate design Customer targeting for initiatives
Phase Identification	System Planning Organization
Voltage Monitoring	Optimizing Power Flow
Remote Service Switch (Connect/Disconnect)	Energy Theft and Write-offs Reduction Service Order Automation
Connectivity Model Verification	Optimizing Power flow
Pre-Element Current Measurement	Market Participation/rate design Customer targeting for initiatives
Micro-Arc Sensing	Proactive Outage Planning Early Outage Detection
Neutral Monitoring	Early Outage Detection
Meter Movement Sensing	Energy theft and write-off reduction
Load-Side Voltage Sensing	Optimizing power flow
Reverse Power Flow Detection	System planning optimization
Cover Removal Detection	Energy theft and write-off reduction

Meter Implementation Plan – Procurement of Products and services

Eversource conducted a rigorous procurement selection process in Massachusetts, outlined in Chapter 8, which resulted in the election of Itron as the Meter Technology vendor. Eversource is requesting that PURA waive the obligation to conduct a blank-slate technology selection process, and permit the Company to move forward with Itron as the Meter technology vendor. By moving forward with Itron the Company can quickly mobilize into design and implementation. However, if the Company is required to conduct its technology selection anew, then there will be a roughly 12-month process as outlined below.

First, the Company will develop an extensive set of requirements for AMI meters that will meet business needs for a secure, cost-effective, and future-proof solution The inclusion of clear and accurate requirements as part of a rigorous RFP process is critical for evaluating, testing, and selecting the vendor for each component of the AMI system. The development of the RFP requirements will also include the evaluation and testing criteria, which the Company will use for final vendor selection. As described below, the Company will follow its established competitive procurement process to test and evaluate the proposed AMI meter equipment solutions. Proposed meter equipment solutions will be assessed and tested on their functionalities, demonstrating the meter equipment's capability to realize the benefits enabled by the AMI system.

The Company will make its AMI meter equipment vendor selection based on performance against the testing and evaluation criteria and the overall cost of the solution. Once the Company makes a final vendor selection, it will begin contract negotiations. Contract language and statements of work will be crafted with clear requirements and accountability for specified milestones and deliverables over the course of the project implementation and warranty periods.

This step is only necessary for the primary meter technology element if PURA does not support the Company's effort to proceed as soon as possible using previously selected technology. The Company would like to be able to utilize Itron as the existing vendor relationship selected under the Massachusetts competitive vendor selection process. Refer to Chapter 8 for details around the Massachusetts competitive vendor selection process. Using this trusted relationships will allow the Company to expedite the implementation timeline by avoiding the RFP process for the meter procurement. This will eliminate approximately 12 months of additional RFP time from the entire program lifecycle. In turn, it will allow the Company to quickly mobilize into the design phase, and reach implementation faster which yields cost savings to customers over time.

Meter Implementation Plan – Planning Activities

The Company will develop a cost-effective equipment deployment strategy for the AMI meters that will utilize internal and outsourced labor resources as appropriate. The Company will require dedicated labor resources to install and test each AMI meter in the field. Following the installation period, labor resources will be required to repair and maintain AMI meters. In addition, as described below, the Company will work with the selected vendor(s) on a cost-effective materials storage and staging strategy for the AMI meters. All the AMI meter equipment vendors that responded to the Company's RFI provided estimated costs for materials storage solutions that they can provide.

The Company will finalize a detailed deployment schedule and budget for the entire AMI system, including the AMI meters, following the completion of the RFP process. The Company expects to deploy the communications network and the accompanying head-end and MDMS approximately six months before the first AMI meter deployment. The Company will develop metrics for the deployment of the AMI meters. Examples of these metrics are the number of AMI meters deployed per day or week, geographical AMI meter deployment percentages, and tracking of post-installation AMI meter issues like failed reads. The Company will utilize these metrics to track the progress of the AMI meter deployment, ensuring that the deployment of the meters is as efficient and aligned with the deployment timeline. Adherence to these metrics will be part of the contract between the selected vendor and the Company.

The Company will also develop AMI meter operations metrics that will ensure post-deployment meter issues are quickly resolved. The Company will establish these metrics as part of its overall AMI operations plan, which includes communications network monitoring and optimization efforts. Once an AMI meter is installed, it becomes part of the communications network, so the Company will develop metrics that will distinguish between the meter and network issues—for example, AMI meters that are experiencing intermittent communications issues not being exhibited by nearby meters in the local area. These metrics will facilitate troubleshooting and monitoring efforts as the AMI network and the number of deployed AMI meters expand.

Meter Implementation Plan –Deployment, Operations and Maintenance Activities

The deployment schedule will ensure that communications infrastructure and supporting back office systems will 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. The planning, testing, and deployment of AMI meters will span roughly three years. The AMI NOC will monitor the AMI meters and communications equipment 24 hours a day, seven days a week, 365 days a year. In addition, the AMI NOC team will perform remote troubleshooting of the meter and network. If an issue is determined to be meter-related, they will route the appropriate work order to the Company's meter operations and services organization.



AMI Headend and MDMS

The AMI Headend System ("HES") and the Meter Data Management System ("MDMS") are critical elements for managing the large quantities of meter data generated by AMI meters. A HES is a hardware and software component of an AMI system, providing the primary interface between data extracted to and from the AMI communications network and, ultimately, the AMI meters.

The HES decrypts incoming meter data to be used in other systems and encrypts outgoing meter commands, ensuring the AMI system is secured end-to-end. For example, the HES encrypts and decrypts data associated with advanced meter functions like service switch reconnections and pinging of the meters to confirm outages or service restorations status. The purpose of the HES is not to store or process the meter data but rather to pass the decrypted data to specialized systems like the MDMS.

The MDMS collects and stores meter data from the HES and processes meter data into information used by other utility systems such as customer systems and the OMS. The core MDMS functionality includes Validating, Estimating, and Editing ("VEE") meter reads before the reads are passed on to the customer billing system. The MDMS also filters power off/on notifications during large-scale outages to not overwhelm the OMS with thousands of individual meter outage notifications. The MDMS can also perform some basic analytics and will be able to provide indicative reports for potential theft and tamper detection.

Data points like customer usage data will be fed from the MDMS to other systems, including the Company's new customer information system to enable billing, to the customer portal to provide energy usage insights and alerts, and ultimately to allow for time-varying rate offers. Other useful information like voltage data will also be sourced from the MDMS to Eversource's analytics system to provide enhanced analytics use cases or other engineering applications like VVO.

AMI HES and MDMS Implementation Plan – Procurement of Products and Services

Eversource conducted a rigorous procurement selection process in Massachusetts, outlined in Chapter 8, which resulted in the selection of Itron for the Head End System technology, and Siemens for the MDMS technology. Eversource is requesting that PURA waive the obligation to conduct a blank-slate technology selection process, and permit the Company to move forward with Itron and Siemens respectively. By moving forward

with Itron and Siemens the Company can quickly mobilize into design and implementation. However, if the Company is required to conduct its technology selection anew, then there will be a roughly 12-month process as outlined below.

If the Company is required to conduct a blank-slate technology and vendor selection process, the Company estimates a roughly 12-month time frame (concurrent with the processes referenced above for other technology selections) to repeat the following steps that had been performed previously when launching the Massachusetts program: First, the Company will develop an extensive set of requirements for the AMI HES and MDMS, respectively, that will meet business needs for a secure, cost-effective, and futureproof solution considering all opportunities to lower the total cost of ownership over the asset life cycle. The inclusion of clear and accurate requirements in the RFP process will be critical for evaluating, testing, and selecting the vendor for each component of the AMI system. The development of the RFP requirements will also include the evaluation and testing criteria, which the Company will use for final vendor selection.

The Company will follow its established competitive procurement process to test and evaluate the proposed AMI HES and MDMS solutions. The Company expects that the HES will be packaged with the AMI meter proposals in a comprehensive procurement activity. These systems use proprietary technology to facilitate secure end-to-end communications between the head-end and the meters.

The Company expects proposals for the MDMS solutions will be independent of the HES and the AMI meters. Thus, the Company will ensure the RFP for the MDMS component includes interoperability between the HES and the MDMS, and the use of open standards, as key requirements. The Company will develop requirements to evaluate proposed MDMS solutions on their capabilities with the VEE of AMI data. The Company will also include integrations into critical systems, like the customer system, the OMS, and the enterprise data platform (i.e., Microsoft Azure Data Lake) as part of the RFP requirements. The Company will evaluate the proposed MDMS solutions on their estimated costs and timetable to integrate with these critical systems, including the HES. In addition, the Company will request proposals for on-premise and cloud hosting solutions for the HES and MDMS, allowing the Company to evaluate the costs, risks, and benefits of these two options.

The Company expects its HES vendor selection will be tied to the AMI meter due to the interdependence of the HES and the meters, however, the Company will consider any

proposed independent HES solutions. It will evaluate these solutions on their capabilities to securely facilitate data exchange between the meters to the MDMS and enabling advanced meter functions like a remote disconnect. The MDMS vendor selection will be based on the proposed solution's performance against the testing and evaluation criteria and the overall cost of the solution.

Once the Company makes a final vendor selection, it will begin contract negotiations. Contract language and statements of work will be crafted with precise requirements and accountability for specified milestones and deliverables over the course of the project implementation and warranty periods. The Company will develop a contracting strategy for on-premise or cloud-hosted solutions to ensure either solution is implemented according to the company's business needs and expectations. For example, suppose the selected HES vendor is different from those selected for the MDMS or AMI meters. In that case, the Company will ensure all parties agree to a contractual obligation to provide mutual support in integrating their respective systems.

AMI HES and MDMS Implementation Plan – Planning Activities

The Company will develop a cost-effective deployment and integration strategy for the HES and MDMS that will utilize internal and outsourced labor resources. These systems will also require dedicated labor resources for planning, system integrations, testing, and deployment of the HES and MDMS. In addition, following the deployment period, the Company will require labor resources to maintain these systems and their integrations.

The Company will finalize a detailed deployment schedule and budget for the entire AMI system after completing the RFP process. The Company expects to deploy the communications network and the accompanying HES and MDMS approximately six months before the first AMI meter deployment. The Company will develop metrics that will ensure the HES and the MDMS, and their integrations with other systems, are completed in time to support the AMI meter deployment schedule. Examples of these metrics include cost and schedule variance, schedule performance index, and resource utilization. Adherence to these metrics will be part of the contract between the selected vendor(s) and the Company.

The Company will also develop AMI operations metrics for the software system components to help monitor any ongoing post-deployment issues experienced by any system utilizing AMI data. That will ensure post-deployment meter issues are quickly resolved. The Company will develop these metrics as part of its overall AMI operations plan, including communications network monitoring and optimization efforts. Once an

AMI meter is installed, it becomes part of the communications network, so the Company will develop metrics that will distinguish between the meter and network issues—for example, AMI meters that are experiencing intermittent communications issues not being exhibited by nearby meters in the local area. These metrics will facilitate troubleshooting and monitoring efforts as the AMI network, and the number of deployed AMI meters expand.

Meter Implementation Plan –Deployment, Operations, and Maintenance Activities

The Company expects the planning, integration, testing, and deployment of the HES and the interim MDMS solution will be done in parallel over a one and half year period. These two systems must be completed before the first AMI meter is deployed. The deployment schedule will ensure that communications infrastructure will 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. The software for the AMI NOC will have a direct integration to the HES, facilitating secure remote troubleshooting of network equipment and meters. The HES and MDMS will be overseen by the existing internal Eversource organizations that support the current operations of AMI systems. The Company's cybersecurity team will monitor the systems 24 hours a day, seven days a week, 365 days a year.

Customer Information System



The customer information system ("CIS") is one the most strategic and mission-critical information technology ("IT") systems within a utility. The CIS underpins a utility's ability to provide high-quality customer service by facilitating and managing virtually all interactions between a utility and its customers. The CIS also serves as a central repository of customer, billing, and account history data that is utilized by numerous other internal IT systems such as the load planning, outage management, and general ledger systems.

A modern CIS is a prerequisite to support the full range of AMI benefits. The Company's current CIS is not capable of billing time varying rates at the scale required to support an AMI deployment. In addition, a modern CIS is necessary to provide usage information to customers, high bill alerts, and to support the numerous other engagement and customer experience options that AMI will make available to customers.

Capabilities within a CIS are typically organized around the major business processes it supports including:

CIS Business Process	Explanation
Billing	The ingestion of reads from a metering system and the calculation and generation of customers' bills based upon the stored tariffs in the CIS.
Customer care	The handling of customer calls and inquires (both live and automated) by providing information to the utility's agents and the customers directly such as usage history, amounts owed, payments made, and available programs and services.
Credit and collections	The calculation and tracking of past due amounts and payment arrangements including the interaction with third-party agencies that provide low income assistance as well as parties which help collect overdue amounts.
Start/stop service	The initiation of service for new customers with the utility and the suspension and/or termination of accounts no longer serviced by the utility.
Field Services	The coordination with downstream utility systems that help manage the utility's field workers to initiate connect, disconnect, on demand reads, investigations and other services that involve visits to a customer's premise.
Online self-service	The CIS enables the Customer My Account experience – 90 percent of the reason customers come to the website is to access their account information. A modern CIS is necessary to enhance that online experience with AMI insights and preference management.

There are several departments in Eversource that use the CIS to perform their duties. The primary users are the customer service representatives in the call centers and web services (the front-office) who spend much of their day logged into the CIS and communicating directly with customers. Customer inquiries and commitments, along with the agents' notes related to the call or chat, are recorded in the CIS. More complex interactions that require additional investigation are handled by back office teams who work directly with information stored within the CIS and other systems to help resolve customer inquiries. The departments that rely upon the CIS to execute their work include:

- Digital channel management
- Customer Service (Call Center)
- Billing
- Credit
- Gas Operations
- Metering/ Meter Reading & Collections
- ESSC/DG

- AMI
- Accounting & Finance
- Regulatory Affairs
- Supplier Services
- Account Executives

The benefits of a modern CIS typically fall within three broad and overlapping categories: (1) risk mitigation, (2) enhanced customer capabilities, and (3) greater cost-effectiveness.

RISK MITIGATION

Most "legacy" CIS platforms (based on software engineered around year 2000 and before) were built using languages and technologies that are becoming obsolete. While many legacy CIS systems have been optimized over time to produce accurate bills in a cost-efficient fashion, the ability to modify these systems to support new customer demands and programs is costly and carries significant technical risk. For example, leading, modern CIS platforms support more flexible rate structures such as Time-Varying Rates ("TVRs") and distributed generation natively through configuration. Modifying a legacy CIS to support TVRs requires a substantial architectural overhaul, and in some cases may not be possible. As the pace of change in customer expectations has increased, the cost and complexity of building and sustaining those capabilities in legacy CIS have also increased. This dual threat of increasing complexity with decreasing know-how has created risk for utilities and is one of the leading reasons why a majority of IOUs have sought the benefits of a modern CIS.

ENHANCED CUSTOMER CAPABILITIES

Customers have come to expect convenience, speed, and personalization when interacting with their utility providers. Although utilities continue to handle a large volume of inbound calls, customers show increasing interest in being able to conduct business via digital channels such as the utility website, chat, and mobile apps. Modern CIS platforms enable this broader set of customer capabilities in a variety of ways including:

- Modern CIS employ microservices which allow real time ancillary applications like a utility's website, Interactive Voice Response ("IVR") system and mobile apps to access data and capabilities within the CIS more readily, providing a broader range of self-service options.
- Modern CIS support real-time transactions which, for example, allow payments to be applied as they are made (so the customer can be confident her bill has been paid in a timely fashion).

- Modern CIS have robust data models that can provide customers with greater insight into their consumption patterns, projected bill amount, and tips for greater conservation. These data models also benefit the utility through access to a richer set of customer data.
- Modern CIS utilize more flexible architecture, including use of the cloud, which allows new capabilities to be deployed more rapidly and with greater security.

GREATER COST EFFECTIVENESS

As legacy CIS platforms become antiquated and complex, sustainability costs generally increase due to three primary factors.

First, the complexity of the legacy CIS often makes meeting changing customer and regulatory requirements time consuming and expensive. Since a legacy CIS is generally utility specific, the cost for any enhancement must be borne by that utility. Normal project activities such as testing, for example, need to become much more robust on a legacy CIS than when working on a modern CIS to avoid unintended consequences. Modern CIS platforms such as Oracle and SAP are deployed at hundreds of utilities globally and possess product roadmaps that seek to address the customer and regulatory demands that its clients are facing. This translates to lower customization and enhancement costs for modern CIS.

The second primary factor is labor costs. Utilities running a legacy CIS experience a year-over-year loss of available people who are skilled in supporting a utility's legacy CIS (often the loss is due to retirement). This not only presents operational risk, it also often translates into higher costs as utilities seek to supplant that loss of knowledge with third-parties or incentives to retain talent. By contrast, modern CIS platforms are implemented and supported by numerous global and niche firms, creating a robust marketplace for skilled labor in the latest technologies.

The third factor contributing to the greater cost-effectiveness of modern systems entails the ability to automate activities handled manually or inefficiently by the legacy CIS. Many users of legacy CIS are forced into building manual workarounds to address the inability of the system. Common examples include billing for complex rate structures; tracking Net Energy Metering pricing plans; generating consolidated bills for multi-account customers; and providing call center agents and customers with the ability to quickly compare utility rates. In contrast, modern CIS platforms support most utility requirements natively, reducing the need for manual support. In addition, modern CIS platforms include robust workflow and reporting tools which drive greater efficiency and better decision making.

Customer System – Procurement of Products and Services

Eversource conducted a rigorous procurement selection process in Massachusetts, outlined in Chapter 8, which resulted in the election of SAP as the CIS Technology vendor. Eversource is requesting that PURA waive the obligation to conduct a blank-slate technology selection process, and permit the Company to move forward with SAP as the CIS technology vendor. By moving forward with SAP the Company can quickly mobilize into design and implementation. However, if the Company is required to conduct its technology selection anew, then there will be a roughly 12-month process as outlined below.

However, the Company's award-winning CIS modernization project[1] for Massachusetts has already proven its immense value as the foundation of the AMI deployment there. Leveraging the system for Connecticut customers would offer economies of scale and the benefits of Eversource's 5 years of experience with that platform.

If the Company is required to conduct a blank-slate technology and vendor selection process, the Company estimates a roughly 12-month time frame to repeat the following steps that had been performed previously when launching the Massachusetts program: First, the Company will develop an extensive set of requirements for the CIS that will meet cyber security business needs for a secure, cost-effective and future-proof solution considering all opportunities to lower the total cost of ownership over the asset life cycle. The inclusion of clear and accurate requirements is critical for evaluating, testing, and selecting the vendor for each component of the AMI system. The development of system requirements will include the evaluation and testing criteria.

The Company will follow its established competitive procurement process to evaluate systems integration services and other vendor proposed CIS solutions that will be needed to provide the labor to integrate the CIS to the MDMS. The Company will develop requirements to evaluate proposed CIS solutions on their capabilities to support the proposed AMI benefits. The CIS integration to the MDMS will be complex and will require extensive planning and project management resources to ensure success. The Company will select vendor(s) with the necessary experience and expertise to integrate CIS with the MDMS.

The Company's PMO organization will be critical in ensuring these complex integrations are completed on time and within budget. The Company will follow its established evaluation process for system integrators, with metrics like the experience of key resources being proposed by the vendor (i.e., subject matter experts' experience with the system in question); experience with other utilities doing similar work; proposed project schedule; and estimated costs. The Company will also include integration of the CIS into other critical systems, like the OMS, and

[1] Eversource was awarded the IUCX Excellence for BEST CIS modernization - a recognition of outstanding innovation, execution, and measurable business value through customer information system (CIS) modernization.

the enterprise data platform (i.e., Microsoft Azure Data Lake) as part of the requirements development process.

The Company will evaluate the proposed CIS product solutions and the system integrator on their estimated costs and timetable to integrate with the MDMS. In addition, the Company will evaluate options for on-premise and cloud hosting solutions for the CIS solution, allowing the Company to evaluate the costs, risks, and benefits of these two options.

Contract language and statements of work will be crafted with precise requirements and accountability for specified milestones and deliverables over the course of the project implementation and warranty periods.

Customer System –Planning Activities

The Company will develop a cost-effective deployment and integration strategy for the CIS that will utilize internal and outsourced labor resources. CIS implementation will require significant numbers of dedicated labor resources for planning, system integrations, testing, and deployment.

As described in previous sections, the Company will finalize a detailed deployment schedule and budget for the entire AMI program as a part of its program management process. Based on experience with its SAP implementation in Massachusetts, and assuming that the SAP system is the choice for Connecticut, the Company estimates a roughly 2.5-year project from planning to go-live.

As dictated by the meter deployment strategy objective of replacing meters on a schedule that minimizes early retirement while addressing aging asset conditions, the Company expects to begin meter installations in the second half of 2029, assuming approval is obtained in 2026 for an early 2027 program launch. This timeline requires the requisite communications and back-office systems to be in place to ensure no disruption in customer billing in the transition from AMR to AMI. The Company expects to deploy the communications network and the accompanying HES and MDMS approximately six months before the first AMI meter deployment. Once meter deployment begins, data will be transmitted securely over the network to the HES and MDMS. Once VEE processes are complete, these data will be used by existing systems to calculate and produce bills using existing rate designs.

The CIS project will begin as soon as possible as required to unlock the full potential of AMI. The Company will develop metrics that will ensure the CIS and its integration with other systems, including the MDMS, are completed in coordination with the overall AMI program schedule. Examples of these metrics include cost and schedule variance, schedule performance index, and

resource utilization. Adherence to these metrics will be part of the contract between the selected vendor(s) and the Company.

Customer System – Deployment, Operations and Maintenance Activities

Following the deployment of the CIS and the completion of all necessary system integrations, the Company will require labor resources to maintain these systems and their integrations. The Company will develop AMI operations metrics for the software system components to help monitor any ongoing post-deployment issues experienced by any systems utilizing AMI data. That will ensure post-deployment meter issues are quickly resolved. The Company will develop these metrics as part of its overall AMI operations plan, including communications network monitoring and optimization efforts. As with all of the Company's IT systems, the CIS will be monitored by the Cybersecurity organization and will be subject to the same cybersecurity evaluations during its life cycle, ensuring any cybersecurity vulnerabilities and risks are identified before they can impact the AMI system.



Cybersecurity

The deployment of AMI meters, the supporting communications network, and software systems will require multiple layers of security to ensure that customer and company data is kept secure and private. Measures to enhance confidentiality, integrity, and availability of data are also part of this effort. The bulk of the cybersecurity costs will occur during the deployment of the AMI meters and the communications network. The Company will also implement additional cyber protection measures as other customer-oriented analytics use cases emerge.

Cybersecurity and Privacy Requirements - Procurement of Products & Services

Cybersecurity will be a critical requirement for every single component of the AMI system. Therefore, as part of its cybersecurity plan, the Company will be including cybersecurity technical requirements in the RFP of each component. Cybersecurity was a mandatory requirement for MA technology competitive evaluations, which resulted in the selections of MA technology vendors. In addition, every component of the AMI system will be evaluated on its capability to meet or exceed the Company's cybersecurity technical requirements for configuration management, encryption, logging and monitoring, and physical access controls for employees and vendors.

As described in the Eversource Grid Modernization Cyber Security Plan, grid modernization programs like an AMI system will utilize various operational and customer data types. AMI data will be developed and collected as part of managing the power grid and will be used to improve the efficiency and resiliency of the grid. The Company may use the customer data such as (but not limited to) usage data, customer address, or account number in the aggregate or original form for this analysis.

As is stated in the Eversource Privacy Policy in the Grid Modernization Cyber Security Plan, the customer has the right to know what data is collected and what it is used for. If Customer data is found to be incorrect, then the customer can correct it. The Privacy Policy also discusses when the Company can give customer data to a third party. If Eversource has a contractual relationship with the third party, Eversource will ensure the third party has sufficient controls to protect the data. Where Customer data is given to a third party because of a customer request or as part of a regulatory ruling, Eversource has no authority to assess the controls of the third party.

Cybersecurity Requirements – Planning, Deployment, Operations, and Maintenance Activities

The Eversource Grid Modernization Cyber Security Plan requires that any new system procured by the Company go through a formal questionnaire referred to as the Corporate Information Security Risk Assessment Questionnaire ("CISRAQ"). This evaluation will be part of the contract negotiations for each selected vendor and their component(s). In addition, if the system or component includes third party access to data storage, process, or transmission of Eversource nonpublic information, the third party must complete a due diligence questionnaire ("DDQ"). This document describes the internal security controls used by the third party to protect the provided data. If the controls are deemed unacceptable, the third party must make the necessary changes, or the data will not be authorized for release.

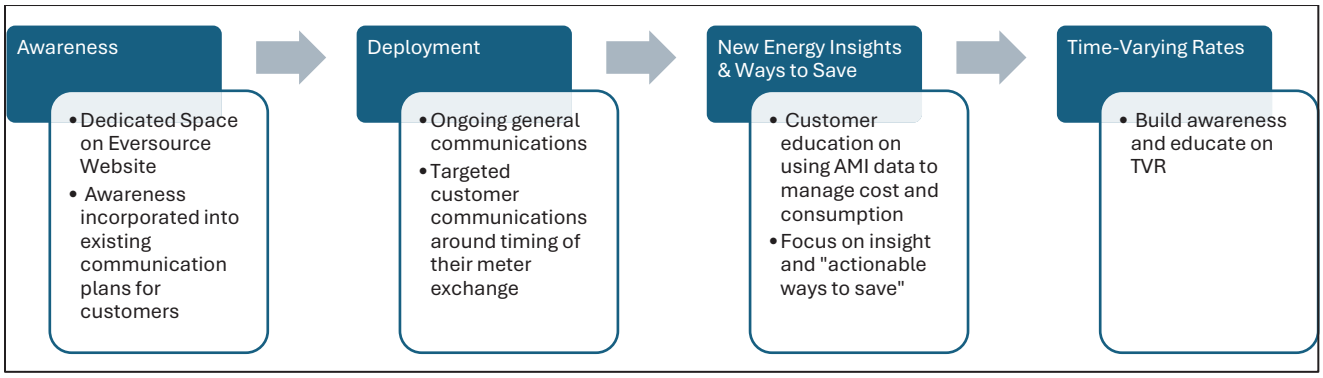
The Company performs application vulnerability scans as part of the System Development Life Cycle ("SDLC"). During final system testing, the scans are conducted to ensure that no critical security vulnerabilities exist before deploying the system. These scans are also part of the ongoing maintenance of these systems and occur on major system changes. The Company will integrate the AMI system components into the SDLC. The Company will continue to implement additional security measures as appropriate based on vulnerabilities found during SDLCs, government or vendor guidance, on an ongoing basis. In mutual support of the AMI NOC, the Company's existing security monitoring center will provide 24x7, 365 days a year monitoring of all AMI system components. The Company's cybersecurity monitoring center is staff by experienced cyber professionals who follow documented procedures for responding to alerts originating from the automated monitoring system.

Customer Engagement & Education

AMI provides several benefits and capabilities that allow customers to better understand and control their energy usage and bills. It also provides near-real-time usage information that can be accessed via multiple channels, such as the website, mobile app or by speaking to a Company customer service representative. In addition, AMI provides near real-time usage insight and enables time-varying rate ("TVR") choices that can give customers more control over their energy bills.

To help guide and educate our customers about smart meters and the benefits and capabilities they enable, the Company has developed a four-phase Customer Engagement Plan as further defined in Section 6. These four phases are:

Figure 9 – Four AMI Customer Engagement Phases



The four customer engagement phases will include multiple communication channels, including customer email, on-bill messaging and inserts, free social media, online videos, press releases and earned media, direct mail, print collateral, town halls, dedicated space on Eversource website, and paid social media campaigns.

An internal team will be conducting customer research through every communication phase. Initial research will provide a baseline of what customers already know about AMI so the Company can tailor future communications accordingly to maximize effectiveness. Without the need to rely on an outside vendor to manage and conduct customer experience research, customer research can be quickly modified to gather needed feedback, and results can be communicated quickly to project stakeholder and deployment teams.



Analytical Tools and System Integrations

The Company's dedicated effort to build the people, process, and technology capabilities to take full advantage of the wealth of data provided by AMI will ensure benefits are maximized in the near and long terms. The Company will evaluate all available options that will enable the analysis of AMI data and provide actionable insights and alerts. For example, there are off-the-shelf analytical tools, and the Company also has internal resources that can create dashboards and reports. Operational systems like the OMS and CIS require a permanent integration into the MDMS. The MDMS will be the source of AMI data for several of these operating systems and analytics tools. To that effect, the Company will develop MDMS integrations with the following operating systems:

Outage Management System ("OMS")

The Company's existing OMS has the capability to interface with an MDMS. With the required enhancements, the OMS can receive AMI meter data like power out/power restoration, improving the Company's ability to respond to outages. The OMS will receive data from the MDMS and perform additional analytics like nested outage identification and will also have the capability to interrogate or 'ping' meters to verify their service status. The benefit of providing remote interrogation of meters through integration with the Company's OMS is expected to be most significant in major, multi-day events with vast numbers of trouble spots. In these events, power is restored first to the system backbone. Typically, this leaves smaller pockets of outages undetected for a period, limiting restoration efficiency at the tail end of the event. With remote service status detection afforded by AMI, these smaller nested outages are identified automatically.

As a result, the expectation is that with AMI, there will be an improvement in reliability for nested outages at the tail end of major events. The ability for the OMS to 'ping' AMI meters is facilitated through the AMI head-end system, with the request and response filtered by the DMS. The data sharing between the OMS and head-end through the MDMS will require close to real-time data processing. The Company's existing OMS and MDMS systems already have the necessary compatibility for these outage detection/management capabilities. If a new competitive technology solicitation is required, the competing systems will have to be evaluated to ensure similar compatibility.

Volt Var Optimization ("VVO") system

The Company's VVO program will benefit from voltage data from AMI meters located along distribution lines. AMI will be beneficial at the end of lateral circuits that are typically unsuitable for standard, low-cost overhead line sensors. Overhead line sensors use electromagnetic induction to power their internal sensors and communications components and require a minimum constant current on the overhead line to harvest enough power to stay in operation. The end of single-phase laterals typically carries a lower current load, which tends to be below the minimum current required by the overhead line sensor. The Company deploys line sensors that have a separate distribution transformer to provide power to the line sensors to circumvent this issue. This alternative solution and its installation are more expensive than the inductively powered sensors.

Currently, the Company deploys battery-powered overhead line sensors to avoid this issue, requiring more frequent maintenance and replacement of the battery than inductively charged line sensors. As the capability of VVO software to incorporate AMI data improves there will be numerous opportunities to leverage data for improved optimization. In the near term, the Company will use internal resources to develop reports and dashboards to monitor voltages along VVO feeders. Because of this increased level of visibility, the Company will be able to support more aggressive feeder-specific VVO programs, providing an incremental increase to the efficiency of the grid already achieved by its existing VVO program. The AMI voltage data for these reports will be sourced from the MDMS. Once the VVO control system can accept AMI voltage data directly, the Company will develop an integration between the VVO control system and the MDMS, allowing the VVO system to respond to voltage violations (below or above stated thresholds) automatically.

Customer Engagement Systems

An AMI system can enhance the Customer's experience with several new functions, such as personalized self-service, new alerts, and bulk data sharing. The Company will develop integrations with existing and future customer engagement systems to deliver capabilities and tools that increase transparency, empower customers, and incentivize behaviors. Feature functionality that will be added to the AMI Customer Data Portal includes:

- ***Personalized Self-Service:*** Hub for customer to view smart meter information and planned installation timeline
- ***Near-Realtime Usage Data:*** Customers can view historical usage data up to previous day
- ***Third Party Sharing:*** Customers can easily share usage data with authorized third parties and will support Green Button Download format

- ***Usage Behavior:*** Integrates customer usage data to generate information and predictions on usage patterns and trends
- ***Tailored Experience:*** Portal will provide a unique experience to its audience (commercial, residential, solar)
- ***High Usage Alerts:*** Adjustable custom usage thresholds, alerting customers to abnormal usage before the end of a billing cycle
- ***Usage Insights:*** Analytics to identify high usage or obsolete equipment and recommend changes in usage patterns to reduce bills
- ***Real-Time Usage Data and Service Status:*** Same-day 15-minute (residential) and 5-minute (commercial) interval data; confirm no outage
- ***Rate Comparison:*** "What-if" scenarios surrounding information on the impact of various rates on the customer's bill (with TVR go-live)
- ***Self-Service Communications:*** Self-enrollment into TVR rates, how switching rates will impact their bill reducing CSR calls

The Company is aware of privacy and cybersecurity concerns, and will first perform the necessary assessments to ensure these features and capabilities are safe and secure.

Other Systems

The Company will make AMI data available for other systems. Analytical tools can use AMI data to uncover valuable insights into grid operations. For example, AMI voltage data can help engineers understand the effects of DER penetration with much greater levels of data granularity relative to current tools.

The Company can use AMI data in systems like the DMS or DERMS to enhance or enable advanced functions. For example, the DMS can use granular AMI load data to improve and verify the load flow model, a critical function of the DMS. The DERMS can utilize AMI data to identify the peak load for each feeder. The Company can potentially use this information to identify the locational value of DERs in an individual feeder and utilize demand response, energy efficiency programs or other use cases, potentially reducing the need for traditional distribution system upgrades.

The Company will also develop integrations that will enable several data analytics functions. The Company will utilize its existing Microsoft Azure database and Microsoft PowerBI software to create dashboards and other analytical tools. Use cases that require relatively fresh data from

the AMI system will source their data from the MDMS. For use cases that do not need close to real time AMI data or are used for historical trending analysis, they will source their data from the Microsoft Azure database. In addition, the Company will utilize internal resources to create dashboards with the Microsoft PowerBI system. Some of the use cases the Company will develop include, but are not limited to:

Outage Reporting

Operational reports and dashboards to enhance outage prediction and restoration.

VVO Scheme Improvement

Engineering reports and dashboards that provide historical summaries of the performance of the VVO schemes down to the individual feeder level and reports for voltage violation (low/high voltage) alerts and their locations.

Transformer load management

Engineering reports that provide peak loading for individual distribution transformers. Overloaded transformers or within certain loading thresholds can be flagged for remedial action.

Customer-focused information

Dashboards and reports for customer service representatives can provide many metrics and alerts on customer energy usage and other statistics. These dashboards and reports can also be provided to customers, showing them their specific and private energy usage data. This information can educate customers on their energy usage and ways to save money by reducing usage and taking advantage of energy efficiency programs.

Analytical Tools and System Integrations - Procurement of Products & Services

If PURA accepts the Company's technology strategies and selections in Massachusetts, the analytics applications already developed there will be readily available to apply in Connecticut.

If, however, the Company must repeat technology selections, it is possible that new platforms/strategies could be adopted that are not compatible with the Massachusetts analytics solutions. In that event, the Company will evaluate all available options for analytical tools, including on-premise and cloud-hosted solutions. As described previously, the Company can quickly implement off-the shelf analytical tools. Most of the required work is in building and testing the system integrations that facilitate the data exchange from the HES, MDMS, or other systems, depending on the nature of the analytical tool and the use cases it enables. The IT

resources required for the systems will be provided by the Company's IT professionals or outsourced from the vendor providing the analytical tool solutions. The Company will develop metrics to evaluate these options, likely based on the cost of each option, how quickly it can enable associated benefits from the AMI data, and its ongoing maintenance costs. In addition, the Company will follow its cybersecurity assessment process as described above.

System integrations like the OMS will be more complex and require extensive planning and project management resources to ensure success. The Company's PMO organization will be critical in ensuring these complex integrations are completed on time and within budget. For these complex system integrations, the Company will go through an RFP process to procure a system integrator, an outsourced resource vendor that can provide the required expertise for the AMI integration particular to each system. The Company will follow its established evaluation process for system integrators, with metrics like the experience of key resources being proposed by the vendor (i.e., subject matter experts' experience with the particular system in question), experience with other utilities doing similar work, and their proposed schedule for the project and estimated costs.

Analytical Tools and System Integrations – Planning, Deployment, Operations, and Maintenance Activities

The Company expects the planning, integration, testing, and deployment of the analytical tools and system integrations to begin a year before the first AMI meter is deployed, with new analytical tools and system integrations to occur as they are needed and able to be completed. Solutions that are dependent on a permanent MDMS will be assessed after that system is deployed. In addition, as mentioned above, the Company will explore off-the-shelf analytical tools that can utilize the AMI data directly from the HES and enable the Company to actualize the benefits in outage restoration, grid optimization, and other operational benefits.

As with the other AMI system components, once a vendor is selected, in this case, a system integrator, the Company will begin contract negotiation. The contract will hold the vendor accountable to mutually agreed-upon metrics. It will help the Company track the progress of the integrations, identify any issues that may delay or cause a budget overrun, and mitigate these issues expeditiously before they have any significant impact on the project. Through this process, the Company will develop a detailed project deployment schedule, and progress will be tracked with the help of the metrics described previously. The Company will negotiate and plan for post deployment support of the system integration or analytical tools. As described in the Cybersecurity section above, the Company will continuously monitor the system for any cybersecurity threats and vulnerabilities throughout its life cycle.



External Reporting and Transparency

Implementation of AMI is a large, multi-disciplinary and complex undertaking that will extend over several years with benefits and outcomes accruing over the entire life cycle of the AMI system assets. A project of this magnitude requires an organized and comprehensive focus on project and risk management. As described above, the Company's implementation plan is designed to maximize outcomes of AMI in terms of customer engagement; support for clean energy technologies; grid planning and optimization; and operational efficiency.

Providing transparency to PURA and other external stakeholders on progress relative to the steps outlined in this implementation plan will ensure that the Company is delivering on its commitment to execute deployment of this important technology in the most secure, reliable, resilient, flexible, customer focused and cost-effective manner possible.

As Eversource progresses into the final stages of planning , the Company expects to provide PURA and other stakeholders with more detailed implementation plans with respect to scope, schedule and budget. Once the deployment period has commenced, it will be important for the Company to provide regular status updates relative to implementation metrics, including narrative descriptions of outcomes achieved, challenges, lessons learned and next steps. These implementation reports should reflect progress relative to expectations on the final AMI project scope, schedule, and budget. In addition to reporting on equipment and software deployment progress, the Company expects to provide updates on its customer engagement and outreach activities.

In finalizing the content of these updates, Eversource will work with PURA and other stakeholders to identify metrics and other implementation updates that are objective, based on observable data and reflect activities and outcomes that are under direct control of the Company. To reinforce the focus on performance and transparency, Eversource proposes a scorecard and incentive/penalty framework as part of this plan (refer to Section IX).

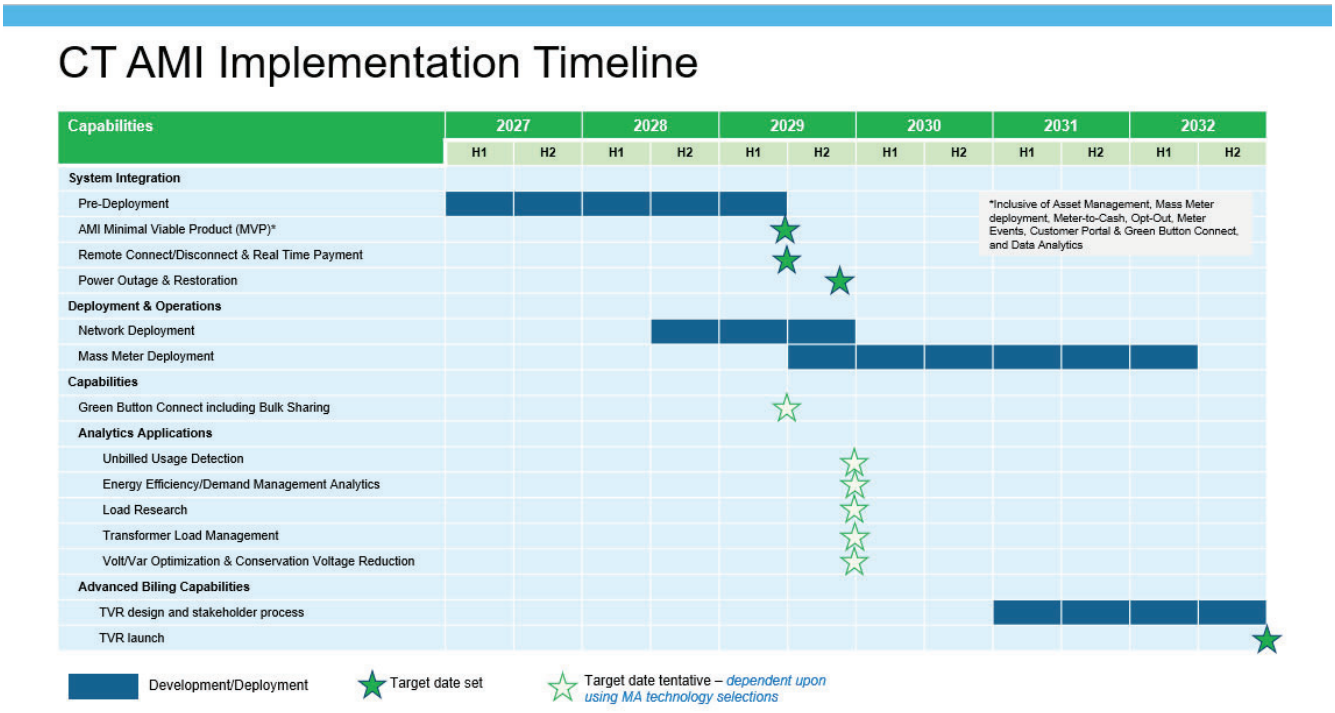
III. Capabilities Roadmap

The Company will be delivering new capabilities, enabled by AMI technology, that will provide nominal and/or qualitative benefits to Connecticut customers. As shown in Figure 10, the capabilities roadmap is designed to deliver accelerated benefit realization to customers by way of an expedited deployment of AMI technology systems, AMI network, and AMI next generation meters. Certain capabilities will be realized as soon as AMI meters are exchanged, while others will be delivered once the complete AMI infrastructure is deployed.

Capability Deployment Sequencing

In order to deliver AMI benefits to customers, the Company must first develop and launch the capabilities on which those benefits rely. The O. If technology selections and strategies must be revisited, there will be substantial design development and testing requirements that will delay all elements on the capability timeline.

Figure 10 – AMI Capabilities Implementation Timeline



The following capabilities can be realized incrementally as AMI meters begin to be deployed:

- Power Outage and restoration
- Bulk Data Sharing

- Energy Efficiency/Demand Management Analytics
- Load Research
- Transformer Load Management
- Unbilled Usage detection
- Voltage Var Optimization
- Remote Connect/Disconnect

Other capabilities require either a critical mass, or complete deployment of AMI meters in order to deploy and realize the benefit:

- Advanced Billing Capabilities

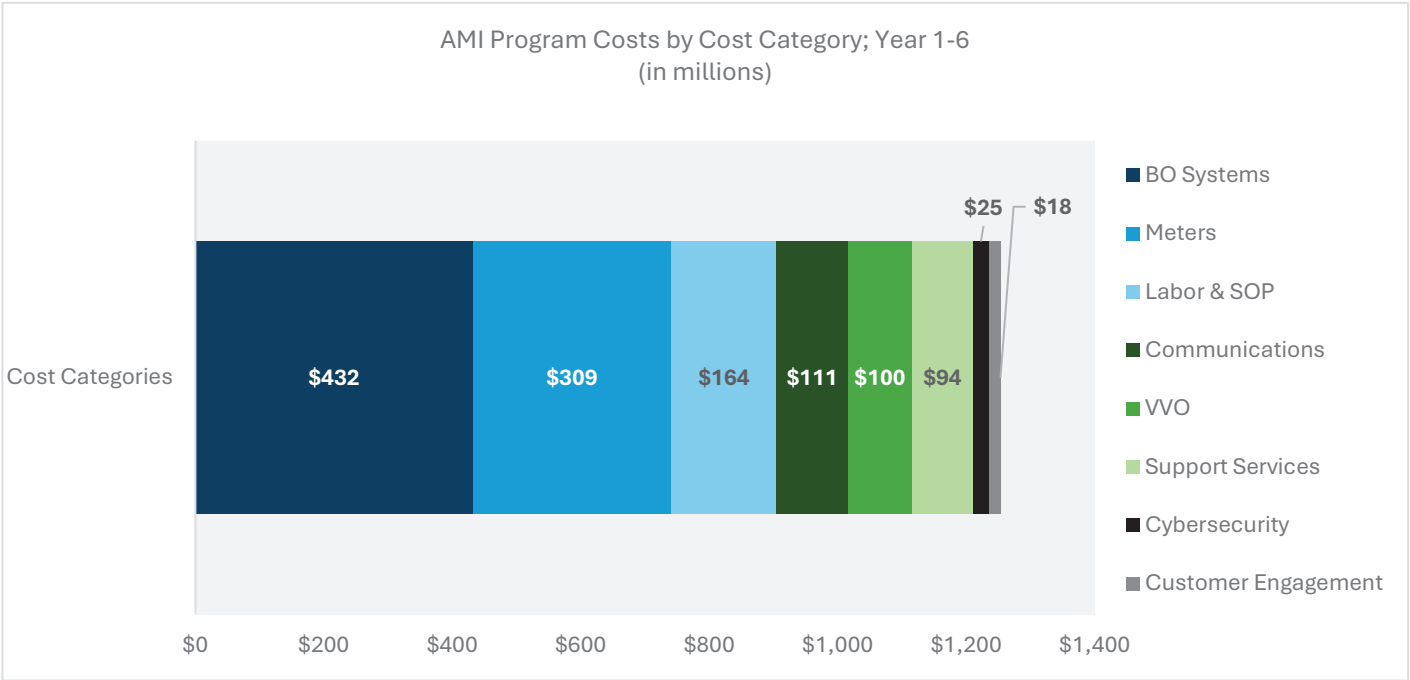
IV. Financial Summary

The Connecticut AMI program will be transformational for nearly all elements of the customer experience and for grid operations. Such scale of transformation requires substantial investments; therefore, the Company recognizes the importance of providing detailed projections of the benefits and costs of the program and a comprehensive business case analysis to reach consensus among stakeholders that the major investments align with the priorities of the State of Connecticut.

AMI Program Costs, Years 1-6

The AMI program cost drivers roll up into eight cost categories that are required to achieve the benefits of AMI. The cost categories include Meters; Communications: Back Office Systems; Labor and Standard Operating Plan; Supporting Services and Platforms; Voltage Var Optimization; Customer Experience; and Data. The total nominal AMI build cost from Years 1-6 is $1.253 billion (refer to Figure 11). Of this, 77 percent represents capital investments, and 23 percent represents O&M expenditures including non-recurring O&M expenses during deployment, and recurring O&M expenses that begin to be incurred during the deployment as a result of new AMI operational requirements.

Figure 11 – Cumulative AMI Program Costs by Category



Back Office System Costs

Back Office System Costs include the procurement, design, integration, and implementation of the CIS, MDMS, and Load Settlement. The new CIS system will enable time-varying rates and other advanced customer-facing options as well as offer additional non-AMI related benefits such as streamlined billing, fewer exceptions, and faster error and issue resolution. It will also provide Eversource with a 360-view of operations and customers enabling Eversource to better serve its customers overall and increase customer satisfaction.

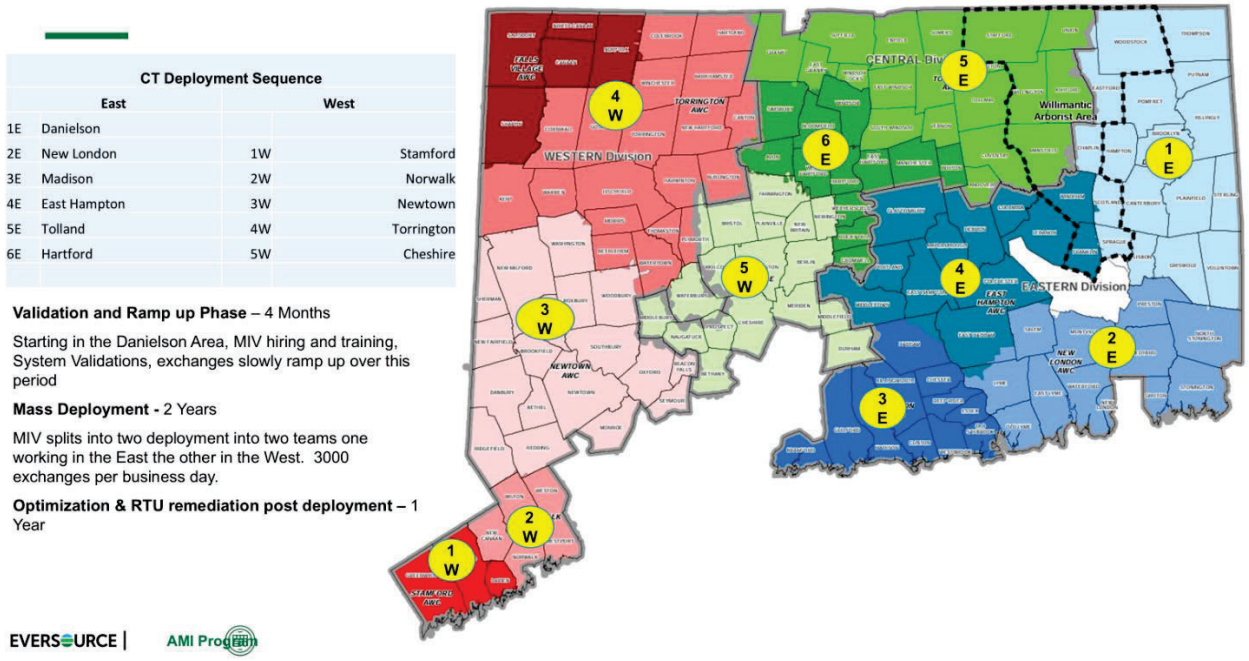
The MDMS covers the platform that collects, stores, and transforms high-volume AMI meter data from the headend and validated information usable by downstream utility systems. As the hub of all meter data gathered from field devices, its core functionality includes VEE of meter reads before the reads are passed to other systems. Usage data from the MDMS will then flow to other systems such as the new CIS to enable time varying rates and customer digital channels to provide usage insights and alerts to customers. The MDMS will also be connected to Eversource's data analytics platform to enable the targeted use cases made possible through AMI data.

Load Settlement capabilities are needed to use interval data to support more accurate allocation of usage for wholesale settlement and supplier reconciliation as advanced rates and interval-based constructs expand. This investment is necessary because AMI enables far more granular measurement, and the settlement process must be able to ingest and process that data in a way that aligns with ISO-NE market constructs and future rate designs.

Meter Costs

Meter costs include the procurement costs of AMI meters, and the undepreciated meter balance of the remaining book of value of legacy AMR/bridge meters that would be removed before they are fully depreciated. The calculated cost includes replacement meters over a three-year deployment period. The detailed deployment schedule will be developed after coordinating with relevant internal stakeholders and the selected Meter Installation Vendor.. Deployment planning will begin in Year 1 and mass meter deployment will begin in Year 3. Refer to Figure 12 for the proposed geographical sequencing of meter deployment Eversource anticipates using a combination of internal and external crews to deploy ~1.35M electric meters over the three-year time frame, beginning in mid-Year3 and concluding mid-Year 6. AMI-ready bridge meters will not be replaced but will be able to communicate over the AMI network.

Figure 12 – Proposed CT Meter Deployment Sequence



The undepreciated meter balance cost was calculated using the Company's meter plant balances and depreciation rates, projecting what portion of the existing meter investment would still be on the books when AMI deployment is completed, and then amortizing that remaining balance over the assumed recovery period. The current book value of AMR/bridge meters as of the end of 2025 is $179.9M. This amount depreciates over 10 years, at a rate of 4.92% per year.

Labor & Standard Operating Plan Costs

Labor and Standard Operating Plan costs include organizational readiness, contact center, incremental labor, and revenue assurance (unbilled usage). Organizational readiness covers the program management, change management, and system integrations required to execute AMI as a multi-year transformation across field operations, customer operations, IT, and control room processes. This investment is necessary because AMI success depends not only on technology installation, but also on requirements and scope definition across multiple vendors, coordinated system cutovers, employee training, effective communications, and disciplined management of scope, schedule, budget, quality, and risk.

Contact center costs reflect both the temporary and ongoing resources needed to support customers through major changes like new meters, new digital tools, new usage information, and new operational processes without degrading customer experience. The combined CIS and AMI implementations will generate a significant amount of new information available to

customers related to their energy use, bills and new rates that may be available. Eversource expects a large increase in customer inquiries related to these new customer benefits following CIS go-live and during AMI meter deployment, as well as an increased call volume steady state to support increased average handle times and customer inquiries related to write-offs.

Revenue Assurance represents the incremental operational resources required to convert AMI capabilities into realized unbilled usage reduction and collections outcomes. While AMI data analysis can surface more actionable leads for tamper events, unusual usage patterns and other indicators of theft, benefits only materialize if the organization has capacity to investigate, resolve, and execute the associated business processes, including required customer notifications. Costs were estimated using a staffing ramp and high-level volume assumptions tied to AMI deployment progression, then escalated using inflation and contingency.

For labor and standard operating plan cost details please refer to BCA in Exhibit CLP-AMI-3.

Communication Costs

Communication costs include communication network upgrades, including a scalable hybrid architecture combining a private wireless mesh network with public carrier cellular. The mesh infrastructure includes meters with embedded mesh/cellular radios, collectors that backhaul data via fiber or cellular, and repeaters for difficult locations; each meter also functions as a repeater to provide resiliency through multiple communication paths. The public carrier network leverages 4G/5G capabilities for near real-time performance and scalability, with contingency connectivity (satellite/ethernet) for areas with weak cellular coverage.

VVO Enablement Costs

VVO enablement covers the systems and field modernization needed to actively manage voltage and reactive power using AMI-driven visibility, improving efficiency and reducing energy and peak demand. In addition to deploying AMI meters to provide granular voltage data at the customer level, Eversource must implement VVO software and deploy field devices to analyze that data and act on the corresponding insights safely and effectively across targeted circuits.

Support Services Costs

Supporting services and platform costs include OMS, Customer Experience Portal, Engineering and Customer Usage Analytics, and Green Button Connect. OMS integration enables AMI outage signals to be operationally useful by connecting “last gasp,” restoration confirmation, and meter interrogation capabilities to outage workflows. This investment is necessary because AMI outage data must be integrated and tuned so it supports faster, more accurate restoration decisions, especially during severe storm events, without overwhelming operators or systems. This integration will enable more accurate reporting and notification of outages and Estimated Time to Restore to customers, thereby increasing customer satisfaction

The customer portal is how AMI becomes meaningful to customers by translating interval data into understandable usage insights, alerts, and tools that support better decisions. Many digital channels will need updates to reflect changes due to AMI. The insights and choices will be available across several channels (such as web, mobile, social, etc.). Finally, the AMI data will enable third parties and competitive suppliers to leverage AMI data for value added services. This initiative will configure a standardized solution to allow third parties and competitive suppliers to receive data access through a configured application programming interface while also enabling the continuation of existing supplier services. Enabling digital features will require the AMI installation to be complete in addition to data brought together from the new MDMS and CIS.

Analytics tools will be required to turn AMI data into operational improvements such as system planning insights, asset loading visibility, theft detection, and measurement/verification for grid programs. The value of AMI requires the tools and expertise to analyze and operationalize the granular data received by the meters into decisions and actions across engineering and customer programs. AMI analytics use cases Eversource will focus on are (1) theft detection, (2) transformer load monitoring, (3) CVR/VVO, (4)TOU/TVR rate design, (5) load research, and (6) energy efficiency and demand management. The Company also plans to run a high impedance detection for distribution intelligence pilot, which will leverage grid-edge data from AMI to identify potential high impedance fault conditions or abnormal system behavior.

Green Button Connect (“GBC”) enables secure, customer-authorized sharing of energy usage data with third-party providers, supporting innovation and customer choice while maintaining utility-grade security and governance. The platform leverages enhanced data capabilities to offer customers data-driven services, programs, and platforms, thereby digitally empowering customers to securely transfer their data to third-party solution providers. Third-party solution providers must go through an approval and onboarding process, including security attestation. All customer usage and PII is encrypted both at rest and in transit, per DOE Green Button Connect and Eversource InfoSec policies. This investment is necessary to provide standardized, scalable data access mechanisms for customers and partners, rather than relying on ad hoc data sharing methods that can be inconsistent or higher risk.

Cybersecurity Costs

Cybersecurity is also a foundational aspect of the AMI program ensuring standards for systems and integrations. With the prevalence of granular usage data and added access points on the network, it becomes critical that Eversource takes appropriate actions to enhance system and grid security through “Defense in Depth”. Added layers of security will ensure that customer data is kept secure. Measures to enhance confidentiality, integrity, and availability of data are also part of this scope. The bulk of cybersecurity costs will incur during the deployment of the

AMI meters and network and will occur also through the development of operational and customer-oriented analytics use cases. Ongoing support will be needed for key management and monitoring and controlling cybersecurity for the AMI network.

Customer Engagement Costs

To maximize the value of the AMI program, the Company will educate and inform customers on the benefits of AMI and engage them with the tools that will enhance their customer experience and help them save money. The objective is also to minimize the number of eventual opt-outs to maximize operational and customer benefits. Efforts will involve multiple channels (such as door hangers, community events, social media etc.) to educate the customer on changes coming, how those changes will help them save on their electric bill and what to expect as their meters are being swapped out. These efforts will proactively address common concerns related to data privacy and health concern myths pertaining to AMI radio frequencies. The campaign will last beyond the AMI meter deployment and continue as customers will need to be informed about the new displays of usage insights and alerts in addition to the benefits of participating in new time varying rate opportunities as they become available.

AMI Quantifiable Benefits

\ For the first time, customers will have access to granular usage information that will close the gap between behavior and understanding of energy savings opportunities. Customers will be able to opt in to mid-cycle high bill alerts and will be able to see their load disaggregation information to understand their consumption drivers. Partnered with new rate designs and energy efficiency and demand-response programs, customers will be armed with new tools to control and reduce their energy costs.

Additional benefits unlocked by AMI will accrue indirectly to customers. Expenses such as theft and other losses can be reduced through initiatives made possible with AMI data. Some benefits, such as reduced truck rolls, will result in reduced greenhouse gas emissions and increased operational efficiency when providing service to customers.

Ultimately, the Connecticut AMI deployment plan is designed to align Eversource's infrastructure investments with Connecticut's energy, environmental, and affordability goals. AMI technology enables 16 benefits (Figure 13), which are foundational requirements for the Company to support Connecticut in delivering upon its goals.

Figure 13 – 20-year AMI Enabled Benefits

Total 20-year AMI Benefit	Nominal Value ($M)	NPV Value ($M)
Meter Reading	$50.8	$21.2
Avoided Meter Capital	$343.9	$160.3
Remote Account Connect/Disconnect	$77.5	$32.2
No Trouble Found Calls Reduction	$13.0	$5.7
System Costs Avoidance	$398.8	$199.5
Volt/VAR Optimization (VVO)	$409.0	$163.8
Carbon Reduction	$441.3	$176.8
Asset Optimization	$169.2	$96.4
Advanced Engineering Analysis	$88.5	$38.7
Avoided Connectivity Survey	$16.8	$6.7
Improved Restoration – Significant Storms	$363.2	$162.4
Improved Restoration – Blue Sky	$5.8	$2.5
Reduced Bad Debt	$188.7	$74.5
Reduced Theft and Unbilled Usage	$39.6	$16.5
Reduced Soft Close Loss	$57.1	$24.3
Time of Use/ Time Varying Rates	$55.4	$23.9
TOTAL AMI BENEFIT	**$2,713.7**	**$1,205.4**

Meter Reading

AMI reduces the need for routine drive-by meter reading by automatically collecting electric interval usage data and sending it back to Eversource over the AMI communications network. This shifts meter reading from a field activity that depends on vehicles, route scheduling, and manual exceptions to a largely automated process, while still supporting any required reads for opt-out or exception scenarios. The quantified benefit reflects the difference between the expected business-as-usual (BAU) costs to continue operating the AMR meter-reading model (labor, vehicles, and supporting tools/systems) and the lower costs once AMI is broadly deployed, with savings ramping as more meters are converted and then stabilizing in steady state.

Remote Account Connect/Disconnect (RCD)

AMI enables remote start/stop service and certain disconnect/reconnect actions to be initiated through utility systems and executed at the meter, reducing the need to dispatch field resources

for work that can be completed remotely. In addition to improving responsiveness and scheduling flexibility, remote service actions reduce truck rolls and associated contractor and dispatch effort, while still preserving processes for situations where remote actions are not possible or require follow-up. The quantified benefit is based on the expected FTE reduction in field operation resources needed for manual connect/disconnect activity. This benefit is dependent on RCD functionality being available in AMI systems and is assumed to reach materiality when the workforce is eventually restructured for post-deployment AMI, roughly 2 years after meter deployment begins and reaching steady state 2 years after meter deployment is completed.

"No Trouble Found" Call Reduction

Without AMI, the Company is dependent on customer calls to detect and respond to an outage. In many cases, customer calls are for a disruption at a single premise. Sometimes, the crews find no trouble with the electric service, typically indicating a problem on the customer-side equipment inside their home/business, but Eversource still incurs the costs for the crews to be dispatched to assess the situation. These calls are ultimately resolved as "no trouble found" ("NTF") and are closed by the operator without additional action by the Company.

With the availability of an AMI system, operators can conduct remote diagnostics without dispatching a crew, including reading the voltage on the high side (i.e., grid-side) and low side (i.e., customer premise side) of the service switch. When a customer reports voltage or other service issue, system operators can immediately 'ping' the AMI meter to confirm the outage. The operator also has ready access to historical event flags, granular usage data, and other useful metrics for the associated meter, providing actionable insights into the cause if there is a confirmed outage. If the reported issue is not caused by a problem on the grid-side, the meter may be able to provide insights with respect to possible issues detected on the load, or customer, side of the meter.

These same AMI capabilities—real-time meter status, outage confirmation, and remote diagnostics—also underpin the Company's improved restoration benefits in both significant storm and blue sky conditions. In those sections, the same underlying functionality is applied to system restoration and crew prioritization; here, it is applied at the individual-premise level to avoid unnecessary dispatches and reduce NTF-related truck rolls. With these capabilities, AMI will significantly reduce the number of NTF-related truck rolls. The Company's ability to provide immediate access to information and analysis and provide actionable insights into the customer's electrical service is also expected to support improvements in customer satisfaction. This capability helps the company reduce the costs of labor and equipment caused by unnecessary truck rolls.

Volt/Var Optimization (VVO)

AMI enables more advanced voltage optimization by providing widespread, near-real-time voltage visibility across feeders, which supports more precise control of voltage and reactive power through VVO software and field devices. By operating voltage more efficiently while maintaining required power quality, VVO can reduce overall energy consumption and lower peak demand on targeted circuits, which translates into avoided supply and capacity-related costs over time. The quantified benefit is estimated by applying expected VVO performance (informed by utility experience and benchmarks) to the portion of the system expected to be VVO-enabled and then valuing the resulting avoided energy and peak impacts using Connecticut avoided cost values, with realization phased as both AMI coverage and VVO deployment mature.

Carbon Reduction

Carbon dioxide reduction is the primary environmental benefit of AMI and is driven mainly by AMI-enabled grid efficiency improvements, particularly enhanced Volt Var Optimization, which is expected to reduce overall energy consumption in the service territory by 2.1 percent. Avoided emissions are calculated by multiplying the avoided energy by the carbon intensity of Connecticut's grid using the EIA 2024 State Electricity Profile, resulting in an estimated reduction of more than 1.5 million tons of CO_2 over the 20-year analysis period. While the BCA quantifies emissions reductions from VVO, additional reductions from operational changes such as fewer truck rolls for meter reading, remote connect and disconnect, avoided connectivity surveys, and fewer no-trouble-found calls are considered qualitative and not quantified.

Asset Optimization

With AMI deployed at scale, voltage and usage measurements from meters can reduce the need to install a separate fleet of dedicated line sensors (and the associated communications fees) that would otherwise be required to support certain planning and optimization use cases. In practice, AMI provides broad grid-edge visibility that can substitute for, or materially reduce, the number of stand-alone monitoring points utilities traditionally deploy to improve situational awareness. The quantified benefit is based on the estimated number of sensors and ongoing communications expenses that can be avoided because AMI provides the needed measurement coverage, valued using all-in sensor and connectivity costs and phased to align with VVO/system rollout timing.,

Advanced Engineering Analysis

Granular AMI data enables advanced analyses that the Company can use to further improve grid operation while simultaneously maintaining the distribution system in a cost-effective way. In particular, transformer load monitoring ("TLM"), which is used to predict which transformers

are at risk for overload and thus failure, will benefit from granular AMI data. Based on loading information and characteristics of the transformers, the Company can determine when and which transformers are at risk for overloading, enabling them to plan replacements before a failure occurs. Additionally, with the growing penetration of behind-the-meter solar generation, among other factors, the historical TLM algorithm is less representative of future load patterns. Behind-the-meter solar generation and other changes to customer load profiles, such as participation in demand response programs and electric vehicle charging, further diminish the reliability of traditional TLM calculations. Incorporating the granular load information enabled by AMI into the TLM methodology will enable engineers to identify and avoid transformer failures to a greater extent.

Avoided Connectivity Survey

One of the key factors currently hindering situational awareness at the grid edge is the inaccurate or incomplete mapping of the connectivity between individual customer meters, their distribution transformer, and that transformer's phase connection on the 3-phase distribution system. Awareness of this connectivity is an essential tool for the OMS to identify the location of outages. Inaccuracies in the modeling of customer-to-transformer relationships can result in service delays or operational inefficiencies. Additional delays in outage restoration occur when customers are misidentified on the wrong phase of the distribution system in the OMS.

Historically, accurate customer-to-transformer connectivity and customer phase identification has been a challenge to maintain given the dynamic nature of the distribution system and the manual intervention that occurs over time. To maintain accurate records and support efficient restoration with timely and actionable customer communications, Eversource conducts periodic GIS field surveys to identify and correct connectivity records. Today, these surveys are performed via a physical walk-down of the entire overhead distribution system, requiring significant labor resources. The availability of granular AMI data from all customer meters to support statistical analysis combined with the on-board intelligence capabilities of the new meter technology have the potential to drastically reduce the need for periodic physical walk-down GIS surveys. With the ability for meters to communicate locally, they can use system data to remotely calculate their position on the distribution system and transmit that information over the AMI communications network.

Granular data available with a full AMI deployment, combined with other field telemetry, can be used in statistical analysis to provide accurate phase identification. Specifically, in areas of high solar penetration this is valuable information as system balancing is increasingly difficult to achieve. As described in the 2019 National Renewable Energy Laboratory report, "Considerations for AMI-Based Operations for Distribution Feeders, researchers have demonstrated methodologies for statistical analysis using AMI data to correct inaccurate

customer phasing information. Advances in meter technology also support accurate meter-to-transformer connectivity.

Accurate customer connectivity records are necessary for regulatory reporting of reliability and regulatory compliance. The Company tracks circuit performance as part of the annual Transmission & Distribution Reliability Performance (TDRP) Report, and identifies the worst performing circuits along with Reliability Corrective Action Plans. Accurate customer connectivity records enable cost optimization and targeted deployment of investments to these circuits, ensuring customers are realizing the benefits of connectivity and reliability tracking at substantially reduced cost.

Improved Restoration - Significant Storms

During significant storms, AMI provides accurate, real-time outage notifications and remote confirmation of service status, giving Eversource earlier and more complete visibility into outage extent and restoration progress—especially for hard-to-detect nested outages in the "tail" of restoration. Compared to today's OMS estimates, this improved visibility enables more targeted crew dispatch, better prioritization, reduced restoration effort, and shorter outage duration for impacted customers, while supporting stronger customer communications. The quantified benefit applies an AMI-driven efficiency improvement to historical significant-storm restoration costs and values reduced customer interruption minutes (for a portion of affected customers) using the Lawrence Berkeley National Lab's ICE calculator. Realization of benefits are dependent on OMS go-live and scales with AMI meter deployment.

Improved Restoration – Blue Sky

On routine outage days, AMI can notify Eversource of outages sooner (without waiting for customer calls) and support faster confirmation and dispatch, which can modestly reduce the time customers remain without power even when repair activities are unchanged. This benefit is driven by earlier awareness and better targeting of the initial response, rather than large reductions in total restoration spend. The quantified benefit is estimated using historical "blue sky" outage experience and an assumed incremental time improvement enabled by AMI outage notifications and confirmation, quantified using standard customer interruption valuation with the Lawrence Berkeley National Lab's ICE calculator. This benefit is dependent on OMS go-live and will scale up with the number of AMI meters deployed in the field.

Reduced Bad Debt/ Write-offs

AMI remote connect/disconnect capability can strengthen meter-to-cash processes and operations by enabling Eversource to remotely discontinue and restore service at individual premises, reducing reliance on field technician visits required under the current AMR infrastructure. When combined with robust customer education and existing customer protections, AMI-enabled RCD can improve the effectiveness and consistency of eligible non-

payment disconnection execution, lowering avoidable write-offs and reducing costs that ultimately flow through to all customers. The quantified benefit is based on the incremental avoided bad debt per incremental eligible event using an average shut off non-payment balance and a bad debt factor. Benefits are dependent on RCD functionality and will begin following the completion of meter deployment.

Reduced Theft and Unbilled usage

AMI provides the capability to reduce unbilled usage losses, which include theft, equipment failures and other causes. Detecting and resolving additional non-technical energy losses results in a reduction of unbilled revenue benefits. Non-technical losses are more difficult to detect using current metering technology. Using AMI, more indications of non-technical losses are automatically detected and captured and that information drives higher quality leads to investigate (versus non-AMI-enabled practices). As a result, by leveraging granular AMI data, Eversource's revenue assurance team will be better able to identify situations where usage is detected, but it is not being billed to a customer at the level being used. AMI data also includes flags and reveals patterns that can indicate tamper or other issues. It is anticipated there will be a material increase in 12-month avoided non-technical losses that will start near the end of the AMI meter deployment given the volume and quality of revenue assurance leads that AMI will detect.

Reduced Soft Close Loss

Another AMI-enabled benefit is related to savings on soft-close scenarios, which occurs when the service remains active after a customer has moved out and before the next customer moves in. Currently, the cost to roll the truck and perform the disconnection and reconnection as customers move in would outweigh the unbilled revenue in some scenarios. In the future with AMI, the system's remote turn-on and turn-off capabilities will significantly reduce costs by allowing Eversource to deactivate inactive meters remotely without needing to roll trucks to perform the work. The quantified benefit is estimated using expected reductions in unbilled kWh, valued using applicable rates and phased as AMI meter deployment expands and analytic/operational processes mature.

Time of Use (TOU)/ Time Varying Rates (TVR)

The interval data made available by AMI meters combined with modern billing capabilities can be leveraged to expand customer choice by providing more advanced rate options including Time of Use ("TOU") and Time-Varying Rates ("TVR"). TOU/TVR encourages customers to reduce or shift electricity use from high-demand peak hours to lower demand off-peak hours and can result in savings on customer electric bills while reducing system peak pressures over time. TOU/TVR can be designed using AMI-derived customer load profiles and system constraints, and Eversource can offer different rate structures targeted to different customer

segments based on stakeholder input and lessons learned across the industry. The quantified benefit is calculated using expected customer adoption and the level of peak load reduction and shifting those participating customers are expected to deliver (based on pilots and benchmarks), and monetizing the system value of reduced peak demand using Connecticut avoided capacity and delivery cost assumptions.

System Costs Avoidance

AMI deployment is paired with modernization of key IT system platforms, which allows certain legacy tools and support arrangements to be retired, reduced, or avoided sooner than they would be in a non-AMI future. As the new CIS system is implemented, portions of ongoing costs to sustain the legacy CIS environment can be eliminated or materially reduced. AMI coverage also avoids recurring cellular fees for survey meters previously used for connectivity verification activities, which will be able to use the communications network deployed as part of the AMI program. Lastly, absent AMI, Eversource would still face a future point where replacing the legacy CIS becomes necessary or materially more expensive to avoid. Replacement of the CIS through AMI deployment avoids this later "business-as-usual" CIS replacement and associated costs. The benefit was quantified by projecting these baseline run-costs and the assumed future replacement timing under business-as-usual, then valuing the costs avoided after AMI cutovers using standard escalation assumptions.

Avoided Meter Capital

Without AMI, Eversource would continue replacing tens of thousands of aging and damaged AMR/bridge meters each year to sustain the legacy metering program. AMI changes that trajectory by replacing the legacy fleet with a single modern meter standard, avoiding ongoing "business-as-usual" capital and labor associated with continued legacy meter purchases and exchanges. The quantified benefit is estimated by projecting the legacy replacements that would have occurred absent AMI and valuing those avoided purchases and installs as AMI deployment progresses; it also reflects any vendor contractual credits available during deployment for certain legacy meter returns that reduce net program cost.

Business Case Analysis (BCA) Summary

Eversource, in conjunction with West Monroe, developed a standalone and comprehensive Benefit-Cost Analysis ("BCA") Report to determine the benefit-cost ratio ("BCR") for deploying AMI in Connecticut. The analysis evaluates the costs and benefits of deploying AMI across all of Eversource's electric customers in Connecticut. It quantifies impacts across PURA-defined benefit and cost categories, documents key assumptions and qualitative (non-monetized)

benefits, and models annual results over a 20-year horizon using discounted present value and sensitivity analysis to assess overall cost-effectiveness.

The Report outlines 19 quantifiable benefits and 18 cost drivers. Each benefit is detailed with a description, calculation methodologies, key inputs, business-as-usual costs, benefit targets, annual benefit calculations, and data to calculate benefit realization. Similarly, each cost includes a description, calculation methodology, key inputs, annual cost calculation and cost granularity, and methodology to track costs. The comprehensive BCA Report can be found in Exhibit CLP-AMI-3.

Since the AMI program consists of up-front investments to develop and launch new capabilities, followed by an extended period of operations during which AMI benefits are achieved, a business case analysis is used to assess the relative values. The BCA Report analyzes the comprehensive investments, including upfront and ongoing costs and benefits, annually over a 20-year time horizon and present valued to 2026 dollars using a 7% discount rate as required in Docket No. 17-12-03RE02 to determine the BCR.

The BCA is based on previously selected AMI 2.0 technology and a presumed AMI implementation schedule commencing in early 2027, referred to as Year 1 in the BCA Report. Project planning is presumed to begin in early Year 1 and back-office system implementation is presumed to begin in earnest by mid-Year 1 to drive toward a three-year AMI deployment beginning by mid-Year 3 and completing by mid-Year 6. The timelines, cost forecasts, and benefit realization assumptions used to develop this plan and the resulting BCA are predicated on timely Public Utilities Regulatory Authority (“PURA”) approval of AMI; any delay or denial of approval would invalidate many schedule and cost-based assumptions and reassessment would be necessary.

The assumptions made in the BCA Report were based on a combination of industry benchmarks, Company subject matter expertise, and experience from the Company’s in-flight AMI deployment in Massachusetts. From February through April 2026, West Monroe hosted over 40 workshops and meetings with Company employees, consulted with over 50 stakeholders, and collected over 400 unique data points across 19 quantifiable benefits and 18 costs.

AMI Implementation Cost Summary

The Company classified expected AMI expenditures into capital expenditures (“Capital”) and operations and maintenance (“O&M”) expenditures. Figure 14 provides a detailed disaggregation of the capital and O&M nominal costs over a 20-year period.

Figure 14 - 20-Year Capital and O&M Nominal Costs

Cost Category	Cost	20-Year Nominal Capital		20-Year Nominal O&M	
Meters	Meters	$340.0M	**$476.8M**	$0.0M	**$0.0M**
	Undepreciated Meter Balance	$136.7M		$0.0M	
Communications	Communications Upgrades	$160.5M	**$160.5M**	$141.7M	**$141.7M**
Back Office Systems	Meter Data Management System (MDMS)	$68.8M	**$310.1M**	$106.0M	**$467.3M**
	Customer Information System (CIS)	$212.5M		$324.3M	
	Load Settlement	$28.8M		$37.0M	
Labor and Standard Operating Plan	Organizational Readiness	$100.2M	**$101.1M**	$4.2M	**$190.3M**
	Contact Center	$0.6M		$140.6M	
	Revenue Assurance (Unbilled Usage)	$0.2M		$45.4M	
Supporting Services and Platforms	OMS Integration	$11.1M	**$63.6M**	$3.7M	**$168.3M**
	Customer Experience Portal	$29.5M		$86.5M	
	Engineering and Customer Usage Analytics	$22.1M		$62.8M	
	Green Button Connect	$0.9M		$15.3M	
VVO Enablement	VVO Enablement	$297.5M	**$297.5M**	$79.8M	**$79.8M**
Customer	Customer Engagement	$0.0M	**$0.0M**	$22.7M	**$22.7M**
Data	Cybersecurity	$5.9M	**$5.9M**	$83.1M	**$83.1M**
	Data Storage and Processing	-	**-**	-	**-**
Total		**$1,415.5M**		**$1,153.1M**	

AMI Benefit to Cost Ratio

The Company classified the financial impact of benefits into five categories:

- **Avoided Costs:** Represents labor, equipment, or system costs that Eversource would have incurred over the normal course of business without AMI meters deployed and reduce the cost of doing business and will flow to customers over a longer time horizon.
- **Operational Savings:** Reduces Eversource's operational costs through improved efficiency or revenue collection from AMI.
- **Customer Savings:** Realized directly by customers, either through reduced billing costs or improved reliability.
- **Environmental:** Lowers carbon produced by the system.
- **Other:** Reduces the cost to deploy AMI via procurement-related value.

The nominal benefits accrued over the 20-year analysis horizon do in fact exceed the nominal costs; however, adjusting for the time value of money (i.e., applying the appropriate cost of capital discount rate) results in an NPV BCR of less than 1.0 (Figure 15).

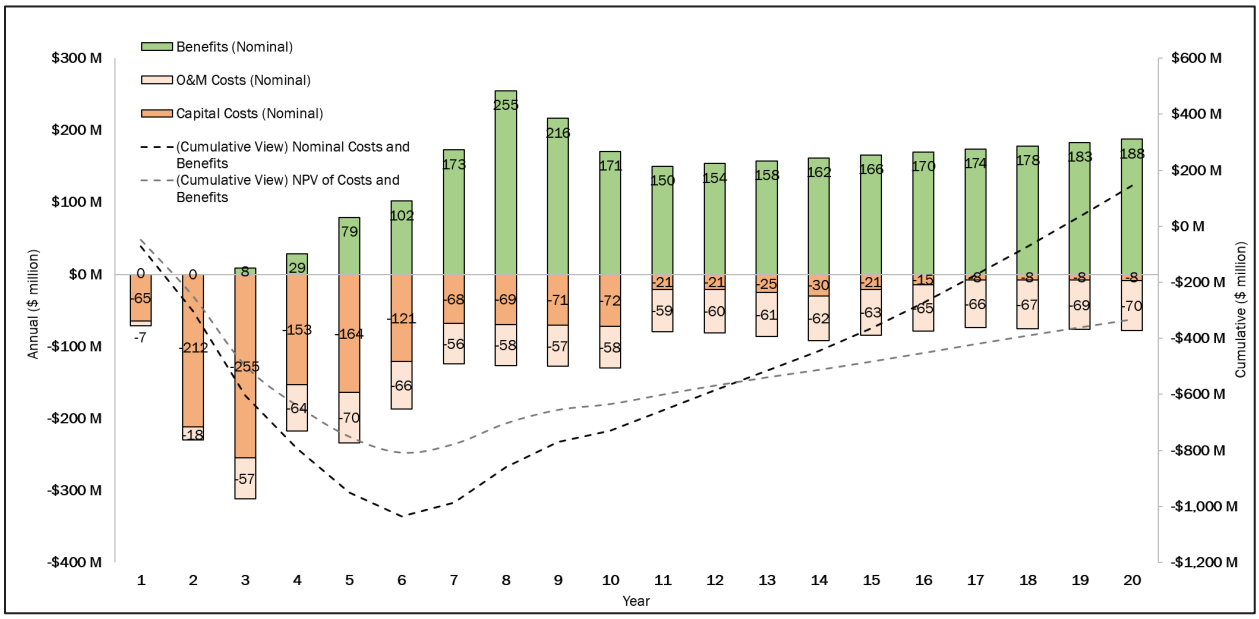
Figure 15 – Annual Nominal Costs and Benefits Over 20 Years

Total 20-Year Cost and Benefit	Nominal Value ($M)	NPV Value ($M)
Total AMI Cost	**$2,568.7**	**$1,557.3**
Meters	$340.0	$238.3
Undepreciated Meter Balance	$136.7	$66.2
Communications Upgrades	$302.2	$167.4
Meter Data Management System (MDMS)	$174.8	$105.1
Customer Information System (CIS)	$536.8	$354.1
Organizational Readiness	$104.5	$83.4
Contact Center	$141.3	$77.2
Incremental Labor (Included in each Cost category)	$0.0	$0.0
Outage Management System (OMS) Integration	$14.8	$11.6
Customer Experience Portal	$116.0	$66.0
VVO Enablement	$377.3	$212.3
Engineering and Customer Usage Analytics	$84.9	$46.4
Customer Engagement	$22.7	$16.1
Cybersecurity	$89.0	$45.7
Revenue Assurance (Unbilled Usage)	$45.7	$20.4
Green Button Connect	$16.2	$7.6
Data Storage and Processing (Included in IT Systems Cost Categories)	$0.0	$0.0
Load Settlement	$65.8	$39.4
Total AMI Benefit	**$2,713.7**	**$1,205.4**
Meter Reading	$50.8	$21.2
Avoided Meter Capital	$343.9	$160.3
Remote Account Connect/Disconnect	$77.5	$32.2
No Trouble Found Calls Reduction	$13.0	$5.7
System Costs Avoidance	$393.8	$199.5
Volt/VAR Optimization (VVO)	$409.0	$163.8
Carbon Reduction	$441.3	$176.8
Asset Optimization	$169.2	$96.4
Advanced Engineering Analysis	$88.5	$38.7
Avoided Connectivity Survey	$16.8	$6.7
Improved Restoration – Significant Storms	$363.2	$162.4
Improved Restoration – Blue Sky	$5.7	$2.5
Reduced Bad Debt	$188.7	$74.5
Reduced Theft and Unbilled Usage	$39.6	$16.5
Reduced Soft Close Loss	$57.1	$24.3
Time of Use /Time Varying Rates	$55.4	$23.9
Customer Targeting for Incentives	$0.0	$0.0

Total 20-Year Cost and Benefit	Nominal Value ($M)	NPV Value ($M)
Improved Reliability (Included in Advanced Engineering and Improved Restoration)	$0.0	$0.0
Billing Accuracy and Timeliness	$0.0	$0.0
Net Benefit ($M)	**$145.1**	**-$351.9**
Benefit-Cost Ratio	**1.06**	**0.77**

This output is due to the fact that the costs of the AMI program largely occur in the early years of the analysis horizon, while the quantifiable customer benefits materialize after most of the expenses have been incurred (Figure 16). The heavy upfront investment is needed to deliver the maximum benefit of AMI technology and capabilities to Connecticut customers, constituents, and to the State's aggressive clean energy and environmental goals. The result is that the net present value ("NPV") of the total costs exceeds the net present value of the total benefits. However, as further discussed below and in the BCA, delaying deployment would result in a lower BCR.

Figure 16 – Detailed 20-Year Financial Summary By Cost and Benefit



From a purely quantitative standpoint, the upfront costs of such a significant investment are in excess of the quantifiable benefits that accrue as a direct result of the investment; however, as outlined in Section V of this report, there are several qualitative benefits that provide significant

value to customers, constituents, and operations, that should be considered when evaluating AMI feasibility. Many qualitative benefits will provide additional nominal value that is not possible to calculate prior to an AMI deployment and therefore is not included in the benefit calculation of the BCA Report. Further, as discussed in Section XI of this report, AMI will produce the modern grid infrastructure and capabilities required to achieve Connecticut's clean energy, environmental, and cost affective goals. AMI is a foundational investment that would modernize Eversource's customer experience and infrastructure, promote energy conservation, and increase system resiliency, while driving economic benefit and reducing environmental impact.

V. Qualitative Benefits

There are numerous benefits that AMI technology unlocks, that are difficult to quantify prior to deployment. Eversource has identified the following qualitative benefits that customers are expected to realize through the deployment of AMI.

i. Enhanced Customer Satisfaction through Outage Restoration Notifications

Once AMI is deployed, the Company will no longer be reliant upon customer calls to inform about outages and restorations. AMI meters will transmit real-time data and alerts when power is lost and restored to the meter. This new AMI capability is expected to improve outage notification accuracy and performance, facilitate proactive customer outage notifications, and enhance the customer experience through increased transparency and optimized restorations.

ii. Empowering Customers and Optimizing System Utilization through More Accurate Load Profiles

AMI provides significant value to engineering and planning by providing sub-hourly load shaping data for all customers. Without AMI, the Company is limited to evaluating one total consumption value for a month and assuming an average profile over all hours. AMI unlocks the difference in usage across different types of customers over the course of a day, as well as the differences in seasonal usage patterns. Access to AMI data will provide the insights necessary to help system planers identify changing load impacts, such as new electric vehicle charging on specific portions of a circuit, or the impact of charging and discharging behaviors from behind-the-meter energy storage.

Additionally, AMI data will enable the Company to be an even more proactive partner supporting Connecticut energy initiatives, such as energy storage and electric vehicle

charging, through enhanced load forecasting. As opposed to allocating load based upon averages, planners will be able to recognize and incorporate usage patterns to improve the accuracy of load flow models at a granular level. Analysis of AMI data will enable planners to characterize customer's usage by key drivers, such as the time of day a customer charges an electric vehicle, and allocate load appropriately.

AMI data will also improve the understanding of potential impacts of policies and programs such as time varying rates, demand response, or electric vehicle managed charging on system load flows. If these new policies or programs are implemented, AMI data would give customers new insights over their energy usage, empowering behavioral shifts to decrease consumption costs that strategically align with the Company maintaining more balanced system loads. AMI makes the secure sharing of more granular usage data with customers and third parties possible and is expected to create additional opportunities for sector growth in customer-side technologies, load management, and innovative third-party solutions.

iii. Enhanced Satisfaction through new Reliability Measures and Resiliency Validations

The Company remains focused on making cost-effective improvements to the service provided to customers by measuring and analyzing reliability performance. Traditionally this has been accomplished by using historical information on the frequency and duration of outages at all locations on the grid to identify investments that maximize reliability. The granularity of AMI data has the potential to improve the accuracy and effectiveness of reliability analysis through increased precision, facilitating more targeted distribution system investments that will deliver predictable value.

Today, the reliability performance analysis process is manual and time intensive, yielding limited visibility into the actual benefit customers experience when switch events occur in the field. By integrating AMI data directly into OMS, in coordination with data from the Company's Energy Control System, engineers will be able to evaluate the reliability of distribution automation switches to improve decision making. An example of AMI data that would facilitate this transformation is short-term power interruptions of less than 5 minutes. Short-term power interruptions can be particularly disruptive and costly to commercial and industrial customers through impacted product lines and business operations. AMI provides visibility into these short duration events so that there can be targeted deployment of devices that automatically isolate faults and re-feed unaffected sections to avert sustained outages for a larger population of customers.

iv. Proactive Operations Management via Integrated AMI Data with the System Operations Center

AMI data will be integrated into the Company's OMS, driving quantifiable benefits for reduced storm costs and increased reliability for customers. Integrated AMI data has the potential to improve the sophistication of near-term forecasting by combining weather forecasts into a system model that allocates load at the customer level. The granularity of AMI data allows for forecasting of load and generation dynamics down to the circuit segment level of the system. System operators will have increased visibility into potential overload conditions at peak conditions and daytime minimums.

The Company's system operations center will need to incorporate a real-time load flow model to support all switching and automation activities. The DMS will incorporate real-time telemetry with physical characteristics and settings of distribution equipment to create a model with visibility into power flows down to the distribution transformer level. Granular AMI interval data is critical to validate the DMS load flow, make adjustments as needed, and increase the accuracy of DMS load flow calculations. An improved DMS will provide Operators with better insights into loading before and after an outage event, closing gaps for issues such as cold load pick-up and the impact of solar facilities coming back on-line.

v. Increased Public Safety through New Alerts

AMI data is emerging as a powerful tool to detect the location of a high impedance fault. When protection schemes cannot determine a fault condition and trip, conductors with high voltages from high impedance faults are a source of concern for public safety that must be identified and immediately repaired. AMI data provides voltage measurements along a feeder which, when combined with detection algorithms, can support identification of these types of faults. Proactive identification and alarming conditions indicating the location of a high impedance fault provides significant public safety benefit through proactive identification and immediate repair.

AMI provides other real-time safety alerts, such as hot socket alerts, which enable Operators to immediately respond to emergency conditions at the customer's premise for mitigation and repair. AMI safety alerts provide direct benefit to protect and preserve the health and property of our customers through proactive action before an emergency event occurs.

vi. Efficiency Gains through Shared AMI Systems Across Affiliates

Eversource expects that the deployment of an AMI system for Connecticut electric customers will have efficiency benefits for Eversource affiliates. Eversource intends to design a communications network that could be used to support gas AMI and modern gas sensing capabilities, such as methane detection for safety and cathodic protection systems to address gas leaks. Advances in gas smart meter technology, particularly remote disconnect for safety purposes, are making the value proposition of transitioning away from current meter technology more compelling. Almost 60 percent of gas meters and infrastructure overlap with electric service territory, providing significant efficiency and cost reduction benefit to any future gas AMI deployment.

The deployment of AMI will also be a powerful catalyst to standardize enterprise IT systems by having electric and gas affiliates transition to the same MDMS and CIS as the one selected to support the Massachusetts electric AMI deployment. Standardizing back-office systems has afforded the Company with increased negotiating power to lower licensing and maintenance costs, as well as streamlining support resources. Operating synergies will result in reduced back office operating costs.

vii. Proactive Customer Engagement through AMI Enabled Notifications, Detailed Billing Data, and Load Disaggregation

For the first time, because of AMI, customers will have access to granular, near-real-time billing and usage data that will enable them to better understand and control their consumption. Customers will be empowered to adjust behavior sooner and reduce bill volatility and rate shock. They will be able to view their usage through the customer portal on the Eversource website and securely share it with authorized third parties. Because AMI data is granular, the customer can see their own specific insights at an hourly/daily/weekly pattern level, and will receive relevant recommendations including a residential rate calculator.

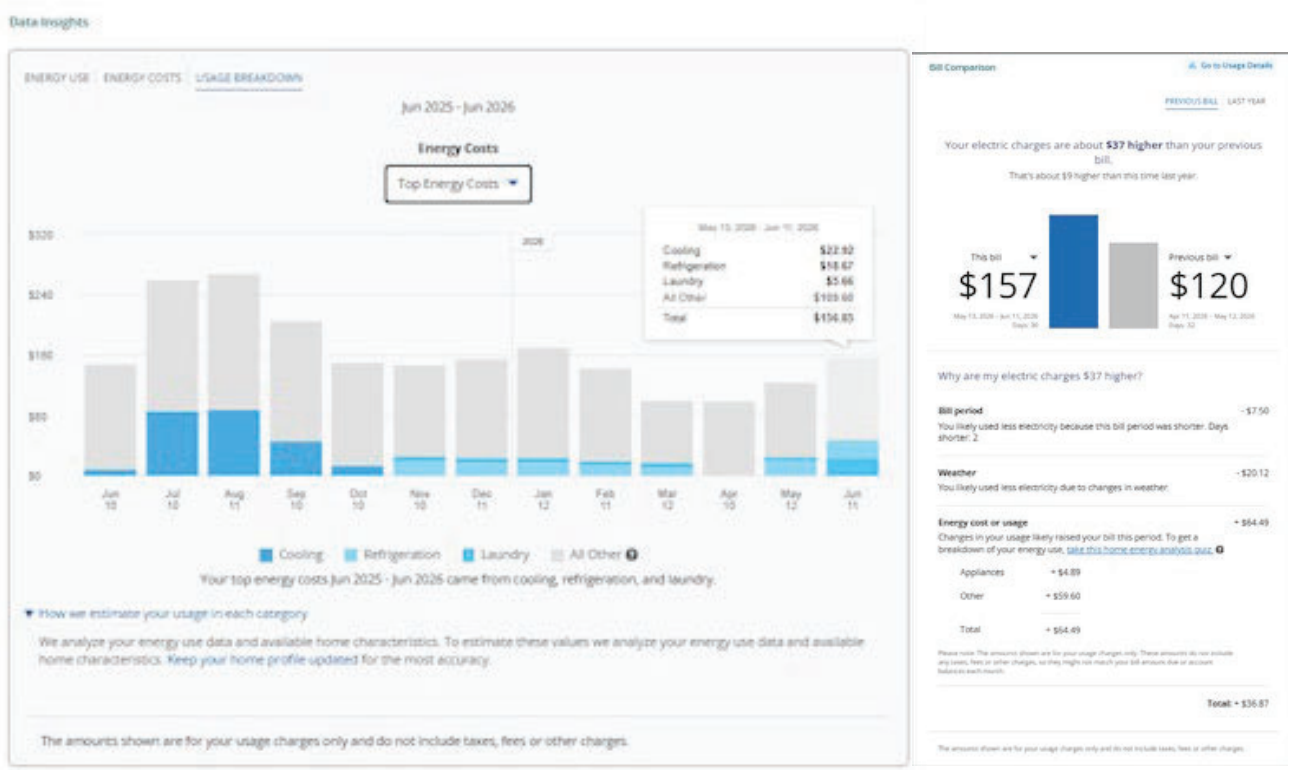
In addition to detailed billing and usage data, customers will benefit from optional usage alerts delivered during the billing cycle. Customers can elect email, text, and mobile app notifications to receive alerts such as unusual consumption or high bill alerts. The combination of proactive alerts in concert with new AMI data and insights will give customers more control over their energy consumption and increased predictability over monthly costs.

Lastly, AMI enables the powerful capability of load disaggregation, providing customers with significantly enhanced visibility and understanding of their energy usage patterns.

Because AMI provides continuous, near-real time consumption data, it enables the ability to break down total energy consumption into specific categories, such as heating, cooling, lighting, and appliance usage. This detailed breakdown provides customers with precise insights into the unique behavioral drivers behind their energy consumption and ultimately their energy bills. Load disaggregation is a critical tool to promote and achieve behavioral changes at the customer level that can increase overall energy efficiency.

Below are examples of some of the ways customers will be able to view their load disaggregation. The first images shows load disaggregation as part of overall usage, so customers can see which appliances are driving their usage. The second image highlights load disaggregation as part of a bill comparison tool, which shows how a customer's bills have changed.

Figure 17 – Example Customer Tools

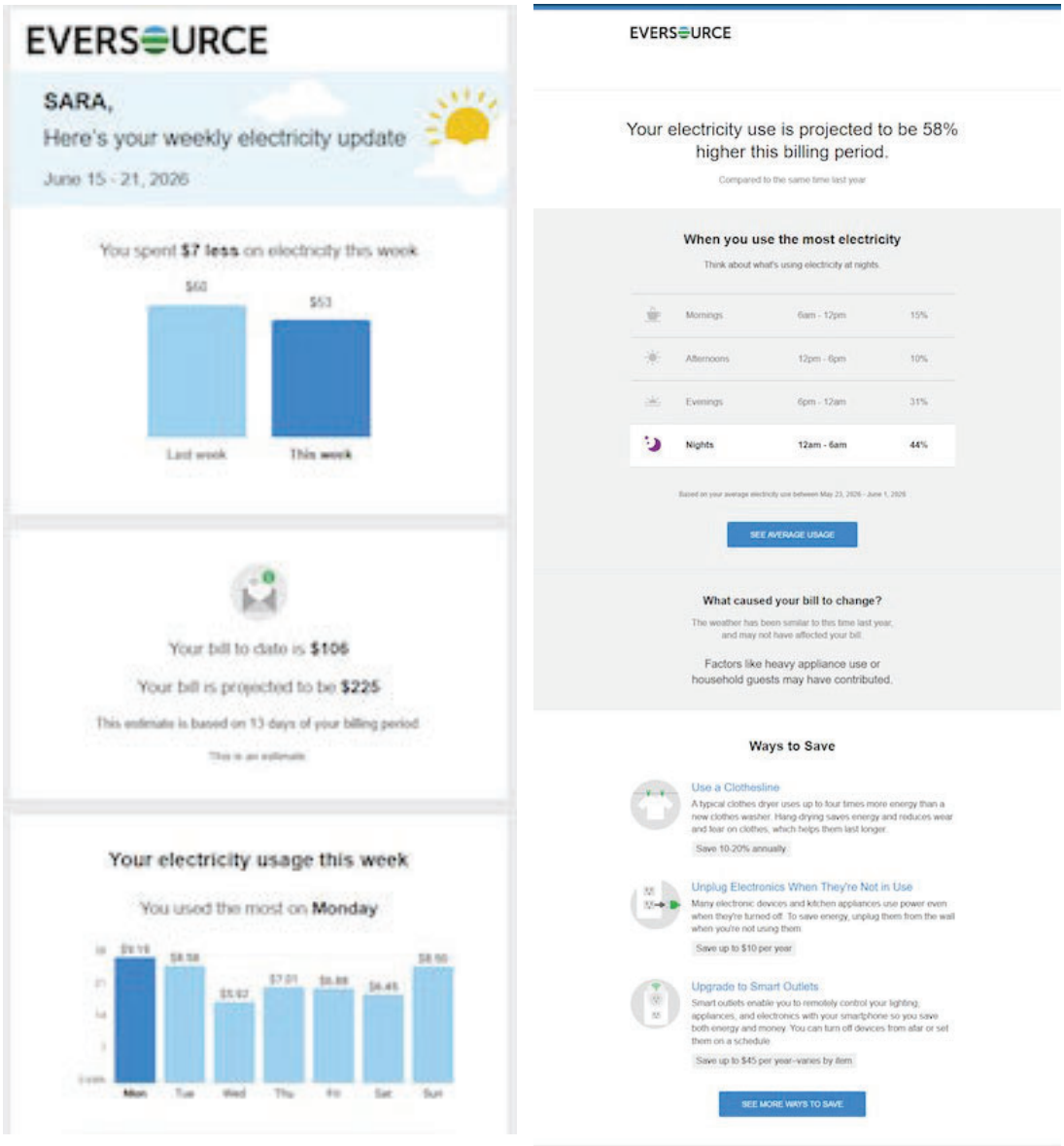


Below is an example of a weekly usage report that is sent to each week with a summary of the previous week's usage and a high bill alert that is sent to customers when their bill is trending higher than the previous year.

As of May 31, 2026, Eversource has deployed 325,791 meters in Massachusetts. Massachusetts customers with AMI meters have received 2,015,701 weekly usage reports

with a 56.0% open rate and a 0.02% unsubscribe rate. 74,485 high bill alerts have been sent with a 60.5% open rate and a 0.17% unsubscribe rate.

Figure 18 – Example Customer Weekly Usage Report



viii. Electric AMI Efficiency Gains That Benefit Any Future Gas AMI Deployment

Eversource's Connecticut Gas division is exploring meter options that will comply with new regulatory requirements that go into effect in 2027, whereby gas meters need to have integrated methane detection. The gas division is exploring the Itron Intelis meters as a compliant option. The Intelis meters are AMI-capable and are fully compatible with the Itron Riva (AMI electric meter) communications network. In Connecticut, there is greater than a 50%

overlap between electric and gas territories, meaning that significant efficiencies and cost savings could be realized for any future gas deployment of Intelis meters. The gas division would also be able to leverage the AMI technology stack implemented for Electric AMI, providing additional cost efficiencies while also yielding the following AMI benefits. It is important to note that this electric-gas synergy is only available if the Company is able to leverage the technology selections previously selected and implemented in Massachusetts.The following benefits are not part of the AMI Plan for CL&P; however, moving forward with AMI leveraging the Massachusetts technology strategieswill offer the compatibility to develop these capabilities cost-effectively at a later date for Yankee Gas customers:

Improved Safety

Safety is one of the biggest drivers for AMI implementation. Under an AMI paradigm, the meter is continuously monitoring the environment and provides remote automatic shut off capabilities if unsafe or abnormal conditions are detected. These conditions include if a leak is detected, over-pressurization, temperature extremes, excess flow, and seismic or other natural disasters. For indoor meters, residential methane detectors and sensors can trigger alarms if a leak is found inside a property and will notify Eversource quickly and accurately. yAdditionally, AMI meter set design is smaller and lighter, making installation and removal easier for worker safety. This also reduces the number of technicians needed from a two-man job to a one-man job.

Faster Response Times

AMI for Gas enables remote shut off capabilities, thus greatly reducing incident response times and reducing the need for a technician to respond to the scene.

Improved Security and Theft/Tamper Detection

The AMI sensors will improve equipment security and theft and tamper detection, which are generally indicators of other unsafe conditions at the site and/or on the equipment.

System Design

With AMI, Eversource can get daily or hourly reads on the gas meter through the network. This will reduce the resources and truck rolls necessary for traditional AMR meter and pressure readings. This will also reduce the need to schedule indoor meter reads with customers. The pressure readings and data can be logged and used for increased data analytic capabilities for accurate forecasting and modeling. Overall, there will be improved energy management by having a better understanding of the overall system to manage and allocate supply in case of a shortage. This will also reduce lost and unaccounted for (known as LAUF) gas through improved accuracy of readings and allocations. Finally, there is a potential that the density of pressure readings available on the system through mass deployment of these meters will alleviate the

need to install additional real-time reading telemetry devices, which are expensive devices that require significant resources to maintain.

Emergency Response Plan (ERP)

Emergency Response Plans will be faster and more efficient with AMI. AMI will be able to provide immediate and greater visibility of the data we have in the territory. The remote shut off capability will be essential to contain gas leaks and other hazardous system and environmental conditions (e.g., wildfires, floods) and cut off service to the affected areas and customer premises to minimize the impact of the situation. This directly improves customer and worker safety because fewer customers will be impacted and workers will not have to respond to a dangerous situation. AMI will help Eversource detect outages faster and respond more efficiently while giving customers more visibility during expected and unexpected downtime.

Billing

Billing and customer experience will see benefits from transitioning to the AMI network. Customers will be able to see real-time energy usage insights and have more visibility and control of their usage. It will give customers the tools to track and manage their energy use with precision. This will reduce disputes regarding estimated bills and provide accurate billing, profiling and measurement, allowing for true measurement of costs.

VI. Customer Outreach and Engagement Framework

AMI provides several benefits and capabilities that allow customers to better understand and control their energy usage and bills. It also provides near real-time usage information that can be accessed via multiple channels, provides near real-time usage insight and enables Time-Varying Rate choices that can give customers more control over their energy bills.

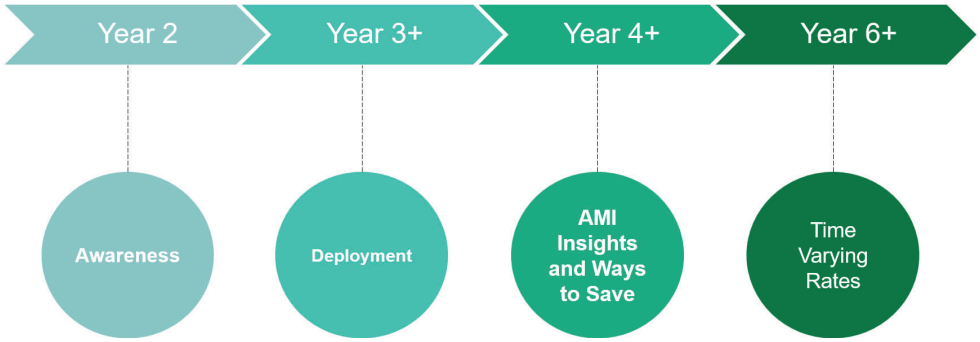
The AMI Plan demonstrates how AMI can improve the customer experience in several ways. The Company proposes to guide and educate its customers about smart-meters and the benefits and capabilities they will provide, ensuring all customers feel included and properly educated throughout the implementation. The Company consulted with other peer utilities, and utilized direct customer feedback from the Massachusetts implementation to develop this outreach methodology. This enabled the Company to review and improve upon processes and customer feedback to yield better future results.

This will be completed in a four phased multi-year approach:

- Awareness
- Deployment
- New Energy Insight and Ways to Save

- Time-Varying Rates

Figure 19 – Customer Outreach and Engagement Timeline



The Customer Outreach and Engagement Framework identifies and builds initial general customer awareness and evolves to support customer-specific understanding and ultimate engagement in key AMI-specific areas, including:

- Customer Usage Insight & Notifications
- Customer Bill Impacts
- Customer requests to opt-out of a smart meter

Energy consumption Insights will be made available via multiple channels to increase customer awareness. The Company's Customer Service Representatives will also have near real-time information available to better answer customer inquiries. AMI can help with inquiries on high bills, inaccurate bills, and outages. These are some of the most common types of calls the Company receives, and a topic that is typically a cause of concern for customers. AMI will position Eversource to enhance its efforts to provide superior customer service by equipping their representatives with the most current information.

Overview

The Customer Outreach and Engagement Framework identifies key phases in the AMI deployment period – from general awareness of AMI to customer-specific understanding of what to expect as their meter is exchanged, through enabling new energy usage insight, notifications and Time-Varying Rates. Customer communication across all channels will be utilized – broadly to all customers with general AMI information and targeted, customer-specific messages that will vary and will evolve.

Customer Research

Eversource maintains a robust Customer Experience program, the core of which is the Company's Voice of the Customer ("VOC") Team. The Company currently utilizes the VOC Team in a wide variety of customer satisfaction research, including broad-based ongoing survey research, sentiment analysis, and on-demand ad-hoc research via the Company's online community, known as the Eversource Advisory Group. The data the Company receives from this analysis heavily influences the final communications plans and advertising campaigns on a wide variety of topics. As a result of their extensive experience, the Company plans to use the same approach in determining the customer messaging for AMI meters through all the phases of the Plan.

Prior to the first phase of the Framework, the Company will perform customer research to determine our customer baseline knowledge levels and their opinions towards AMI. The results from the research will help develop customer communications that are relevant and help continue to drive adoption. It will also provide the Company with a baseline to compare later research against to ensure the chosen methods of communications are effective.

Throughout the Framework, the Company will continue to use the research capabilities to identify concerns Eversource customers may have about AMI deployment so that these concerns can be proactively addressed. The Company will also test communications with customers for clarity and tone. The results of this data will ensure that the selected communications for phases two and three are accurate.

Customer research and engagement will remain crucial post-deployment. In these phases, the Company will focus on adoption of the new tools that smart meter technology enables, which in turn allows customers to better understand their energy usage. User experience research and usage trend measurement will be heavily utilized to guide this process.

The capability of Time-Varying Rates has the potential to prompt a wide range of customer usage changes to help lower their monthly bills. Research in this phase will examine those behaviors and also identify reasons why behavior may not change among different types of customers.

Because the Company's VOC Team will be involved throughout the AMI project, customer satisfaction research will respond in an agile way to any shifting priorities and timelines. Customer research can be quickly modified to gather needed feedback, and results can be communicated quickly to project stakeholder and deployment teams.

The resources that are available to the Company in the area of customer experience research will enable customer satisfaction to be a primary factor in the deployment of smart meter technology and the development and iteration of tools to best utilize the benefits of the new infrastructure.

Customer Outreach

The Company's customer outreach Framework is extensive, beginning once the AMI Plan is approved and continuing for years after AMI meter deployment has been completed. Ensuring that customers understand the benefits they will have with the new meters is a priority for this project.

Customer Awareness

The Framework begins by creating baseline awareness and education on AMI meters into existing communications plans for customers, a clean energy future, grid modernization and energy efficiency. Since these topics are already priorities for Eversource, and the benefits of AMI meters affect and may enhance many of these topics, it will be a natural fit to begin to incorporate the topic of AMI meters into these communications. Aside from incorporating AMI into customer communications, we will add a dedicated area on our website on smart meters as a customer education resource. Social media and other collateral will direct customers to this area. Additionally, a paid media digital campaign that links to the website will be launched, providing awareness of the coming meter changes and benefits with an ability to easily dig into the specifics if desired.

By communicating on this topic early, Eversource will create transparency with our customers, familiarity, and buy-in. It will also provide time to address any concerns that come up and adjust our communications as necessary. It will also not create significant additional costs for the project since it will be incorporated into existing communications.

Deployment

The Company understands that being told a new smart meter is being installed will generate a number of questions and create some concerns from a minority of our customers. This change in how customers relate to energy requires a commensurately thorough and enlightened approach to boost customer awareness of AMI and the benefits it can offer. The goal is to educate customers about their energy consumption and how AMI enables them to personally control their own energy costs, as well as take advantage of a full scope of enhancements and benefits.

There are multiple customer benefits of the AMI meter deployment. These benefits include:

- The ability to manage and reduce energy usage through real-time or near real-time engagement by incremental time data updates directly to their customer portal
- Notifications about consumption and management
- Improved storm response and outage notifications
- Potential savings from efficiencies in reducing usage in inactive accounts
- Avoiding energy theft (which will help control and stabilize rates that directly impact customers over time)

The next phase of the Plan moves from general customer understanding and education to a targeted approach. Eversource will continue to maintain information on AMI in general communication channels, and will also begin targeting communities that are scheduled to receive their new meters in 90-, 60- and then 30-day time periods.

90-60-30-Day Implementation Protocol

Along with general media outreach, Eversource will promote awareness about planned AMI meter installations at each of the three 30-day intervals leading up to installation.

90 Days Prior	60 Days Prior	30 Days Prior
Community Engagement • Share AMI online • Meet with key stakeholders and community officials • Provide fact-sheets with key messaging • Engage with key businesses • Target customers with special circumstances • Mass Market outreach	Customer Awareness • Customer mailings • Welcome letters • Town meetings • Email, online communication • Continue talks with community partners	Customer Outreach • Customer mailing • Customer emails • Welcome brochure • Address media relations • Social media

90 Days Ahead

AMI/Stakeholder Education Group members will connect with community leaders wherever possible in face-to-face meetings. Eversource will work in partnership with elected officials, community leaders, and customers to address and build FAQs and ensure customers know what's in it for them and AMI benefits. Information will be available in English and Spanish to further ensure all customers easily have the information needed and readily available to them.

Audience	Key Messaging	Channel	Material
Customers Elected Officials Community Leaders	• Intro to AMI Meters • Customer Benefits	• Website • Media Ads • Online • Printed Material	• Educational Campaign • Instructional Videos • Meetings

60 Days Ahead

Group members will organize and speak to community gatherings about how AMI meters could help them better understand the cost of the energy they use and, ultimately with the addition of Time-Varying Rates, save them money. Eversource will target customers who may have special situations or needs and therefore require a more personalized and targeted approach. Special consideration will be given to diverse groups, low-income customers, and small commercial customers.

Audience	Key Messaging	Channel	Material
Residential Small Business Medium Business	• Deployment Phases • Customer Benefits	• Email • Direct Mail • Community Meetings	• FAQs • Welcome Brochure • Online Information

30 Days Ahead

Customers will receive a notification using the various channels indicated in the table below, with a timeframe they could expect an AMI to be installed at their residence. Eversource will focus on continuing to build awareness and remain transparent in its communications regarding AMI benefits. Education and outreach will be key in this time period to ensure our customers are ready for their upcoming meter change. The communication method will vary based on customer need and preference.

Audience	Key Messaging	Channel	Material
Deployment Area	• Deployment Phases • Deployment Timeline • Customer Benefits	• Email • Direct Mail • Community Meetings • Social Media • Ads • Press Releases	• FAQs • Welcome Brochure • Online Information • Fact Sheets • Introduction Letter

Day of Meter Installation

On the day a customer's meter is scheduled to be changed to an AMI meter, a technician will knock on the customer's door to make contact. This is due to the brief (up to 60 seconds) power disruption the customer may experience. If contact is not made, the technician will continue with the meter change. Once work is finished, a doorhanger with information in both English and Spanish, will be left that explains the work that was done. It will detail that a power disruption occurred, and explain the benefits they will have with their new meter and where they can go for more information. More information will be available on our website for customers to reference

New Energy Insights and Ways to Save

Once customers have their AMI meter installed, the Company will continue to educate and engage customers in energy management solutions, using more near-real-time and granular data available with AMI. As previously noted, the engagement framework post-deployment will focus on customer insight into their usage and actionable ways to save in key AMI-enabled areas, including:

- Detailed Customer Usage
- Detailed Usage Sharing with Third Parties
- Enhanced Web and Mobile App Customer Experience
- Customized High Bill Alerts
- Delivered Energy Insights
- Enhanced Outage Alerts

Similar to the outreach pre-installation, the Company will leverage existing customer touchpoints such as bill inserts, bill messaging, and website messaging. We also will host community meetings and webinars.

Detailed Usage Insight

Access to detailed billing data is expected to provide value to different customer segments. Residential customers will benefit from targeted information on how different rates or programs will impact bills based on their specific usage patterns. All customer segments have the potential to benefit from visibility of near-real-time data. Visibility into this data will empower customers to more quickly modify behavior and better manage their usage. Access to more timely and detailed usage information is expected to support improved insight and reduce customer surprises with high bills.

With access to this information, customer service representatives will also be able to provide more targeted recommendations to callers for participation in time-varying rates or energy efficiency or demand response programs.

Detailed Usage Sharing with Third Parties

Via the Eversource website, customers can access their data as well as applications that allow them to easily and securely share their usage data with third parties. AMI data will be made available via those existing methods and additional data sharing mechanisms that may be made available in future years. For example, customers may authorize their competitive electric power supplier or other service provider to access their monthly, daily, and interval data.

Enhanced Web and Mobile App Customer Experience

Eversource will leverage AMI to develop an enhanced digital experience via inbound channels, namely the Eversource website and mobile application, that will provide access to detailed energy usage data in a compelling, visual format. This will enable customers to interact with usage information to gain insights about their energy use and turn those insights into actions. The digital customer experience will integrate customer usage data to generate information on usage behavior, patterns and trends and display this information in ways that customers can easily understand. Customers will have the ability to overlay additional data in graphical format, including weather, price and billing data. Through the utilization of load disaggregation analytics software, customers will be presented with insights that can help them understand usage pattern drivers to determine how their energy is being used and where savings may be realized.

Functionality will be tailored to specific customer segments such as residential, small business, and large commercial and optimized for viewing on all devices (e.g., mobile phones, tablets). These digital capabilities will provide increased transparency through near-real-time data for customers, allowing the Company to deliver value-added programs and targeted messaging. For example, the Company will be able to identify customers experiencing high bills and offer them energy management suggestions and payment plans tailored for their specific segment. The digital experience with AMI will also be able to opt-in to receive new near real-time alerts and notifications related to usage, billing, and outage insight that their AMI meter provides.

Customized High Bill Alerts

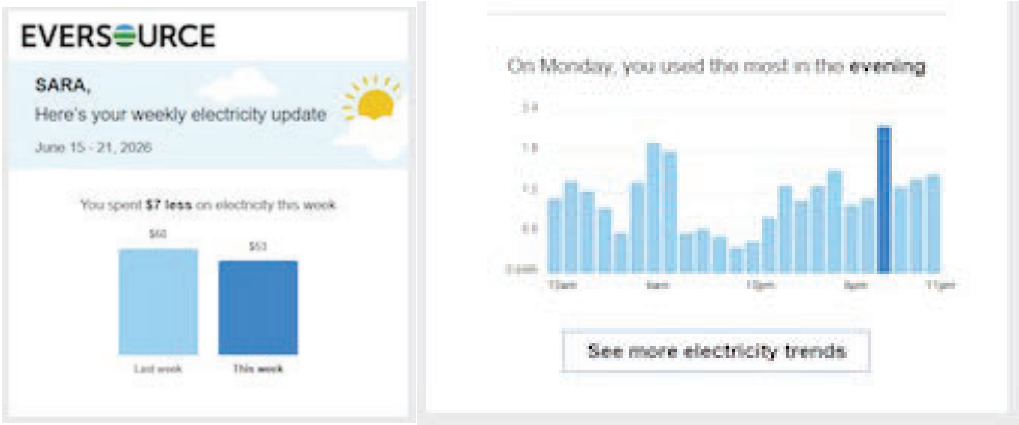
Eversource will also allow customers the option to receive relevant energy insights and notifications based on detailed data, sent out to customers via outbound channels, namely email, text, and mobile application notifications. Customers will be able to set thresholds to receive alerts when the amount of their bill for a defined period exceeds a certain amount. In addition, the Company can proactively set high-bill alert thresholds for customers based on their historical usage and allow customers the ability to opt out of such communications. For example, a customer can receive a high bill alert in the middle of their billing cycle if their usage is already at their monthly average or higher.

The primary benefit of high bill alerts is customer satisfaction in avoiding a surprise high bill after their billing period has ended. This functionality also allows the Company to proactively address customer billing issues in advance of the bill being sent to the customer. Additionally, the alerts can make customers aware of unusual consumption patterns typically caused by faulty or inefficient in-home heating/cooling systems or appliances. In cases where a faulty or inefficient appliance is involved, the alert gives the Company a timely opportunity to offer an energy-efficient replacement solution.

Delivered Energy Insights

The Company's approach to delivering customer-specific energy usage insights via outbound communications is driven by usage data. Currently, the personalized usage insights that customers receive, such as year-over-year usage comparisons and seasonal usage summaries, are based on monthly usage data. The ability to further customize outbound communications is greatly enhanced with the more specific data that AMI provides. Being able to analyze customer usage at the hourly, daily, and weekly levels allows insights into energy usage that were previously unobservable, which provides the ability to message customers with recommendations that are most relevant to them. Additionally, receiving data on a more frequent basis allows these usage insights and associated recommendations to be delivered to customers in a more timely manner that will motivate them to take action.

Figure 20 – Customer Energy Usage Insight Examples from MA AMI Deployment



Enhanced Outage Alerts

Integration of the existing Outage Management System with the new AMI Meter Data Management System will enable the Company to provide accurate restoration status to customers by leveraging the ability to remotely ping and interrogate AMI meters. This capability is particularly valuable to customers that are required to evacuate (e.g., due to a hurricane) or are not at their property, to avoid any inconveniences from electric service outage during the storm event. Remote pinging capability also allows for accurate identification of

nested outages (i.e., outages caused by more than one reason), allowing the Company to provide more accurate power restoration estimates and avoid an inaccurate restoration notification to customers impacted by this type of outage. A customer will only receive a restoration notification once the OMS confirms the customer's meter has responded to its ping with a power restored message. Industry research has proven the improved outage capabilities enabled by AMI lead to higher customer satisfaction.

Time-Varying Rate (TVR) Communications

The implementation of Time-Varying Rates is dependent upon the implementation of a new CIS and the completion of mass meter deployment. Once the majority of AMI meters have been deployed, the Company will focus on design, implementation, and communication of TVR to ensure readiness when TVR billing capabilities are launched after meter deployment is complete. TVR communications will be closely aligned to a stakeholder process for designing TVR (Details in Section 7 below). The TVR communication strategy focuses on building awareness and educating customers about benefits of Time-Varying Rates, supported by customer tools and insights like a new rate comparison tool. The company will also gather stakeholder input around the role of competitive suppliers in driving TVR adoption. Importantly, prior to AMI-enabled TVR, the Company aims to start communicating with customers about TVR through its TVR customer engagement plan, being filed in the Company's base distribution rate case as compliance with Public Act No. 25-173, Section 21.

Customer AMI Meter Opt-Out

During the deployment phase, our customers will have the opportunity to decline the installation of an AMI meter. The Company's Plan includes an opt-out plan for both the installation of the AMI meter as well as choosing not to participate in the new rate plans. Refer to Section X for more details on customer education and communication around Opt Out.

Summary

Eversource is poised to diligently execute this Plan to ensure that our customer outreach and engagement are robust, and that understanding is achieved. This will ensure that all customer groups, segments, and demographics represented in the Eversource service territory are fully engaged and aware of the AMI process and the opportunities AMI will provide for them. The Company's AMI Plan will allow customers to have a controlling hand not only in their own electric usage, but a true ability to modify their energy costs due to tangible involvement in their consumption and the resulting benefits from the rates and programs that AMI meters provide.

Finally, Eversource's partnership with its existing community advocates and other stakeholders

will further ensure that AMI educational materials are disseminated to all customers, and particular customer segments and groups, in a customized way that meets their needs. Communications will be delivered through several channels, including print materials, social media, web, digital, and public presentations.

The ongoing communication efforts will begin after AMI Plan approval and will continue for many years after deployment commences. This framework is a continuation of Eversource's commitment to providing customers with the best energy service and the most up-to-date, modern and customer-focused opportunities available.

VII. Time-Varying Rates

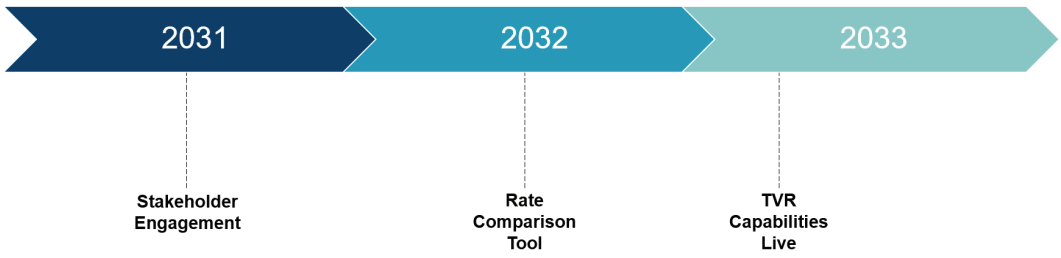
Time-Varying Rates Implementation Timeline

The Company recognizes that AMI provides the technological foundation necessary to support future time-varying rate offerings, including time-of-use, critical peak pricing, and other demand-responsive rate designs. However, implementation of such rate structures is most effective and equitable only after AMI deployment has been substantially completed across the Company's service territory.

Time-varying rates rely on interval usage data, advanced billing system functionality, customer access to timely consumption information, and robust customer education and engagement programs. These capabilities cannot be fully realized until AMI meters have been installed and activated for the majority of customers and the supporting data management, communications, and billing systems have been fully integrated and tested. Additionally, the Company envisions a collaborative stakeholder process to reach consensus on TVR priorities, which will need to be informed by robust interval usage data across customer segments. Such robust data will not be available for the majority of customers until the AMI meter rollout is nearly complete. The Company will develop a rate comparison tool to help customers navigate their TVR options, and that tool will require at least a year of usage data for the customer in order to provide reliable customized results.

Accordingly, the Company does not propose to implement time-varying rates during the initial phases of AMI deployment. Rather, such rates are anticipated to be developed and evaluated as a subsequent phase of the AMI program for launch approximately one year after the completion of system-wide AMI meter deployment and operational stabilization (Figure 18). This approach ensures that all customers have equitable access to the technology and information necessary to understand, respond to, and benefit from time-varying pricing signals.

Figure 21 – Tentative Timeline for TVR



Deferring implementation of time-varying rates until the latter stages of AMI deployment also reduces program complexity and implementation risk. It allows the Company to focus first on

the successful deployment of AMI infrastructure, customer onboarding, and realization of foundational grid modernization benefits before introducing new rate structures that depend upon mature AMI functionality.

By sequencing time-varying rates after full AMI deployment, the Company can ensure accurate interval data collection, consistent customer experiences, effective customer education, and informed regulatory evaluation of rate design alternatives. This phased approach represents a prudent and measured path toward achieving the long-term customer, operational, and environmental benefits associated with advanced metering and grid modernization.

Furthermore, delaying the implementation of time-varying rates until AMI deployment is substantially complete supports customer affordability and consumer protection objectives. Customers should first have access to the tools, usage data, and educational resources necessary to make informed energy decisions before being asked to respond to dynamic pricing signals. A deliberate, phased implementation strategy maximizes customer participation, enhances program effectiveness, and helps ensure that the benefits of advanced rate designs realized fairly and consistently across Connecticut's electric distribution system.

Customer Journey

Pursuant to Section 21 of Public Act No. 25-173, the Company is proposing in its pending base distribution rate case, Docket No. 26-05-10, a customer engagement plan for TVR. The current proposal focuses on existing Time-Varying Rates and will serve as a starting point for later iterations of TVR customer education and engagement programs. Prior to full implementation of AMI, the primary objective of the plan is to engage interested customers at a more targeted level and provide information to aid in their decision making and in any necessary behavioral shifts. As customer familiarity with TVR pricing evolves, Eversource will continue to refine its engagement efforts based on customer feedback and observed information needs.

Once the majority of AMI meters have been deployed, the Customer Information System TVR capability has been developed, and Time-Varying-Rates designs determined, the Company will be building awareness and educating customers on the benefits and availability of new Time-Varying Rates. We will accomplish this by using existing communications tools, such as customer emails, on-bill messaging and inserts, free social media, online videos, press releases and earned media, direct mail, print collateral, town halls, and paid social media campaigns.

We will be sure to communicate with customers based on their preferences, where applicable, and some communications will be targeted to specific customers, while others will be mass communications. It will also be possible to seamlessly work the topic of TVRs into other conversations, such as energy efficiency, grid modernization, and other top-priority topics for Eversource. As much as there will be communications that solely focus on TVRs, we will also be

able to bring the conversation around TVRs into other communications as well.

Aside from incorporating the benefits of TVRs into customer communications, we will also add a dedicated area on our website as a customer education resource. This will be where customers will be directed to from any social media posts, paid social campaign or other collateral that is created.

Incorporating this topic as often as possible into our customer communications will be necessary to educate customers on the benefits of TVRs. Just like it was necessary to communicate on the benefits of AMI, we will need to follow the same plan with TVRs in order to create transparency, familiarity, and buy-in.

VIII. Competitive Solicitation Summaries

The Company has already undergone a rigorous vendor selection process through the sourcing of RFPs for the Massachusetts AMI Program. This includes selection of third-party affiliates to staff: (1) the program management office ("PMO"), organizational change management ("OCM"), and System Integrator; (2) MDMS and Integrator; (3) AMI HES, Meters, and Network; (4) installation vendors; and (5) other technology vendors.

Within the implementation for Connecticut, Eversource proposes to utilize the established relationships and contractual agreements between its selected vendors for the major technology elements of the Connecticut implementation, namely the meters and communications network, CIS, and MDMS. Leveraging the already-completed processes from Massachusetts will ensure that Connecticut customers will benefit from the shorter project timeline, economies of scale, and the extension of pricing options negotiated in the original contracts. Competitive solicitations will be conducted for project management and systems integration services, recognizing that partners who have performed well during the Massachusetts deployment and are already familiar with the deployed technologies will likely offer advantages to Connecticut customers.

The Company's competitive solicitation process is facilitated through a structured and transparent approach, which is designed to ensure fairness and competitiveness. This process includes:

- **Initial Planning:** Identification of specific AMI requirements and use cases, as well as timing to select vendors to maintain program deployment schedule.
- **RFP Development**: Developed comprehensive RFP documentation that outlined technical specifications, performance criteria, and evaluation metrics.
- **Publication and Outreach**: Notified potential vendors through direct communications to participate in RFP process.
- **Evaluation and Selection**: Formed a cross-functional evaluation committee, consisting of representatives from various Company departments, for each RFP to assess bids based on predefined criteria including technical capability, cost, and vendor reliability. The committee developed a set of evaluation criteria to ensure a consistent and fair assessment of all bids. Multiple factors were considered as part of the evaluation and scoring of all bidders. Criteria included but was not limited to:
    - Assessment of the technical features and functionalities of the proposed solutions, including compliance with specified requirements and performance metrics.

- Evaluation of the total cost of proposed solutions, including initial procurement, installation, operational, and other ongoing costs.
- Analysis of the bidder's track record, ability to deliver on commitments, and other reliability standards.

Each bid was scored against the predefined criteria using a weighted scoring methodology. The scores were aggregated to provide an overall score for each bid. The Company conducted reference calls with other utilities that had implemented similar solutions from the bidder and scheduled interviews with the top three (3) bidders for each RFP. Based on the aggregated scores, reference calls, and interview outcomes, the evaluation committee selected the winning bids. The selected vendors demonstrated the best overall value, balancing technical capability, cost-effectiveness, and reliability.

- **Contract Negotiation**: Cross-functional evaluation committee and bidders engaged in contract negotiations to settle on pricing, terms and conditions, service level agreements, and other contractual requirements. The Company ensured that the full meter lifecycle costs were comprehensively accounted for in the RFP process, which included initial procurement costs associated with infrastructure, installation costs for labor and logistical expenses for meter deployment, operational costs for ongoing maintenance, software updates, software-as-a-service fees, and data management expenses, as well as end-of-life costs for eventual meter replacement and disposal costs.

Through this rigorous process, all program technology vendors and partners were selected, along with materials vendors for meters and field network equipment. To help reduce costs for Connecticut customers, Eversource leveraged economies of scale in the course of issuing the competitive RFPs, asking vendors to provide quotes for both Massachusetts and Connecticut AMI deployment. Within the contracts for some of these selected vendors, the AMI Program was able to negotiate competitive pricing options and favorable terms for expanding and scaling services across the Company's service territories for meters, network equipment, and MDMS, if approved in accordance with each state's AMI regulatory approval process. Based on the historical relationships within Massachusetts for vendor selection, there will be cost savings to Connecticut customers by leveraging the expertise of the current AMI project personnel in these selected technologies.

Because the Connecticut AMI program has not advanced in the timeline originally contemplated when those sourcing agreements were negotiated, the pricing options for Connecticut applying to meters, network equipment, and MDMS have expired. However, leveraging the relationships built within the Massachusetts deployment, the Company was able to secure Letters of Intent (or equivalent) from its primary vendors that are integral to the implementation of AMI: Itron, Siemens, and SAP. These vendors have provided the Company pricing structures for

Connecticut based on the established enterprise agreements which in turn will yield overall cost savings. These preferred pricing options are time-bound assuming approval of the AMI Plan is received in 2026.

The Company selected the following key program partners as primary vendors to implement the founding AMI technology pillars: HES, MDMS, and CIS.

To determine the best solution provider for the Company for each of the three pillars, the following vendors went through the rigorous RFP process:

Meters (Includes HES, and network)

- Aclara
- Trilliant
- Elster Electric Metering
- Landis+Gyr
- **Itron** was selected as the Company's AMI meter solutions vendor.

Meter Data Management System (MDMS)

- Itron
- Landis+Gyr
- TRC
- **Siemens** was selected as the MDMS provider.

Customer Information System (CIS)

- **SAP** was selected as the Company's CIS provider.
- Note that Oracle was also invited to propose on the CIS solution. After their initial exploration of the opportunity they elected not to pursue the opportunity.

The following list of vendors were selected in Massachusetts from a competitive solicitation selection process. These vendors will be invited to bid, alongside industry peers, to be involved in the RFP evaluation process to be selected as vendors for the Connecticut implementation.

- **Z2 Solutions** was selected as AMI Program Advisors who supported the development of RFPs and evaluation of vendor services.
- **West Monroe** was selected to manage the PMO, which oversees the management and governance of Financial Reporting, Program Reporting, Resource Management, Schedule Management, Risks/Issue Management, Scope Management, Vendor Management, and Quality Management. West Monroe was also selected to develop and implement OCM.
- **TRC** was selected as the system integrator for the MDMS system, Seimens.
- **Ernst and Young** was selected as the Company's CIS systems integrator.

- **Accenture** was selected as the overall AMI System Integrator responsible for blueprinting/requirements, high-level designs, solution architecture, test management, test data, test environment management, release management, System Integration Testing execution, and cutover and hyper-care support. Accenture was also selected to oversee Metering Edge System Integrations and Enterprise Data Platform development and system integration.
- **Oracle** was chosen as the Solution Provider, with Opower as the platform to be the Customer Web Portal solution.
- **Elecnor Hawkeye** was selected as the Communications Installation Vendor. They install the routers and switches within the field area networks on the poles to set up for AMI transition.
- **Grid One Solutions** was selected as the Meter Installation Vendor. They send technicians out to residential homes to install the new AMI meters.
- **Utility API** was selected as the Green Button Connect Solution Provider. They completed the installation of the software as a service.

Eversource also works with a number of partners, such as Utilipros, Powersolve, and Gridbright, on various support applications (e.g., asset management) which will need to be updated or modified in order to enable end-to-end AMI functionality for the Connecticut implementation.

Under this AMI Plan, Eversource proposes to leverage in Connecticut the three main Massachusetts technology elements that provide economies of scale across jurisdictions: meters/network, CIS and MDMS. The remaining services do not offer direct economies of scale and therefore will rebid, with consideration being given to partners that have experience and demonstrated success with the Company's in-flight Massachusetts AMI program.

Please refer to the Exhibit CLP-AMI-2, Appendix (Confidential) for vendor LOIs, pricing proposal, and contract bid information and evaluation documentation.

IX. Performance Metrics

Recognizing that the AMI program requires sizable investments, Eversource embraces accountability for executing the program effectively and delivering the expected benefits to customers. Accordingly, Eversource proposes a performance metrics framework to provide transparency into both the success of the AMI deployment and the realization of benefits. In each category, the Company is proposing to report annually on a slate of metrics.

AMI deployment success:

A successful AMI program implementation requires a foundational plan to design and deploy the systems and equipment, and adherence to that plan for on-time and on-budget delivery. The following metrics will allow the Company, PURA, and other stakeholders to assess the progress of the program and the effectiveness of the deployment:

DEPLOYMENT SUCCESS MEASURES	
Metric	**Definition**
Performance to Plan	Measure the actual delivery of AMI components against plan Milestones
Meter Deployment Schedule Variance	Measure actual meter installations vs. baseline schedule
AMI Program Budget Variance	• Measure actual spend vs budget • Measure spending forecasts vs. budget forecasts
Availability of Alerts	Confirmed implementation of bill alerts, outage alerts according to Plan timeline
Availability of Reports and Load Disaggregation	Confirmed implementation of AMI Customer Experience Portal according to Plan timeline
Availability of Data Sharing	Confirmed implementation of Green Button Connect (secure, customer-authorized sharing of energy usage data w/ 3rd party providers) according to Plan timeline
Availability of Time Varying Rates • Customer awareness of TVR Benefits • Customer TVR Adoption	Confirmed implementation of TVR according to Plan timeline Customer Survey percentages Adoption rate vs. benchmark

AMI operational success

As the AMI program delivers new capabilities and other benefits, it is important that customers do not experience a material decline in the operational processes that underpin their electric service. The following metrics will allow the Company, PURA, and other stakeholders to assess the Company's success in maintaining strong operational performance during the major deployment activities:

OPERATIONAL SUCCESS MEASURES	
Metric	**Definition(s)**
Automation of Manual Processes	• Measure Truck Rolls vs pre AMI history • Measure reduced truck rolls vs. BCA estimates • Measure No Trouble Found calls vs. pre-AMI history • Measure NTF call reduction vs. BCA estimates
Measure Impact of Grid-facing AMI Technology	Volt/Var Optimization – Energy & Peak demand vs. pre-AMI history
Increased Precision of Outage Response	Measure outage durations vs. pre-AMI history
Improved Locational Awareness	Avoided connectivity survey savings vs. BCA estimates
Bad Debt Reduction	Measure Bad debt reduction vs. BCA estimates
Revenue Assurance Benefits	• # Successfully identified Unbilled usage cases vs. pre-AMI deployment • Revenue recovered per case per year vs. pre-AMI deployment
Customer utilization rates of new alerts and reports	Measure customer adoption percentages of AMI alerts and consumption data against target benchmarks
Technology Performance: Meter Read Rate	Measure success rate in collecting daily register reads and Load Profile Reads
Process health: Bill Timeliness	Measure percentage of bills produced within the standard billing window

Bill Accuracy	Measure percentage of monthly bills NOT subsequently adjusted due to company error (excludes customer-requested adjustments)
CO2 Reduction from AMI Implementation	• CO2 Reduction from VVO vs. BCA estimate of 2.1 % • CO2 Reduction from reduced truck rolls
Prevented Safety Events	• Count of Hot Sockets resolved before safety event • Count of High Impedence Fault Identification and Repair before safety event

X. Customer Opt-Out

We understand that being told a new "smart meter" is being installed will generate a number of questions, and some concerns for a small minority of our customers. During the deployment phase, our customers will have the opportunity to decline the installation of an AMI meter. However, the customer will still receive a new meter to replace the aging AMR meter.

The Company's Plan includes an opt-out plan for the installation of the AMI meter. If a customer chooses to opt out of a meter, the Company will connect with that customer to better understand their decision not to participate and address any lingering questions or concerns that they may have. This is also an opportunity for the Company to educate the customer on the many benefits of AMI meters including, but not limited to, energy efficiency insights, usage and outage notifications, and money-saving Time-Varying Rates.

If a customer does not choose to participate in the AMI installation, monthly meter-reading fee will be applied to the billing statements to cover the service cost of manually reading the meter. The monthly Opt-Out fee is based upon the fully loaded cost to roll a truck. Furthermore, if the Company is unable to install the opt-out meter during the customer's designated AMI deployment schedule, then a 1-time Opt-Out meter exchange fee will be applied. This one-time installation fee also applies if, after an AMI meter has already been installed at the premise, the customer subsequently requests that a opt-out meter be installed. Customers who still elect to opt-out of the smart meter will be provided information and education on the benefits, as well as the option to have an AMI meter installed or participate in the new rate structure at any time.

Prior to any changes taking effect, the Company will deploy multiple communications to customers including billing inserts, outbound calls, and billing notifications to further educate the customer on the many benefits of AMI as well as any resulting charges that may apply should they choose not to allow the AMI meter to be installed at their home.

XI. AMI Path to Achieve Connecticut's Energy Future

The greatest advantage of the proposed AMI Plan is accelerating benefit realization by advancing investments to rapidly deploy AMI. The result is the delivery of the maximum possible value to Connecticut customers over the useful life of the AMI meters. The AMI benefits defined herein are strategically aligned with Connecticut's clean energy, environmental, and affordability goals. By accelerating AMI benefit realization, Eversource will be equipped with the modern grid capabilities necessary to meet Connecticut's target timelines for zero-carbon electricity and net-zero greenhouse gas emissions.

If the plan to accelerate deployment of AMI technologies is not supported, then the Company will implement a long-term strategy to transition to AMI technology by exchanging AMI meters when existing AMR meters reach their end of useful life. Several of the AMI capabilities and benefits cannot be implemented until there is a critical mass of AMI meters deployed. The timing of benefit realization in a delayed implementation scenario is largely unknown, resulting in significant erosion to the benefit cost ratio.

BCR Impacts of a Long-term Transition to AMI, as AMR reaches End of Useful Life

The Meter End of Life scenario models AMI deployment on a non-accelerated schedule, with AMI meters installed once existing AMR meters reach end-of-life or malfunction (rather than through a compressed 3-year deployment). The analysis is based upon the following assumptions:

- Avoided Meter Capital is significantly reduced as a benefit since there is no mass deployment and meters will be replaced as they reach EOL or malfunction (assumed approximately 75k/year over 20 years).
- Several benefits scale with the number of AMI meters installed and are therefore materially lower in the EOL Deployment Case. In the Base Case, 1.4M meters are installed by Year 6 and generate benefits through Year 20. In the EOL Deployment Case, meters are deployed incrementally from Year 3 through Year 20, finally reaching 1.4M meters by Year 20.

AMI-related benefits are realized more gradually due to the slower pace of AMI saturation across the service territory. The result is a 41% erosion of realized benefit value, compared to the Base Case, equating to -$4490.4M (Figure 22). The largest variances to the preferred, accelerated deployment approach are:

- Avoided Meter Capital: $160.3M reduction as meters are replaced as they reach EOL or malfunction. Reduced bridge meter credit is from year 3 through year 20 (compared to 4 years in preferred scenario). Benefits in later years reduce the NPV impact.
- Volt/VAR Optimization: $72.1M reduction due to only 75k AMI meters installed per year.
- Carbon Reduction: $71m reduction due to only 75k AMI meters installed per year.
- Improved Restoration Major Storms: $84.4M reduction due to only 75k AMI meters installed per year.

Figure 22 – End of Life Benefit Comparison to Base Case

Benefit Category Comparison to Base Case

Benefit Categories	Base NPV ($M)	EOL Deployment NPV ($M)	Variance (in $M)
Meter Reading	$21.2	$16.4	$4.8
Avoided Meter Capital	$160.3	$0.0	$160.3
Remote Account Connect/Disconnect	$32.2	$31.7	$0.5
No Trouble Found Calls Reduction	$5.7	$2.8	$2.9
System Costs Avoidance	$199.5	$198.4	$1.1
Volt/VAR Optimization (VVO)	$163.8	$91.7	$72.1
Carbon Reduction	$176.8	$105.8	$71.0
Asset Optimization	$96.4	$87.3	$9.1
Advanced Engineering Analysis	$38.7	$19.3	$19.4
Avoided Connectivity Survey	$6.7	$3.8	$2.9
Improved Restoration Major Storms	$162.4	$77.9	$84.4
Improved Restoration - Blue Sky	$2.5	$1.2	$1.3
Reduced Bad Debt	$74.5	$47.8	$26.7
Reduced Theft and Non-Technical Line Loss	$16.5	$6.6	$9.9
Reduced Soft Close Loss	$24.3	$12.8	$11.5
Time of Use / Time Varying Rates	$23.9	$11.4	$12.5
Customer Targeting for Incentives	$0.0	$0.0	$0.0
Improved Reliability	$0.0	$0.0	$0.0
Billing Accuracy and Timelines	$0.0	$0.00	$0.0
Total	**$1,205.4**	**$714.9**	**-$490.4**

Conversely there is a smaller variance in the cost comparison between the End of Life scenario and the Base Case, as several investment costs remain and fewer efficiencies are realized. There is only a 19% cost savings between the two scenarios, equating to a $291.6M reduction of cost (Figure 23). Two cost categories have zero cost savings between the two scenarios. The greatest cost savings for an End of Life scenario are:

- Meters: $58.7M due to only 75k meters replaced each year from Year 3 – Year 20.
- Undepreciated Meter Balance: -$66.2 removed since no meters will be removed prior to reaching end of life or malfunction.

Figure 23 – Cost Comparison between End of Life and Base Case Scenarios

Cost Category Comparison to Base Case

Cost Categories	Base NPV ($M)	EOL Deployment NPV ($M)	Variance ($M)
Meters	$238.3	$179.7	$58.7
Undepreciated Meter Balance	$66.2	$0.0	$66.2
Communications Upgrades	$167.4	$133.2	$34.2
Meter Data Management System (MDMS)	$105.1	$88.2	$16.8
Customer Information System (CIS)	$354.1	$304.8	$49.3
Organizational Readiness	$83.4	$79.4	$4.0
Contact Center	$77.2	$62.1	$15.2
Incremental Labor (Included in each Cost category)	$0.0	$0.0	$0.0
Outage Management System (OMS) Integration	$11.6	$9.8	$1.8
Customer Experience Portal	$66.0	$57.5	$8.5
VVO Enablement	$212.3	$200.8	$11.5
Engineering and Customer Usage Analytics	$46.4	$37.7	$8.7
Customer Engagement	$16.1	$14.2	$1.9
Cybersecurity	$45.7	$42.3	$3.3
Revenue Assurance (Non-Technical Line Loss)	$20.4	$14.6	$5.8
Green Button Connect	$7.6	$4.8	$2.8
Data Storage and Processing	$0.0	$0.0	$0.0
Load Settlement	$39.4	$36.6	$2.8
Contingency, Overhead, AFUDC	N/A	N/A	N/A
Total	**$1,557.3**	**$1,265.7**	**-$291.6**

For the End of Life scenario, the difference between eroded benefits and reduced costs is -$550.7M, yielding a Benefit Cost Ratio of only 0.56 (Figure 24). The Benefit Cost Ratio is decreased by 27% compared to the Base Case BCR of 0.77.

Figure 24 – BCR Comparison of End of Life vs. Base Case

ANALYSIS RESULTS		
Total 20-Year Cost and Benefit	**Base Total NPV ($M)**	**EOL Deployment NPV ($M)**
Total AMI Cost	**$1,557.3**	**$1,265.7**
Capital	$989.6	$806.7
O&M	$567.6	$459.0
Total AMI Benefit	**$1,205.4**	**$714.9**
Avoided Cost	$700.8	$435.0
Operational Savings	$115.3	$6.7
Customer Savings	$195.5	$106.8
Environmental	$176.8	$105.8
Other	$16.9	$0.0
Net Benefit ($M)	**-$351.9**	**-$550.7**
Benefit Cost Ratio (BCR)	**0.77***	**0.56**

Best Path to Achieve Connecticut's Desired Energy Future

Connecticut is a leader among states in advancing aggressive clean energy and climate policy goals. The State has prioritized affordable heating and cooling, grid reliability, and the expansion of renewable energy programs and energy storage as pillars of a clean energy strategy. Connecticut has defined the following goals of note:

- **Greenhouse Gas Reductions (Connecticut General Statutes § 22a-200a):** Reduce emissions from greenhouse gases to 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.
- **Zero-Carbon Electricity (Connecticut General Statutes § 22a-200a):** Requires all electricity supplied to customers in Connecticut to come from zero-carbon sources by 2040.
- **Renewable Portfolio Standard (Connecticut General Statutes § 16-245a):** At least 29% of the electricity sold to customers must come from Class I renewable energy sources by 2030.
- **Energy Efficiency (Connecticut General Statutes § 16-245m):** Reduce total building energy consumption through cost-effective energy conservation programs, demand management, and market transformation initiatives.
- **Energy Storage (Connecticut General Statutes § 16-243cc):** Deploy 1,000 MW of energy storage by the end of 2030.
- **Energy Affordability through a Modernized Grid (Public Act No. 25-173):** Fosters transition to cleaner, more affordable energy by supporting active demand-response programs, modifying renewable energy tariffs, and introducing new tax frameworks for solar systems.

Today's grid, using AMR technology, does not possess the granular data and capabilities required to support several of Connecticut's strategic policy mandates and goals. Figure 25 demonstrates the AMI enabled capabilities that will support Connecticut's goals. The Base Case AMI deployment scenario guarantees benefit realization from an accelerated AMI deployment, compared to unknown benefit realization in the End of Life deployment scenario.

Figure 25 – Achieving CT Goals through AMI Enabled Modern Grid Capabilities

Connecticut Goal	Modern Grid Capabilities that Actuate CT Goals	Benefit Realization	
		Base Case Deployment	*End of Life Deployment*
Zero Carbon Electricity	• VVO	☑	?
Greenhouse Gas Reduction	• VVO • Reduced Truck Rolls (RCD, Outage & Non-outage alerts, meter reads over network)	☑	?
Increased Renewables	• TLM • Advanced Engineering Analysis	☑	?
Energy Efficiency	• TLM	☑	?
Energy Storage	• Advanced Engineering Analysis	☑	?
Affordability	• Enhanced Outage Response • TVR • Reduced Unbilled Usage • Customer Bill Alerts • Load Disaggregation	☑	?

The Base Case approach to deploying AMI, with accelerated investments and deployment, is the strongest option for Connecticut to realize financial and strategic benefit from AMI technologies. The Base Case yields the strongest Benefit Cost Ratio of 0.77, which does not include significant qualitative benefits that will provide financial value but cannot be quantified prior to an AMI deployment. Additionally, the Base Case better positions Eversource as a partner providing Connecticut with the modern grid infrastructure necessary to realize current and future energy, environmental, and affordability goals.