MASSACHUSETTS
DEPARTMENT OF
ENERGY RESOURCES

AMI Implementation and Centralized Data Repository

May 2025 D.P.U. Working Session

Presented by

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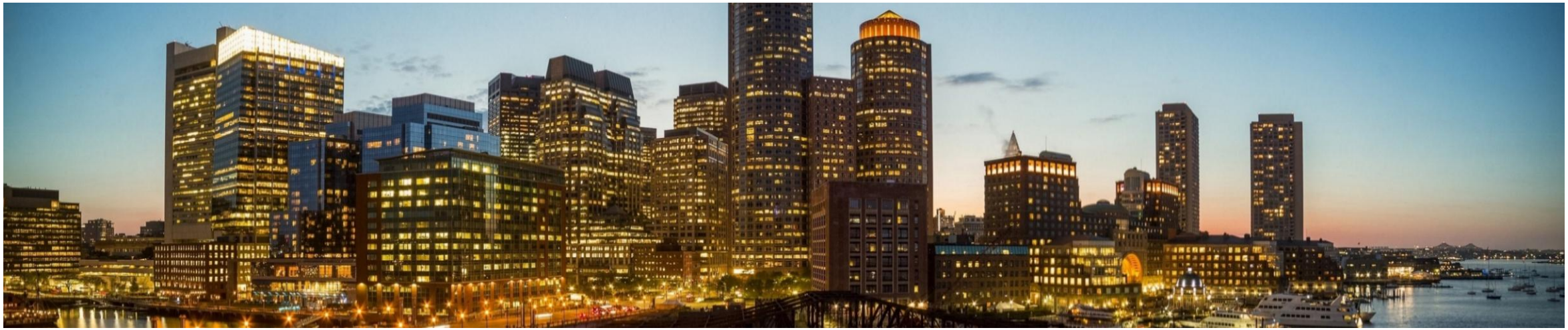
Our Mission

The Department of Energy Resources' (DOER) mission is to create a clean, affordable, resilient, and equitable energy future for all in the Commonwealth.

Who We Are: As the State Energy Office, DOER is the primary energy policy agency for the Commonwealth. DOER supports the Commonwealth's clean energy goals as part of a comprehensive Administration-wide response to the threat of climate change. DOER focuses on transitioning our energy supply to lower emissions, reducing and shaping energy demand, and improving our energy system infrastructure.

What We Do: To meet our objectives, DOER connects and collaborates with energy stakeholders to develop effective policy. DOER implements this policy through planning, regulation, and providing funding. DOER provides tools to individuals, organizations, and communities to support their clean energy goals. DOER is committed to transparency and education, supporting the accessible access to energy information and knowledge.



DOER's AMI Priorities

Advanced Metering Infrastructure (AMI) is a crucial enabling technology to support the Commonwealth's clean energy goals.

- AMI allows the Commonwealth and electric service providers to use more precise data to offer **targeted load management programs**, including demand response and TVRs.
- The Massachusetts Clean Energy & Climate Plan (CECP) identifies **Time-Varying Rates (TVRs)**, enabled by AMI, as critical tools to meeting the Commonwealth's transportation and thermal electrification goals while managing load, reducing grid stress, and controlling rate increases.
- Granular AMI data can enhance **load forecasts** and improve the **accuracy of grid planning**, which can help identify **opportunities for ratepayer savings**.
- A **centralized data repository** will be essential in ensuring load management strategies and TVRs are designed to maximize grid and ratepayer benefits.

Where We Are & Where We Are Going

D.P.U. 21-80/81/82, Track 2 approved AMI Implementation Plans and reiterated TVRs as a priority.

(1) Approved the use of different meter and "mesh network" vendors* to collect and process consumption data

(2) Established AMI SHWG to discuss AMI-related issues in a non-adjudicatory setting

Dec 2022

Jan 2023 – July 2024

AMI Stakeholder Working Group Meetings

Companies filed the AMI Stakeholder Working Group Final Report in 2024. TVRs were identified as the preeminent use case for AMI implementation.

Aug 2024

Nov 2024

2024 Grid Equity Act's Centralized Data Repository Requirement

Companies to establish a centralized data repository that houses "near-real time" AMI data, including interval usage and load data and is accessible to customers, third parties, and competitive suppliers.

Today

May 2025

DPU Working Group Session

Feb 2026

Deadline for EDCs to establish centralized data repository

*Mesh network: Head end systems (HES), Customer Information Systems (CIS), and Meter Data Management Systems (MDMS)

Unlocking The Full Potential of AMI

Are the approved HES, CIS, and MDMS functionalities (the "mesh network") capable of providing a sufficient level of granularity?

- Consumption data **segmented by rate class, time, and geographies** allows for the design of effective load management programs, including TVRs.
- Consumption data **aggregated across the system** allows for effective grid planning and load forecasting.
- Access to segmented and aggregated consumption data is critical for stakeholders to meaningfully engage with TVR and grid planning proposals.

How can we ensure that AMI meter and centralized data repository implementation is efficient and transparent?

TVRs, load forecasts, and grid plans are essential tools to advance the Commonwealth's clean energy *and* affordability goals:

- Companies should provide stakeholders with **a clear implementation timeline** that includes regular reporting on meter and mesh network deployment and centralized data repository development.
- Companies should establish **a centralized process to communicate any delays in implementation** with stakeholders.
- Stakeholders should have a **clear and shared understanding of initial and future AMI functionalities** required to enable TVR and inform strategic grid planning.

How A Centralized Data Repository Can Serve Stakeholders

Many different stakeholders could benefit from access to AMI data in a centralized repository.

DOER	Inform policy development related to load management, demand forecasts, and rate design
EDCs	Development of TVRs, demand forecasts, ESMPs, and grid modernization plans
Suppliers	Deployment of supply-side TVRs and other AMI-enabled rates and products
Municipal Aggregators	Deployment of supply-side TVRs and other AMI-enabled rates and products that more closely reflect municipalities' unique load profiles
GMAC	Assessment of ESMPs and exploration of innovative grid solutions, like NWAs and VPPs
Mass Save Program Administrators	Accurate measurement and verification of energy savings, and investigation into modifications
Individual Customers	Understanding of household consumption patterns and opportunities for cost-saving
Researchers and Academics	Data analysis and research into load and grid policy/technology topics

Key Questions

1. AMI Functionality:

- What functionality will the initial AMI meters have?
  - ❑ Will any functionality be available to stakeholders prior to full mesh network deployment?
  - ❑ Will initial meters be capable of meeting the minimum requirements to comply with FERC 2222?
- What functionality will the AMI meters be able to have in the future through software and hardware updates?

2. Getting to TVR:

- What are the Companies' plans to begin implementing TVR after AMI meters are fully deployed?
- How will the Companies engage with stakeholders to design initial TVR offerings?

3. Implementation & Transparency:

- What types of TVR will be available to consumers and businesses, and when?
- How do the Companies plan to communicate regarding implementation timelines with stakeholders and consumers?

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Thank You!