



MASSACHUSETTS
**DEPARTMENT OF
ENERGY RESOURCES**

Decoupling & Capital Recovery

Expert Presentation Series | October 22, 2025

This expert level presentation series session will provide the Massachusetts Electric Rate Task Force an opportunity to learn from experts and/or other jurisdictions on the above topic.

Note: The contents of this presentation do not necessarily reflect the views or positions of the Massachusetts Department of Energy Resources.

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Massachusetts Electric Rate Task Force Goals

The Rate Task Force brings together diverse stakeholders to reimagine how electric rates and the regulatory framework can drive an affordable, equitable, and decarbonized energy future.

Through targeted conversations, expert presentations, and thoughtful exploration of complex issues, the Task Force aims to deepen understanding, surface critical questions, clarify challenges, and build the foundation for durable regulatory reform and action.

The Rate Task Force will use the Massachusetts Interagency Rates Working Group's Long-Term Ratemaking Study and Recommendations as a starting point for discussion and knowledge building on rate designs, ratemaking, and regulatory mechanisms.

Build technical knowledge

Provide an opportunity for **knowledge-building** by and amongst stakeholders, including those who have not traditionally been involved



Develop shared understanding

Converge towards **shared understandings** of the challenges and priorities



Today's Focus

Facilitate open, inclusive dialogue

Engage in **open, inclusive dialogue** about complex ratemaking and regulatory issues outside of a regulatory proceeding



Frame critical questions and opportunities

Empower stakeholders to identify **critical questions and opportunities** for the advancement of rate design and ratemaking reform



Ground Rules & Engagement

This work is complex – and your insight matters; let's focus on learning, listening, and shaping together!

Participation, Engagement, & Respect

- Everyone's perspective is valuable – this space works best when all voices are heard
- Respect differences in background, experience, and priorities
- Bring curiosity – ask questions and offer potential answers
- Focus on understanding others' goals and values, not just their positions
- It's okay not to have a solution – help us shape the right questions

Collaboration, Not Consensus

- This body is deliberative, it is not a decision-making space
- We don't need to agree on everything, but we should work toward shared understanding
- Where we disagree, help clarify what the tension is and why it matters

Transparency & Trust

- We'll be clear about how input is used
- Share what you can; identify when you're speaking on behalf of your organization or personally
- Materials, summaries, and key findings will be shared openly to support accountability

Focus & Productivity

- Stay on topic and honor the scope of the Task Force
- Raise related concerns, but help us stay anchored in the rate design and regulatory issues at hand
- Use the structures provided (i.e., expert sessions, targeted conversations, office hours) to deepen discussion
- Avoid discussion about open and ongoing proceedings at the DPU



Expert Presentations

I. Revenue Decoupling in Massachusetts

Synapse Energy Economics, Tim Woolf

Present the origins and drivers under which the DPU implemented revenue decoupling in Massachusetts

II. Evolving Role of Energy Efficiency

Massachusetts Department of Energy Resources, Liz Reichart

Present on the existing landscape of pursuing all cost-effective energy efficiency and the implementation of performance standards, building codes, and other market transformations

III. Capital Recovery Needs and Mechanisms

Massachusetts Electric Distribution Companies

Present on the utilities' need for incremental capital recovery or revenues to support growing investments and current mechanisms that support those needs (e.g., k-bar)

IV. Evolution of Revenue Decoupling

Massachusetts Department of Energy Resources, Austin Dawson

Present on the challenges with revenue decoupling and the opportunities associated with modifying the existing approach to revenue decoupling

Reminder

Expert presentation sessions are not for substantive deliberation amongst participants. Questions for each speaker will be taken as time allows.



Revenue Decoupling in Massachusetts

Origins and Drivers of Decoupling
Are They Still Relevant?

Massachusetts Electric Rates Task Force: Decoupling and Capital Recovery
October 22, 2025

Tim Woolf

Synapse Energy Economics

The Fundamentals of Decoupling

Traditional Rate Setting

In the rate case:

- Revenue requirements (RR) based on single year
- Rates = RR / sales

Between rate cases:

- Rates are fixed until the next rate case
- Revenues collected can deviate from allowed RR
 - When sales go up, utility keeps excess revenues
 - When sales go down, utility loses revenue shortfall
- Utilities are affected by changes in sales

Utilities face financial disincentives to activities that reduce sales

Decoupling

In the rate case:

- RR based on a forecast for future years
These are set in the multi-year rate plan (MRP)
- Rates = RR / sales

Between rate cases:

- Rates are adjusted to provide forecast RR
- Using an annual reconciliation
 - When sales go up, rates are adjusted down
 - When sales go down, rates are adjusted up
- Utilities are unaffected by changes in sales

Utilities are unaffected by activities that reduce or increase sales

The Department's Order Establishing Decoupling

In 2008 the Department established decoupling

The Department's rationale:

- Utilities should have the proper regulatory and financial incentives to meet evolving regulatory goals,
 - Promotion of “energy efficiency, demand response, combined heat and power, and renewable generation” (p. 3)
- Demand resources are
 - “The single most effective tool we have to mitigate the increases in and volatility of gas and electricity prices” (p. 3)
- Demand resources are essential for achieving efficiency and clean energy goals
 - To prepare for the “unavoidable future of a carbon-constrained world” (p.2)

The Department directed utilities to propose decoupling in their next rate cases

After that, all three electric utilities filed rate cases requesting and receiving approval for decoupling

Source: Massachusetts Department of Public Utilities, *Investigation by the Department of Public Utilities on its own Motion into Rate Structures that will Promote Efficient Deployment of Demand Resources*, DPU 07-50-A, July 2008.

The Department's Recent Orders on Decoupling

In 2022 the DPU directed the electric utilities to terminate decoupling (in the Three-Year EE Plan Order)

The Department's rationale:

- MA EE programs now include strategic electrification programs
 - They now result in a *net increase* in electricity consumption in the residential sector (p. 230)
- Electrification is essential for achieving decarbonization goals
 - Electric utilities should no longer be neutral to load,
 - but should instead “embrace increasing clean electric load” (p. 232)
- Eliminating decoupling will provide utilities with incentives for electrification
- Directed electric utilities to propose eliminating decoupling in their next rate cases

Since then, all three electric utilities have filed rate cases but declined to terminate decoupling, stating that it was premature.

The Department's order on the recent Three-Year EE plans is silent on decoupling

Source: Massachusetts Department of Public Utilities, *Petition of the Massachusetts Program Administrators for Approval of the Three-Year EE Plan for 2022-2024*, DPU 21-120 through 21-129, January 2022.

Have Conditions Changed Much Since 2008?

Conditions	2008	2025
Utilities should have financial incentives aligned with state goals	✓	✓
Prices are a high priority	✓	✓
Load-reducing DERs are a high priority	✓	✓
Decarbonization is a high priority	✓	✓
Electrification is a high priority	-	✓
Anticipated future load growth	roughly stable	high growth

All the conditions supporting decoupling in 2008 remain in play today.
Except electrification and anticipated high load growth.

Are these changes sufficient to terminate decoupling?

Utility Incentives to Support Load-Reducing DERs

There are many distributed energy resources (DERs) that reduce load:

- Many electric EE programs
 - Low-income, retrofit, new construction, non-wires alternatives
 - In recent EE plans these programs reduce GHGs more than the electrification programs
- Distributed generation programs

These are still essential resources needed to (a) reduce costs and (b) reduce GHG emissions

Note that utilities already have a significant disincentive for these resources:

- DERs that reduce load also reduce the need to build distribution infrastructure
- Utilities have a financial incentive to build infrastructure because they can earn returns on the capital costs
 - Referred to as the capital bias

If decoupling were terminated, utilities would face two types of negative incentives for these resources

- Lower profits from the lost revenues due to lost sales
- Lower profits from less capital investments in distribution infrastructure

Utility Incentives to Support Electrification

Strategic electrification is a clearly critical element of MA decarbonization goals

- Transportation electrification
- Building electrification
- Industry electrification

Utilities already have a financial incentive to encourage electrification (the capital bias)

- Electrification will require increased distribution infrastructure
- Which will lead to capital expenditures and increased profits

Further, a lot of electrification will occur without any actions from utilities

- This is much less true for load-reducing DERs

If decoupling were terminated, utilities would face two types of positive incentives for electrification

- Increased profits from increased revenues from increased sales
- Increased profits from less capital investments in distribution infrastructure

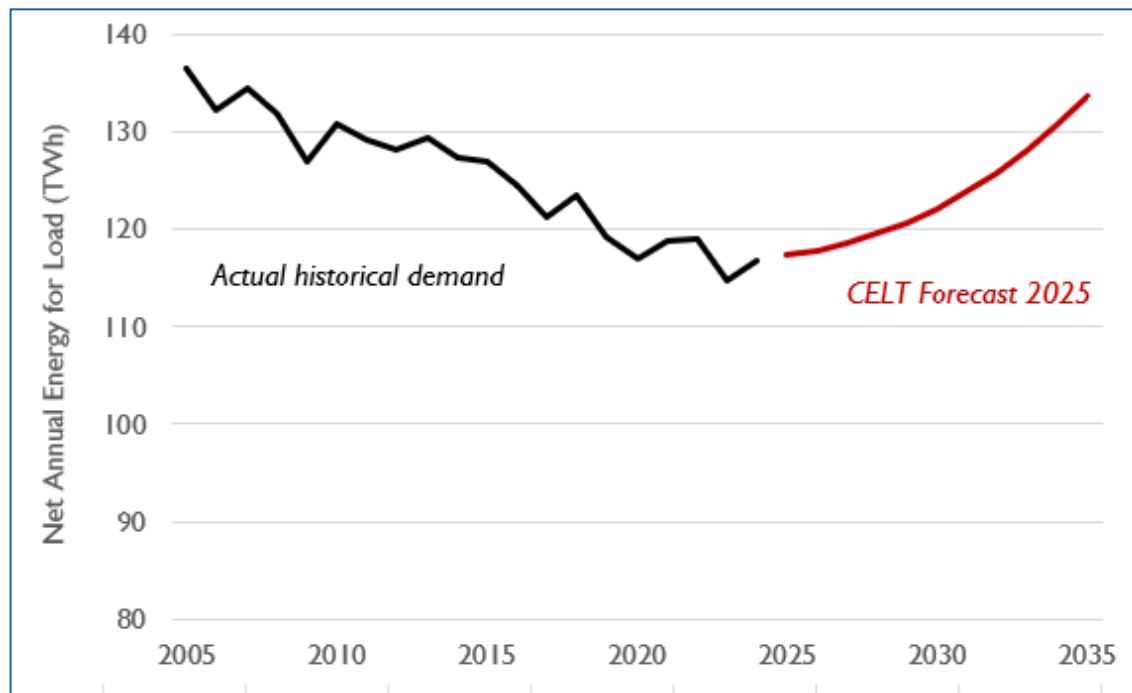
Current Forecasts of Electricity Sales

Recent ISO-NE forecasts show significant increase in load for the next ten years

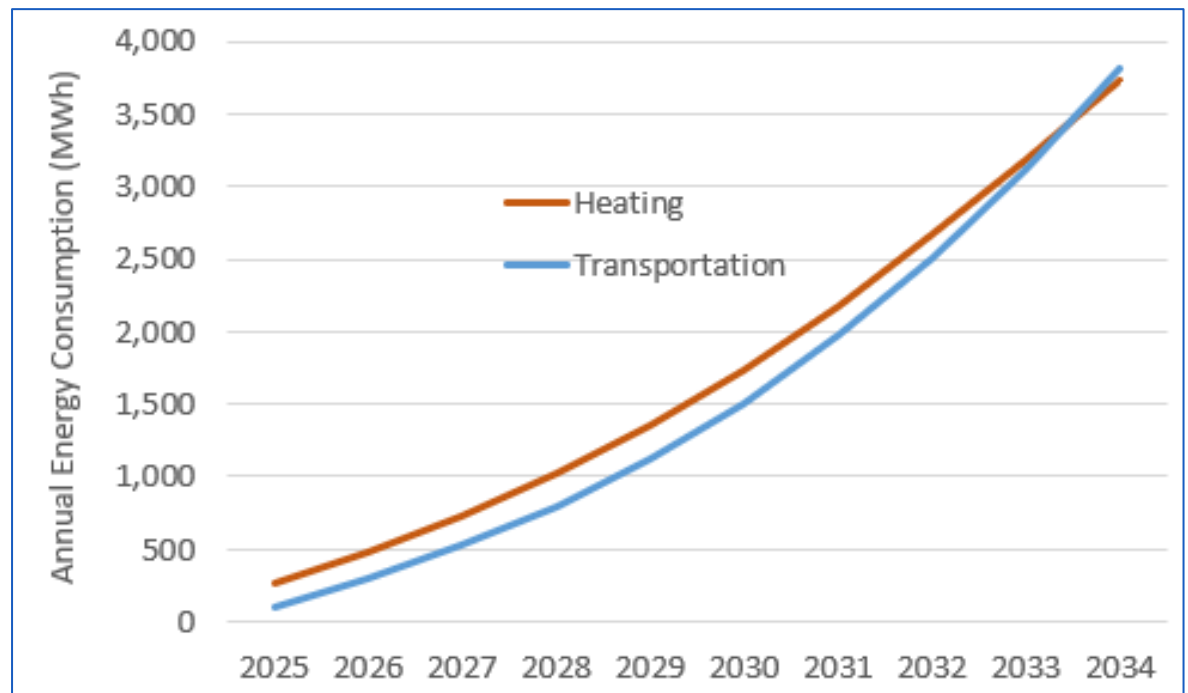
- This forecast does not include any data centers because their impact is still uncertain

Much of the new load is expected to be driven by building and transportation electrification

ISO-New England Load Forecast



Massachusetts Electrification Load Forecast



Source: ISO-NE, Capacity Energy Loads and Transmission (CELT) Report, May 2025.

Implications for Electricity and Gas Prices

Reducing electricity prices is clearly a top priority

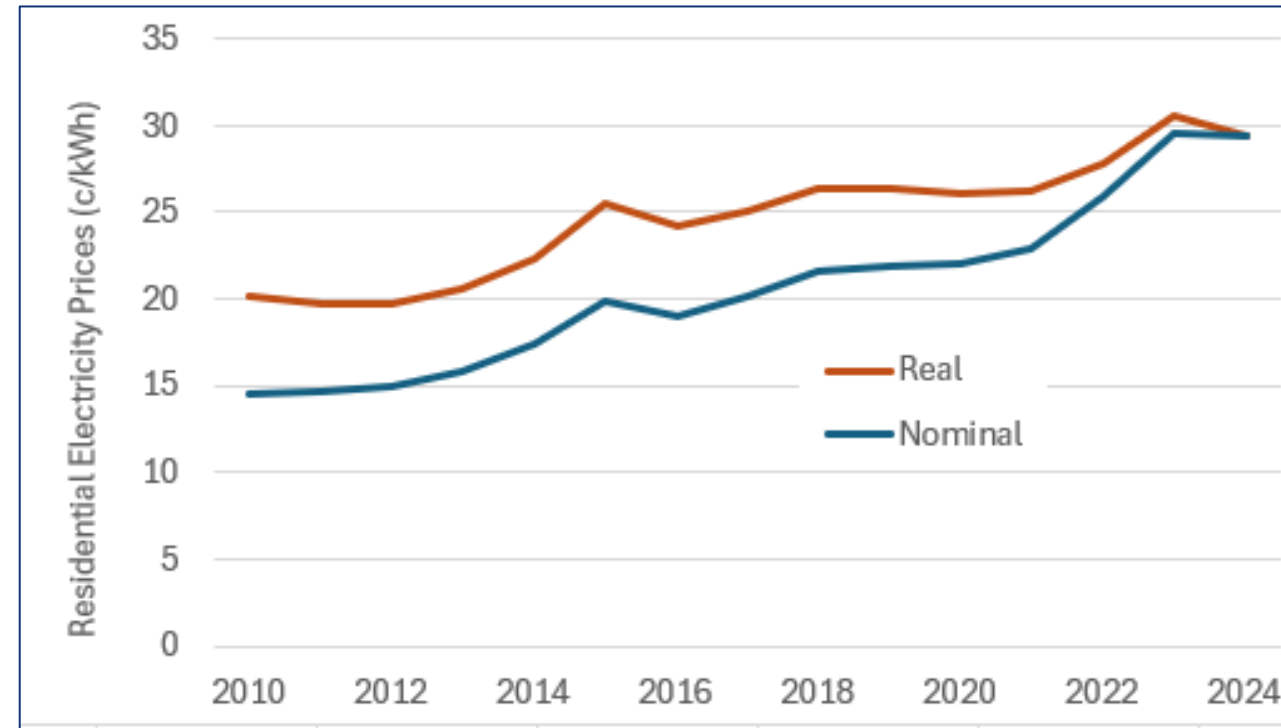
- Since 2010 prices have increased by:
 - 50% in real terms (above inflation)
 - 100% in nominal terms
- High electricity prices will hinder electrification

When electricity sales increase, due to electrification or other reasons, decoupling will

- Return money to customers
- Thereby push rates down

Given the high probability that sales will increase well into the future, and decoupling helps push down rates:

- This is the worst possible time to terminate decoupling



Blunt Versus Focused Incentives

Eliminating decoupling will clearly provide electric utilities with more incentive to support electrification.

However:

- This is a very blunt incentive
 - Utilities will increase revenues and profits for all sources of increased sales
 - Some of the increased sales might be due actions beyond the utility
 - For example, data centers
 - Some of the increased sales might lead to significantly increased costs
 - For example, data centers
 - Some of the increased sales might be for reasons that are inconsistent with climate goals
 - For example, data centers
- Utility shareholder incentives are more effective when they are focused, they affect utility actions, they can be measured and monitored, and they result in outcomes consistent with regulatory goals.
- A much more focused way to provide electric utilities with electrification incentives:
 - Performance incentive mechanisms tied to utility actions and desired outcomes
 - This is consistent with the utility shareholder incentives for EE programs

In theory, termination of decoupling could be used to help improve cost recovery under MRP

- However, that does not address the concerns raised throughout this presentation



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The Massachusetts Energy Efficiency Landscape

October 22, 2025

Liz Reichart

Deputy Director, Energy Efficiency

It begins with the Green Communities Act (2008)

The Green Communities Act laid the foundation for the **Commonwealth's energy efficiency transformation**:

- The GCA governs the development, content, and the funding of the three-year energy efficiency plans, as well as the Department's review and approval. G.L. c. 25, §§ 19, 21, 22
- The GCA mandates the Program Administrators pursue “all available energy efficiency and demand reduction resources that are cost effective or less expensive than supply.” G.L. c. 25, § 21.
- The GCA was amended in 2018, 2021 and most recently in 2022. Among other things, the amendments shift the plan focus toward decarbonization and GHG reductions

Introduction to Mass Save

Mass Save is the Commonwealth's nation leading energy efficiency program provider.

- Mass Save is the umbrella in which the statewide energy efficiency investment plans operate
- The plans are delivered by the investor-owned gas and electric utilities and the Cape Light Compact, a municipal aggregator

WE ARE MASS SAVE®:



EVERSOURCE



nationalgrid



Nearly **530,000 homes** weatherized since 2013, and installed heat pumps in **105,000 homes and businesses**

Over \$1.3 Billion invested in improvements that lower energy bills and improve health, safety, and comfort for low income customers

Delivered over 157 million megawatt-hours (MWh) and 5.1 billion therms in energy savings

Mass Save from 2010 - 2018

How many kwh / therms are being saved?

2010-2012: The first Mass Save Plan

- Joint electric / Joint gas plans
- Pure efficiency programming

2013-2015

- 1 document instead of 2 separate plans
- + air sealing, oil burner → gas conversions
- Electric resistance → gas



2016-2018

- Baselines are shifting
- LEDs more prevalent
- Window rattlers → central air

In 2018, Mass Save is poised to go beyond just energy efficiency

Mass Save from 2019 - Present

How many MMbtus CO2e are being saved?

2019-2021

- Shifts to hybrid heat pump delivery
- Stopped incentivizing AC
- No more fossil fuel → fossil fuel conversions for market rate customers

Legislative change: 2020

The plans must achieve greenhouse gas emissions reduction goals set by the Energy and Environmental Affairs Secretary.

2022-2024

- First plan to contain heat pump goals
- First plan to be informed by the Energy Efficiency Advisory Council (EEAC) Equity Working group



2025-2027 Plan

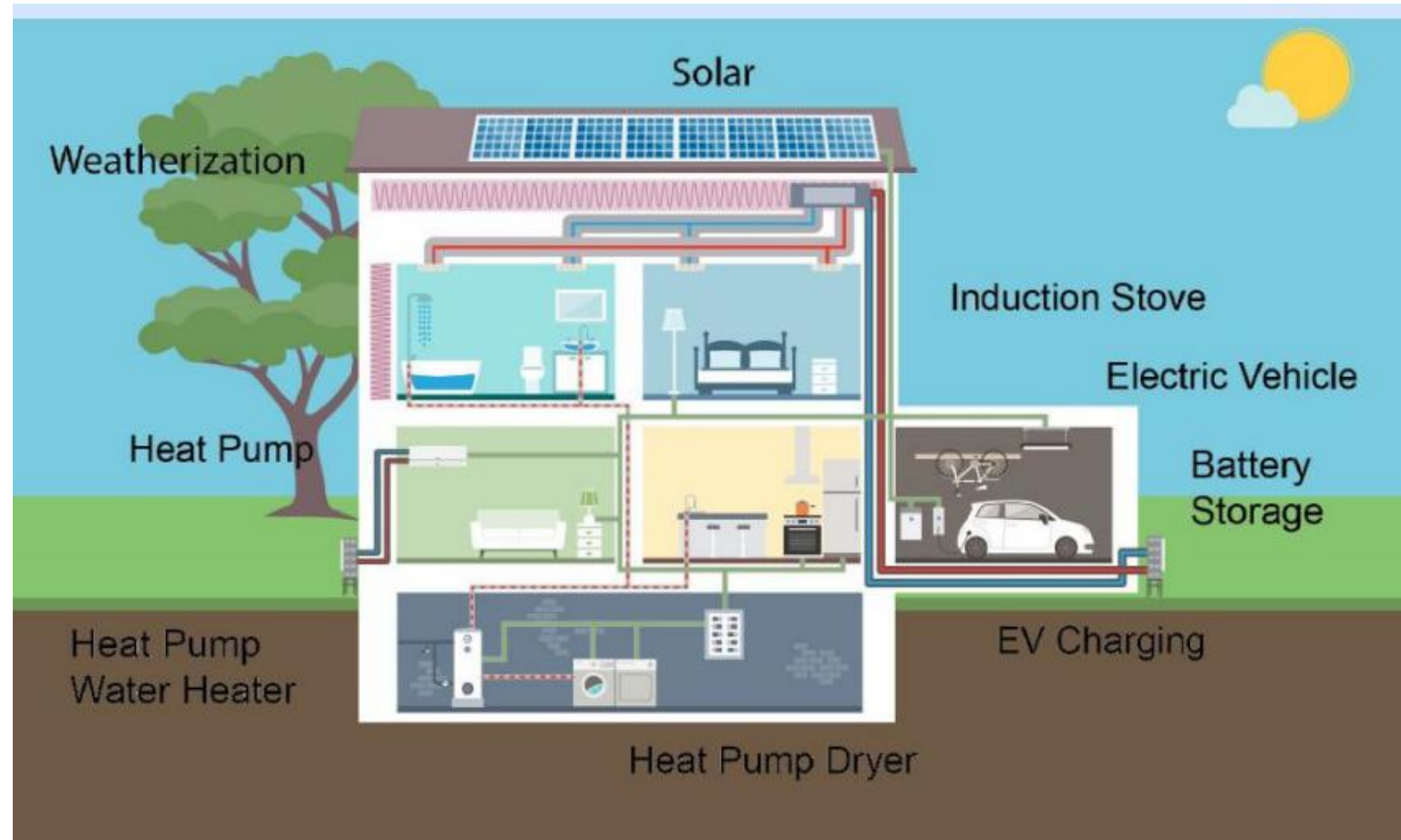
The approved 2025-2027 plan will invest

\$4.5 billion in energy efficiency and decarbonization efforts

- 865,000 MT CO₂e saved
- Aims to reduce greenhouse gas emissions by over 1 million metric tons.
- Includes unprecedented investments in equity-oriented programs for low- and moderate-income residents, renters, and small businesses - **\$1.8 billion**
- Strong heat pump and weatherization focus

NEW offerings:

- Mass Save Solution Center (MSSC)
- Virtual decarbonization consultations
- HPWH Online Marketplace
- Redesigned, decarbonization-oriented Home Energy Assessment





Key Take-Aways: Cost Effectiveness

It is how Mass Save protects ratepayer investment!

- In Massachusetts, energy efficiency efforts must be cost effective: benefits exceed costs
- Measured at the sector level
- Cost effectiveness is determined using a Total Resource Cost (TRC) Test
- TRC Test calculates a benefit cost ratio (BCR)
- $BCR = \text{ratio of total lifetime benefits and total costs}$
- Benefits = value of the savings from program participation
- Costs = all costs to the PA and the Participant that result from the program

Example of Cost-Effectiveness

Moderate Income Weatherization (Gas Home)

	Savings/Detail	Benefit/Cost
Electric Energy & Capacity	1.58 MWh (lifetime) & 0.02 kW	\$681
Natural Gas	498 MMBtu (lifetime)	\$21,098
Non-Energy Benefits	N/A (increased thermal comfort, resiliency, etc)	\$9,844
Costs	Cost of Measure	\$7,142
Benefit-Cost Ratio		4.43

- ▶ Non-Energy Benefits & Social Cost of Carbon greatly aid in cost-effectiveness
- ▶ In this example NEBs & SCC make up 67% of the benefits



Codes

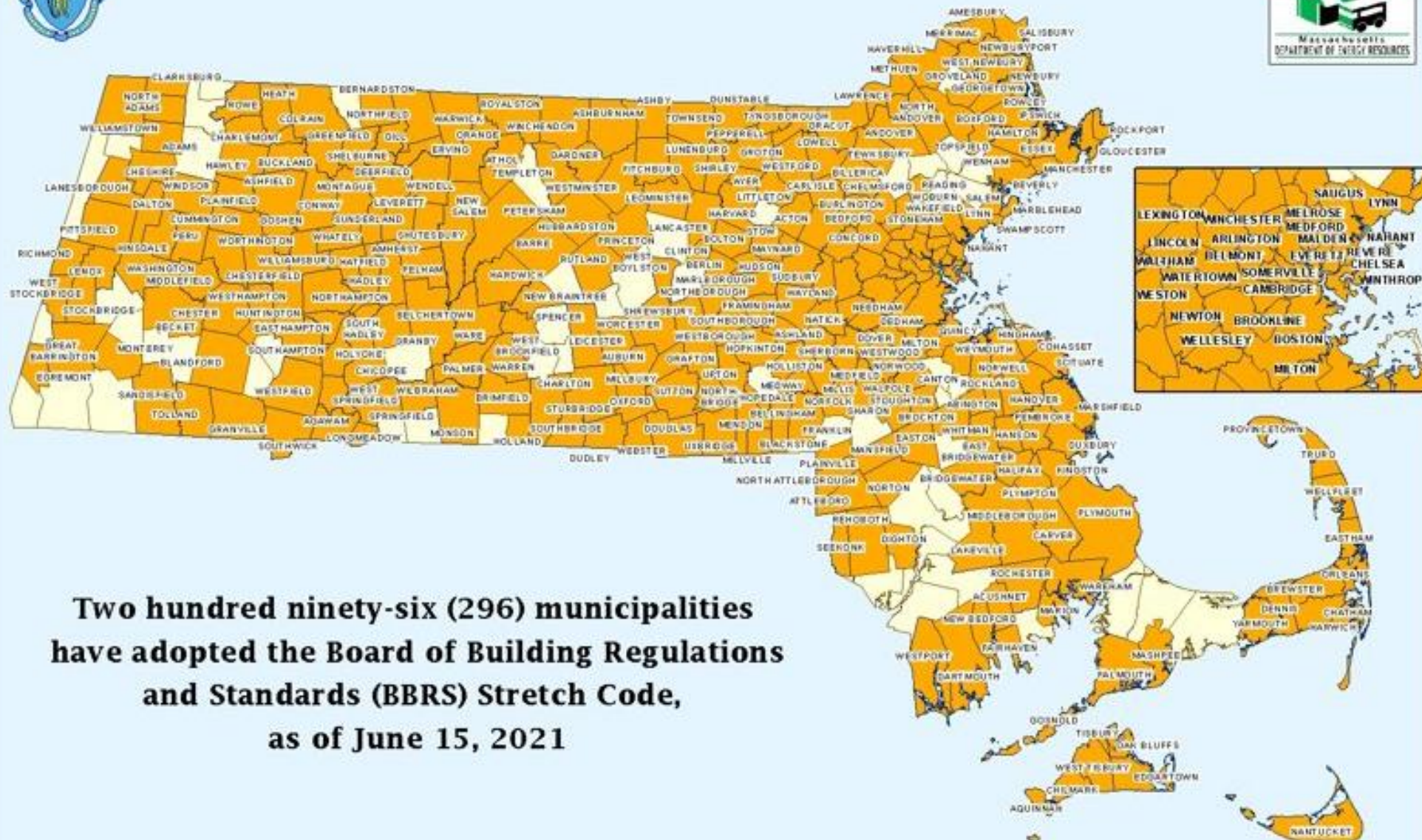
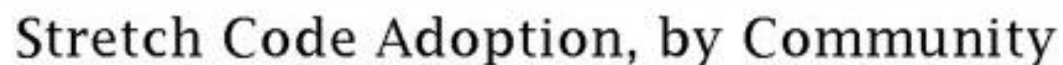


Green Communities Act of 2008

- **Base Code:** Adopt latest IECC and **strengthening amendments** reviewed and approved by independent Board of Building Regulations and Standards (BBRS)
- **Stretch Code** (Adopted by newly created Green Communities). **All life-cycle cost effective energy efficiency and renewable energy**

Climate Act of 2021: Requires DOER to promulgate a **specialized opt-in municipal stretch code** that includes:

- **Net-zero building performance standards** for new construction
- Definition of a **net-zero building**
- Develop and promulgate by **December 2022**
- The department may phase in requirements based on building types, uses, or load profiles

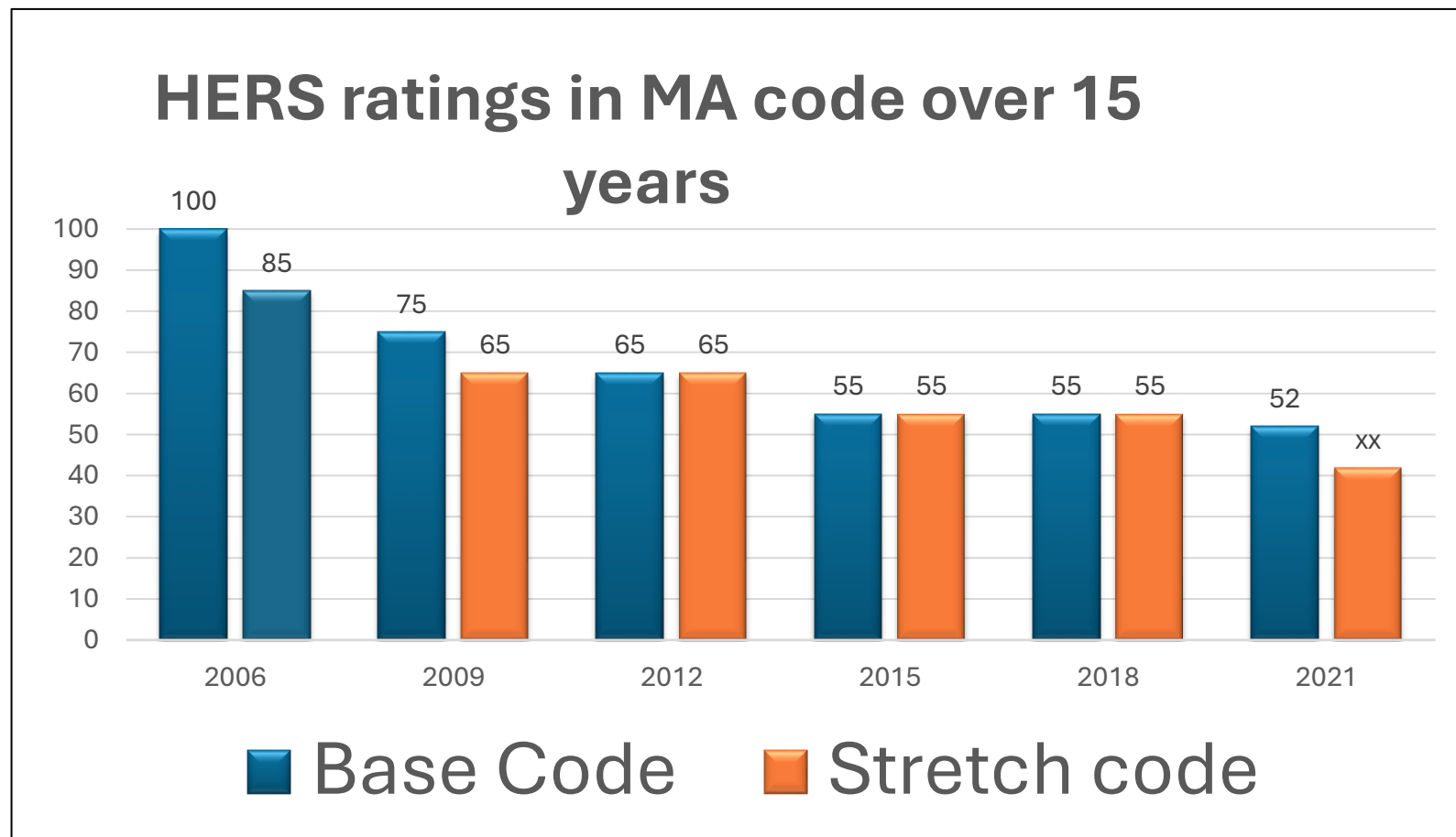


**Two hundred ninety-six (296) municipalities
have adopted the Board of Building Regulations
and Standards (BBRS) Stretch Code,
as of June 15, 2021**

Residential Stretch Code - Context

Context:

In 2020, 87% of new homes in MA used the '**Home Energy Rating System**' (HERS) code pathway, with an average of HERS 51



Large Building Energy Reporting

Energy must be disclosed in buildings over 20,000 sq ft. by 2025 (Ch.25A, S.20 (2022))

- Electric, gas, and steam utilities report directly to DOER
- Owners report everything else

DOER, with the help of consultants, identified over 30,000 commercial buildings in the first year of the program

- Almost 3 billion in gross sq. ft. benchmarked
- 21,584 helpdesk tickets fielded by DOER and its vendor
- Extensive building owner outreach efforts

Year 1 LBER report is expected shortly



Building Performance Standards

Jurisdictions are adopting building performance standards across the Commonwealth

- Boston *BERDO* – Annual benchmarking, GHG emissions compliance beginning in 2025
 - Commercial buildings > 20,000 sq. ft, residential buildings > 15 units
- Cambridge *BEUDO* – Annual benchmarking, GHG emissions compliance beginning in 2026 for the city's largest buildings
 - Commercial buildings > 25,000 sq. ft
 - Residential buildings > 50 units (reporting only)

Additional jurisdictions have either 1) passed ordinances to develop BPS; or 2) are benchmarking with the goal of a future BPS



Appliance Standards

2021 bill required MA to set minimum efficiency standards for certain products



Commercial
Kitchen Equipment



Electric Vehicle
Chargers



Water Coolers



Plumbing Products



Bathroom Fans



Portable Spas



Computers &
Monitors



Sprinklers

Expected
\$64.2 billion
saved for
consumers
between
1987-2035
through
efficiency
standards

Coming soon: Flexible demand standard for electric water heaters



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Thank You!

EDC Capital Recovery Needs and Mechanisms

October 22, 2025

Massachusetts utilities operate in a restructured electric market

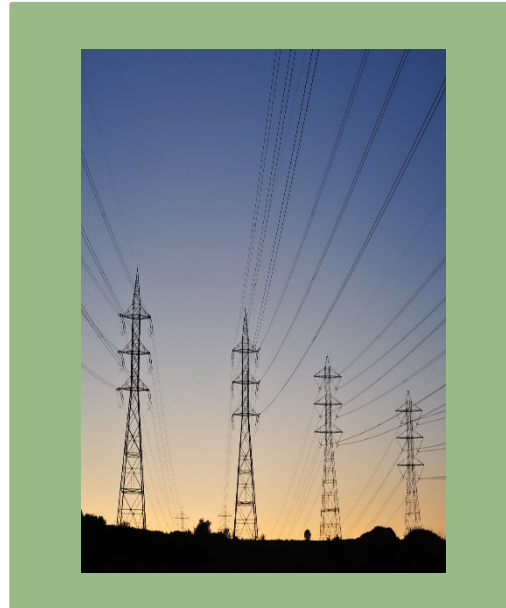
Generation Supply

Unregulated Market



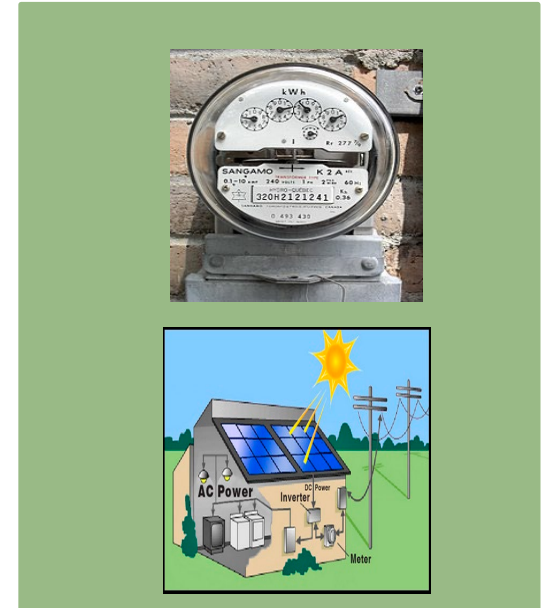
Transmission

FERC Regulated



Distribution

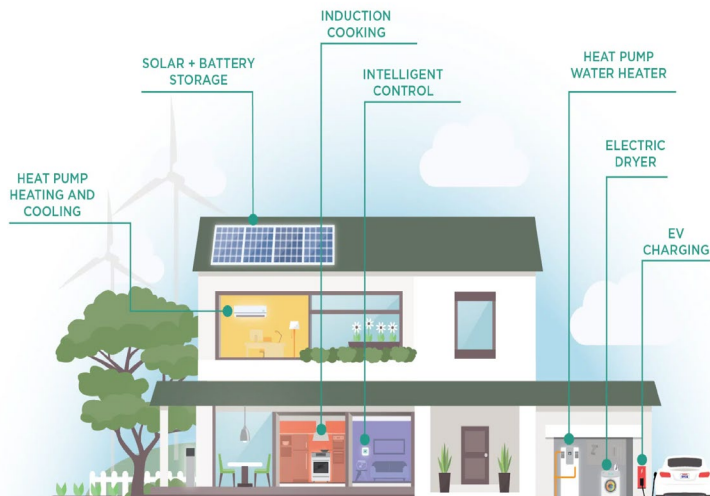
MDPU Regulated



ISO-NE oversees the unregulated wholesale marketplace and operates New England's bulk electric power system

Home of the Clean Energy Future

Moving Away from Fossil Fuels toward Electricity- Based Solutions



	 Today	 Future	 Usage Changes
Heating	 Fossil Fuel	 Heat Pump	+ 1,000 kWh per month during the winter months
Cooling	 Air Conditioner	 Heat Pump	- 100 kWh per month during summer if home previously had central A/C.
Transportation	 Gas-Powered	 Electric-Powered	+ 400 kWh per month, per vehicle
Household Appliances			+ 100 kWh per month for induction cooking
Average Monthly Usage	~ 700 kWh	~ 1,400 kWh in summer ~ 2,400 kWh in winter	2-3x more household electric usage
 Rooftop Solar			On average, producing rooftop solar can help offset energy consumption by about 700 kWh per month.

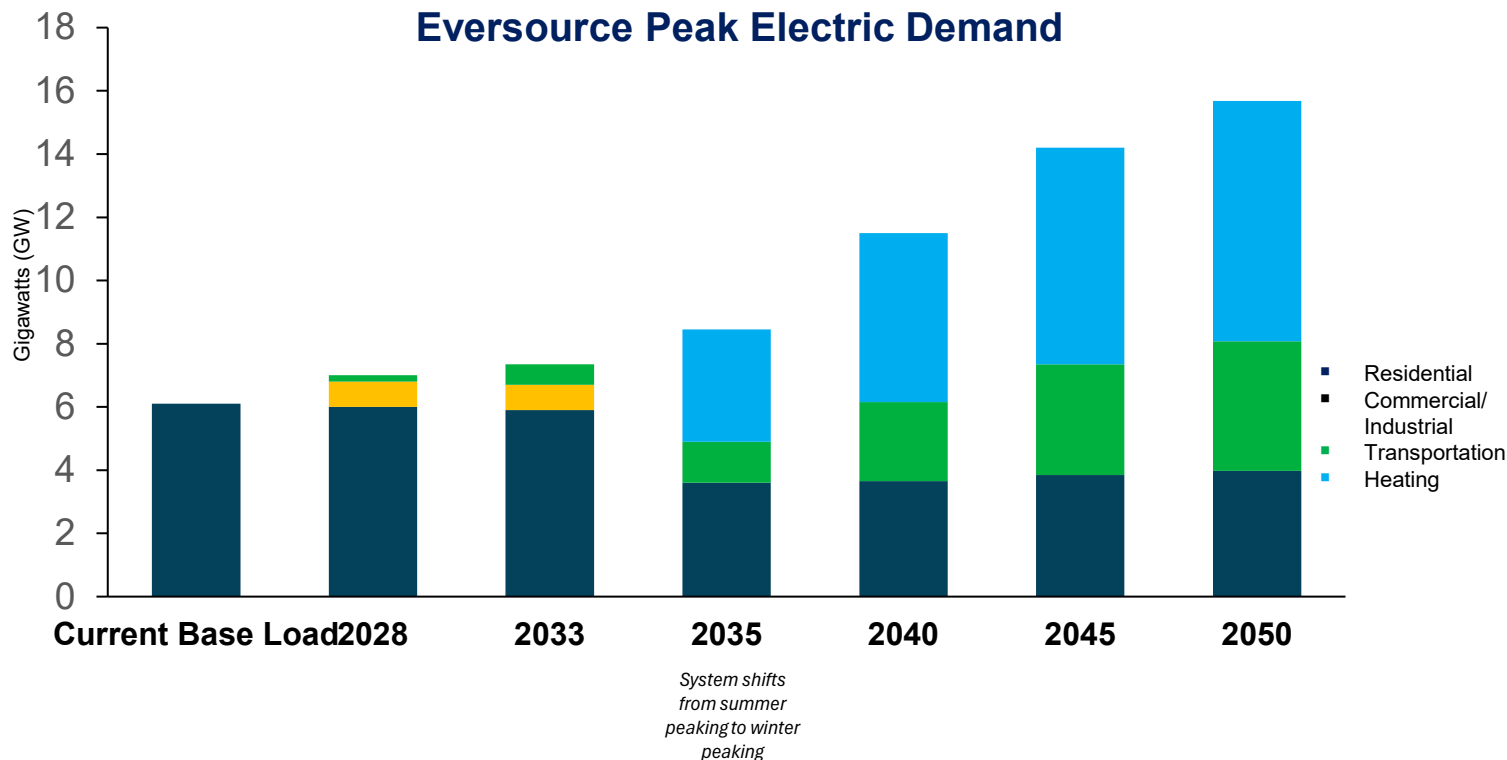
Key Drivers of Net-Zero Goals



Electric vehicle adoption projected to add
1.3 GW of demand by 2035



Zero-carbon heating projected to add
3.5 GW of demand by 2035



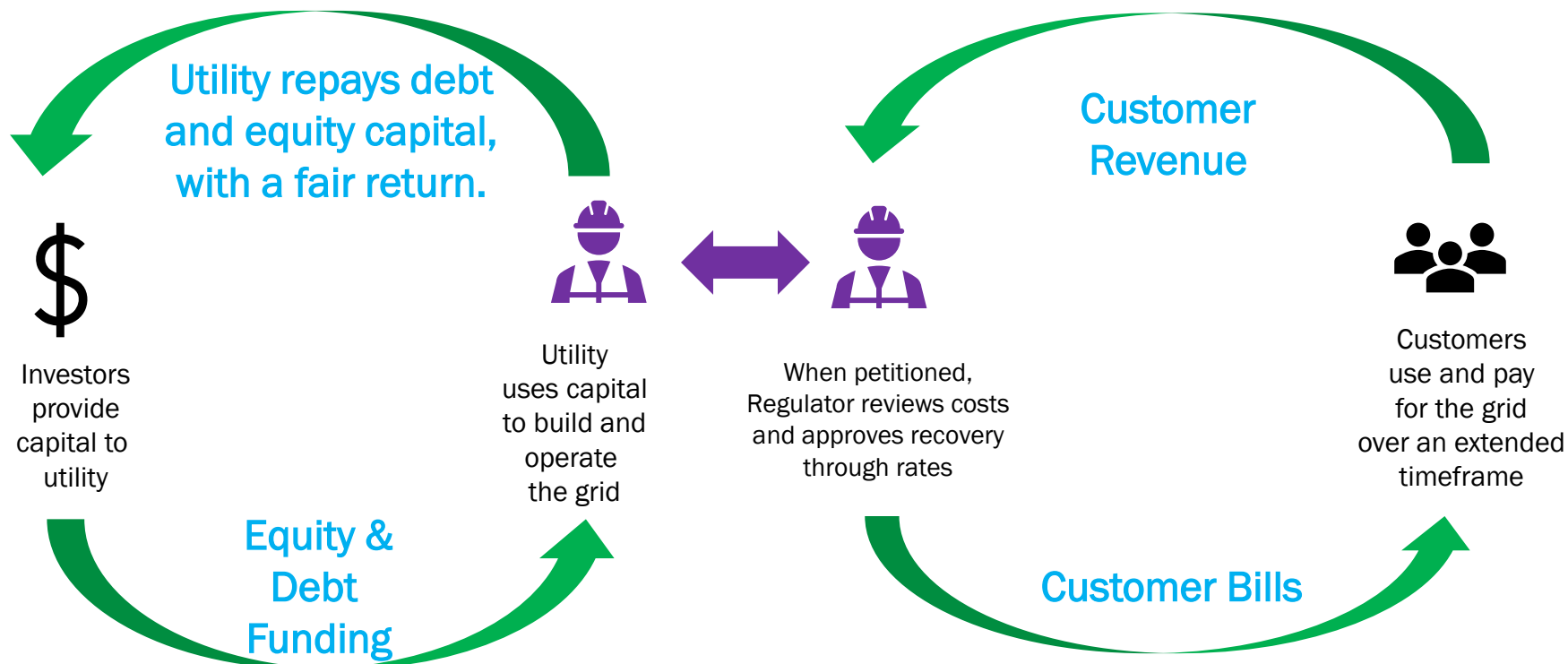
What is a Gigawatt?

It's the equivalent of
100 million
LED bulbs!



Source: [energy.gov](https://www.energy.gov)

Utility investment is necessary to build and reinforce the grid. Capital resources to fund that development are obtained from investors and lenders, and customers repay those funds through their rates.



Goal: Set “just and reasonable” rates, which are rates that recover (1) reasonable and prudently incurred operating costs; and (2) a fair and reasonable return on invested infrastructure capital.

There is no “guaranteed” return!

Rate regulation fundamentals

Approved revenue requirement is a representative level of the cost to serve for a particular year

$$\begin{array}{c} \text{Revenue Requirement (RR)} \\ \leftarrow \text{Revenue Requirement} \rightarrow \\ = \text{O\&M} + \text{T} + \text{d} + (\text{RB} * r) \end{array}$$

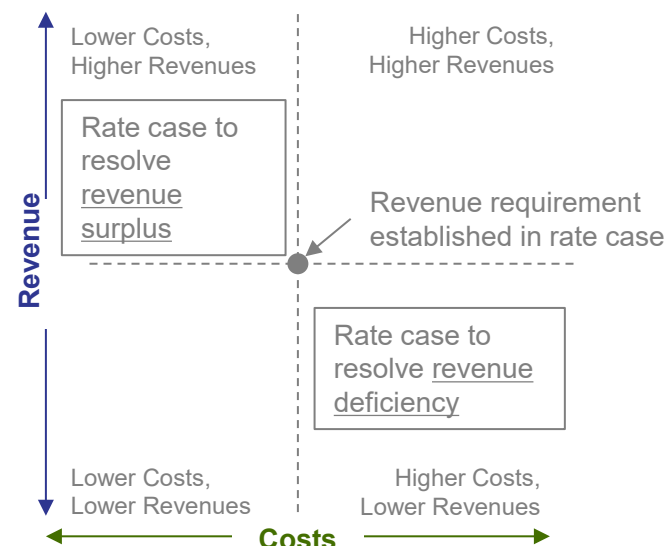
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- Rates are established at a level to collect the revenue requirement

$$\begin{array}{c} \text{Operating Revenues (OR)} \\ \leftarrow \text{Operating Revenues} \rightarrow \\ = (\text{customer charge} * \text{\# of customers}) + \\ (\text{energy (kWh) charge} * \text{energy sales}) + \\ (\text{demand (kW) charge} * \text{billed demand}) \end{array}$$

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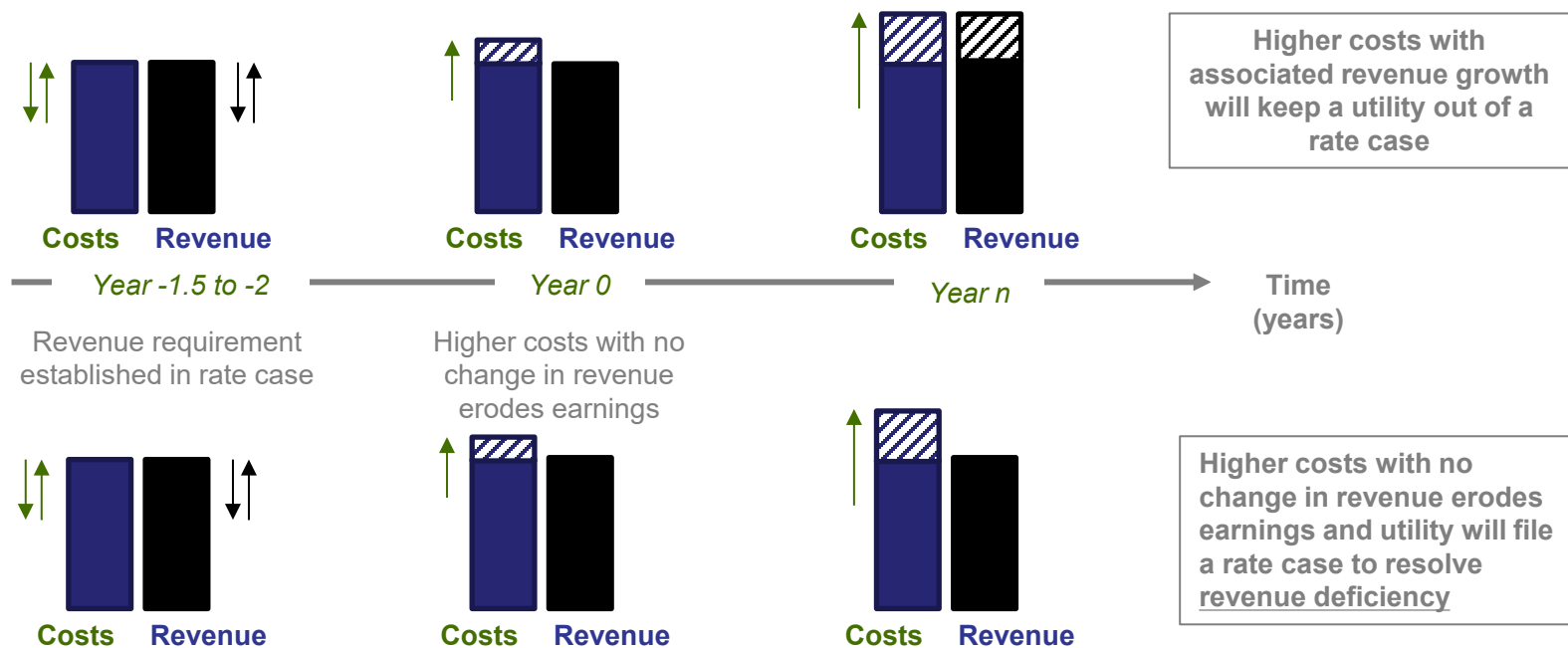
Revenues, costs, and earnings are not guaranteed and will likely be higher or lower than estimated



Source: MA DOER Presentation: "Multi-Year & Formula Based Rates", targeted conversation October 7, 2025

Traditional rate regulation

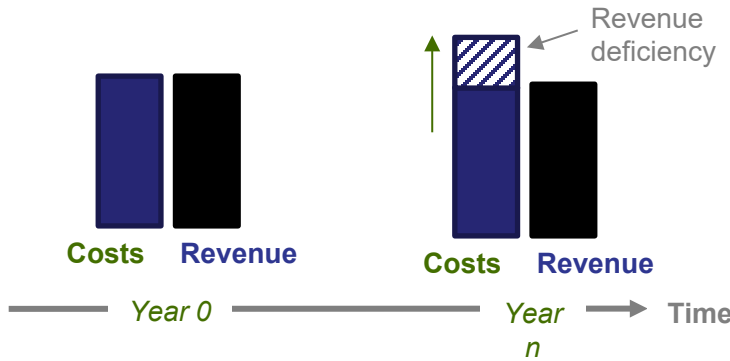
Utilities will generally avoid rate cases when possible, so long as rate levels are providing adequate revenue support



Source: MA DOER Presentation: "Multi-Year & Formula Based Rates", targeted conversation October 7, 2025

Alternative regulatory mechanisms for providing incremental revenues between rate cases

Regulatory mechanisms designed to address growing cost pressures and investment need

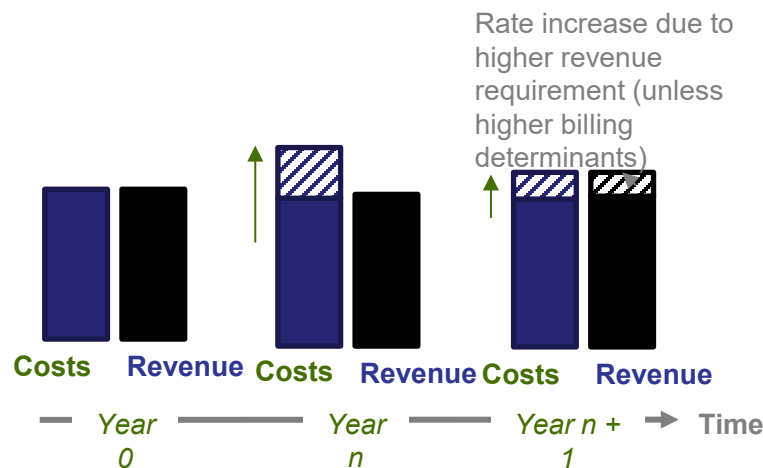
- Utility financial attrition refers to the erosion of earnings over time where revenues do not keep pace with costs
 - Revenue adjustment mechanism provide rate relief between rate cases
- 
- The diagram shows a bar chart with two time points: Year 0 and Year n. At Year 0, the 'Costs' bar (blue) and 'Revenue' bar (black) are of equal height. At Year n, the 'Costs' bar is taller than the 'Revenue' bar. The top portion of the Year n 'Costs' bar is shaded with diagonal lines and labeled 'Revenue deficiency' with an arrow. A green arrow points upwards from the Year 0 'Costs' bar to the Year n 'Costs' bar, indicating the increase in costs over time. A horizontal arrow labeled 'Time' points from Year 0 to Year n.
- Several options for addressing revenue attrition (not mutually exclusive):
 - More regular rate cases
 - Broaden revenue opportunities
 - Future test year
 - Multi-year rate plans
 - Capital cost recovery mechanisms
 - I-X regulation (i.e., revenue cap or price cap formulas)
 - Alternative regulatory mechanisms that provide incremental revenues accelerate cost recovery and inflate electric rates – cost containment, connection to distribution system planning, utility performance, and prudence review are cornerstones of consumer protection

Source: MA DOER Presentation: “Multi-Year & Formula Based Rates”, targeted conversation October 7, 2025

Regulatory mechanisms to address revenue attrition

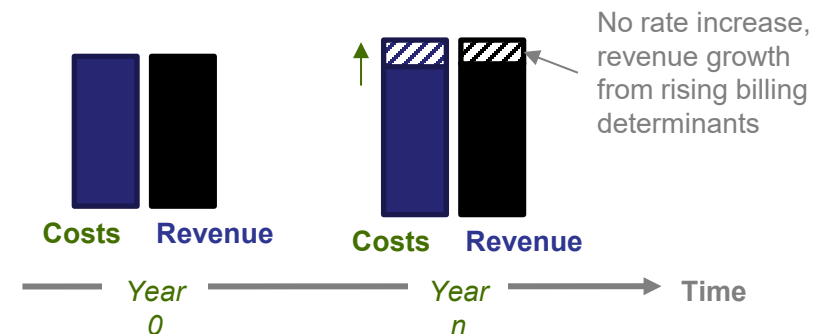
More regular rate cases

- Rate cases provide an opportunity for the utility to demonstrate its revenue deficiency and request a rate adjustment to earn revenues consistent with cost to serve



Broaden revenue opportunities

- Under revenue decoupling, utility does not retain revenue growth from billing determinants
 - New customers, higher electricity use, and growth in billed demand raise additional revenues



- Additional revenue opportunities for the utility that align with customer interest:
 - Operational expenditure/capital expenditure (Opex/Capex) equalization
 - Export tariffs for DERs
 - Etc.

Source: MA DOER Presentation: "Multi-Year & Formula Based Rates", targeted conversation October 7, 2025

Benefits of Performance-Based Ratemaking

- Several public utility commissions are exploring performance-based regulation, a regulatory framework to connect achievement of specified objectives to utility financial performance.*
- PBR can include performance incentive mechanisms (PIMs) and supporting metrics that determine the levels of financial rewards or penalties (i.e., adjustments to allowed revenues) to achieve a specified objective or goals.*

Under PBR, customers benefit from:

- **Greater rate stability:** Support for infrastructure investments with rates that increase gradually over time, followed by relatively smaller base-rate increases.
- **Increased Cost Control Incentives:** Leverages base-rate stay-outs to motivate the utility to maintain cost-efficiency until the next base-rate proceeding. When rates are “re-based” in the next proceeding, efficiencies obtained during the stay-out period are captured in the new cost of service and passed to customers through rates that are lower than otherwise would occur.
- **Performance measures:** Establishes metrics to provide transparency on the utility’s performance to help demonstrate to customers that their essential service is being provided safely, reliably and efficiently.
- **Earnings Sharing and Credit for Future Productivity Gains:** Sharing in earnings with the utility if the utility performs better than the established benchmark. Additionally, through the application of a consumer dividend, customers are obtaining a credit for expected future productivity gains for the utility expected to be achieved by the utility under a PBR plan.
- **Administrative Efficiency:** Utility and stakeholders can focus on system operations and performance, while avoidance of frequent, lengthy, costly rate and annual prudence proceedings.

* Source: [NARUC](#), [Rocky Mountain Institute](#)

Massachusetts has adopted K-Bar to provide adequate capital recovery not covered by PBR I-X formula

- K-Bar” provides annual increases in revenues above the PBRM based on actual plant additions.
- Calculates a theoretical rate base based on historical avg of plant additions. Then, compares theoretical rate base to level of rate base supported by rates and provides incremental revenue toward the gap.

General PBR Steps for I-X and K-bar

I-X

- Step 1: Determine the period-over-period percentage increase
- Step 2: Apply % increase to appropriate base distribution rates in effect

K-Bar: Determine revenue provided by other means (i.e. current base rates and I-X)

Step 3: Calculate capital revenue requirement already provided for by existing revenue

K-Bar: Calculate current core capital revenue requirement

Step 4: Escalate historical plant additions by % increase established in first step & average

Step 5: Build up representative level of distribution rate base using results from preceding step

Step 6: Estimate capital revenue requirement (depreciation expense, property taxes, return on rate base) using rate base established in preceding step along with approved capital costs as functions of approved rate base (for example, approved depreciation expense divided by gross plant)

Step 7: Calculate difference between #6 and #3

ISRE Mechanism Overview

October 22, 2025

nationalgrid



MECO faces a step change in Core investment needs due to a convergence of factors

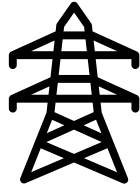
- Increase in Core capital investment being driven by multiple factors
 - An aging system requiring maintenance and upgrades to continue safe, reliable and affordable service
 - Expanded customer needs driven by the clean energy transition (e.g., heat electrification, EV charging)
 - Lower outage tolerances (e.g., work from home, increased reliance on electricity for heat and transportation) necessitating improvements in resiliency and performance
- Anticipated level of Core investments cannot be sufficiently funded through a traditional “I-X” PBR plan alone
- Separate recovery mechanism established for capital (ISRE) while continuing “I-X” PBR for operating costs (PBR-O)
 - PBR-O provides strong O&M cost control incentives (an O&M cost growth allowance less than inflation; based on peer O&M cost trend)
 - ISRE funds necessary capex while providing strong cost control and accountability via (1) budget cap; (2) prudence reviews; and (3) regulatory revenue lag
 - Allows for a multi-year rate plan which reduces administrative burden and provides flexibility to enable efficient operations

Core capital projects provide safe and reliable service, including:

- Asset condition work
- New & existing customer requests
- Public requirements
- Damage or failure projects
- System capacity & performance
- Non-Infrastructure (IT, fleet, property)

Core Investments

Maintaining a Safe & Reliable Grid



Capital Investment Only

ISRE Mechanism

- Annual filings
- 3% budget cap
- Core investment-only

LIMITED BY:

- ✓ Budget cap
- ✓ Prudency review
- ✓ Recovery lag (last year's revenue requirement, collected this year)

Base Distribution Rates + PBR-O

(Annual "I-X" Adjustment for O&M only)



Core Operating Expenses

PBR-O Adjustment

- O&M-specific Inflation Index
- X-factor = 0.21%
- Consumer Div'd = 0.3%

LIMITED BY:

- ✓ Fixed "I-X" calculation for O&M (growth less than inflation)
- ✓ Prudency review
- ✓ Recovery lag (historical test year, lagged inflation adjustment)



Recovery of incremental capital investment over what is covered by cast-off base rates (i.e., above the cast-off rate base)



Recovery of incremental operating expense, over amount in cast-off base rates

The ISRE Mechanism enables necessary levels of investment over the rate plan period to support safe, reliable and affordable service

How it Works

- National Grid files for recovery annually in June for the revenue requirement on eligible investments placed in service the prior CY (recovery starts in October once new rates have been approved)
- Revenue requirement includes
 - Allowed return, on new plant in service net of depreciation
 - Depreciation expense
 - Property tax expense
- ISRE filings must include documentation for DPU's review that demonstrates investments were (1) prudent, and (2) met the eligibility criteria
- Any reconciliation of allowed vs. recovered amounts from lag between when assets are placed into service and cash is recovered (average time of ~16 months) accrues interest at the customer deposit rate (recently 4.37%)

A revenue cap limits rate impact on customers

- Annual revenue requirement increases from ISRE are capped at 3% of prior CY revenue
- Company will continue to make any investments necessary to ensure safe and reliable service
- Revenue requirement above 3% cap can be included when rates are re-based in next base distribution rate case

ISRE Mechanism Example: June 2025 Filing

- \$409M of capital investment placed in service in CY 2024
- ISRE Mechanism filed June 2025 requesting \$21.7M revenue requirement in rates (i.e., recovery of incremental costs)
- Recovery through rates began October 2025

**Massachusetts Electric Company
Nantucket Electric Company
Capital Project Expenditures Placed in Service
Plant Additions & Cost of Removal Summary**

Calendar Year In-Service Asset Additions	Calendar Year 2024
Specific Projects - Individual	122,921,588 (1)
Specific Grouped Projects - USSC	50,125,888 (2)
Blankets	203,981,493 (3)
Programs	32,312,756 (4)
Total Plant In-Service Asset Additions	409,341,725 (5)
Cost of Removal (Total)	25,709,826 (6)
Total Plant In-Service Plus Cost of Removal	435,051,551 (7)

Spending Rationale	CY2024 Capital Asset Additions (\$M)
Asset Condition	87.6
Customer Request/Public Requirement	155.7
Damage/Failure	102.3
Non-Infrastructure	16.1
System Capacity & Performance	47.6
Grand Total	\$ 409.3



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**DEPARTMENT OF
ENERGY RESOURCES**

Evolution of Revenue Decoupling

Massachusetts Electric Rate Task Force

October 22, 2025

This presentation explores the evolving role of revenue decoupling to support affordable decarbonization.

Note: The contents of this presentation do not necessarily reflect the views or positions of the Massachusetts Department of Energy Resources.

Presented by

Austin Dawson

Deputy Director of Energy Supply and Rates

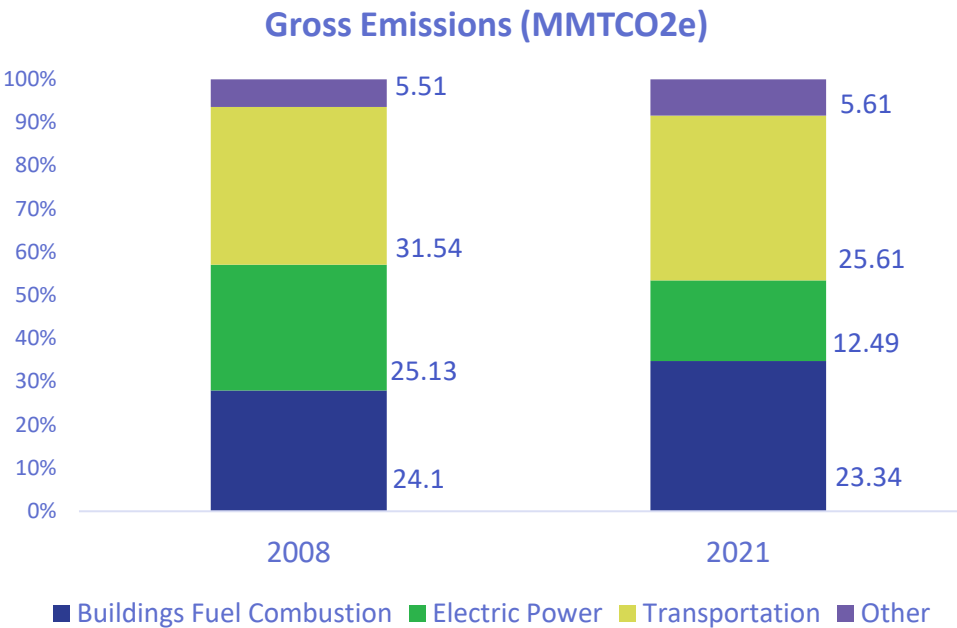
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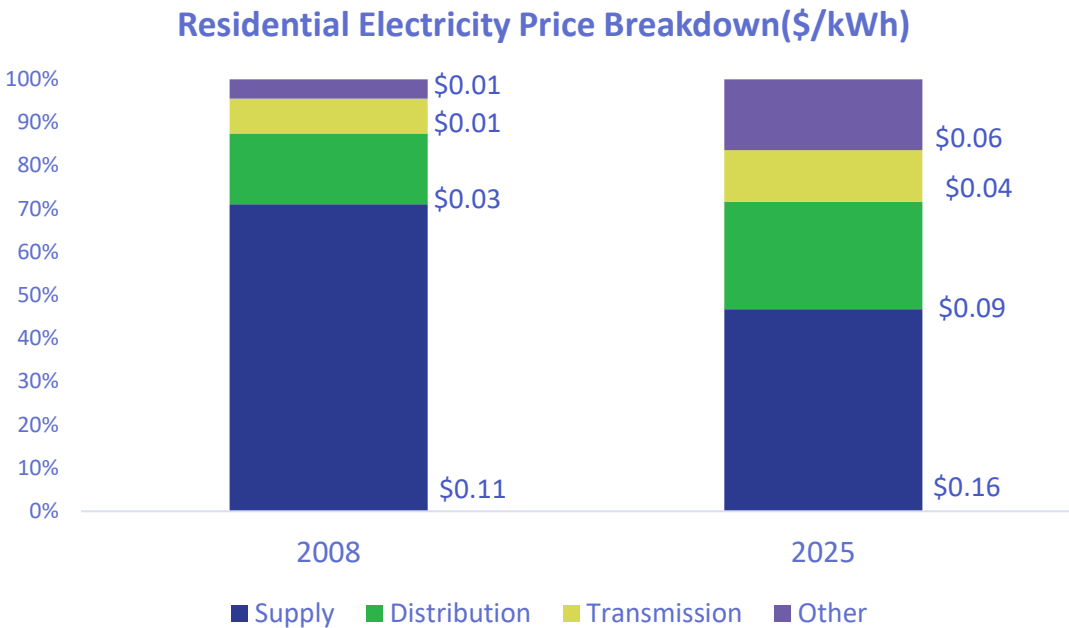


Electrification is critical for decarbonization and affordability

Electric power emissions have more than halved since 2008



Energy supply is no longer the majority of retail electricity prices



Affordable electricity depends on efficient utilization of existing grid capacity

Electric delivery rates are based on average cost of the system

- In economic terms, average costs can be lowered by increasing output where marginal costs are less than average cost
- Costs of the electric grid are predominantly recovered through volumetric energy charges (kWh), but significant cost driver of system infrastructure remains forecasted growth in peak demand (kW) and hosting capacity for distributed resources
- Continued growth in system infrastructure without growth in load (kWh) will increase rates

Load factor represents a measure of efficiency

- Load factor is the ratio of actual kWh delivered on a system relative to the total possible kWh that could be delivered on a system

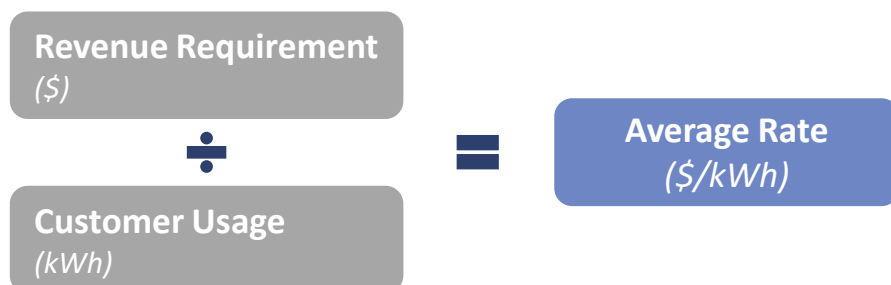
Load growth can lower electricity rates

- Load growth driven by electrification (i.e., fuel switching) and load management strategies to minimize additional system costs (i.e., demand flexibility) present a meaningful opportunity to control the increase of electricity rates

Changes in load impact rate levels

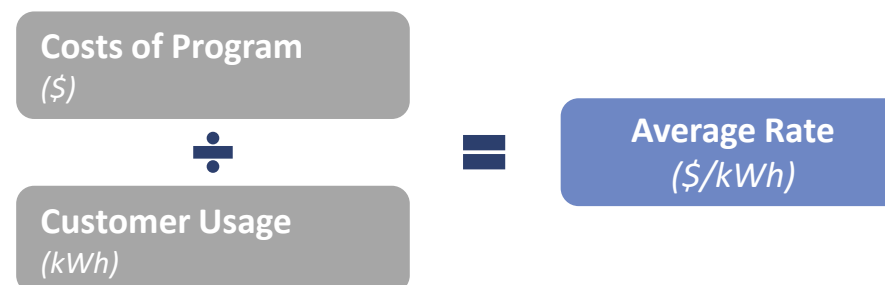
Distribution and transmission infrastructure

- As revenue requirement increases, rates will increase *unless* there is a comparable growth in load (kWh)
- Rates are increasing to support proactive investments, though higher pricing disincentivizes load growth which will put further pressure on rates

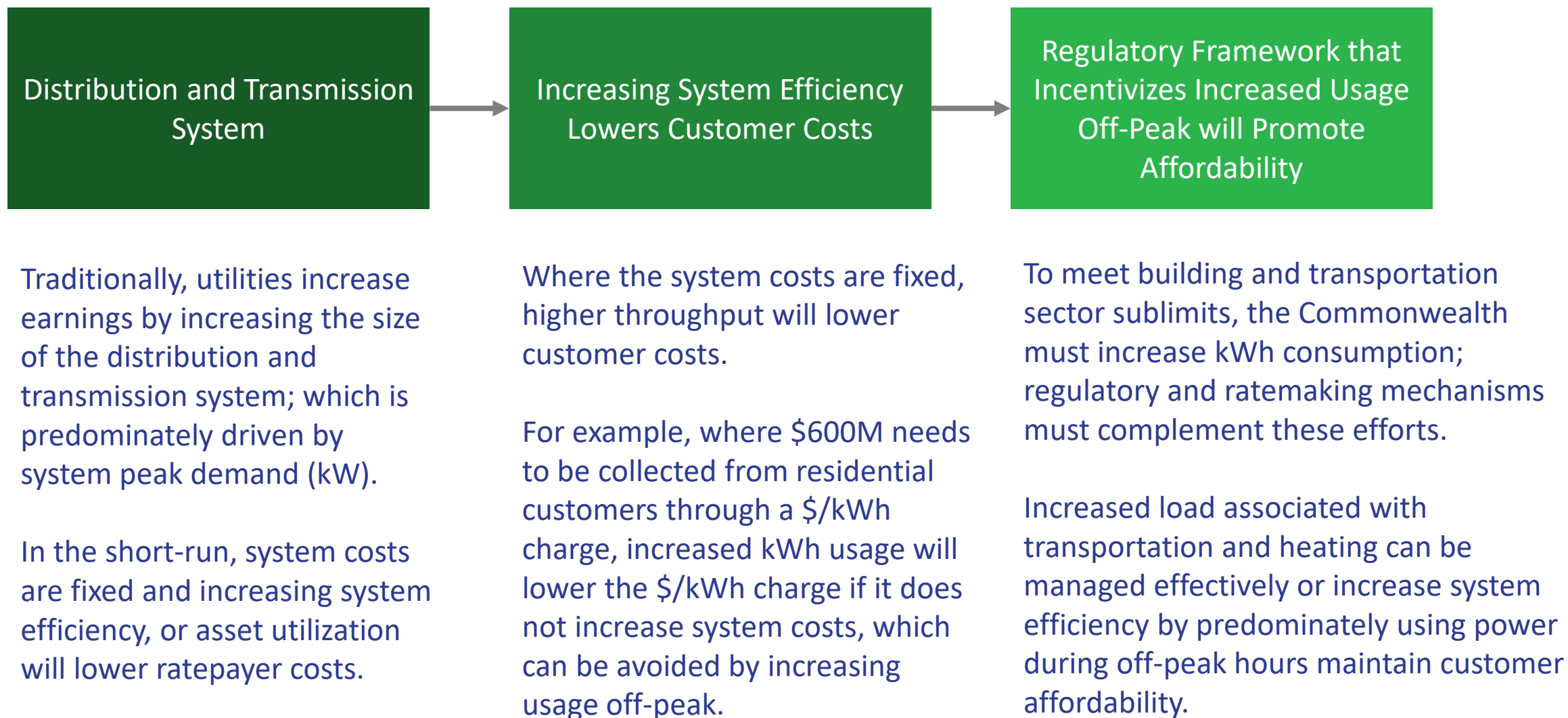


Other programs and policies

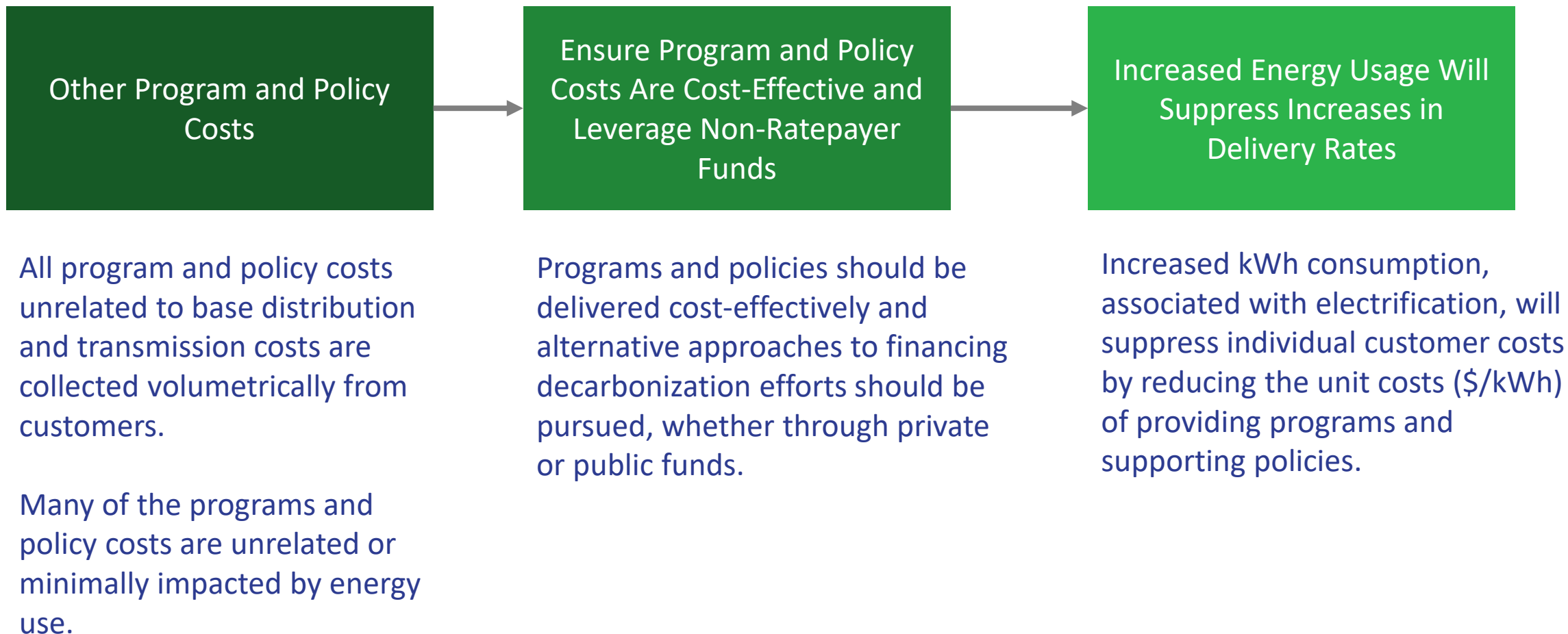
- Costs of other programs and policies supported through electricity rates (e.g., bill discounts, energy efficiency, net metering, SMART, etc.) have also been increasing
 - When costs of programs are recovered through energy charges (\$/kWh), decreases in load raise the charge for programs/policies



Efficiency of the electric power system infrastructure



Other costs of program and policies



Revenue decoupling and impacts on customer affordability and risk

Mechanics of revenue decoupling

- Disconnects utility revenues from customer sales to eliminate the incentive to sell more electricity to increase revenues and earnings (i.e., throughput incentive)
- Revenue requirement is established in a rate case and a revenue decoupling mechanism adjusts rates to account for over- or under-recovery from customers relative to the approved revenue requirement
- With revenue decoupling, new revenue support mechanisms are needed to provide utilities with sufficient revenues to meet investment demands (e.g., capital cost recovery mechanisms, reconciling mechanisms, etc.)

Impacts on affordability and customer risk

- Advancing least-cost distribution system can be driven by:
 - Minimizing system costs through right-sizing the distribution system
 - Increasing load while reducing peak demand shifting demand to non-peak hours
- Revenue decoupling, in addition to extensive use of capital trackers and reconciling mechanisms, has shifted most revenue risk away from utilities *and onto customers* and out of base distribution rate cases

The electric grid is the platform for the clean energy transition

Utilities require revenues for forward-looking investments

- Without revenue decoupling, growth in sales units (e.g., # of customers, kWh sales, etc.) provides additional revenues
- With revenue decoupling, new revenue support mechanisms are needed to provide utilities with sufficient revenues to meet investment demands (e.g., capital cost recovery mechanisms, reconciling mechanisms, etc.) – each of these raises the cost of electricity, further disincentivizing electricity use
- Discontinuing revenue decoupling (i.e., recoupling) may eliminate need for extraordinary cost recovery mechanisms to meet policy goals and statutory obligations

Customers bear most of the risk

- Forward looking, or proactive, investments create costs today for benefits tomorrow
 - If load does not grow as expected, existing customers will bear the burden through increased rates
- Utilities are making investments as part of several programs or initiatives to support the future energy system: grid modernization, electric sector modernization plans, electric vehicle plans, advanced metering infrastructure, capital investment projects, etc.
 - Investments will increase utilities' earnings, but through higher rates *unless* load grows or additional revenue streams are made available
 - Risk of an electrification death spiral

Recoupling can benefit utilities and customers in transition

Alignment of utility incentive with decarbonization mandates

- Recoupling provides an opportunity to leverage the financial interests of the companies to accelerate implementation of electrification through the adoption of critical electric end-use technologies, such as EVs and heat pumps
 - Under a recoupling approach, the companies are more likely to pursue innovative approaches that incentivize electrification, such as additional rebates, zero-cost equipment and installation, equipment leasing, or promotional pricing since the additional load from those customers will provide the company with additional revenues that would offset the cost of supporting such programs/offerings

Minimize distribution system capital investment

- Revenue decoupling never addressed the utility incentive for system build out – other mechanisms can be employed to address this more effectively (e.g., CapEx-OpEx equalization mechanisms)
- Distribution system planning and integrated resource planning are effective strategies at ensuring distribution companies are planning investments and managing its infrastructure consistent with its public service obligation to provide safe, reliable, and least-cost service to its customers in the present and future





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Thank You!

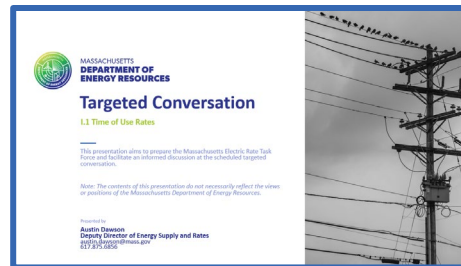
Next Steps

Targeted Conversation

October 27, 2025, 2-4pm

- Will serve as a deliberative space following related expert presentations to prompt informed discussion on policy questions and priorities

Illustrative Presentation



Optional Office Hours

November 5, 2025, 2-4pm

- Optional office hours for further conversation, serving as a structured opportunity to work towards common understandings and positions. We also encourage participants to have discussions amongst each other beside formal Task Force sessions
- Please reach out to chris.connolly2@mass.gov to request an invitation.