MASSACHUSETTS
DEPARTMENT OF ENERGY RESOURCES

Alternative Rate Designs

Targeted Conversation | June 18, 2025

This presentation will be used to guide the Massachusetts Electric Rate Task Force's targeted conversation, designed to facilitate an open, inclusive dialogue and frame critical questions and opportunities.

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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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

Alternative Rate Design Expert Presentations

I. Policy Fixed Charge

Department of Energy Resources, Mike Giovanniello

Present on IRWG's recommendation to consider nonbypassable fixed charge for policy costs

II. Overview of Long-Term Advance Rate Designs

Current Energy Group, Ron Nelson

Present a high-level overview of advanced rate designs, including critical peak pricing, export tariffs, non-firm tariffs, real-time pricing, and day-ahead tariffs

III. Residential Demand Charges

Electric Distribution Companies

Present on the use and the implications of demand charges for residential customers

II. Key Concepts and Options of Advanced Rate Design

Regulatory Assistance Project, Mark LeBel

Present an overview of key background and theory of advanced rate design and associated concepts and options

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

Targeted Conversations

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.

- Targeted conversations are intended to facilitate open, inclusive dialogue and frame critical questions and opportunities
- 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.

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

IRWG Recommendations on Alternative Rate Designs

Enable load management and peak demand reductions

- Consider an opt-in critical peak pricing as a supplement to a default time-of-use rate
- The focus of the analysis was on residential rate design, but the IRWG noted that rate designs and programs for commercial and industrial (C&I) customers were critical
- Consider further advanced rate designs following deployment of AMI and default seasonal TOU rates
  - Examples included: demand charges, export tariffs, non-firm or limited import tariffs, day-ahead tariffs, real-time pricing

Reduce the disincentive to adopt heat pumps and electric vehicles

- Expand non-ratepayer funding (i.e., fund certain programs outside of electric rates)
  - Costs of many decarbonization and affordability polices are recovered from electric ratepayers through volumetric charges
- Consider funding certain programs through a fixed charge or through a combination of fixed and variable charges
  - Consider a non-bypassable monthly charge for certain public benefits programs

Agenda

i. Introduction (10 minutes)

ii. Deep Dive on Electric Rates (40 minutes)

iii. Break (5-10 minutes)

iv. Alternative Rate Designs (55 minutes)

v. Next Steps and Closing (5 minutes)

vi. Appendix (included for additional context)

Electric Rates Deep Dive

Before exploring rates further, we want to take a step back to better understand the distinct features of electric rates and their development. Whether for TOU rates or alternative rate designs, it's important to further understand how rates are determined or priced.

Affordable electric bills are important for households aside from decarbonization, but are also essential for electrification

Customers can reduce electric bills through a few strategies today

Electric Bill *($/month)* = **Customer Charge** *($/month)* + **Total Retail Rate** *($/kilowatt-hour)* × **Consumption** *($/kWh)*

- **Discounts rates** provide a percentage off electric bills
- **Assistance programs** (e.g., Home Energy Assistance Program) can reduce bills
- **Solar credits** can provide bill offsets for off-site projects

- **Supply rate** options (e.g., Basic Service, municipal aggregation, competitive supplier)

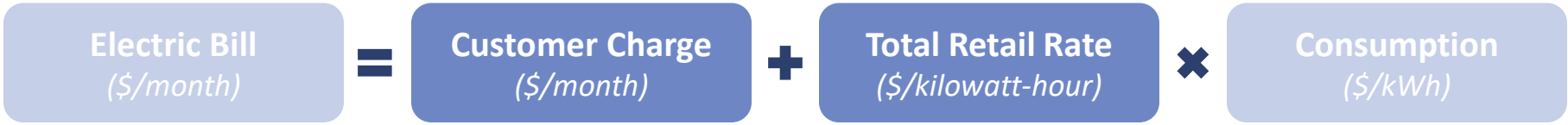
- **Conserve** energy (e.g., setting thermostat lower in winter)
- **Efficiency** allows for same service with lower energy use (e.g., energy-efficient refrigerator)
- **Offset** consumption via self-generation (e.g., rooftop PV); may also export surplus energy to grid at set rates

Key Takeaways

- Identified strategies are largely customer-driven (i.e., requiring customer action)
- Customers have limited to no control over customer charge and total retail rates

Affordability requires holistic, comprehensive solution sets

To complement existing strategies, the Task Force is focused on rates that enable customers to reduce electric bills in a manner that also reduces total ratepayer costs



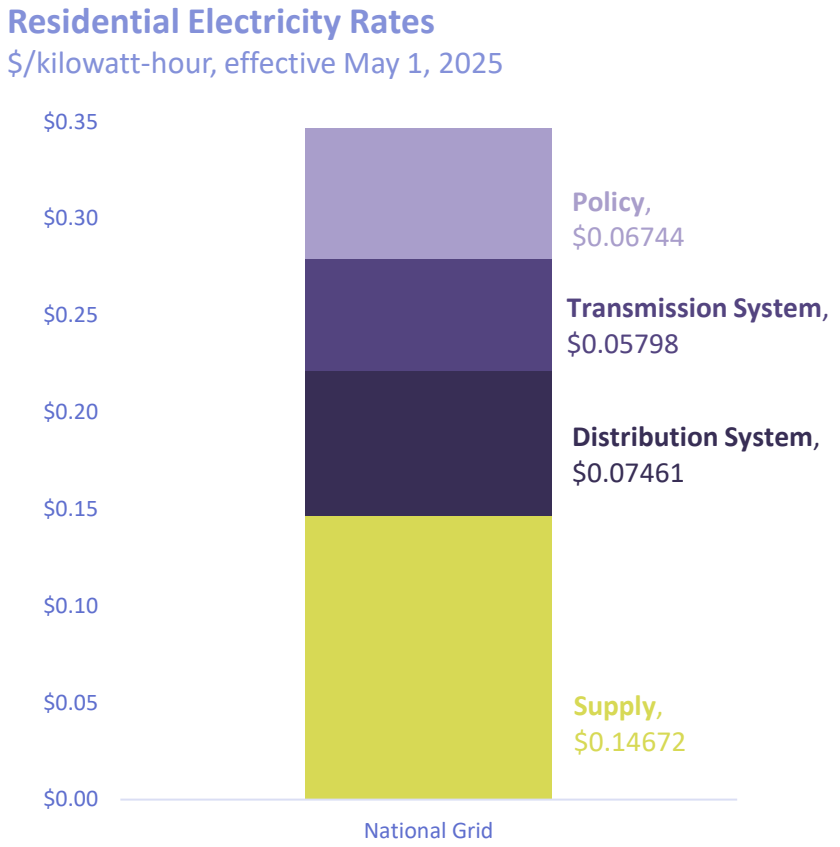
Key Takeaways

- Mathematically, lowering the customer charge or total retail rate can reduce electric bills
- Alternative rate designs introduce complexity to this generalized formula; but it can provide customers alternative means to manage electric bills
- Not all rate designs are applicable or relevant to all components of retail electric rates (i.e., customer charge and total retail rate)

Components of retail electric rates

Existing retail electric rates include over twenty separate charges, but can be summarized by components that generally reflect the different elements of electricity service[1]

- **Supply rates - or products -** reflect the costs of supplying energy, including costs of wholesale energy, capacity, and other supply-related requirements
- **Distribution charges** recover the costs associated with the existing distribution system
- **Transmission charges** recover the costs associated with the existing transmission system
- **Other policy & program charges** recover the costs associated with state policies or utility programs (e.g., energy efficiency, net metering, solar incentives, low-income assistance, etc.)



[1] *See Summary of Electric Charges for overview of individual charges.*

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Total retail rates include dozens of charges, but are categorized below for clarity

Below are the categories, or components, of total retail rates; but how are they determined?

Customer Charge
($/month)

Distribution Customer Charge
($/month)

Total Retail Rate
($/kilowatt-hour)

Base Distribution Charge
($/kWh)

Transmission Charge
($/kWh)

Supply Charge
($/kWh)

Other, Policy, & Program Charges
($/kWh)

Key Takeaways

- As a result of unbundling rates in Massachusetts, customers are charged for distribution, transmission, and supply services separately
- In addition, several other charges are included in the total retail rate
- The customer charge is treated as a distribution service; all other costs are collected via a $/kWh charge

Distribution service cost allocation and recovery

Distribution revenue requirement, allocators, and charges are established in a base distribution rate case at the DPU

Annual Distribution Revenue Requirement *($)*

- Represents distribution utility's total cost to serve all customers
- Established through a base distribution rate case

✖

Residential Base Distribution Allocator *(%)*

- Represents the share of distribution costs driven by residential customers

=

Annual Distribution Residential Revenue Requirement *($)*

- Represents distribution costs driven by residential customers
- Customer classes have distinct rates reflecting the different costs to serve unique customer types

Reminder: a key benefit of alternative rate designs (e.g., time of use) is predicated on the opportunity to leverage demand-side resources to "bend the curve" of revenue requirement through deferring or avoiding future investment that would otherwise increase costs for all customers

Annual Distribution Residential Revenue Requirement *($)*

- Established above; used to determine distribution charges for residential customers

=

Distribution Customer Charge *($/month)*

- Generally, set to cover fixed customer costs (e.g., meter, customer service, etc.)

✖

Customer Months *(# of customers x months)*

- Represents the product of customers and billing months

✚

Base Distribution Charge *($/kWh)*

- In a rate case, other terms are determined, and base distribution charge is set to balance the equation

✖

Customer Usage *(kWh)*

- Represents the annual kWh usage of residential customers

Reducing the customer charge or base distribution charge

Annual Distribution Revenue Requirement *($)* × **Residential Base Distribution Allocator** *(%)* = **Annual Distribution Residential Revenue Requirement** *($)*

- Reducing revenue requirement can lower customer charges or total retail rates for all customers
- Lowering the allocator can reduce residential customers charges, but it will increase charges for all other customers (e.g., commercial, industrial)

Note:
- Customer usage serves as a baseline, based on actual usage of a historical test year in a rate case
- Between rate cases, the revenue decoupling charge adjusts annually to account for over- or under- collection relative to the approved revenue requirement

Annual Distribution Residential Revenue Requirement *($)* = **Distribution Customer Charge** *($/month)* × **Customer Months** *(# of customers x months)* + **Base Distribution Charge** *($/kWh)* × **Customer Usage** *(kWh)*

- If annual revenue requirement is held constant, then:
- Lowering the customer charge requires an increase in the distribution charge ($/kWh)
- Additional customers may increase revenue, enabling a reduced distribution charge ($/kWh)
- Lowering the base distribution charge requires an increase in the customer charge ($/month)
- Incremental usage may increase revenue, enabling a reduced distribution charge ($/kWh)

Key Takeaways
- A trade-off exists between the customer charge ($/month) and distribution charge ($/kWh); all else equal, an increase in one results in a decrease to the other
- Customer growth is difficult for distribution utilities to control; generally thought to be driven by general economic trends (i.e., drivers of population growth)
- Increased usage can put downward pressure on the distribution charge ($/kWh) *if, and only if,* growth does not drive a proportional increase in system costs (we want to decrease usage that drives system costs, and increase usage that does not)
- Decreased usage can put downward pressure on the distribution charge ($/kWh) over time *if, and only if,* reduced usage avoids incremental distribution system investments

Transmission service costs are assigned to distribution utilities and allocated and charged to customer classes, separately

Annual Transmission Revenue Requirement *($)* × **Residential Allocator** *(%)* = **Annual Transmission Residential Revenue Requirement** *($)*

- Represents distribution utility's share of transmission service assigned by ISO-NE
- Represents the share of transmission costs driven by residential customers
- Represents transmission costs driven by residential customers
- Customer classes have distinct rates reflecting the different costs to serve unique customer types

Annual Transmission Residential Revenue Requirement *($)* = **Transmission Charge** *($/kWh)* × **Customer Usage** *(kWh)*

- Established above, used to determine transmission charges for residential customers
- Calculated to recover the transmission revenue requirement
- Represents the annual kWh usage of residential customers

Note:
- Customer usage serves as a baseline, based on forecasted usage, not test year
- Transmission charges reconcile annually and include under- or over-collections driven by variances in usage relative to forecasts

Key Takeaways
- Like distribution charges, transmission charges can be reduced through reducing transmission revenue requirement or increasing customer usage without a proportional increase in transmission costs
- If incremental load does not increase the assignment of transmission costs or does not drive incremental investments, load growth can reduce the transmission charge
- Decreased usage can put downward pressure on the transmission charge ($/kWh) over time if, and only if, reduced usage avoids incremental transmission system investments; in the short-term, decreased usage at peak can reduce assignment of costs to a given customer class or to the distribution utility, but results in an increase to other customer classes and other utilities

Supply charges are unique from delivery charges, offered through three distinct contracting mechanisms

In Massachusetts, retail customers can receive supply through Basic Service, municipal aggregation, and individual competitive supply

Supply Charge
($/kWh)

- Represents the costs of wholesale energy, capacity, and other supply-related requirements (e.g., ancillary services, renewable energy portfolio standard, clean energy standard, alternative energy portfolio standard, and clean peak energy standard)

Reminder: a key benefit of alternative rate designs (e.g., time of use) is predicated on the opportunity to leverage demand-side resources to shift energy usage to lower cost periods, thereby reducing the total cost to serve load

Basic Service
($/kWh)

- Distribution utility (e.g., Eversource, National Grid, Unitil) competitively procures supply services on behalf of residents and businesses within their service territory

Municipal Aggregation
($/kWh)

- Town or city competitively procures supply on behalf of residents and business within municipality territory

Competitive Supply
($/kWh)

- Individual customers enter supply contracts directly with competitive suppliers

Key Takeaways

- Currently, residential customers are charged a flat, volumetric supply charge ($/kWh) due to existing metering technology
- Wholesale energy costs, as determined through wholesale energy markets, vary throughout the season and day; flat supply charges distort the price signal of energy service, either being “above cost” (i.e., overvalues reductions in demand, or disincentivizes demand at low-cost periods) or “below cost” (i.e., undervalues reductions in demand, or incentivizes demand at high-cost periods)

Other program & policy costs are collected via energy charges

The costs of other programs and policies are allocated and recovered from residential customers as follows:

Annual Other, Policy, & Program Revenue Requirement *($)*

- Represents distribution utility's total cost of other programs and policies

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Residential Allocator *(%)*

- Represents the share of costs allocated to residential customers

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Annual Other, Policy, & Program Residential Revenue Requirement *($)*

- Represents the costs to be recovered from residential customers

Annual Other, Policy, & Program Residential Revenue Requirement *($)*

- Established through above formula, used to establish other program and policy charges for residential customers

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Other, Policy, & Program Charge *($/kWh)*

- Calculated to recover the other, policy, & program revenue requirement

✖

Customer Usage *(kWh)*

- Represents the annual kWh usage of residential customers

Note:
- Customer usage serves as a baseline, based on forecasted usage, not test year
- Other program and policy charges reconcile annually and include under- or over-collections driven by variances in usage relative to forecasts

Key Takeaways
- Other policy and program charges can be reduced by lowering cost of programs, leveraging other funding sources, or increasing customer usage
- Conversely, increasing costs of programs and policies and reducing customer usage will drive increases in other policy and program charges
- Customer class charges can be reduced by decreasing allocator, though that will increase the charges of other customer classes

Break: 5-10 minutes
(if time allows)

Alternative Rate Designs

With a better understanding of the components of rates, and how each is determined or priced, we can turn to a discussion of alternative rate designs.

Commercial and Industrial Rates

Up to this point, we have been focused on residential rates; but the benefits of cost-reflective rate design and load flexibility are relevant for other customers

- To the extent that peak demand drives system costs, time-varying rate (TVR) and load flexibility can be leveraged to reduce system costs for all customers.
- Utilities rely on various demand allocators to assign demand-related costs, the table below shows a sample of three distinct demand allocators utilized to allocate categories of demand-related costs by customer class

Electric Distribution Company	Demand Allocator	Description	Residential	Commercial & Industrial
National Grid	Class Coincident Peak at 115kV	Based on class coincident peak demand at transmission-rated voltage level; used to allocate cost categories such as transmission plant	50.62%	49.37%
Eversource	Class Non-Coincident Peak	Based on class non-coincident peak demand; used to allocate cost categories such as substations and conductors	44.25%	55.73%
Unitil	Coincident Peak Demand Substation	Based on class coincident peaks at the transmission level; used to allocate cost categories such as substation and load dispatching costs	58.4%	41.6%

Source: E3, Long-Term Ratemaking for a Decarbonizing Commonwealth at 43.

- What's one insight or question that jumps out to you from this framing?
- What other advantages and disadvantages are there about rate design for C&I customers?

Distribution Charge
($/kWh)

Transmission Charge
($/kWh)

Demand Charges

Adapted from EDC's and Regulatory Assistance Project's Presentations

- **Demand essentially measures electricity consumption at a specified moment rather than the total amount of electricity consumed during a billing period (i.e., energy)**
  - Distribution costs (costs of building, running, and maintaining the entire grid and serving customers) are primarily driven by demand and capacity; distribution systems are sized to serve system and local demands
  - Local area usage patterns and peaks are likely to be different from the system in aggregate and drive investments
    - Rates would ideally send signals to support management of both coincident peak (demand at the time of the system peak) and individual customer maximum demands
    - Demand charges or peak window demand charges may be arbitrary unless individual customer maximum demands is highly correlated to system peaks
  - Distribution system costs reflected in the revenue requirement are already incurred/approved, but appropriate rate designs can help to limit growth in system costs by encouraging efficient use of the system
  - Volume of energy is not a constructive price signal to customers for system planning purposes because the distribution system is sized on capacity needs
    - Load diversity towards the customer end of the grid is lower, demand charges may be appropriate for these costs (e.g., line transformers, secondary voltage lines, service drops)
    - Timer peaks (i.e., surge of demand at the end of peak period) may present challenges for rate designs with peak periods

- What's one insight or question that jumps out to you from this framing?
- What other advantages and disadvantages are there about demand charges?

Distribution Charge *($/kWh)*

Transmission Charge *($/kWh)*

Demand Charges (cont.)

Adapted from EDC's and Charles River Associates' Presentations

- **Distribution costs (costs of building, running, and maintaining the entire grid and serving customers) are primarily driven by demand and capacity; distribution systems are sized to serve system and local demands**
  - Rates would ideally send signals to support management of both coincident peak (demand at the time of the system peak) and individual customer maximum demands

EDC's Cost-Reflective Rate Design

- **Customer charge (fixed):** for customer-related costs (billing, meter, service drop, etc.)
- **Customer maximum demand charge** (per kW): for costs related to customer maximum demand
  - Can be designed as tiered fixed per kW rate (like subscription charge)
- **Peak demand charge** (kW): for costs related to system peak demand
  - Peak period demand charge with on- and off-peak periods

Amparo Nieto's Marginal Cost Basis (slide 7)

- **Customer charge (fixed):** costs of meter, service drops
- **Contract kW charge** (per kW): local distribution facilities
- **Peak demand charges** (kW) **OR TOU energy charges** (kWh)**:** costs of upstream distribution (i.e., substation, primary trunkline feeder, etc.) allocated to hours

- What's one insight or question that jumps out to you from this framing?
- What are the trade-offs between peak demand charges and TOU energy charges?

Supply Charge
($/kWh)

Critical Peak Pricing

Adapted from Current Energy Group's Presentation on Critical Peak Pricing for Discussion

- **Critical peak pricing (CPP) can supplement TOU rates to maximize its price signal**
  - Peak demand events are characterized by costs that exceed even the peak period price signal
  - CPP provides an even higher price during called events, and enables lower prices for all other hours
  - CPP may be too risky for most customer bills, but certain customers will be able to respond to these signals to lower bills and better manage peak demand, particularly with advances in technologies and automation
- **IRWG recommended that opt-in CPP rates should be made available to customers as soon as practical**

	Applicable Period	Rate
On-Peak Period	3pm to 8pm on non-holiday weekdays	7.8 ¢/kWh
Off-Peak Period	12am to 6am every day	1.9 ¢/kWh
Base Period	All other hours	4.1 ¢/kWh
Critical Peak Pricing	Up to 75 hours per year	55.9 ¢/kWh

- What's one insight or question that jumps out to you from this framing?
- What other advantages and disadvantages are there about critical peak pricing?
- Is CPP appropriate for distribution or transmission charges?

Supply Charge
($/kWh)

Real Time Pricing and Subscription Pricing

Adapted from Current Energy Group's and Regulatory Assistance Project's Presentations

- **Real Time Pricing**
  - Supply rates (e.g., wholesale energy costs) vary hour-by-hour based on day-ahead locational marginal pricing (LMPs)
  - Real-time pricing exposes customers to volatility in wholesale markets, but also provides economically efficient price signals for consumption and gives customers greater control over bills
- **Subscription Pricing**
  - Subscription pricing functions like a fixed customer charge, a customer pays a fixed $ amount per month and can use any amount of energy
  - Examples of subscription pricing are more common in telecommunications industry (e.g., monthly phone plan, cable plans, or streaming subscriptions)
  - Comparable to budget billing programs, but typically would not true-up over- or –under collection in a period

- What's one insight or question that jumps out to you from this framing?
- What other advantages and disadvantages are there about these advanced rate designs? What rate designs are more valuable?
- Are these rate designs appropriate for distribution or transmission charges also?

Policy Fixed Charge

Arguments for volumetric rates

High volumetric rates send a stronger signal to conserve electricity

- "the cheapest kilowatt hour is the one you don't use"
- Promotes distributed generation (e.g., solar) and energy efficiency

Customers have more control over their bills

- Customers can avoid costs by consuming less, and their ability to do so is reduced when more of the bill is a fixed charge

- What's one insight or question that jumps out to you from this framing?
- Are there unique considerations for policy and program costs?
- What other advantages and disadvantages are there about a policy fixed charge?

Argument for *policy* fixed charges

Promote electrification

- Heat pumps and electric vehicles are less competitive against fossil fuel alternatives when volumetric rates are high

Reduce bill volatility

- Under volumetric recovery, customers pay more for policy during high consumption months when their bills are already highest

Certain customers can avoid contributing to critical infrastructure/programs, despite enjoying the benefits

- Customers with solar and energy efficiency contribute less because their volumetric consumption is lower but still enjoy the benefits of the grid

Reduce barriers to using safe and healthy levels of electricity

- A growing body of literature reveals that low-income customers engage in unsafe and unhealthy "energy limiting behaviors" to minimize electricity bills

Approximate a "progressive" recovery structure when paired with tiered discounts

- Discounts apply to fixed charges. As a customer's discount rate increases, their contribution to policy costs decreases

Closing

Next Steps

Optional Office Hours

June 25, 2025 from 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 Connolly, at chris.connolly2@mass.gov to request a meeting.
  - **NOTE:** all available time slots above have been booked, please include availability in reaching out to Chris

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Thank You!

Summary of Electric Charges

Distribution and transmission system charges

Charge	Category	Definition
Customer Charge	Distribution System	Covers a portion of fixed costs to provide electricity, including meters, billing, and customer service
Base Distribution	Distribution System	Covers cost of wires, poles, and other distribution system infrastructure, including the operation and maintenance necessary to support the operation of the distribution utility's system
Capital Cost Adjustment	Distribution System	Cost recovery mechanism for expenses associated with utility plant additions since specified date *[Unitil only]*
Infrastructure, Safety, Reliability, and Electrification Factor	Distribution System	Cost recovery mechanism for incremental costs associated with core capital investments *[National Grid only]*
Transmission Charges	Transmission System	Covers costs of transmission service (i.e., delivering electricity across transmission lines from generators to distribution system), includes Base Transmission, Internal Transmission, Transmission Service Cost Adjustment, External Transmission *[utility specific]*

Grid modernization and associated program charges

Charge	Definition
Grid Modernization Factor	Covers the costs associated with the companies' Grid Modernization Plans
Advanced Metering Infrastructure Factor	Covers the costs of legacy meter and enterprise IT and costs associated with the implementation and deployment of AMI approved by the DPU *[National Grid and Eversource only, Unitil's AMI expenses recovered in company's Grid Modernization Factor]*
Provisional System Plan Factor	Covers costs associated with the Capital Investment Projects (CIPs) to enable interconnection of distributed facilities *[National Grid and Eversource only]*
Electric Vehicle Program Factor	Covers costs associated with the companies' Electric Vehicle (EVs) Plans *[National Grid and Eversource only, Unitil's AMI expenses recovered in company's Grid Modernization Factor]*
Electric Sector Modernization Plan Factor	Covers the costs associated with investments identified in the companies' Electric Sector Modernization Plans

Other distribution charges

Charge	Definition
Exogenous Cost Adjustment	Covers costs beyond the Company's control due to a change in accounting requirements, policy, or other exogenous events
Pension Adjustment Factor	Covers the costs of pension and post-retirement benefits other than pensions (PBOP) not included in distribution rates
Attorney General Consulting Expense	Covers the costs incurred by the Attorney General of Massachusetts, the statutorily designated ratepayer advocate, for experts and consultant services in DPU proceedings
Basic Service Adjustment Factor	Covers the cost difference between the costs of Basic Service supply and the collected revenues from Basic Service (i.e., power supply reconciliation) and the administrative costs of providing Basic Service to customers
Vegetation Management Factor	Covers the costs associated with vegetation management [*Eversource's Resiliency Tree Work program; National Grid's Vegetation Management Pilot]*
Vegetation Management Reconciliation Factor	Covers the cost difference between allowed vegetation management expenses and the collected revenues from the Vegetation Management Factor [*National Grid only]*
Storm Reserve/Fund Adjustment Factor	Covers the costs to maintain a storm reserve fund, impacted by storm costs in excess of reserve funding
Storm Cost Recovery Adjustment Factor	Covers the costs of exogenous storm events above a certain threshold *[Eversource and National Grid only; Unitil's exogenous storm costs recovered in company's Storm Reserve Adjustment Factor]*

Other distribution charges

Charge	Definition
Tax Act Credit Factor	Returns an amount of collected in association with the Tax Cuts and Job Acts of 2017 *[Eversource and National Grid only]*
Electronic Payment Recovery	Covers the cost of implementation and administration of Fee Free Credit and Debit Card Payment Option *[Eversource and National Grid only]*
Revenue Decoupling Adjustment Factor	Covers the cost difference between the companies' revenue target and the collected revenues from customer charges and base distribution charges
Solar Cost Adjustment Factor	Covers the investment and ongoing maintenance costs of solar generation projects constructed, owned, and operated by the companies *[Eversource also charges a Solar Expansion Cost Recovery Factor]*
Transition Charges	Covers stranded or transition costs associated with utilities divesting from generation *[Eversource and National Grid only; National Grid delineates between Base Transition Charge and Transition Charge Adjustment Factor]*
Service Quality Penalty	Refund to customers for service quality penalties imposed on utility, as applicable

Climate and affordability program charges

Charge	Definition
Energy Efficiency System Benefits Charge	Contributes to the costs of energy efficiency, established at $0.00250/kWh pursuant to G.L. c. 25, § 19(a)
Energy Efficiency Reconciliation Factor	Covers the incremental, or net, costs of energy efficiency included in the companies' Three-Year Energy Efficiency Plans
Net Metering Recovery Surcharge	Covers the cost of net metering credits applied to customers, lost revenue from customers who have installed on-site generation facilities, and other associated costs
Distributed Solar (SMART)	Covers the cost of DOER's Solar Massachusetts Renewable Target (SMART) program to incentive the development of solar in Massachusetts
Long-Term Renewable Contract Adjustment	Covers the costs and contract remuneration for long-term renewable energy contracts (e.g., large-scale renewable generation, offshore wind procurements) and transmission service agreements
Renewable Energy	Provides funding to the Massachusetts Renewable Energy Trust Fund, administered by the Massachusetts Clean Energy Center, a quasi-public research and development agency, established at $0.00050/kWh pursuant to G.L. c. 25, § 20(a)
Residential Assistance Adjustment Factor	Covers the cost of the low-income discount rate and incremental expenses of the Residential Arrearage Management Program (i.e., debt management)