MASSACHUSETTS INTERAGENCY RATES WORKING GROUP

A Collaboration to Advance Near- and Long- Term Rate Designs that Align with the Commonwealth's Decarbonization Goals

LONG-TERM RATEMAKING DRAFT STUDY WORKSHOP

DG/DER – NOV 1

Executive Office of Energy and Environmental Affairs

MASSACHUSETTS CLEAN ENERGY CENTER®

DOER Massachusetts Department of Energy Resources

Office of the Attorney General Commonwealth of Massachusetts

AGENDA

I. Introduction & Overview (5 minutes)

II. Facilitated Discussion (45 minutes)

III. Debrief and Close (10 minutes)

IRWG OBJECTIVES

- **Near-Term Rates Strategy** to address barriers to near-term electrification through rate design offerings available before electric consumers receive advanced metering infrastructure (AMI) meters.
- **Long-Term Ratemaking Study** to present a vision and recommendations for advancing ratemaking mechanisms and rates for a decarbonized energy system and the associated technologies and capabilities available.
  - **Regulatory and ratemaking mechanisms** that:
    - incentivize least-cost distribution system upgrades as the Commonwealth seeks to achieve its Clean Energy and Climate Plan targets through 2050;
    - incentivize improved grid reliability, communication, and resiliency; and
    - promote DER and generation for decarbonization;
  - **Rates** that:
    - accommodate transportation and building electrification, in addition to new loads
    - provide appropriate price signals, including to effectuate load management; and
    - minimize or mitigate impacts on ratepayers, especially low- and moderate-income ratepayers.

PURPOSE OF LONG-TERM RATEMAKING STUDY

- **Rate Design**
  - Review of potential rate design options in Massachusetts with the deployment of advanced metering infrastructure (AMI)
- **Regulatory & Ratemaking Mechanisms**
  - Review of existing regulatory and ratemaking mechanisms in the Commonwealth, with attention to barriers to decarbonization and affordable electrification
- The Long-Term Ratemaking Study and the IRWG's accompanying recommendations will provide a vision for advancing ratemaking to achieve a decarbonized energy system.

STAKEHOLDER ENGAGEMENT OPPORTUNITIES

IRWG will release recommendations at the end of the year; please register for engagement opportunities at IRWG's website

OCTOBER

M	T	W	TH	F
	1	2	3	4
7	8	9	10	11
14 Indigenous Peoples Day	15	16	17	18
21	22	23	24	25
28 E3 Presentation of Draft Long-Term Ratemaking Study (LTRS)	29	30	31	

NOVEMBER

M	T	W	TH	F
				1 DG/DER Workshop (LTRS)
4	5 EDC/MLP/ Supplier Workshop (LTRS)	6	7 Consumer & Advocacy Workshop (LTRS)	8
11 Veterans Day	12	13 Synthesis Workshop (LTRS)	14	15 Public Comment Due on LTRS Deck
18	19	20	21	22
25	26	27	28 Thanksgiving Day	29

INTRODUCTION TO E3 PRESENTATION

- IRWG is requesting feedback on the **Long-Term Ratemaking Study Draft** presented by E3
- Feedback will inform the Long-Term Ratemaking Study prepared by E3
- The IRWG is hosting a workshop series to engage in dialogue with and between stakeholders on the draft Report
- **Written comments on the Long-Term Rate Strategy Draft Report are due by November 15, 2024 to give sufficient time for consideration and should be sent to Rates.WG@mass.gov**

Key research questions explored in this report

1. What are the anticipated drivers of electric system cost growth?
2. What is the range of rate options under "TVR" (time-varying rates), and what are best practices in designing TVR to reflect avoidable system costs?
3. How can TVR provide price signals to enable customer flexibility and efficient dispatch of distributed energy resources?
4. What are alternative regulatory approaches to traditional cost-of-service ratemaking that could supplement those already in place in the Commonwealth?
5. Could certain components of today's electricity rates be shifted to non-ratepayer cost recovery to better support decarbonization and affordability?

Key takeaways

- **TVR covers a range of different rate design strategies with an inherent tradeoff between complexity and ability to reflect system conditions**
- **To provide customers with economically efficient price signals, TVR should ideally reflect changes in avoidable system costs over time**
  - Customers should anticipate that TVR rates will be expected to evolve year-to-year as system costs change
- **Many jurisdictions have taken the approach of implementing simpler TOU rates as default, with more complex TOU designs and/or CPP as opt-in rate options**
  - Affordability impacts for low-income customers should be considered prior to any TVR rate rollout
  - For real-time pricing (RTP), near- to mid-term potential is for highly flexible customers and end uses, likely not whole-home RTP
- **A winter-peaking grid will have high costs during the coldest hours of the year. A key challenge will be maintaining affordable building electrification while providing efficient price signals**
  - Key roles for TVR, non-bypassable charges, alternative ratemaking (PBR), and changes to cost recovery
  - Also key roles for programs and technologies that reduce winter peak impacts such as building shell measures, ground-source heat pumps, networked geothermal systems, and nascent technologies like thermal storage

DISCUSSION QUESTIONS (KEY SLIDES FOLLOW)

AMI-Enabled Rate Design

- How will AMI-enabled rate designs (e.g., TOU blocks, critical peak pricing, demand charges, etc.) impact the incentives to adopt DER/DG?
- To what extent should time-varying rate designs be applied to distribution, transmission, and generation/supply components of residential customers' rates?
- How would AMI-enabled rate designs impact existing rate mechanisms (e.g., net metering) and programs (e.g., SMART, Clean Peak Standard, etc.)?
- What AMI data should be collected to inform future rate design?

Regulatory & Ratemaking Mechanisms

- How can alternative ratemaking mechanisms better align utility performance with policy goals? How can they incentivize key objectives such as DER and DG deployment?
  - Massachusetts has implemented advanced ratemaking mechanisms such as performance-based ratemaking, multi-year rate plans, performance incentive metrics, capital trackers, and revenue decoupling. How can these be modified or revisited?

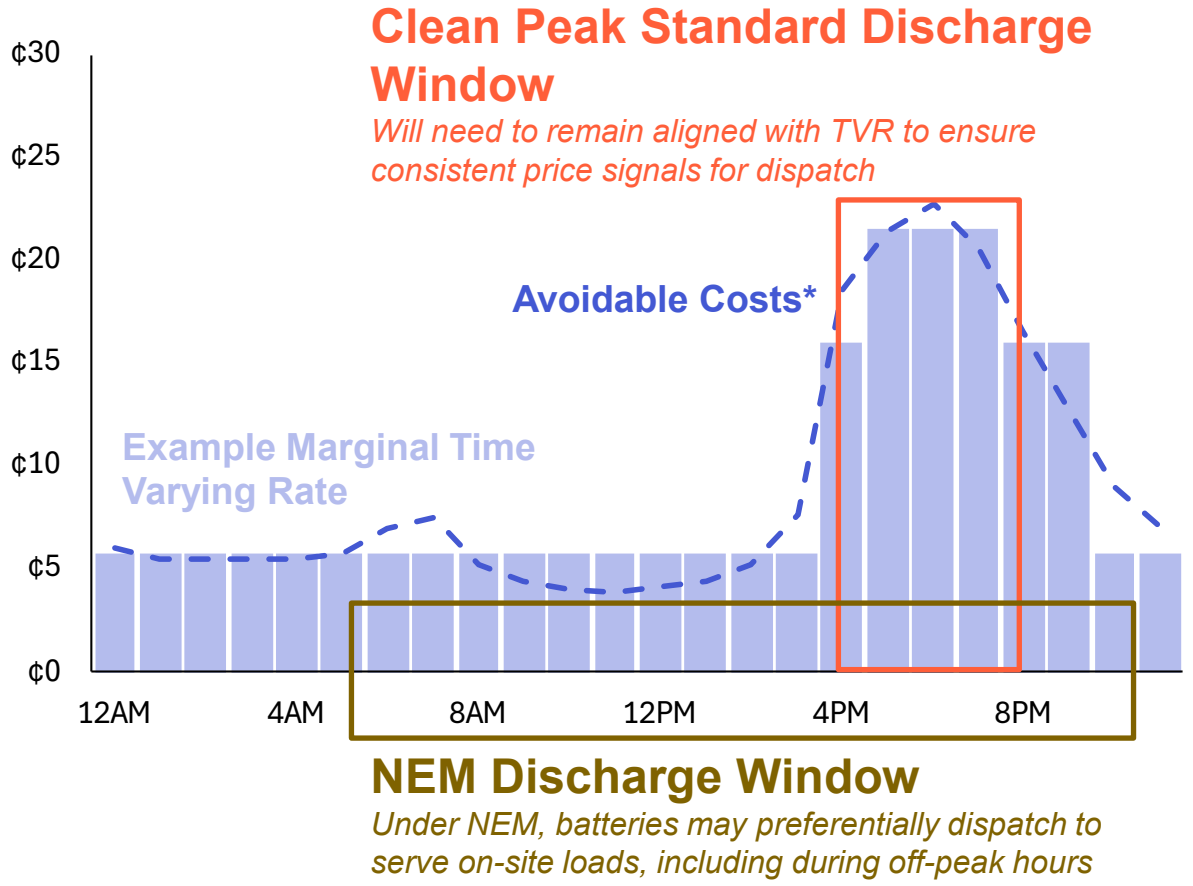
Future rate changes should trigger reevaluation of existing DER programs with overlapping goals

Programs and rates should work in unison to provide clear dispatch signals for distributed energy resources (DERs) such as batteries

- In the long run, the simplest price signals for DER dispatch would be symmetric import and export rates reflecting avoidable system costs, with a non-bypassable charge to reflect embedded system costs
- Today, rates and programs provide distinct signals to customers that can be difficult to navigate:
  - Net energy metering (NEM) encourages offsetting on-site loads due to only 60% of exported energy receiving NEM credits
  - The Clean Peak Energy Standard encourages charging and discharging during specified windows
  - ConnectedSolutions introduces calls during times of peak system stress, compensating batteries on a $/kW basis

Battery Dispatch Signals with Winter Avoidable Costs

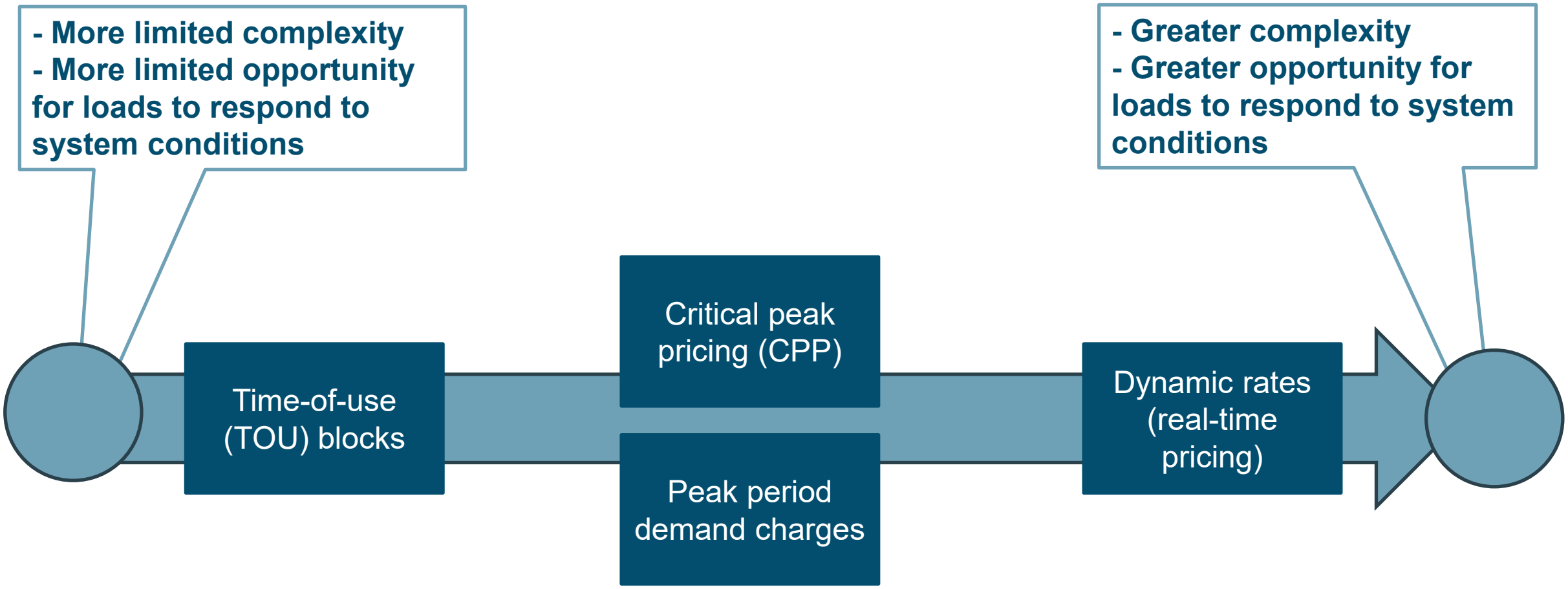
cents/kWh



- Combining rates and programs also risks compensating customers twice for the same system benefit

*Energy, generation capacity, and transmission capacity

Time-varying rate designs will have tradeoffs between complexity and opportunity for economic load response



Several regulatory reforms have been proposed that have the potential to better align utility and public interests

+ **Traditional cost of service model enables utilities to earn a fair rate of return on capital investments**
  - This does not provide a clear incentive for utilities to prioritize efficient capital spending to support energy affordability or pursue other policy goals including decarbonization and instead incentivizes greater capital investment
+ **Advanced ratemaking mechanisms seek to align utility performance with the public interest, including examples such as:**
  - **Performance-Based Ratemaking,** including Reporting Metrics, Scorecard Metrics, Performance Incentive Mechanisms, and Earnings Sharing Mechanisms. These entail utilities reporting to regulators on specified metrics related to goals such as decarbonization and customer service, with clear financial incentives to pursue these goals and share benefits with ratepayers
  - **Revenue Decoupling** ensures that utilities only recover approved revenue requirement; additional revenue generated through greater-than-expected sales is passed back to ratepayers
  - **Multi-year Rate Plans and Formula Rates** are alternatives to frequent utility rate cases, reducing the regulatory burden on utilities, boosting revenue certainty (and thus reducing borrowing costs), and creating an incentive to increase operational efficiency
+ **These approaches have important risks that must be considered, including:**
  - Risk that reducing scrutiny of utility expenditures may lead to higher costs for ratepayers
  - Risk that certain incentive elements may be “gamed” by the utility

THANK YOU!

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