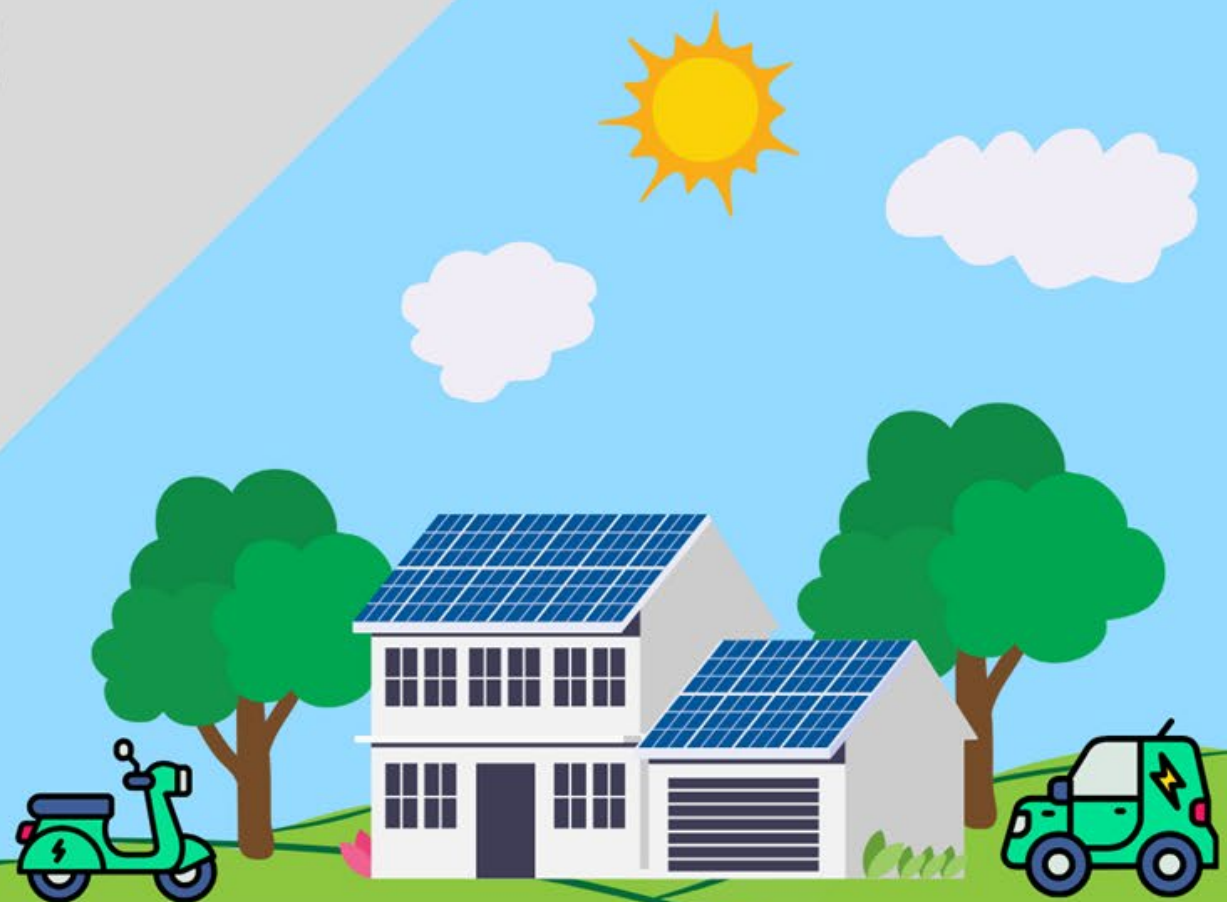


Transitioning to the Future Grid in MA Event Series

Event 3 | Mapping a Path Forward



Agenda

9-9:15 AM

Welcome and Introduction

Joe Curtatone, President, ACT
Alistair Pim, VP Innovation and Partnerships, ACT
Ben Downing, The Engine Accelerator

9:10-9:45 AM

Recommendations

Sarah Cullinan, Senior Program Director, Net Zero Grid, MassCEC

9:45-10:05AM

Keynote: MA DOER Perspective on Grid Policy

Commissioner Elizabeth Mahony, MA DOER

10:05-11:00AM

Table Discussion

11-11:15 AM

Break

11:15-12:15 PM

Fireside Chat

Melissa Lavinson, Executive Director, MA Office of Energy Transformation
Chair James Van Nostrand, MA DPU
Andrew Schneller, VP Network Strategy and Regulation, Nat. Grid
Digaunto Chatterjee, SVP Engineering, Eversource

12:15-12:30 PM

Wrap up and Next Steps

Sarah Cullinan

Senior Program Director, Net Zero Grid, MassCEC



Transition to the Future Grid: Draft Recommendations

Sarah Cullinan, Sr. Program Director, Net Zero Grid



Sept. 2024

Image Credit: DOE

Summary of the Event Series

The Challenge

The grid transition ahead is **uncharted**

Navigating the transition requires

- **new ways of thinking**
- **new processes**
- **new relationships**

The Objective

Develop strategies that lean into

- **Collaboration**
 - **Innovation**
- to help make the transition to a future grid **more efficient and effective**

Events

March: Brainstorming on the major transition challenges, as stakeholders experience them

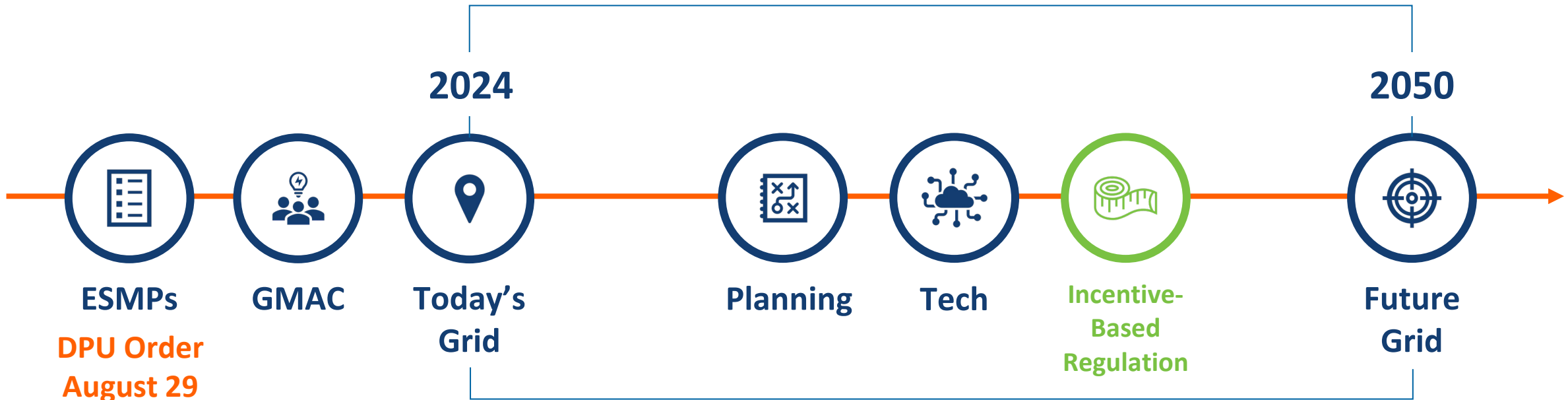
May: Knowledge-building and small group, solutions-based conversations

Today: Stakeholder recommendations & actionable next steps



Getting to the Future Grid: Recap

The future grid needs to be efficient, flexible, and democratized.



The only way to solve for these challenges is with new levels of collaboration and innovation.



Recommendations



Outline of Recommendations



**Incentive-Based
Regulation**



**Event Series
Takeaways**



ESMP Order Context

Recommendations

Rec. 1: Metrics Working Group

Rec. 2: Peak demand management targets



**Fostering the
Adoption of Gridtech**



**Event Series
Takeaways**



ESMP Order Context

Recommendations

Rec. 3: Develop sandbox program

Rec. 4: Develop gridtech look-book



**Democratizing Grid
Planning**



**Event Series
Takeaways**



ESMP Order Context

Recommendations

Rec. 5: Define critical engagement gaps

Rec. 6: Change management skills-building



Event Series Takeaways

- **Lack of alignment** of utility incentives with State goals is a key concern for stakeholders
- **Diverse objectives need to be reflected** so that the future grid works for everyone
- Reviewed tools & methods
- In the past, MA has failed to create **meaningful metrics and PIMs**
- **Work can be done outside of formal proceedings** to improve alignment and balance of outcomes

ESMP Order Context

DPU Balancing Act: Sufficient **certainty** to EDCs and investors & the obligation to **affordability**

Next steps: Investigate how **innovative approaches to cost recovery** can further climate mandates, and balance DPU priorities

But – That investigation will **require lengthy inquiry**

On the table: Cost-containment provisions, process for evaluating alternatives, mechanisms to encourage innovative approaches to minimize costs



Recommendation 1

Establish **Metrics Working Group** tasked with developing a **straw proposal for a set of grid performance metrics**

- Define objectives for the electric grid, and metrics for status of progress toward those objectives
- At least one metric for overall investment efficiency and/or one for cost efficiency
- Capable of being developed into PIMs, but not yet tied to incentives
- Goal: File Straw proposal with DPU





Recommendation 2

Part 1: Conduct an analysis to **determine reasonable quantitative targets for expected demand-side management** for each utility

- What do we mean by “efficient” grid? What is our expectation of the utilities?
- What amount of forecasted peak demand can be mitigated?

Part 2: Map **practical building blocks** needed to operationalize demand-side approaches, such as VPPs



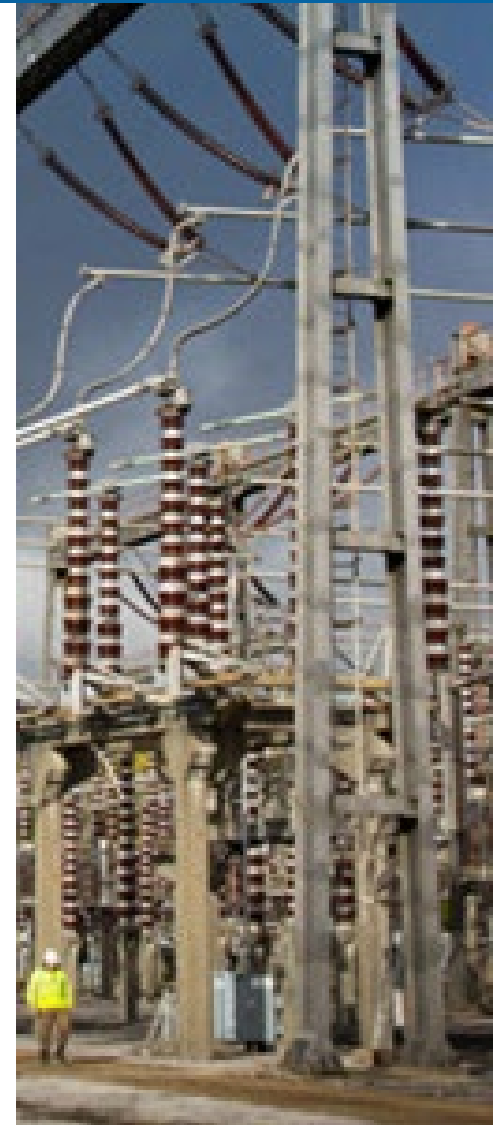


Event Series Takeaways

- **“Gridtech” is broad:** Dx & Tx, grid- and customer-facing, hardware and software, early-stage to fully commercialized
- All can **deliver ratepayer benefits**
- All face **barriers to adoption and scaling** in MA
- **Utility incentives contribute to barriers**, but **several others exist:** lack of access channels, “pilot-itis”, workforce capacity & change management at utilities, need for PUC buy-in
- Other jurisdictions have **models for deployment success**

ESMP Order Context

- DPU recognizes there is a role for **emerging technologies**, and preserves a level of flexibility in grid planning
- Utilities recognize the same: need for flexibility and ability to re-prioritize plans to **adapt to emerging and dynamic trends in technology**, among other things

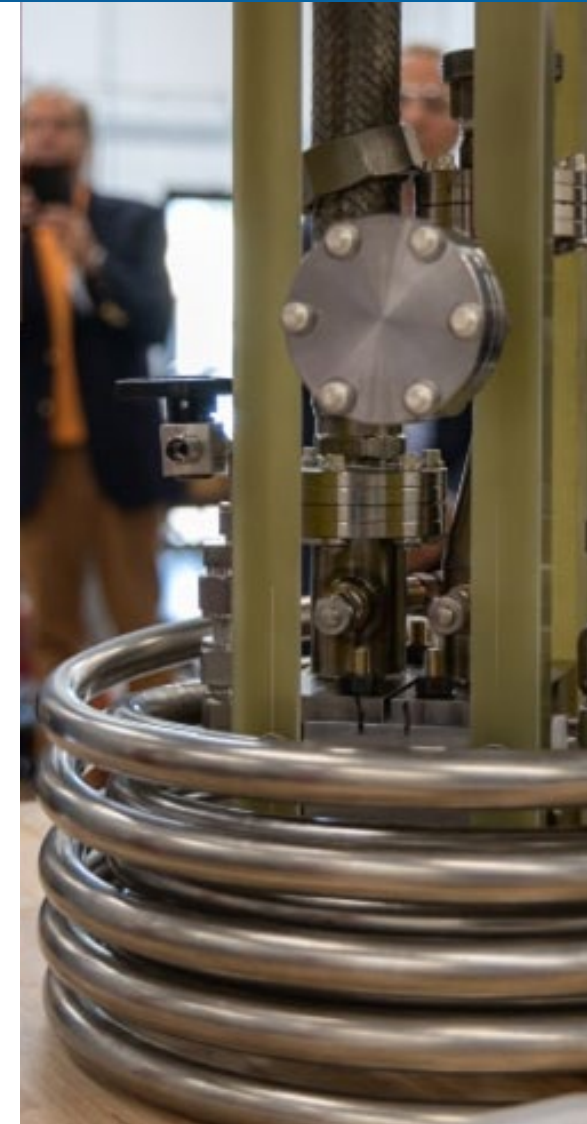




Recommendation 3

Develop a “sandbox” type program to support gridtech, with integrated DPU collaboration

- Can be paired with grant funding opportunities
- Form advisory group to help shape structure and offerings

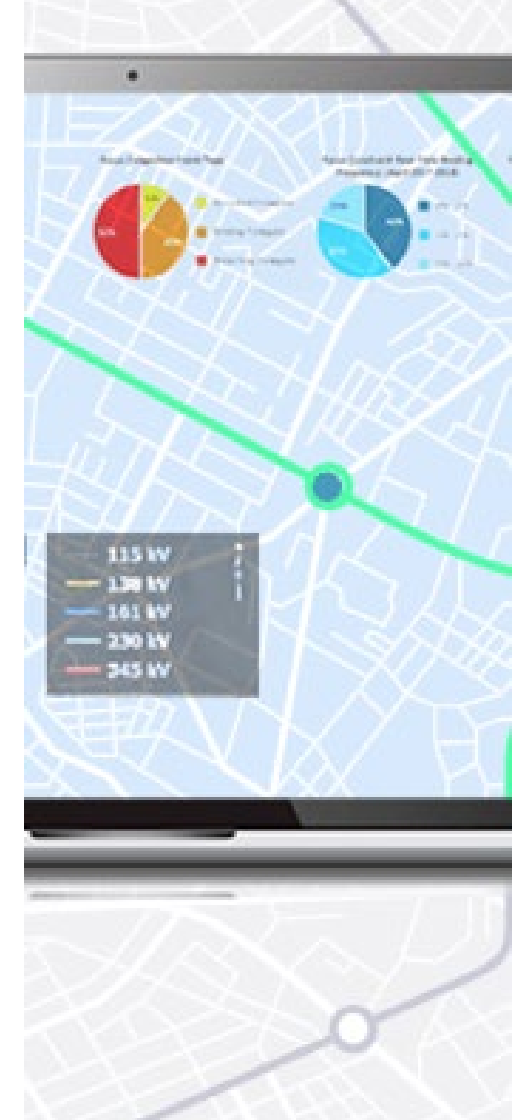




Recommendation 4

Develop a **look-book of gridtech case studies** from other jurisdictions of companies deploying solutions that we want to see on the Massachusetts grid

- Demonstrate what the path to adoption and scale looked like and how to translate that to Massachusetts
- Ideally, utilities and DPU would have a representative available for input, and to ensure it would be useful to them





Event Series Takeaways

- The GMAC was established in part to increase transparency and stakeholder engagement in the grid planning process
- The ESMPs help facilitate longer-term system planning
- Utilities are exploring new processes and adding resources to expand stakeholder reach
- Change management school of thought provides helpful frameworks and tools

ESMP Order Context

- **Demand forecasting** was identified by intervenors as a key area for more stakeholder involvement
- A **new process was proposed** for forecasting and needs assessment (“FNAP”), yet was not approved
- DPU finds that the 2022 Clean Energy Act did not “override typical electric distribution system planning” and that “**within substantial range, utility business decisions are matters for company management to determine**”
- DPU orders utilities to develop a long-term system planning process for DERs/DG, with the involvement of a broad group of stakeholders
- Community Engagement Stakeholder Advisory Group (CESAG) and a framework for equity were established



Recommendation 5

To address the **continued gap and critical need for meaningful and sufficiently broad stakeholder engagement in planning specifically, more coordinated exploration is needed** to define problem statements and solutions. Consider designing additional convenings or workshops to explore further.





Recommendation 6

Acknowledging the complexities introduced by adopting new processes and technologies (which often includes role, process, and system changes), encourage grid stakeholders to pursue **skills-building and acquisition of expertise in change management to support the transition.**



Questions



Incentive Based Regulation

Rec. 1: Metrics Working Group

Rec. 2: Peak demand management targets



Fostering the Adoption of Gridtech

Rec. 3: Develop “sandbox” program

Rec. 4: Develop gridtech “look-book”



Democratizing Grid Planning

Rec. 5: Define critical engagement gaps

Rec. 6: Change management skills-building

Across all Recommendations:

1. How well do the Recommendations capture key priority actions for the topic areas we focused on?
2. If you could add one more Recommendation, what would it be?

For each Recommendation:

1. By whom should the Recommendation be owned/advanced?
2. List any important implementation considerations.
3. What revisions, if any, would you make to the Recommendation?

Next Steps



Transition to the Future Grid: Next Steps

1



Today: Real-time discussion & feedback

In table groups, discuss recommendations and submit table feedback.

2



Tomorrow: Receive written recommendations via email

You'll receive these slides and a longer-form document soon after the event for your further review. We are open to more detailed thoughts through **October 11**.

3



By November 8: Receive final recommendations via email

We will digest feedback and update these draft recommendations and provide a final copy to attendees.

4



Ongoing: Follow the progress

Our objective in designing these recommendations was for them to be actionable. What will come of them in the wild?



Appendix: Transition to the Future Grid Event Series Summary



Incentive-Based Regulation

Tools & Best Practices (Cara Goldenberg, RMI)

History and Current Practice in MA (Sarah Cullinan, MassCEC)

Discussion focus: Goals & desired outcomes from our grid, ideating around PIMs



Fostering the Adoption of Gridtech

DOE Innovative Grid Deployment Liftoff Report (Ariel Horowitz, GDO)

CT Innovative Energy Solutions Program as Model (Josh Ryor, MA EEA)

Gridtech Spotlight Series

Discussion focus: gridtech applications and “sandbox” model for MA



Democratizing Grid Planning

New Approach to Fleet Load Planning (Collette Lamontagne, National Grid)

Change Management (Alison Magoon, MassCEC)

Discussion focus: information flow from grid users to planners, stakeholder mapping exercise