Massachusetts Grid Modernization Advisory Council

Meeting Presentation

June 26, 2025

GMAC

Grid Modernization Advisory Council

Agenda & Roll Call

Item	Time
Administrative Items • Welcome, Roll Call, Agenda • Public Comment Period • Meeting Minutes Review and Voting • GMAC Strategic Plan Update	1:00 – 1:20
Updates on ESMP Activities • ESMP Phase II Order • Energy Affordability, Independence, and Innovation Act (EAIIA)	1:20 – 1:40
Integrated Energy Planning Presentations • Regulatory Assistance Project (15 min) • EDC/LDC Joint Presentation (20 min)	1:40 – 2:15
Break	*2:15 – 2:20*
Integrated Energy Planning Presentations • Department of Energy Resources (15 min)	2:20 – 2:35
Facilitated Discussion	2:35 – 2:55
Close	2:55 – 3:00

Public Comment

- 15-minute period for public comment
- Speakers will have up to **3 minutes** to speak on any topics of interest related to the GMAC. Once everyone who has pre-registered has provided comment, others may speak, as time allows.
- Please state your name and affiliation before delivering your comment.

GMAC Minutes Review and Voting

Meeting Minutes

- Calling for vote to finalize:
  - May 29, 2025 GMAC minutes
  - June 5, 2025 Executive Committee minutes

Motion to approve the May 29th GMAC minutes [as distributed/as corrected]?

Motion to approve the June 5th ExCom minutes [as distributed/as corrected]?

GMAC 2026 Strategic Plan Update

Thank you to everyone who took the GMAC member survey and provided thoughtful responses!

GMAC Member Survey

- 15 GMAC members completed the survey
- Strategic Plan Scope: GMAC members generally want to focus strategic planning efforts on more detailed objectives for 2026 and draft a higher-level plan for 2027-2029.
- GMAC members are positive about continuing discussions, collaboration with EDCs, and staying up-to-date on ESMP developments and related activities.
- Many respondents emphasized the diversity of perspectives and expertise the GMAC offers
- DOER and Synapse will share detailed survey results with GMAC members

DOER plans to build upon topics brought up in survey in upcoming small group discussions

- Small group discussions will be scheduled for early August

September GMAC meeting will be used to guide the first draft of the GMAC 2026 Strategic Plan

Subsequent meetings will be used to finish the GMAC 2026 Strategic Plan

ESMP Activities Updates

1. **ESMP Phase II**
   - **Interim ESMP Mechanism: Order out** *(see slides 7-8)*
   - **Metrics and Reporting: Process continues**
2. **CESAG**
3. **IEP Working Group**
4. **LTSPP Working Group/Proposal**
5. **Other**
   1. **Energy Affordability, Independence, and Innovation Act (EAIIA)** *(see slide 9)*

Key Upcoming Dates	
CESAG meeting – communication strategy	**6/26**
ESMP Phase II metrics/reporting discovery closes	**6/25**
LTSPP proceeding (25-20) public hearing + public comments	**7/1**
CESAG meeting – Final framework	**7/10**
Additional intervenor comments on metrics/reporting	**7/16**
LTSPP (25-20) reply comments	**7/22**
IEP working group meeting	**7/24**
Petition to intervene in LTSPP proceeding (25-20)	**7/27**
Additional EDC reply comments on metrics/reporting	**7/30**
IEP Public Listening Session #1	**8/24**

**Stay up to date on ESMP activities via the Activity Tracker!*

Are there any updates on these items?

ESMP Phase II Order

- The DPU issued its Phase II ESMP Order on Friday, June 13th establishing an interim, annually reconciling cost recovery mechanism for ESMP investments.
- In this Order, the DPU stated that it endeavors to "maintain a delicate balance between continued progress toward grid modernization efforts and achievement of the Commonwealth's clean energy and **decarbonization goals** with **affordability** for ratepayers" (p. 2).
- Additionally, the DPU states that "grid modernization and resiliency planning must ultimately become a part of each company's **standard business practices**" (p. 2).
- The DPU disallowed cost recovery for more than half of the proposed ESMP investments.

Electric Company	Proposed Company Spending	Approved Company Spending	Denied Company Spending
Eversource	$336 Million	$144 Million	$192 Million
National Grid	2,153 Million	698 Million	1,455 Million
Unitil	51 Million	21 Million	30 Million

Summary of investments, Order p. 2

ESMP Phase II Order (Cont.)

Approved for Short-Term Recovery	Ineligible for Short-Term Recovery*
• Tech hardware upgrades for early fault detection and conservation voltage reduction • VPPs and DERs for grid services; clean energy customer portals • Platform investments to optimize infrastructure and serve customers • Resiliency upgrades: undergrounding, reconductoring, storm hardening • Integrated energy planning • CESAG implementation • Three National Grid EV highway charging substation projects	• National Grid and Unitil substation and distribution feeder projects • National grid private fiber expansion analog replacement projects • National Grid TVR billing engine National Grid medium- and heavy-duty fleet vehicles projects **Can be proposed through distribution rate cases.*

Consideration for GMAC

- DPU encourages DOER and the GMAC to explore the EDCs' resiliency considerations to inform the future CVRP and ESMP filings (p. 152).

Next Steps

- The next part of the Phase II ESMP proceeding is focused on long-term cost recovery.
- The EDCs are expected to provide initial comments on cost recovery via base distribution rates on 9/10/25. Intervenor comments are due 10/8/25.

Energy Affordability, Independence, and Innovation Act (EAIIA)

Governor Healy filed the EAIIA on May 13, 2025. If passed, many provisions of the Act would affect electric and gas utilities, including ESMPs and distribution system planning. These are summarized below.

Expansion of ESMP planning requirements (revised Section 92B)

Requires ESMPs to include (i) a load management plan that includes a variety of demand-side resource options, and (ii) a flexible interconnection program and alternative connection solutions that facilitate interconnection of DERs.

Requires a description of how the load management plan and flexible interconnection program will be integrated with other distributions system planning efforts to reduce costs and maximize benefits to ratepayers.

Comprehensive distribution planning required (new Section 92D)

Requires the DPU to establish a comprehensive distribution system planning and cost recovery framework by July 2028. To apply to all rate petitions after that.

- Encompassing ESMPs, base distribution rates, reconciling charges, and other proceedings deemed relevant.
- The framework shall seek to consolidate distribution system planning, consolidate the number of proceedings for EDCs to recover costs, optimize distribution investments, minimize costs to ratepayers, consider incentive mechanisms, prioritize base rates over reconciling charges, and maximize transparency and input.

Supplemental ESMP

Requires EDCs to file a supplemental ESMP within one year after the Act is enacted.

- The supplemental ESMP should address the new ESMP requirements in the Act.
- The EDCs shall consult with GMAC no later than 120 days before filing with the DPU

Expanded GMAC Role

Requires EDCs to (i) solicit input from GMAC on topics such as the new planning requirements, and (ii) respond to information and document requests from GMAC.

Additional Information: mass.gov/EAIIA

June 26, 2025

Opportunities for Integrating Electric and Gas Planning

Grid Modernization Advisory Council

Prepared for LBNL with funding from the U.S. Department of Energy

Ronny Sandoval, Managing Principal
rsandoval@raponline.org

Why Integrated Electric and Gas Planning?

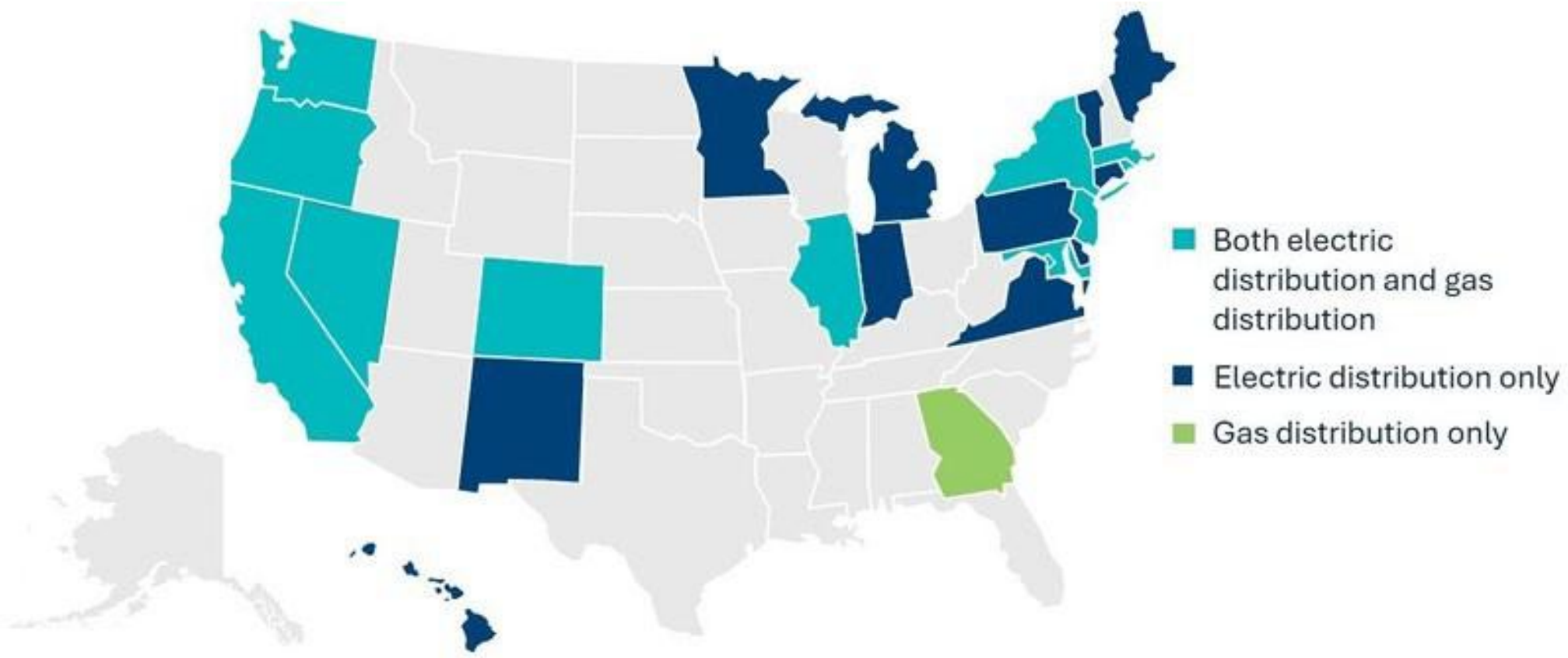
- Simultaneous impacts on electric and gas system from heating electrification makes the two systems linked in a way they have not been before
- Integration may deliver improvements compared to siloed processes
  - Lower costs and improved affordability
  - Better reliability
  - Greater confidence in utility investment decisions
  - Least-cost compliance with environmental and public health requirements
  - Streamlined administrative processes
  - More equitable allocation of costs across fuels and customers
- Some integrated capabilities can likely only be built on top of related electric and gas planning capabilities

Purpose and Structure of the Report

Our goal is to present a long-term vision for successful integration of electric and gas planning.

- Background on Electric and Gas Planning
- Benefits and Challenges of Integrated Electric and Gas Planning
- Characteristics and Indicators of Integrated Electric and Gas Planning
- Implementation Options

Jurisdictions with Electric and Gas Distribution Planning Requirements



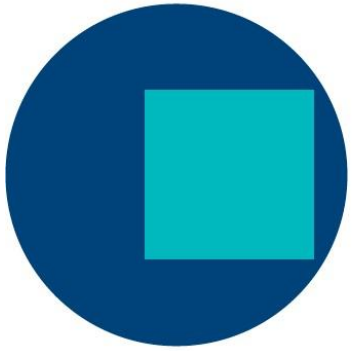
Source: Adapted from Schwartz et al. (2024) and Sandoval, Frick, and Deason. (2024)

Key Shared Features of Modern Utility System Planning

Feature	Description
Advanced forecasting and system modeling	Improved locational detail for load forecasting, customer technology adoption, and up-to-date system modeling using granular data are important to identify system needs correctly.
Disclosure of system needs and value	Well-defined needs and values are necessary to scope alternative solutions.
Improved solution acquisition practices	Traditional utility investments should be compared with programs, competitive procurements and improved customer pricing options.
Support for innovation	New system technologies and customer programs should be fully considered, including testing and scalable pilots.
Meaningful and equitable stakeholder participation	Establishing processes for open dialogue, transparent information sharing, collaboration and consensus-building among stakeholders.

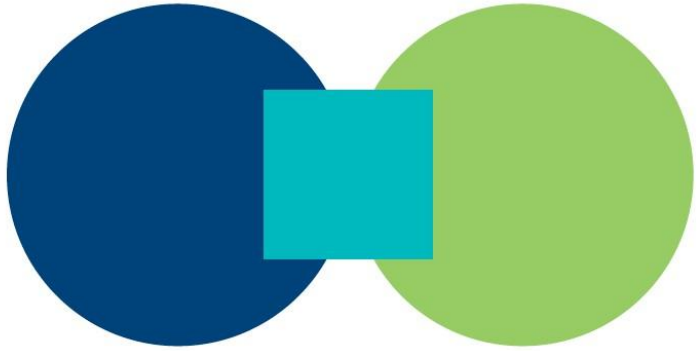
Service Territory Scenarios

Case A



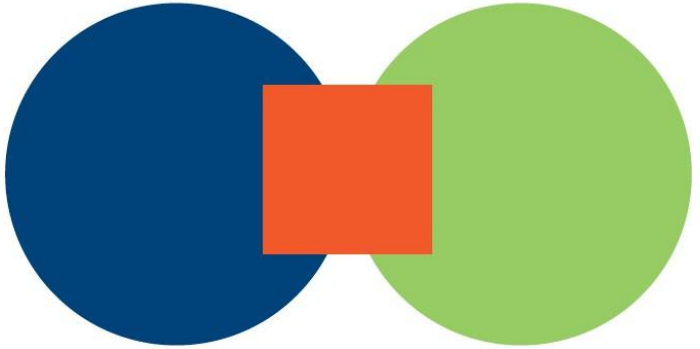
- Utility 1 owned electric service territory
- Utility 1 owned gas service territory

Case B



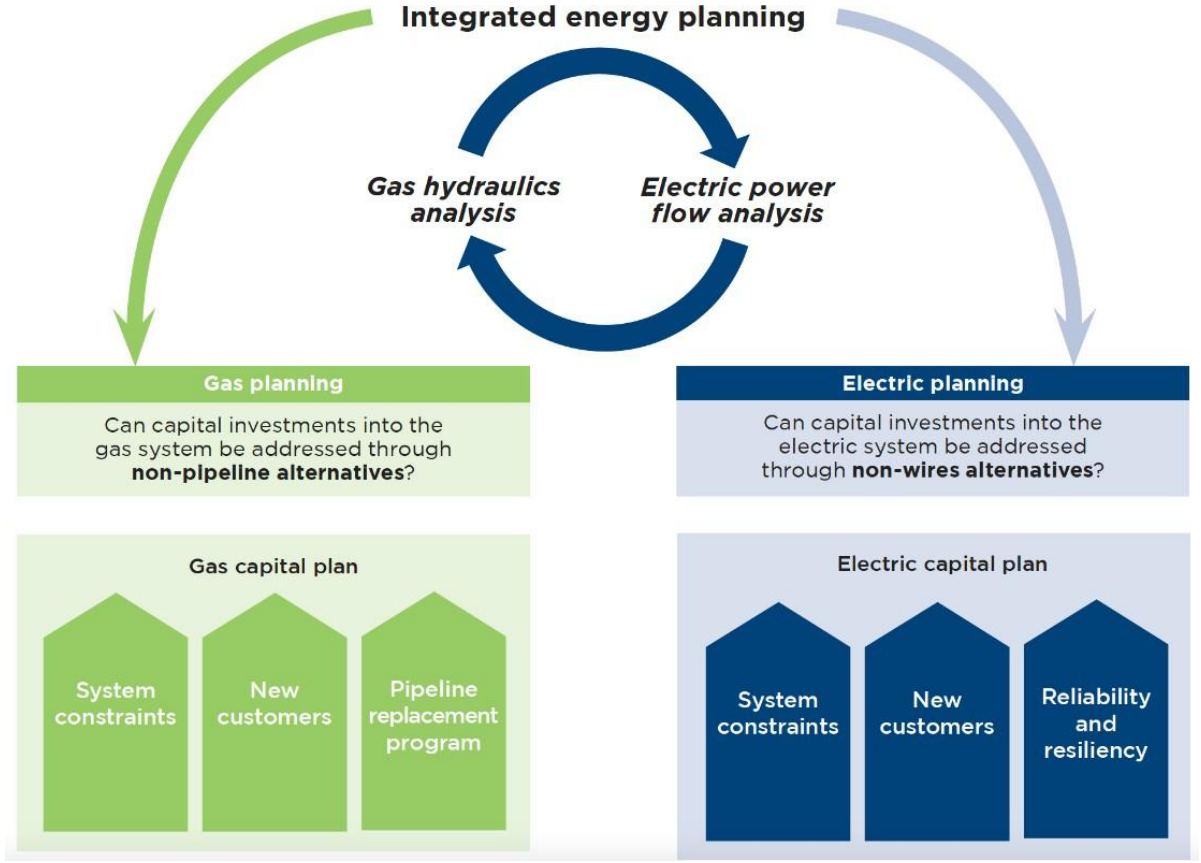
- Utility 1 owned electric service territory
- Utility 1 owned gas service territory
- Utility 2 owned electric service territory

Case C



- Utility 1 owned electric service territory
- Utility 2 owned electric service territory
- Utility 3 owned gas service territory

The Heart of Integrated Planning



Adapted from Eversource [Integrated Energy Planning presentation] to National Association of Regulatory Utility Commissioners Task Force on Natural Gas Resource Planning. June 26, 2024.

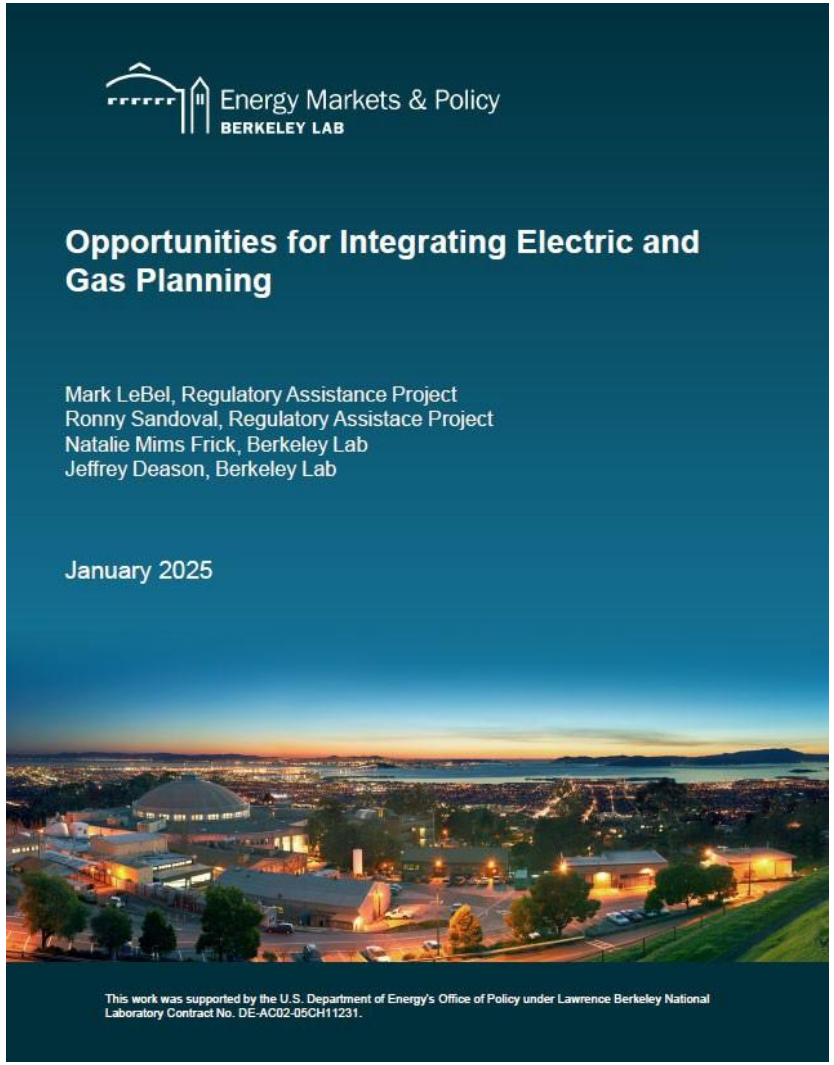
Sample Indicators of Progress on Electric / Gas Coordination

Table 4. Reformed Analytical Structure: Indicators and Benefits

Indicator	Benefit					
	Lower costs	Reliability	Greater confidence	Equitable cost allocation	Streamlined processes	Least-cost compliance with environment and health
Improved sequencing and coordination of utility filings	◑	◑	◑	◑	●	◑
Joint assessment of electric and gas system impacts and costs	●	●	●	◑	◔	◕

○ = None ◔ = Low ◑ = Moderate ◕ = High ● = Full

Questions



https://eta.lbl.gov/publications/opportunities-integrating-electric

About RAP

Regulatory Assistance Project (RAP)® is an independent, global NGO advancing policy innovation and thought leadership within the energy community.

Learn more about our work at raponline.org

Ronny Sandoval
rsandoval@raponline.org

Integrated Energy Planning

Presented on behalf of

EVERSOURCE

nationalgrid

Unitil

Agenda

- Regulatory Background of IEP
- The Motivation for IEP
- A Vision of IEP
- IEP and the ESMP
- Updates from the IEP Working Group

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Regulatory Background of IEP

Electric Sector Modernization Plan Objectives

The DPU approved the Companies plan to:

(1) convene a joint utility planning working group ("Joint Working Group");

(2) develop a comprehensive data exchange; and

(3) conduct electrification feasibility assessments

Each company to include status reports on the progress on the IEP processes in its biannual ESMP reports, including, but not limited to, updates on the Joint Working Group, data exchange, feasibility assessments, and targeted electrification projects.

Future of Gas DPU 20-80 Order Directives

- Non-Pipeline Alternatives Analysis
- Electrification Demonstration Projects
- NPA Framework and Stakeholder Working Group
- Climate Compliance Plans

GSEP Order Directives

- Revenue Cap Reduction
- Deferred Costs
- Carrying Charges
- NPA and Spending Allowances

Energy Burden Inquiry

- 24-15 Phase II issues, esp. LIDR eligibility and verification, enrollment, and outreach

Energy Efficiency

- Ongoing evolution of 3-Year Plan priorities, program scope and design, and affordability approach

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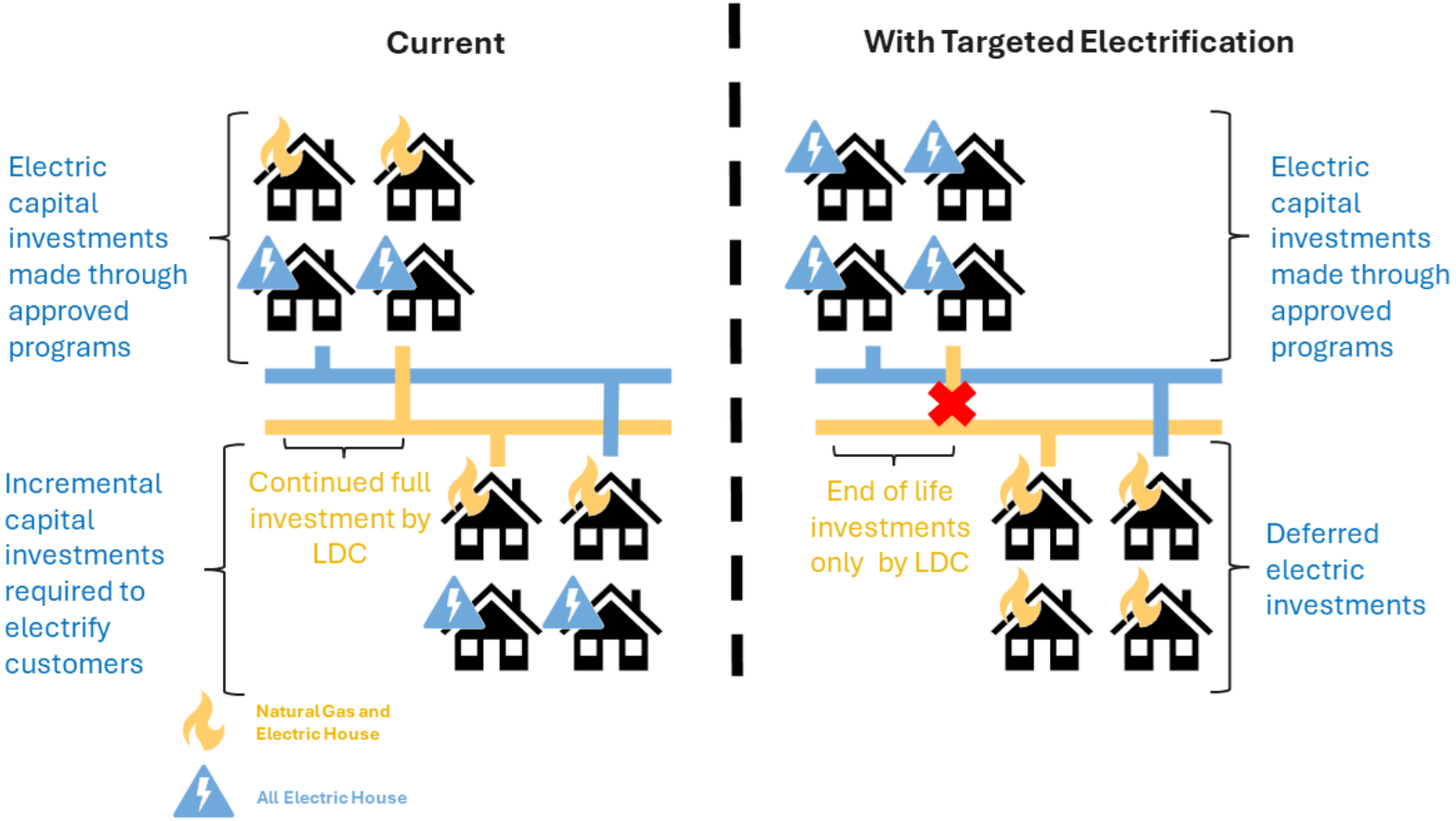
The Motivation Behind IEP

- Many current electrification efforts are carried out through electrification programs, which often prioritize **optimizing customer cost but not system cost.**
- As more and more customers transition this results in **dual infrastructure** which is becoming increasingly **expensive** to maintain.
- Integrated Energy Planning coordinates investment activities between **gas and electric systems as well as other electrification efforts.**



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A Vision of IEP

As the Commonwealth moves towards its electrification goals for heating and transportation, the energy utilities and other stakeholders recognize that this transition to electrification can be done more affordably if IEP allows three things to be planned in coordination to foster an orderly transition while maintaining safe and reliable service:

1. Targeted **customer adoption of electrification** in specific locations and timeframes;
2. **Electric system investments** to ensure sufficient capacity for electrification-driven load growth; and
3. Strategic **decommissioning of gas infrastructure**, including asset retirement, maintenance, and investment planning.

Such an orderly transition mitigates challenges such as spreading the costs of maintaining the current gas system across fewer and fewer customers over time, potentially burdening those customers during the transition and the cost of maintaining two networks.

The primary objective of IEP is to maintain safe and reliable service in a cost-effective manner while supporting the Commonwealth's ambitious decarbonization and energy efficiency goals, rather than directly pursuing greenhouse gas emissions, which are the focus of other programs.

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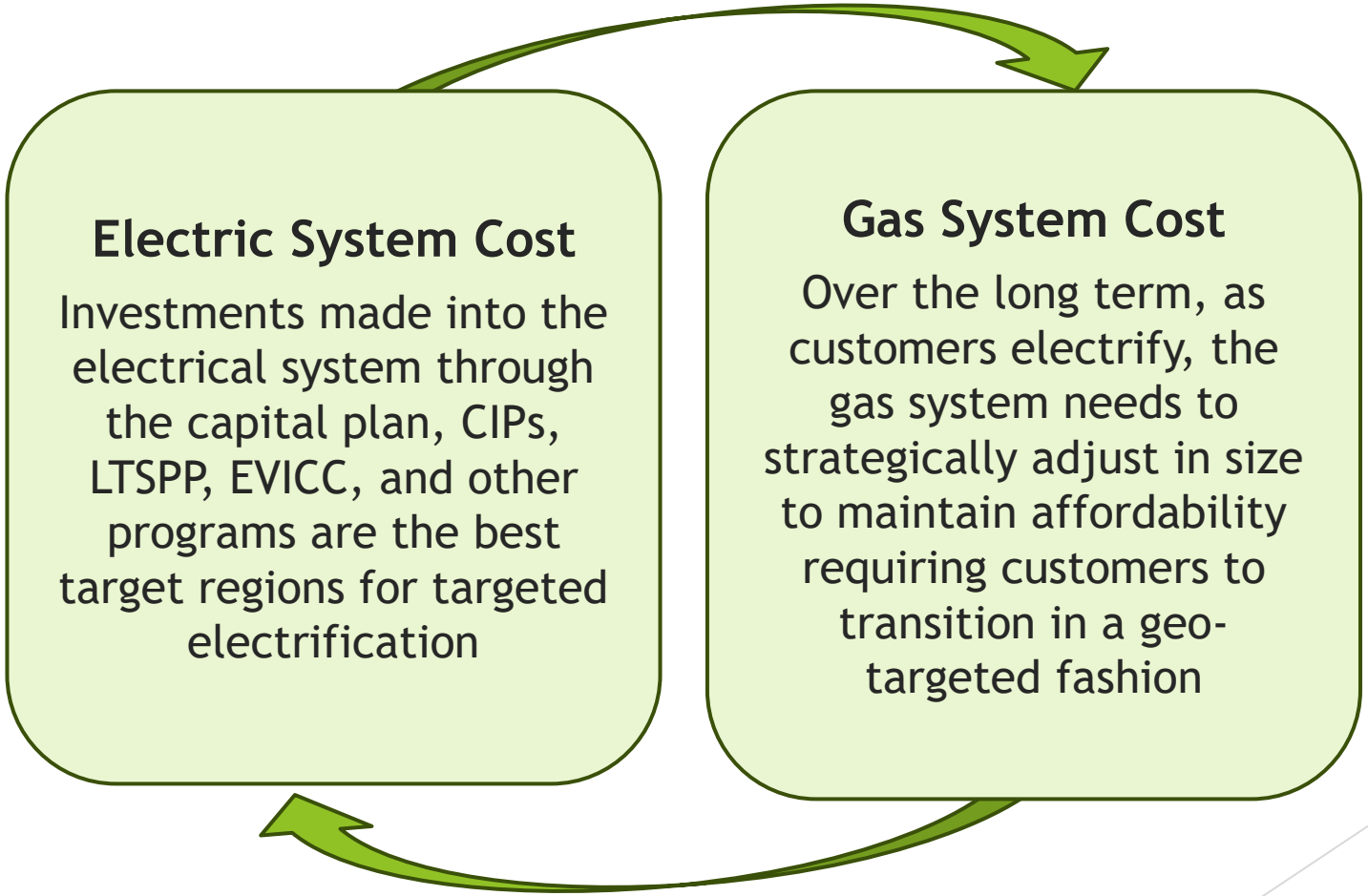
A Vision of IEP – Optimizing Investments

With integrated energy planning, the system costs can be balanced with the benefits gains from avoided costs.

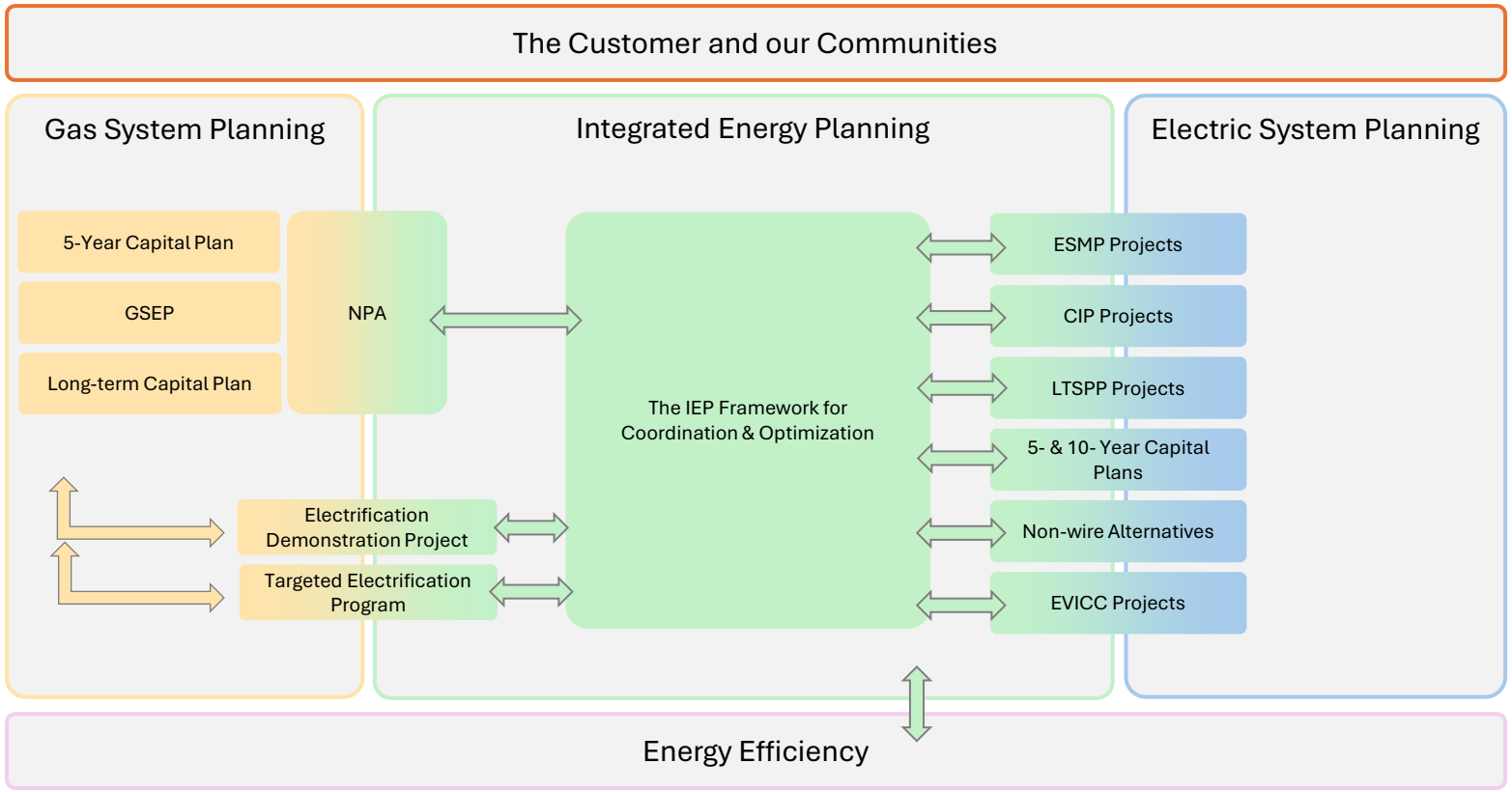
Without integrated energy planning for the gas and electric system investments, there is risk that the cost for customers on both systems could increase.



IEP and the ESMP

- An Integrated Energy Planning Process takes in gas and electric system information, expected capital projects, customer information, and available electrification funding.
- Through an Integrated Energy Planning Process, resources for targeted electrification will be focused in geographically confined areas in a cost optimized manner while ensuring safe and reliable system operations
- The resulting expected higher adoption propensity in targeted electrification regions will inform updated forecasts to the ESMP

Eversource's proposed IEP Framework*



Framework proposed in 2025 Climate Compliance Plan of Eversource Gas Company of Massachusetts d/b/a Eversource (D.P.U. 25-44/25-45)

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Key Opportunities for the IEP Working Group

Before the Companies can provide a definitive overview of what will be included in the next ESMP's Integrated Energy Planning Portion, key aspects which shape IEP to its core must be addressed

- Cost Allocation; How is cost of accelerated targeted electrification financed and who bears the cost while striving for affordability?
- Customer Choice; Customers retain the right to choose, and the Companies have an obligation to continue providing safe and reliable natural gas service to their existing customers in a manner that is affordable. IEP only works if customers are along for the ride. How can customers be brought along?
- Energy Efficiency; EE constitutes the bulk of electrification incentives in the state. What role and function does a future Energy Efficiency plan play in an effective IEP process?
- Affordability; How are increased costs to ratepayers from higher energy costs and potential rate impacts considered?

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IEP Working Group Objectives & Timeline

Over the course of 6+ months, the objectives of this Working Group are to (a) provide an overview of "current state" of electric and gas planning processes; (b) invite stakeholders to share and discuss their visions for IEP; and (c) sharpen the picture of the "future state" of IEP and the enablers that will allow it to flourish.

Meeting Date	Meeting Type	Topic
Thursday, May 29	IEP Stakeholder Session #1 (3hrs)	**IEP Guiding Principles** – provide an overview of current gas and electric planning, discuss the objectives for IEP, high-level future states, and enablers. Invitation to stakeholders to provide an overview of their vision of an IEP Plan.
Thursday, Jul 24	IEP Stakeholder Session #2 (3hrs)	**IEP in Action** – guest presenters will share real-world insights into how other regions (U.S. and abroad) are successfully implementing IEP. Topics may include customer choice models, adoption rates, and funding strategies. This will cover what worked, what didn't, and how we can use it.
Thursday, Aug 21	Public Listening Session (1 hr)	Readout of IEP Stakeholder Sessions 1 and 2
Thursday, Sep 18	IEP Stakeholder Session #3 (3hrs)	**Proposed Topic:** Continue iterations of future state and focus on IEP Enablers – Supporting Transitions While Protecting Ratepayer Affordability and System Integrity **[Topic to be finalized with feedback from stakeholders]**
Thursday, Nov 13	IEP Stakeholder Session #4 (3hrs)	**Proposed Topic:** Continue iterations of future state and incorporation into ESMP updates and 2029 filing **[Topic to be finalized with feedback from stakeholders]**
Thursday, Dec 11	Public Listening Session (1 hr)	Readout of IEP Stakeholder Sessions 3 and 4

Questions?

Break

Please be ready to start again in ~5 minutes

DOER Vision for Integrated Energy Planning

DOER seeks an IEP Framework, developed through coordination between Massachusetts' EDCs and LDCs, that:

- Enables the Commonwealth to achieve its required GHG limits and sublimits for heating and cooling, specifically a **49% reduction from 1990 levels for the building sector by 2030.**
- Uses a **methodical, geographically-targeted** approach for identifying the order in which areas of the gas system can be reliably and cost-effectively decommissioned.
- **Minimizes impacts to peak** demand and the need for costly electric system upgrades by incorporating networked geothermal, load management, and other NPA/NWA strategies.
- Proposes **regulatory and legislative interventions** needed to accelerate the gas-electric transition.

DOER Vision for Integrated Energy Planning Cont.

- **Influences existing planning processes** for building-decarbonization and grid investments (ex. 3-Year Plan, ESMPs).
- Enables collaboration with interested communities and **proactively engages and educates customers** located in optimal transition areas.
- **Prioritizes EJ communities** to provide health and safety benefits and ensure they are not left behind on the gas system.
- **Works with Massachusetts' MLPs** to overcome logistical and financial barriers to IEP in their territories.
- Is developed and implemented transparently and with continued **stakeholder input.**

Facilitated Discussion

Led by Councilors Kyle Murray and Alex Worsley

Discussion Questions

1. Does anyone have any clarification questions based on what was presented today?
2. What takeaways do you have from the presentations?
3. Which IEP issues discussed today are a priority for your organizations?
   - Are there IEP priorities for your organization that were not discussed today?
4. As organizations, how involved are you in gas planning proceedings compared to electric planning proceedings?
   - Are you planning on changing that level of involvement in the future?
5. Considering the overlap between CCPs and ESMPs
   - Should LDCs participate GMAC meetings and related activities?
   - Should the GMAC participate in or contribute to the CCP processes in any way?

Close and Next Steps

- The next EWG meeting is July 11th from 10 – 11:30 AM.
- The first GMAC stakeholder session is July 17th from 9 – 12:30 PM.
- The next GMAC meeting is July 31st from 1 – 3 PM. The meeting topic is equity.