

# TSC Meeting #4: Framework Follow-up

Non-Gas Pipeline Alternatives Stakeholder Process

February 11<sup>th</sup>, 2025



Energy+Environmental Economics



# Proposed Meeting Schedule

| # | Date                             | Topic  |
|---|----------------------------------|--|
| 1 | November 18 <sup>th</sup> , 2024 | <b>NPA project identification</b> <ul style="list-style-type: none"><li>• What makes a good NPA</li><li>• Project attributes including type, cost, and timeline</li></ul>  |
| 2 | December 17 <sup>th</sup> , 2024 | <b>Cost test pt. 1</b> <ul style="list-style-type: none"><li>• BCA framework, including discussion on benefit/cost categories</li></ul>  |
| 3 | January 22 <sup>nd</sup> , 2025  | <b>Framework follow-up</b> <ul style="list-style-type: none"><li>• Technical questions from the Working Group framework discussion</li></ul>   |
| 4 | February 11 <sup>th</sup> , 2025 | <b>Framework follow-up &amp; City of Somerville</b> <ul style="list-style-type: none"><li>• Walkthrough of remaining framework</li><li>• City of Somerville presentation on networked geothermal's feasibility in the city</li></ul> |
| 5 | February 25 <sup>th</sup> , 2025 | <b>Framework read out</b> <ul style="list-style-type: none"><li>• Read out of final framework</li><li>• Review how TSC feedback was leveraged in framework</li></ul>   |

# Goals of today's discussion

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1. Wrap up discussion of key steps of draft LDC framework
2. Walk through TSC written feedback on final steps
3. Learn from City of Somerville presentation on networked geothermal feasibility study



# Agenda

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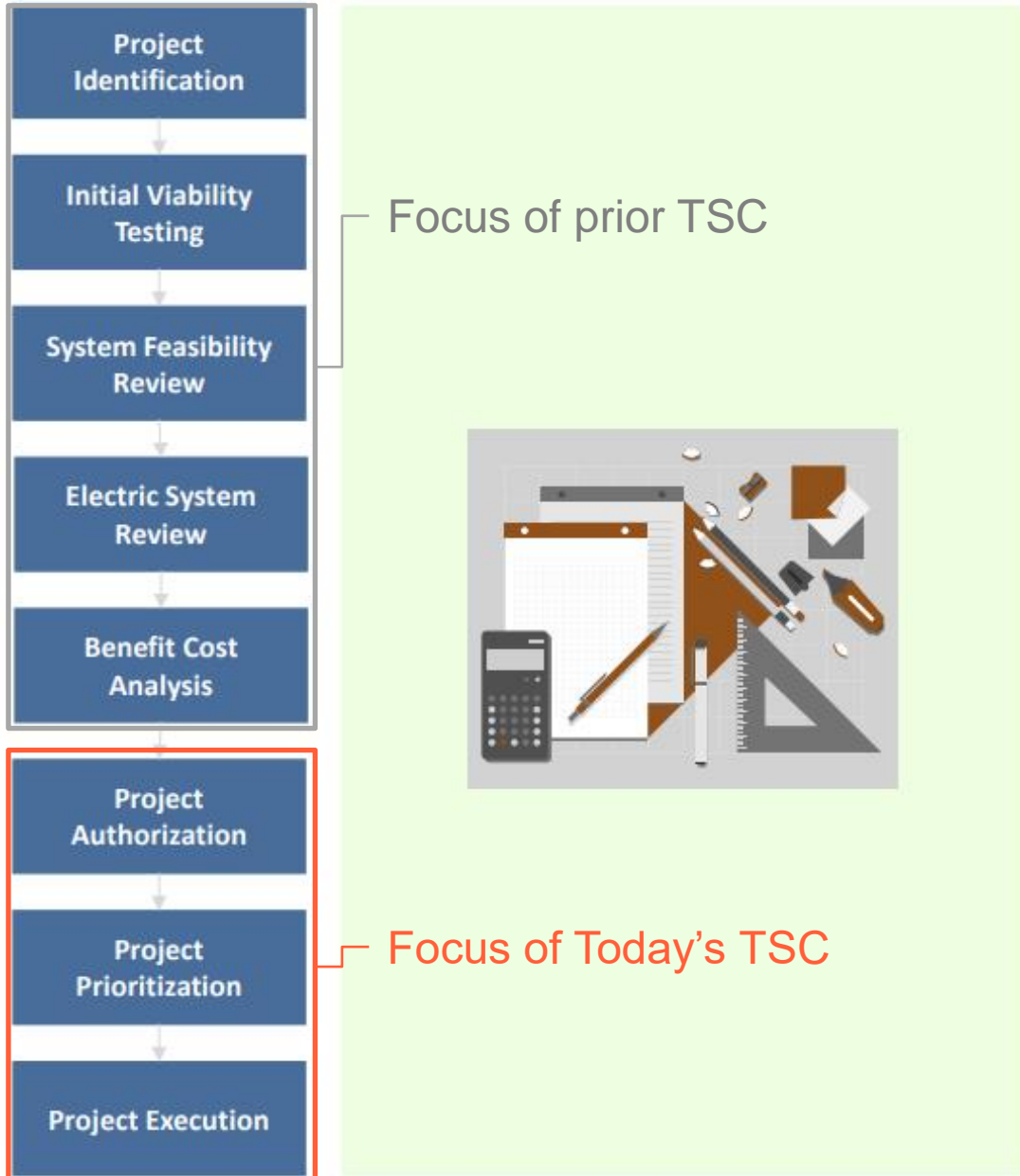
| Time        | Topic                                     |
|-------------|---|
| 11:00-11:05 | Welcome                                   |
| 11:05-12:10 | Continue discussion of LDC framework      |
| 12:10-12:50 | City of Somerville – Networked Geothermal |
| 12:50-1:00  | Wrap up and next steps                    |



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## **Draft LDC Framework Cont.**

# NPA Identification Process



- Defines the Step-by-Step process which the Companies will use to identify likely NPA Candidates
- Each step in the NPA Identification Process is accompanied with requirements the Companies must fulfill when reviewing their projects
- Ensures optimal use of resources by avoiding time and resource expenditures for projects that are not high likelihood candidates

# Overview of TSC feedback:

## Authorization – Customer education, Engagement and Commitment

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### + Project prioritization:

- Mix feedback on prioritization list, including order and use:
  - e.g., for early application, avoid the use of structure in favor of situational judgement.
  - e.g., avoided capital should be the primary prioritization, along with environmental justice communities and timeline constraints.
  - e.g., design prioritization for early projects to produce representative mix of high-potential NPA candidates.
  - e.g., avoid micro-optimizing for environmental justice at the project level and broaden the environmental justice perspective.
- Staff/utility resources should not constrain NPAs.

### + Project execution:

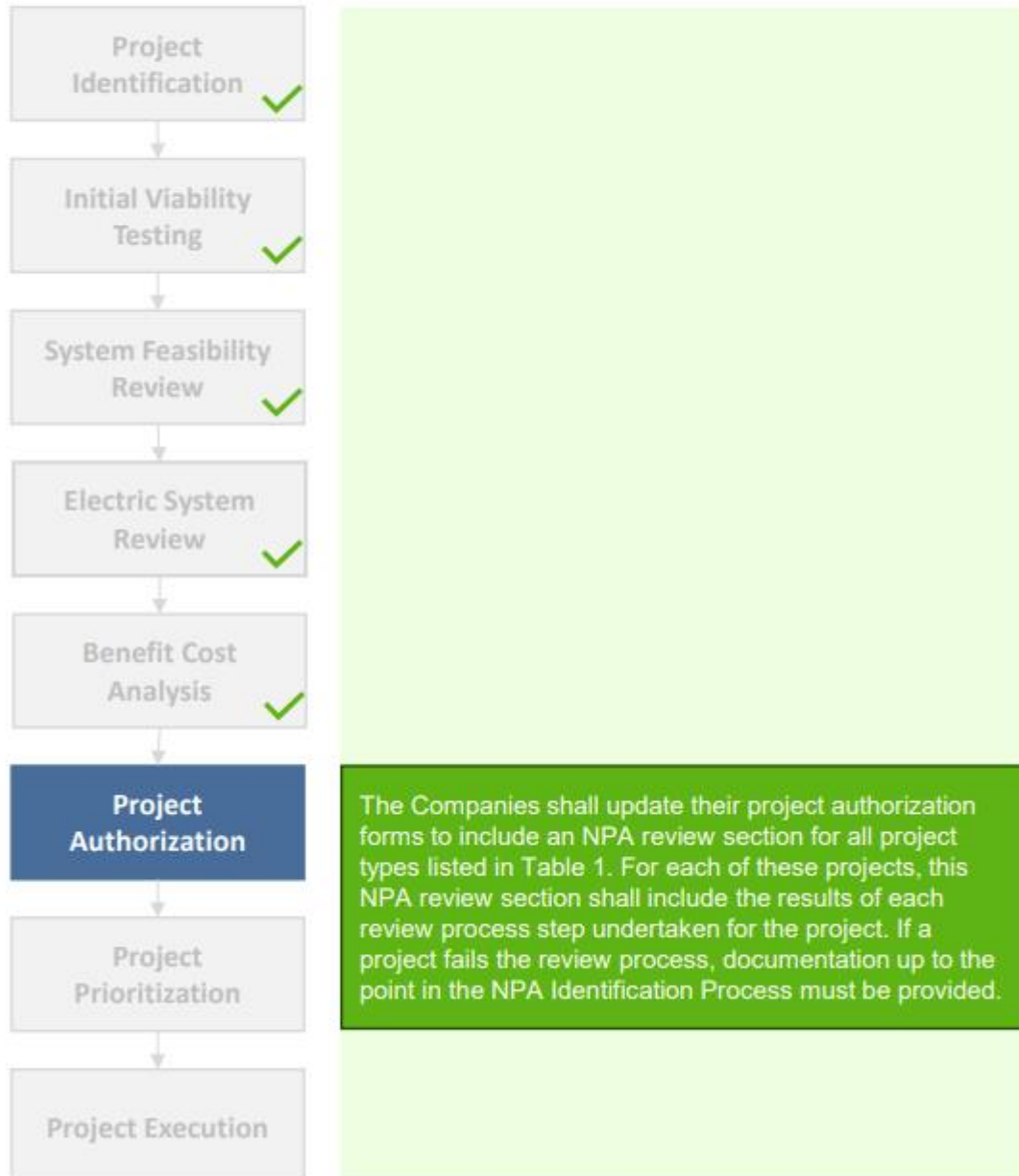
- Recommend including a “post-execution” reporting process.

### + Customer education, engagement and commitment:

- Request for clarity and more information.
  - Need for proactivity with customer education and community engagement.
  - Customer engagement timing should be included.
- Recommend customer education include additional context like the challenges facing the gas system, customer options, and how electric and gas rates are evolving.
- Flagged the limitations of an education-only approach for new customers/need for incentives.
- Concern that emphasizing customer choice without providing sufficient information, resources and guidance would risk customer inertia limiting NPA opportunities.



# Project Authorization



- All Companies have internal project authorization and approval processes which approve solution design and budget allocation to a specific project. These processes generally include a documented Project Authorization Form which outlines the need, impact of the need, the preferred solution, and all alternatives considered.
- The Companies will be updating these documentation and authorization process to include the NPA Identification Process and projects will only be able to proceed to implementation if they have provided sufficient evidence through the NPA Identification Process.



# Project Prioritization



If NPA projects must be prioritized for execution, the Companies shall prioritize the projects by and in the order of their impact to EJC's, avoided GHG emissions, and avoided gas capital. Prioritization will also consider project need and timing, ability to execute, customer needs, and other factors that may impact project success, such as the need to coordinate with state or municipal work.

If more NPAs are identified than can be reasonably implemented in a specific timeline the Companies shall consider prioritizing their NPA projects in this order:

- I. Projects in EJC's will be given highest priority.
- II. Projects will then be prioritized based on their net avoided GHG emission reductions.
- III. Projects will lastly be prioritized based on the amount of avoided capital on the LDC's system.

This prioritization ensures focus on NPA efforts in alignment with stated objectives and directives.

Prioritization should also take note of timeline needs, compliance obligations, state and municipal project coordination, and customer specific issues that may impact execution timeline

# Project Execution



# Customer Education, Engagement and Commitment



# Customer Education, Engagement and Commitment

New Customers



Existing Customers

The Companies shall engage all new gas customer requests with alternative options and require each customer to sign the "Customer Acknowledgement" form that they have been informed and have chosen to proceed with gas or an NPA solution.



- Each LDC has implemented a process to educate prospective customers about alternatives to natural gas.
- The LDCs requests these potential customers examine alternative options prior to agreeing to new natural gas service.
- Customers are required to sign a "Customer Acknowledgement" form, acknowledging their awareness of non-gas options available to them and their decision to move forward with natural gas before the LDCs will proceed with the installation of a new gas service or additional gas equipment.
- Residential single service and small commercial service requests:
  - Provided with the form describing non-gas options. LDCs may make information available via links to MassSave or a company web page
- Residential subdivisions and large commercial and industrial customers:
  - Provided with the form and the LDC will discuss project-specific alternatives with these customers.



# Customer Education, Engagement and Commitment

New Customers

Existing Customers

Each Company shall develop a Customer Engagement Framework informed through the targeted electrification pilots



- The success of implementing NPAs depends on customers exercising their choice to adopt an alternative energy option.
- LDCs have an obligation to provide safe and reliable service to their customers.
- The LDCs are committed to engaging with customers regarding the availability of NPAs which can avoid potential stranded investments while providing safe and reliable service to remaining customers at an affordable cost.
- Each LDC will develop a customer education, engagement and commitment process to ensure that customers have sufficient information available to make an informed decision to participate in the NPA project.
- Each LDC will work closely with its customer and energy efficiency teams to develop an engagement strategy which fits its customer base, geographic region and demographics best, while setting a specific priority on EJC's.
  - The LDCs intend to apply lessons learned from their upcoming Pilots to this process.
- LDCs expect to gain an understanding of customer reactions and concerns associated with full removal of natural gas service, as well as effective education strategies.

# Impacts to Project Implementation





# Impacts to Project Implementation

Non-Gas Customers

The Companies will only consider the natural gas customers within an NPA Service Area at time of project authorization.

Changes in Project Viability

- There will be customers, within a NPA Project area, that do not have natural gas service or have certain applications on delivered fuels.
- As part of an NPA, the LDCs will only consider these customers which are required to avoid the traditional gas investment.
- Incremental and project specific funding made available by the LDCs for an NPA Project will not be made available for non-gas applications.
- During the NPA implementation period, the LDCs would not be accepting new gas connections in the discrete NPA project area.



# Impacts to Project Implementation

Non-Gas Customers

Changes in Project  
Viability

The Companies may evaluate the NPA in the event of emergent situations or changes in customer participation. The Companies shall make all necessary investments to deal with emergent situations where applicable without impacting the prudence review of the NPA decision.



- Unpredictable circumstances:

- Emergent field conditions may force an LDC to make unplanned system investments
- The required level of electrification to avoid the gas capital investment cannot be met due to changes in customer commitment

| Circumstances           | Examples                                  | Cancellation Criteria   |
|-------------------------|---|---|
| Company/Asset Condition | Emergency gas pipe issue                  | Requires new asset investment negating the economics of the NPA/BCA                                       |
|                         | Estimated cost increases                  | Cost increases negates economics of the NPA/BCA   |
| Customer Participation  | Customer terminates their participation   | Entire NPA scope cannot be completed; Company may choose to offer remaining customers option to electrify |
|                         | New property owner refuses to participate |   |

# Framework Updating



# Framework Updates

## Updates

The Companies are required to update the NPA Framework at a minimum every 5-years and submit the updated version to the Department for review with each CCP filing. Specifically, the Companies shall provide updates on technologies and solutions which may act as NPAs, the BCA, and Community Engagement topics. The Companies shall solicit stakeholder feedback for each iteration it submits to the Department.

- Regular updates to the Framework as experiences are gained through the process.
- A specific update cycle will allow for consistency and the chance to make updates with lessons learned.



- The LDCs will provide an updated NPA Framework, if appropriate, through the CCP filing process.
- The LDCs will work with stakeholders to make updates.

# Summary of NPA Identification Requirements





# Summary of NPA Identification Requirements (1-7)

| Requirement Number | Requirement   |
|--------------------|---|
| 1                  | The Companies shall initiate the NPA Identification Process as defined in this NPA Framework for all projects identified as requiring such review.  |
| 2                  | The Companies shall review viable NPA candidates with the following NPA technologies and solutions, or combination of solutions, as defined in Table 2 and provide results of said evaluation.  |
| 3                  | All projects within the applicable programs will be run through an initial viability test to evaluate if projects are viable NPAs candidates.   |
| 4                  | For all projects which pass the Initial Viability Testing, the Companies shall produce a System Integrity Review. LDCs may also conduct a Customer Viability review following the Gas System Integrity review to gauge the likelihood that customers would be willing and able to electrify.  |
| 5                  | For all projects which pass the Gas System Integrity Review, the Companies shall work with the corresponding electric distribution system operators to attain a Step Zero Electric System Review.   |
| 6                  | For every project which passes the system feasibility review, the Companies shall request an Electric System Impact Assessment from the relevant electric distribution system operators. This electrification impact assessment shall include, at a minimum, cost and timing estimates for any required electric system upgrades.   |
| 7                  | For every project which passes the initial viability test and the Electric System Impact Assessment, the Companies shall furnish a BCA that includes one or more of the following tests as appropriate - a gas and electric rate impact measure (RIM), a participant cost test (PCT), and a total resource cost test (TRC). For the TRC, the Companies shall use the most currently approved TRC in the 3-year Energy Efficiency Plan with all applicable values. |



# Summary of NPA Identification Requirements (8-16)

| Requirement Number | Requirement  |
|--------------------|--|
| 8                  | The Companies shall consider all funding sources for any NPA undergoing BCA evaluation, including reallocation of funds from different value streams within the NPA, so long as it does not turn any BCA negative.   |
| 9                  | Companies will pursue a viable, cost-effective NPA with the BCA tests $\geq 1$ . If the Companies proceed with an NPA which has failed one or more of the BCA tests, the Companies shall document sufficient evidence in support of their decision to proceed.   |
| 10                 | The Companies shall update their project authorization forms to include an NPA review section for all project types listed in Table 1. For each of these projects, this NPA review section shall include the results of each review process step undertaken for the project. If a project fails the review process, documentation up to the point in the NPA Identification Process must be provided.                  |
| 11                 | If NPA projects must be prioritized for execution, the Companies shall prioritize the projects by and in the order of their impact to EJC's, avoided GHG emissions, and avoided gas capital. Prioritization will also consider project need and timing, ability to execute, customer needs, and other factors that may impact project success, such as the need to coordinate with state or municipal work.            |
| 12                 | The Companies shall engage all new gas customer requests with alternative options and require each customer to sign the "Customer Acknowledgement" form that they have been informed and have chosen to proceed with gas or an NPA solution.   |
| 13                 | Each Company shall develop a Customer Engagement Framework informed through the targeted electrification pilots  |
| 14                 | The Companies will only consider the natural gas customers within an NPA Service Area at time of project authorization.  |
| 15                 | The Companies may evaluate the NPA in the event of emergent situations or changes in customer participation. The Companies shall make all necessary investments to deal with emergent situations where applicable without impacting the prudency review of the NPA decision.   |
| 16                 | The Companies are required to update the NPA Framework at a minimum every 5-years and submit the updated version to the Department for review with each CCP filing. Specifically, the Companies shall provide updates on technologies and solutions which may act as NPAs, the BCA, and Community Engagement topics. The Companies shall solicit stakeholder feedback for each iteration it submits to the Department. |



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# **City of Somerville – Networked Geothermal**



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**Next Steps**

# Next steps and follow-up items

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- + Final framework read out and review of how LDCs responded to TSC feedback in final TSC session on Feb 25.
- + E3 to share meeting notes.
  - TSC members to provide written feedback via email within 1 week

# Thank You



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