

Non-Gas Pipeline Alternative Working Group

Working Group Meeting #1

October 16, 2024



Energy+Environmental Economics



Agenda

Time	Topic
10-10:30	Introductions, Ground Rules
10:30-11	Background, Working Group Purpose
11-11:30	NPA 101
11:30-12:15	Lunch
12:15-1:45	Gas System 101
1:45-2	Wrap Up, Next Steps



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Introductions

Introductions

Please share the following pieces of information:

- Name
- Organization
- Favorite fall activity or food



Names and Organizations

Acadia Center	Ben Butterworth
Arise for Social Justice	Rusty Polsgrove
Boston University	Elijah Ecolino
Boston University	Patricia Fabian
City of Fitchburg	Sam Squailia
City of Northampton Massachusetts	Benjamin Weil
Conservation Law Foundation	Priya Gandbhir
Energy New England, LLC.	Noel Chambers
Environmental Defense Fund	Jollette Westbrook
Environmental League of Massachusetts	Amy Boyd Rabin
Eversource - Electric Planning	Gerhard Walker
Green Energy Consumers Alliance	Carrie Katan
HEET	Zeyneb Magavi
Low-Income Energy Affordability Network (LEAN)	James P. Collins IV
Massachusetts Clean Energy Center	Meg Howard
Mayor of Lynn	Mayor of Lynn

City of Somerville	Christine Blais
NAIOP	Anastasia Daou
National Consumer Law Center	Jenifer Bosco
Office of Attorney General	Jessica Freedman
PowerOptions	Heather Tackle
Sierra Club	Sarah Krame
The Massachusetts Department of Energy Resources	Shevie Brown
USW	John Buonopane
Utility Workers Union of America and Brotherhood of Utility Worker Council	Daniel Leary
Worcester Business Development Corporation	Jason Kruckas
Berkshire Gas	Frank Maher
Eversource	Erin Engstrom
Liberty	Kristin Jardin or
	Miguel Rodriguez
National Grid	Amy Smith
Unitil	Rob Furino

Logistics and Ground Rules

20-80 NPA Stakeholder Website



Logistics

- + Materials will be posted to Working Group website (<https://npaworkinggroup.com/>)
- + Working Group members encouraged to attend in person but there will be a virtual option
- + Apex will facilitate the main Working Group, E3 will facilitate the Technical Subcommittee, with Efficiency for Everyone facilitating the Community Focus Group
- + Translation services are available if needed

Ground Rules

- + Chatham House Rules
 - Please no recording or screenshots
 - Do not attribute verbal comments as official comments outside of the meeting
- + One member from each org at the table, and no more than one additional support personnel or SME in the audience per org
- + Solution oriented intent and respect for other people's perspectives



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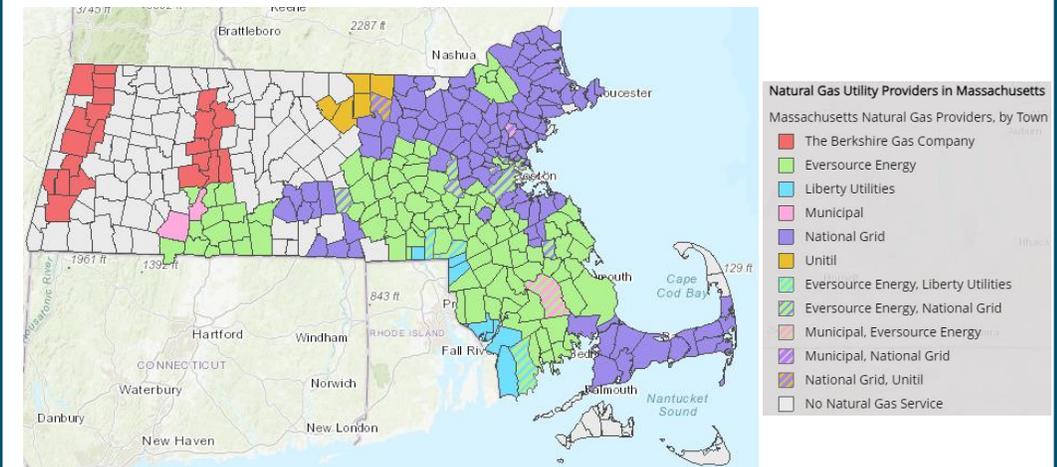


Background and Context

Context for Non-Gas Pipeline Alternatives in the Commonwealth of Massachusetts

- + DPU Order 20-80 examines the role of local distribution companies (LDCs) in helping the Commonwealth:
 - Avoiding stranded costs while achieving its climate goals.
- + NPAs could offer a unique opportunity to decarbonize buildings and capture savings on the gas distribution system, but key uncertainties remain:
 - Balancing investments in safe and reliable service
 - Developing workable and practical solutions
 - Refining site selection
 - Selecting the right data and aligning modeling capabilities
 - Incorporating environmental justice considerations
 - Considering customer affordability
 - Understanding customer and community priorities

Natural gas service territory by LDC



“Each LDC is distinct and has different capabilities and limitations within its own service territory.” -DPU

Order 20-80 At A Glance

Order issued on Dec 6th, 2023, with a focus on setting a path to decarbonize the gas system

Cost Recovery

In order to recover costs for any new distribution system investments, LDCs must demonstrate they first considered NPAs

Applicability

NPA evaluation is only applicable to all new infrastructure (no matter the reason) from date of Order, does not apply to projects already underway or to be initiated at the time of the order.

Types of NPAs

Non-pipeline alternatives could include electrification, networked geothermal, demand response, behavior change, market transformation, and targeted energy efficiency

Rejection Criteria

NPAs can be rejected if they are found to be “non-viable or cost prohibitive”

Stranded Assets

NPAs are to be considered in order to minimize the possibility of future stranded assets

What do the DPU 20-80 orders say about developing an NPA framework?

- + DPU's 20-80-B the Order states that gas utilities must consider NPAs for all projects that seek cost recovery under the initial NPA framework. The full NPA framework developed in collaboration with stakeholders may consider materiality screening.
- + The proposed NPA analysis framework must be consistent with DPU principles laid out in Order 20-80-B and 20-80-C:
 - Safeguarding ratepayer interests and maintaining affordability for customers;
 - Ensuring safe, reliable, and cost-effective natural gas service;
 - Ensuring compliance with state and federal laws and regulations;
 - Minimizing the burden on low- and moderate-income households as the transition proceeds; and
 - Facilitating a just workforce and energy infrastructure transition.
- + DPU Order does not specify evaluation criteria for LDCs to consider in the NPA analysis framework and states that “good faith engagement with stakeholders and consensus, where possible, will support a showing of reasonableness”*

*DPU 20-80-C at 27

Purpose of NPA Working Group

The goal of the NPA Working Group is to solicit input from a diverse set of stakeholders on the NPA framework and related considerations.



+ Working Group Objectives:

- Review LDC's NPA Phase 1 (interim approach) for development of a final framework
- Provide constructive feedback on key elements for inclusion in LDC's Phase 2 NPA framework
- The Working Group is **not** a forum to re-litigate 20-80 issues or issues from other cases

+ How feedback will be used:

- The LDCs will consider input and stakeholder feedback in the finalization of the NPA framework that will be filed with the DPU in April
- LDCs will be part of the Working Group so they can directly hear feedback and answer questions
- Working Group may offer input on the overall structure of the framework and the process flows

Focus of NPA Working Group

This working group will provide comments on the Utility decision-making process, what criteria are used, and how the decision tree is applied across different cases. Facilitator will gather and submit feedback.

Focus Areas

NPA Evaluation Criteria and Process

- Safety, Cost, Avoided infrastructure, timing, customer interaction, etc

Cost Effectiveness and BCA

- What benefits and Costs should be included

How the NPAs framework is applied by the LDCs

- Expedited vs. full review of potential investments
- Data and/or tools necessary to facilitate an NPA analysis

Customer and Community Integration

- Equity considerations being integrated into framework
- How customer participation/community interest is evaluated

Low Priority or Out-of-Scope Items

Gas System Policies and Programs

- Gas Supply procurement
Relitigating 20-80 or other cases
GSEP program's existence (*costs of avoiding GSEP in scope*)

Financial Mechanisms and Rates

- NPA Cost recovery
Utility PIMs
Customer Compensation

Safety and Reliability Standards

- What counts as a “leaky pipe”
- What projects are designated as needed to be completed for safety compliance

Development of the IEP process

- Changes to Electrical and gas planning standards

Roles of Working Group vs. Technical Sub-Committee vs. Community Focus Group

NPA Stakeholder Input Process

NPA Working Group

Technical Subcommittee

Community Focus Group

Public Engagement

+ Working Group (Today's Group)

- Group of expert stakeholders that will provide input on the LDC's NPA framework

+ Technical Subcommittee

- Group of SMEs that can offer expertise on technical issues related to the framework, respond to technical issues raised in the Working Group

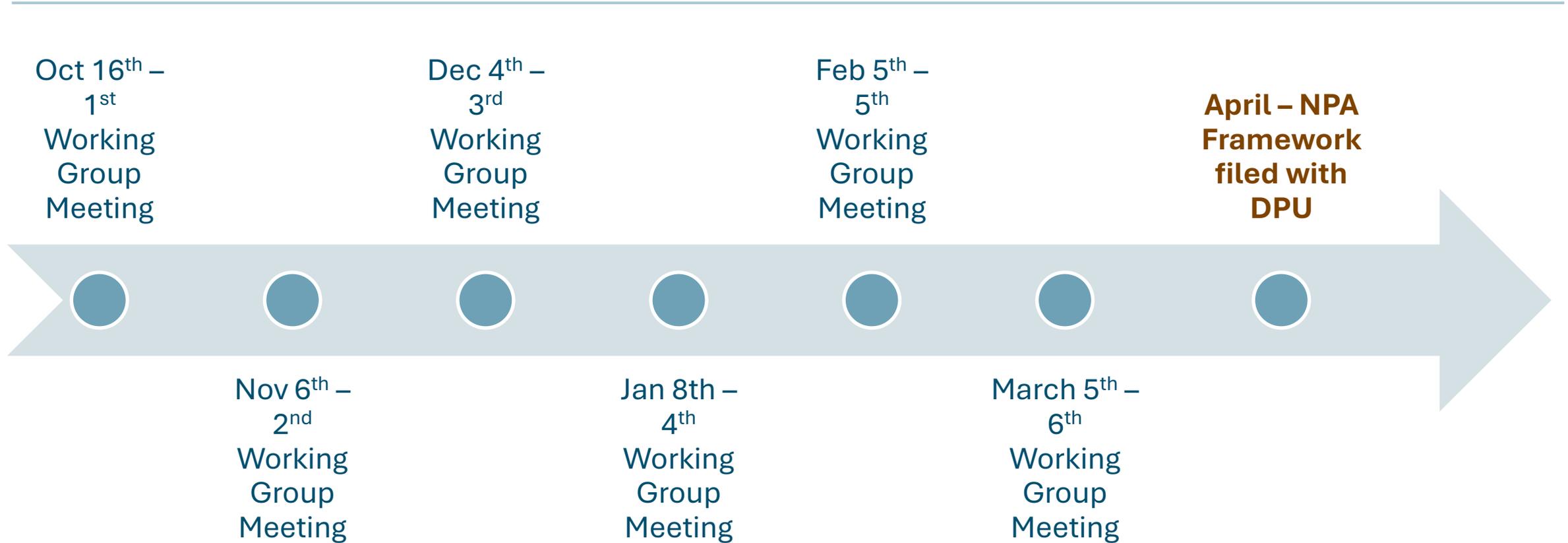
+ Community Focus Group

- This group will examine the potential impacts of NPAs on communities in Massachusetts, with an emphasis on historically overburdened and marginalized populations.

+ Public Engagement

- Public listening sessions, electronic public comment

Process Timeline



Future Meeting Topics: *NPA Initial Framework, NPA Criteria, NPA Opportunities, Case Studies*



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NPA 101: Introduction to NPAs

Typical Non-Pipeline Alternatives (NPA)

An NPA is a project that eliminates the need for a traditional infrastructure investment by employing a combination of demand and supply side resources.

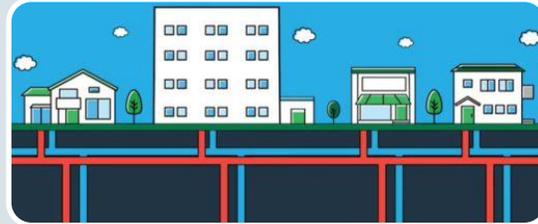
Demand Side Resources	New and Hybrid Infrastructure	Supply Side Resources*
Electrification	Hybrid Systems (<i>downsize vs eliminate</i>)	Localized Storage
Targeted heating electrification	Complex Hybrid Solutions for Large C&I, Multifamily buildings	LNG
Whole building electrification	Hybrid systems	CNG
Individual geothermal installations		
Energy Efficiency	Geothermal/Thermal Networks	Localized production
Increased gas heating equipment efficiency incentives	Networked geothermal loops	RNG
Building envelope energy efficiency		Electrolyzed hydrogen
Gas Demand Response	Other Fuels	
Direct load control/Interruptible tariffs	Tanked Propane	*As per the 20-80 Order, the Working Group will not be considering supply side resources
Behavioral	Biofuels	

20-80 Order Identified Different NPA Strategies*



Electrification

- Replacing gas appliances with electric appliances
- "Targeted electrification" allows for neighborhood-scale electrification and avoided gas infrastructure replacement costs



Thermal Network Systems

- Using shared infrastructure to deliver heating and cooling to customers, including networked geothermal and steam systems
- Feasibility of networked geothermal depends on site conditions (e.g., geology, building density, etc.)



Energy Efficiency & Demand Response

- Energy efficiency reduces heating energy consumption with weatherization, insulation, and more efficient appliances
- Demand response programs incentivizes reduced consumption during peak periods



Behavior Change & Market Transformation

- Rate designs and incentives for customers to conserve or shift energy consumption
- Workforce training and development will help transition the labor force from gas furnace/boilers to heat pump installations and accelerate electrification

*The set of NPA solutions to consider will evolve as available technologies mature

Types of Infrastructure Investments NPAs Can Replace

The primary infrastructure investments that NPAs can include:

1. Capacity Expansion

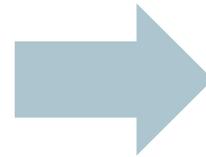
- Driven by a need for higher peak capacity, not a need to increase throughput

2. Pipe Replacement

- Done to address certain leak prone pipes

3. Line Extension

- Extending pipe to new accounts



NPAs typically address *localized* capacity and pipe quality concerns and are consequently administered only to specific areas

- An NPA must be administered either downstream of a constraint point or in the specific area where pipe replacement is needed
- NPAs are most likely to be cost-effective when targeted at avoiding infrastructure improvements within a specific local area.

NPA Proceedings in Other States

State	Status of NPA Proceedings (list not exhaustive) NPAs are similar to but distinct from electrification pilots or decommissioning efforts
California	<ul style="list-style-type: none"> In 2020, CPUC ruled that LDCs are required to evaluate NPAs for large, transmission-level investments and identified NPAs as a viable strategy to avoid repairing and replacing gas distribution infrastructure In 2024, Senate Bill 1221 was passed, requiring the CPUC to designate priority neighborhood decarbonization zones (incl. consideration of disadvantaged community presence), relieving the LDCs of their obligation to serve customers within a maximum of 30 pilot projects, and requiring LDCs to report foreseeable gas distribution pipeline replacements (<i>Electrification Pilot</i>)
Colorado	<ul style="list-style-type: none"> In 2021, CO PUC directed LDCs to evaluate NPAs in their Gas Infrastructure Plans (GIP) In 2024, CO PUC provided additional guidance, ordering PSCo to evaluate NPAs for all new business and all capacity expansion projects in future GIPs
Massachusetts	<ul style="list-style-type: none"> In 2024, MA DPU ordered LDCs to develop an NPA analysis framework that considers the costs and benefits with stakeholder input
New York	<ul style="list-style-type: none"> In a 2022 order, NY PSC required LDCs to include NPAs in a “no-infrastructure option” of their Long-Term Plans and to annually identify whether LPP could be replaced with NPAs, subject to a minimum project cost threshold In 2024, NY PSC developed a set of questions and requested stakeholder responses to guide its NPA framework development
Rhode Island	<ul style="list-style-type: none"> In 2020, RIPUC established a 3-year System Reliability Procurement Plan (SRP) reporting requirement for Rhode Island Energy, which then identified NPA suitability criteria and a planning process in its 2022 SRP In 2024, the LDC published a Decarbonization Framework – Gas Segment Decommissioning (<i>Not NPA framework</i>)

Key Questions



What are the **considerations** that need to be analyzed to facilitate an NPA analysis?



Which NPA **technologies** should be considered to defer or avoid gas projects?



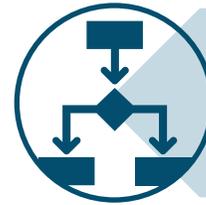
What utility **processes and timelines** need to consider to enable NPAs?



What **policy goals** can NPAs help achieve?



Should a **feasible** NPA be competitively bid to an open market?



How should NPAs be **evaluated**? What benefits and costs should be considered?



What approaches can **formalize equity** and EJ considerations in NPA planning?



How should utilities **communicate** NPA options with communities and customers?



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Gas System 101

Separate Deck



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Wrap Up and Next Steps

Next Steps

+ Next meeting will be November 6th

- 10:00 AM-2:00 PM at 75 State Street

+ Expected topics for next meeting

- Introduction of NPA framework
- Evaluation of projects and evaluated criteria of increases the likelihood of an NPA option
- Discussion of GSEP opportunities and projects to be evaluated

+ Technical Subcommittee

- Aggregate any topics that the Technical Subcommittee should address

+ Public listening session

- 1st public listening session will be in Nov (date TBD)
- Working group members are encouraged but not required to attend

+ Materials

- All of today's materials will be posted to the working group website (<https://npaworkinggroup.com/>)

Feedback from Today?

- Email us at:

npaworkinggroup@apexanalyticsllc.com

(We will assume internal/informal feedback; specify if you prefer public posting)

- Formal, Public Comment:

Submit written comments on

<https://npaworkinggroup.com/> through

contact us at bottom of page