

MASSACHUSETTS DEPARTMENT OF ENERGY RESOURCES

DOER Goals & Priorities for an NPA Framework

December 4, 2024

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Agenda

Commonwealth Climate Goals & NPA Framework

Priorities for NPA Framework to Succeed

Extended Planning Horizon

Proactive & Supportive Customer Engagement

Geographic Targeting to Minimize Stranded Costs

Lessons Learned to Apply in MA



Commonwealth Climate Goals & NPA Framework

Massachusetts' Clean Energy and Climate Plan (CECP) established the following emissions sub-limits for the building sector:

Sector	% Reduction from 1990			
	2020 (Actual)	2025	2030	2050
Residential Heating & Cooling	20%	29%	49%	95%
Commercial & Industrial Heating and Cooling	26%	35%	49%	92%

- "All scenarios modeled show declining consumption of pipeline gas. Thus, any capital costs and other fixed costs associated with the gas pipeline systems result in an increase in gas delivery price."
 (CECP for 2025 & 2030, P. 28)
- A robust NPA framework is an essential component of reducing natural gas consumption at least cost.
- The NPA framework must be designed to enable meaningful carbon emissions reductions while avoiding stranded investments in natural gas infrastructure.



DOER Priorities for NPA Framework to Succeed

- 1. Extended planning horizon: Successful deployment of NPAs depends on an extended horizon for capital investments.
 - A business-as-usual approach to capital investment planning is too short to allow for meaningful consideration or deployment of NPAs.
 - A longer timeline allows LDCs sufficient time to analyze and plan NPA projects and allows customers sufficient time to plan for transitioning to electric or other non-gas alternatives
- 2. Proactive and supportive customer engagement: Proactive and long-term engagement with customers is necessary to ensure successful deployment of NPAs.
 - LDCs should propose a plan for customer engagement that identifies trusted community partnerships and utilizes Mass Save[®] resources and other funding sources (GSEP, Federal Funds, etc.) to the maximum extent.
- **3. Geographic targeting to minimize stranded costs and advance Environmental Justice:** The NPA framework should include analysis of how geographic targeting NPA investments can minimize stranded costs. Geographic targeting should also consider benefits and burdens to Environmental Justice (EJ) communities.





Lessons Learned from Other Jurisdictions

NPA Working Group Meeting #3

December 4, 2024

Prepared for DOER by Synapse Energy Economics

NPA Requirements in Gas Planning Processes

NPA Requirements for:	New York	Colorado	California
General infrastructure planning processes	There are currently NO requirements for NPAs within general gas planning processes	NPA analysis required for all new business projects or capacity expansion projects, including BCA, employee impact, and certain geographic information	NPA analysis required for all projects >\$50 million
Future of gas planning processes	 Case 20-G-0131 2022 Gas Planning Order In 2022, LDCs were required to submit the following: NPA Screening and Suitability Criteria NPA Shareholder Incentive Mechanisms NPA Cost Recovery Procedures (Status: Commission issued a Notice Seeking Further Comments on NPAs by Oct 2024) 	Proceeding No. 21R-0449G Decision No. C22-0760 In addition to the NPA requirements for general projects, LDCs must include in their Clean Heat Plans a portfolio with "the maximum amount of clean heat resources practicable" (Gas Rules 4731(b)(I)(A))	Rulemaking 20-01-007 General Order 177 Track 2a of R20-01-007 will address and establish further NPA requirements (before ultimate statutory deadline in March 2027)

NPA Discussions Illustrate Different Approaches to Key Issues (1/2)

	New York	Colorado	California
Scope	NPA analysis required withing gas planning proceeding, but no analysis required outside of this proceeding	NPA analysis required for new business projects or capacity expansion projects meeting cost thresholds	NPA analysis required for new business projects or capacity expansion projects meeting cost thresholds
Screening	Gas planning process requires LDCs to file NPA screening criteria and suitability criteria, followed by cost recovery procedures and incentive mechanisms	Screening focused on developing a BCA with social cost of carbon and impact on employment; to be completed for specific/identified NPA projects	Screening includes environmental and health impacts
Stakeholder Engagement	Stakeholder engagement as part of the larger gas planning process	Limited stakeholder engagement in NPA evaluation	N/A
Implementation	Development of NPA framework within the gas planning process	Project specific, based on cost thresholds	Project specific, based on cost thresholds

NPA Discussions Illustrate Different Approaches to Key Issues (2/2)

	New York	Colorado	California
Screening Elements	 Screening and suitability criteria vary by LDC, examples include: Cost and time thresholds Number of customers impacted 'Critical' infrastructure 	 Required NPA analysis includes: BCA with social cost of carbon Technical feasibility Impact on employment Implementation strategy 	 Required NPA analysis for projects \$50M includes: Cost-effectiveness Cost savings on reliability over expected lifetime Projected construction and operating costs Environmental and health impacts
Geographic Considerations	None required	For all proposed infrastructure, LDCs must spatially report pipeline pressure zones, electric service provider at that site, and the locations of LI communities	The Commission's ESJ Action Plan requires LDCs to consider project impacts on EJ communities and minimize local air pollutants in these areas
Implementation	No implementation requirements; however, some LDCs have set annual targets for NPA identification	Project specific, LDCs must demonstrate consideration of NPAs for new business and capacity expansion projects	Project specific, LDCs must demonstrate consideration of NPAs for projects >\$50M

NPA Issues Raised in Other Proceedings

- NPA criteria: What are the characteristics of a gas infrastructure project that can be replaced by an NPA? How much time is required between identification of need and NPA implementation? How do criteria differ for different project types?
 - Leak prone pipe Suitable for NPAs given the high opportunity cost of pipe replacement; but given current LDC planning horizons, replacements that may need to be done quickly might not leave enough time for NPA implementation.
 - **Reliability upgrades/expansions** Can be addressed by load management NPAs such as energy efficiency, demand response, electrification but requires sufficient time for NPA evaluation, outreach, and implementation.
 - New customer connections Electrification as an alternative to gas connection. Tied up in discussions of lineextension subsidies and the obligation to serve.
- Targeted approach: Proactive NPA planning vs case-by-case in real time
- Stakeholder and customer outreach: When should outreach occur? What materials/resources/services are provided to customers?
- Benefit/Cost assessment of NPAs: How are the benefits and costs of NPAs measured and weighed compared with traditional investments
- Utility Incentives and Cost Recovery

Lessons Learned

1. Other jurisdictions have considered key NPA questions

• MA stakeholders should review the proceedings in other jurisdictions, consider the arguments, and evaluate if any considerations or resolutions are appropriate for the state

2. Inconsistent NPA evaluation methodologies

- Variability between LDCs on NPA and BCA treatment, within a state
- Lack of specificity and transparency about NPA evaluation criteria
- Need for monitoring and guidance from the commission as the NPA evaluation framework and process evolves

3. Incompatible planning horizons

- Advanced planning is critical for NPA evaluation and implementation
 - Current gas investment planning processes may not provide enough lead time for NPAs to be considered
 - As stated by the Colorado PUC in Order C22-0760 (Proceeding No. 21R-0449G): "The Commission requested feedback on the timing of alternatives, recognizing that NPAs in particular can take several years of lead time to mitigate growth and associated capacity expansion requirements. The Commission recognized that "the ideal timeframe to assess NPAs is approximately 3-5 years ahead of a planned infrastructure project"

4. Information asymmetry

• Detailed geographic information is restricted and not available to stakeholders, thus limiting their ability to identify geographic areas suitable for NPAs and ability to review the LDCs' NPA evaluation



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Thank You!