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I. Introduction

Environmental Defense Fund (“EDF”), Natural Resources Defense Council (“NRDC”), Sierra Club, Earthjustice, and Alliance for a Green Economy (“AGREE”) (collectively, “Joint Environmental Commenters”) respectfully submit this comment to the New York Public Service Commission (“NYPSC” or “Commission”) in response to the Notice Seeking Further Comments issued July 3, 2024, regarding the development of a comprehensive Non-Pipes Alternative (“NPA”) framework proposal. In order to reduce reliance on polluting natural gas, robust policies are needed both to pull end users towards cleaner alternatives *and* to push for methodical downsizing of the existing natural gas system. To satisfy both of these objectives, NPAs are valuable tools in the energy transition. An effective NPA framework can help ensure that near-term energy demand is satisfied while preventing overinvestment in natural gas infrastructure, reducing natural gas reliance, and contributing to New York State’s climate goals.

The determination by Department of Public Service Staff to seek further information from the local gas distribution companies (“LDCs”) and other stakeholders regarding approaches to robust NPA implementation is an important step forward, as the NPA screening and suitability criteria previously proposed by the LDCs in 2022 would inappropriately narrow the opportunities for consideration and pursuit of NPA solutions. The Commission and Staff should develop and finalize comprehensive statewide standards to ensure that all gas utilities implement robust NPA programs, as detailed herein.

II. Background

The Climate Leadership and Community Protection Act (“CLCPA”) directs the State of New York to reduce statewide greenhouse gas (“GHG”) emissions 40% by 2030 and 85% by

2050 (from 1990 levels) and to achieve economywide net zero emissions by 2050.¹ The CLCPA also requires the consideration of out-of-state GHGs associated with “the extraction and transmission of fossil fuels imported into the state,” and the consideration of methane emissions,² the primary component of natural gas, which causes 84 times as much global warming as the equivalent amount of carbon dioxide over a 20-year horizon.³

The CLCPA established the Climate Action Council and directed the development of a Scoping Plan with “recommendations for attaining the statewide greenhouse gas emissions limits,” including considering “[m]easures to achieve reductions in energy use in existing residential or commercial buildings.”⁴ The Scoping Plan, finalized in 2022, calls for a statewide transition off the gas system and expansion of the electric grid, noting the near-term need for “fossil natural gas use reductions statewide by at least 33% by 2030 and by 57% by 2035.”⁵ The Plan projects significant end-use gas decline “[a]s New York’s economy becomes more efficient and electrified . . . with reductions ranging from 84-94% by 2050.”⁶ The Scoping Plan provides detailed recommendations to facilitate reduced natural gas reliance including the following:

- “New York State will need to implement an ongoing effort to plan for and manage the strategic downsizing and decarbonization of the gas system as the transition to greater electrification proceeds. That ongoing effort should include identification of strategic opportunities to retire existing pipelines as demand declines and exploration of the safest, most reliable, resilient, and least expensive approaches for an orderly transition.” Scoping Plan at 351.

¹ Climate Leadership and Community Protection Act, 2019 N.Y. Laws 106, § 2 (“CLCPA”); N.Y. ECL § 75-0107(1), (11).

² N.Y. ECL § 75-0101(7), (13).

³ IPCC, *Climate Change 2021: The Physical Science Basis, Summary for Policymakers* at B.5 (2021).

⁴ CLCPA § 2; N.Y. ECL § 75-0103(11), (13).

⁵ NYS CLIMATE ACTION COUNCIL, *Scoping Plan* (Dec. 2022), at 350, <https://climate.ny.gov/-/media/project/climate/files/NYS-Climate-Action-Council-Final-Scoping-Plan-2022.pdf> [hereinafter Scoping Plan].

⁶ Scoping Plan, Appendix G, at 24.

- “An emphasis and focus needs to be placed on permanent load reduction measures that can significantly reduce fossil natural gas usage and demand in the short term, while also providing benefits for the end users if and when buildings are electrified in the mid- to long-term.” *Id.* at 355.
- The Commission should implement “greater scrutiny of investments in infrastructure that will be necessary to maintain reliability and safety for remaining customers of the existing gas delivery system, to ensure they do not result in stranded assets and make it more expensive to decarbonize the gas system.” *Id.* at 362.

The Commission has taken actions to align its oversight of gas utilities with state climate objectives. The Commission instituted a gas planning proceeding in 2020, stating that gas utilities need to “meet current customer needs and expectations in a transparent and equitable way while minimizing infrastructure investments and maintaining safe and reliable service,” and that “planning must be conducted in a manner consistent with the [CLCPA].”⁷ In May 2022, the Commission adopted a long-term planning process for New York gas utilities.⁸ That order required utilities to submit proposals for non-pipeline alternative (“NPA”) screening and suitability criteria, NPA cost recovery procedures, and an NPA incentive mechanism,⁹ which the LDCs timely filed in August 2022.¹⁰ To date, the Commission has not acted on the utility proposals, and in July 2024 it issued the Notice Seeking Further Comments (to which this comment responds).¹¹ Meanwhile, utilities have incorporated¹¹ their August 2022 NPA proposals

⁷ *Proceeding on the Motion of the Commission in Regard to Gas Planning Procedures*, Case 20-G-0131, Order Instituting Proceeding at 2-3 (Mar. 19, 2020).

⁸ *Proceeding on the Motion of the Commission in Regard to Gas Planning Procedures*, Case 20-G-0131, Order Adopting Gas System Planning Process (May 12, 2022) [hereinafter “Gas Planning Order”].

⁹ *Id.* at 65-66

¹⁰ *Proceeding on the Motion of the Commission in Regard to Gas Planning Procedures*, Case 20-G-0131, Joint Local Distribution Companies’ Proposals for Non-Pipe Alternative Incentive Mechanism and Cost Recovery Procedures (Aug. 10, 2022).

¹¹ *Proceeding on Motion of the Commission in Regard to Gas Planning Procedures*, Case 20-G-0131, Notice Seeking Further Comments (July 3, 2024).

into their long-term plans to varying extents,¹² despite public comments recommending necessary improvements to ensure broad NPA adoption.¹³

In July 2024, the Commission issued a Department of Public Service Staff Straw Proposal Regarding Modification of 16 NYCRR Part 230, which proposes to eliminate certain financial incentives that facilitate growth of the gas system. The Straw Proposal discusses the importance of halting gas system expansion and driving potential new customers to other energy choices—both in order to achieve statewide climate goals and to reduce the risk of stranded assets “that follows indirectly from the CLCPA’s emission-reduction mandate.”¹⁴ The Straw Proposal, in conjunction with the Gas Planning Order and the Notice Seeking Further Comments on NPA frameworks at issue here, affirm to stakeholders the Commission’s understanding of the need to reduce reliance on the natural gas system.

III. Discussion

NPAs are projects designed to meet energy demand that was historically met with natural gas, without advancing expensive, climate-warming, and long-lived gas infrastructure projects. NPAs can focus on reducing demand for natural gas, including through targeted electrification to enable downsizing segments of the gas system, or ensuring strategic supply.

¹² See, e.g., *In the Matter of a Review of the Long-Term Gas System Plan of Nat’l Fuel Gas Dist. Corp.*, Case 22-G-0610, NFG Final Long-Term Plan at 85 (July 17, 2023); *In the Matter of a Review of the Long-Term Gas System Plans of Consolidated Edison Co. of New York, Inc. & Orange & Rockland Utilities, Inc.*, Case 23-G-0147, Final Gas System Long-Term Plan at 33 (Nov. 29, 2023); *In the Matter of a Review of the Long-Term Gas System Plans of The Brooklyn Union Gas Co. d/b/a Nat’l Grid NY, KeySpan Gas East Corp. d/b/a Nat’l Grid, & Niagara Mohawk Power Corp. d/b/a Nat’l Grid*, Case 24-G-0248, Initial Gas System Long-Term Plan at 79 (May 31, 2024).

¹³ *Proceeding on Motion of the Commission in Regard to Gas Planning Procedures*, Case 20-G-0131, Comments of Environmental Defense Fund on Proposed Non-Pipes Alternative Criteria (Dec. 19, 2022).

¹⁴ *Proceeding on Motion of the Commission in Regard to Gas Planning Procedures*, Case 20-G-0131, Staff Straw Proposal Regarding Modification of 16 NYCRR Part 230 at 20 (July 16, 2024).

Traditional Utility Projects	Non-Pipeline Alternatives to Consider	
<ul style="list-style-type: none"> Gas supply procurement, such as capacity contracts; New gas system infrastructure, such as installing new pipeline or system expansions; Upgrading existing system infrastructure, such as increasing existing pipe pressure to transport more gas; or Replacing leak-prone pipe segments. 	<p>Demand-Side</p> <ul style="list-style-type: none"> Demand response programs Energy-efficiency – for residential, commercial, and industrial customers Thermal energy networks Residential/commercial building electrification Industrial electrification, where feasible 	<p>Supply-Side</p> <ul style="list-style-type: none"> Compressed natural gas Liquefied natural gas Climate-beneficial biomethane (for hard-to-electrify end users) Climate-beneficial hydrogen (for hard-to-electrify end users)

Figure 1.¹⁵

A. Prior Engagement with NPA Development (Question 22)

22. *Have you or any group you are affiliated with actively suggested or discussed NPAs with an LDC? If so, in what way did you submit your suggestion (e.g., in the context of a rate case, one-on-one interaction with the LDC), what response did you receive, and what was the outcome?*

The Joint Environmental Commenters have consistently and actively advocated in support of robust NPA programs by New York’s gas utilities.

Environmental Defense Fund. EDF has engaged in a number of proceedings regarding the development of NPA programs and frameworks in New York. In 2021 comments on Staff’s Gas System Planning Proposal, EDF stated that “[r]ather than engaging in a solicitation of NPA alternatives as a side effort that may not be prioritized if a utility already has a preferred supply-side option lined up, the Commission should consider employing a more systemized approach to comparing alternatives that could either provide natural gas supply or demand relief.”¹⁶ In 2022,

¹⁵ Sullivan & Murphy, *Non-Pipeline Alternatives: Meeting Energy Demand Responsibly* at 7, EDF (Feb. 2024), https://www.edf.org/sites/default/files/2024-02/Non-Pipeline-Alternatives-Report_EDF_Feb2024.pdf#page=9. In the case of supply, any investments in short-term natural gas supply (such as compressed natural gas) should be used as an interim option and should be accompanied by a plan for achieving commensurate demand reductions in the medium/long-term so that shorter-lived gas assets can be retired.

¹⁶ *Proceeding on Motion of the Commission in Regard to Gas Planning Procedures*, Case 20-G-0131, Comments of EDF on Staff Gas System Planning Process Proposal at 23 (May 3, 2021).

EDF submitted comments on the NPA screening and suitability criteria proposed by 11 New York LDCs and recommended that the Commission must seek further information about the companies' planned capital projects in order to effectively evaluate the proposed criteria.¹⁷ In 2024, EDF submitted supplemental comments with analysis of new information collected from two LDCs, demonstrating the importance of broad consideration of NPAs without arbitrary time thresholds.¹⁸ EDF has also been active in proposing and supporting NPA programs and detailed reporting on NPA progress in multiple rate cases and long-term planning proceedings.¹⁹ Thus far, the most successful pathway to obtaining LDC commitments to implement specific and tangible NPA efforts has been through the settlement negotiation process in rate cases. This could be in part because utilities have been unwilling to be proactive about NPA implementation, unless pushed in a rate case, while the NPA criteria they proposed in 2022 have been pending before the Commission. While utilities are generally receptive to instituting broad frameworks related to NPA implementation, seeing projects through to successful implementation has been less consistent.

¹⁷ *Proceeding on Motion of the Commission in Regard to Gas Planning Procedures*, Case 20-G-0131, Comments of EDF on Proposed Non-Pipes Alternative Criteria (Dec. 19, 2022).

¹⁸ *Proceeding on Motion of the Commission in Regard to Gas Planning Procedures*, Case 20-G-0131, Supplemental Comment of EDF on Proposed NPA Criteria (Mar. 4, 2024); see also Sullivan & Murphy, *Non-Pipeline Alternatives: Meeting Energy Demand Responsibly* (Feb. 2024), https://www.edf.org/sites/default/files/2024-02/Non-Pipeline-Alternatives-Report_EDF_Feb2024.pdf.

¹⁹ See *In the Matter of a Review of the Long-Term Gas System Plans of The Brooklyn Union Gas Co. d/b/a Nat'l Grid NY, KeySpan Gas East Corp. d/b/a Nat'l Grid, and Niagara Mohawk Power Corp. d/b/a Nat'l Grid*, Case No. 24-G-0248, Comments of EDF on National Grid's Initial Long-Term Plan at 9 (Sept. 18, 2024); *Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of The Brooklyn Union Gas Co. d/b/a Nat'l Grid NY for Gas Service & KeySpan Gas East Corp. d/b/a Nat'l Grid for Gas Service*, Cases 23-G-0225 & 23-G-0226, EDF Statement of Support for Joint Proposal at 7 (May 1, 2024); *In the Matter of a Review of the Long-Term Gas System Plan of Nat'l Fuel Gas Distribution Corp.*, Case 22-G-0610, Comments of EDF on National Fuel Gas Distribution Company's Initial Long-Term Plan at 21 (Mar. 13, 2023).

Natural Resources Defense Council. NRDC has consistently emphasized the importance of NPAs and the strategic downsizing of the gas system in its recommendations for evolving gas utility regulation to align with New York’s climate and clean energy policies. This has been a central focus in the proceeding on gas planning procedures (Case 20-G-0131), long-term planning processes of various gas utilities,²⁰ and numerous gas utility rate cases.²¹ In this proceeding specifically, on June 29, 2020, NRDC submitted a whitepaper by Synapse Energy Economics, Inc., *Gas Regulation for a Decarbonized New York: Recommendations for Updating New York Gas Utility Regulation*, which included key recommendations for developing a comprehensive NPA screening framework and for strategic asset retirement.²² On May 4, 2021, NRDC, alongside other Public Interest Organizations, filed comments and reply comments on Staff’s Gas System Planning Proposal.²³ These filings reinforced the need for a comprehensive NPA screening framework, advocated for the adoption of practices for strategic asset retirement through a geotargeted approach to electrification, and called for updates to Benefit-Cost Analysis

²⁰ *In the Matter of a Review of the Long-Term Gas System Plan of National Fuel Gas Distribution Corporation*, Case 22-G-0610, NRDC Comments on the Final Long-Term Plan (Sept. 5, 2023); *In the Matter of a Review of the Long-Term Gas System Plans of Consolidated Edison Company of New York, Inc. and Orange and Rockland Utilities, Inc.*, Case 23-G-0147, NRDC Comments on Final Long-Term Plan (Feb. 6, 2024); *In the Matter of a Review of the Long-Term Gas System Plans of The Brooklyn Union Gas Company d/b/a National Grid NY, KeySpan Gas East Corporation d/b/a National Grid, and Niagara Mohawk Power Corporation d/b/a National Grid*, Case 24-G-0248, NRDC Comments on Initial Long-Term Plan (Sept. 19, 2024).

²¹ NRDC has advocated for NPA in the following gas utility rate cases: Consolidated Edison (Case 22-G-0065); National Grid (Cases 20-G-0381, 23-G-0225, and 23-G-0226); and National Fuel Gas (Case 23-G-0627).

²² *Proceeding on Motion of the Commission in Regard to Gas Planning Procedures*, Case 20-G-0131, *Gas Regulation for a Decarbonized New York: Recommendations for Updating New York Gas Utility Regulation* at 17-28 (June 29, 2020).

²³ *Proceeding on Motion of the Commission in Regard to Gas Planning Procedures*, Case 20-G-0131, Comments of Natural Resources Defense Council, Sierra Club, Regional Plan Association, Association for Energy Affordability, And New Yorkers for Clean Power on the Staff Gas System Planning Process Proposal (May 4, 2021).

(BCA) practices. The filing also included another whitepaper by Synapse, *Long-Term Planning to Support the Transition of New York's Gas Utility Industry*, which provided further recommendations on these topics.²⁴ Together, these efforts underscore NRDC's commitment to ensuring that gas utility regulation is fully aligned with the state's climate goals.

Sierra Club & Earthjustice. Sierra Club and Earthjustice have consistently highlighted the importance of NPAs and offered suggestions for improving utility NPA proposals in gas utility long-term plan dockets.²⁵ This has included recommendations for improving the benefit-cost analysis frameworks applied by utilities to review of NPAs²⁶ and for taking a more granular, neighborhood-scale approach to system planning that more fully incorporates and takes advantage of NPA opportunities.²⁷ In its recent order regarding Consolidated Edison and Orange & Rockland's final gas system long-term plan, the Commission expressly required the utilities to incorporate the recommendations from Sierra Club and Earthjustice, "direct[ing]" the companies

²⁴ *Proceeding on Motion of the Commission in Regard to Gas Planning Procedures*, Case 20-G-0131, Long-Term Planning to Support the Transition of New York's Gas Utility Industry (April 30, 2021).

²⁵ See, e.g., *In the Matter of a Review of the Long-Term Gas System Plan of National Fuel Gas Distribution Corporation*, Case 22-G-0610, Sierra Club and Earthjustice's Comments on the Final Long-Term Plan of National Fuel Gas Distribution Corporation at 16-18 (Sept. 5, 2023) (hereinafter "SC/EJ NFG LTP Comments"); *In the Matter of a Review of the Long-Term Gas System Plans of Consolidated Edison Company of New York, Inc. and Orange and Rockland Utilities, Inc.*, Case 23-G-0147, Sierra Club and Earthjustice's Comments on the Final Long-Term Plan of the Consolidated Edison Company of New York, Inc. and Orange & Rockland Utilities, Inc. at 17-22 (Jan. 31, 2024) (hereinafter "SC/EJ ConEd/ORU LTP Comments"); *In the Matter of an Enforcement Proceeding Against Center Island Contracting, Inc. for Alleged Violations of 16 NYCRR Part 753 – Protection of Underground Facilities, in the Service Territory of KeySpan Gas East Corporation d/b/a National Grid*, Case 23-G-0427, Sierra Club and Earthjustice's Comments on the Final Long-Term Plan of New York State Electric and Gas Corp. and Rochester Gas and Electric Corp. at 32-35 (June 21, 2024).

²⁶ SC/EJ ConEd/ORU LTP Comments at 20-21.

²⁷ SC/EJ NFG LTP Comments at 16-18.

“to develop an NPA deployment plan that reflects the input from [independent consultant] PA stated above as well as the comments from [Sierra Club and Earthjustice].”²⁸

Alliance for a Green Economy (“AGREE”). AGREE has worked through the rate case process—including in testimony and settlement—since 2017 to advance specific NPA projects, programs, and frameworks with most major utilities in New York. A few examples of outcomes of this engagement include: NYSEG/RG&E’s commitment to net zero gas demand growth and avoidance of investment in two major pipeline projects, as well as their commitment to NPA criteria and process in the Joint Proposal adopted in case 19-G-0379;²⁹ Con Edison’s commitments to develop an NPA program to avoid replacement of leak-prone services in the Joint Proposal in case 22-G-0065;³⁰ and KEDNY/KEDLI’s commitments to advance a broader range of NPA types and improve NPA outreach as well as the companies’ and DPS staff’s commitment to reviewing the need for and analyzing alternatives to major investments in KEDNY’s Greenpoint Energy Center in the Joint Proposal in cases 23-G-0226/23-G-0225.³¹ We have most recently filed detailed testimony in the Upstate National Grid (Nimo) rate case 24-G-0323 regarding the applicability of NPAs, the need for improved NPA process, and the Company’s failure to consider NPAs for some key costly infrastructure proposals. We

²⁸ *In the Matter of a Review of the Long-Term Gas System Plans of Consolidated Edison Company of New York, Inc. and Orange and Rockland Utilities, Inc.*, Case 23-G-0147, Order Regarding Long-Term Natural Gas Plan and Requiring Further Actions at 57 (Sept. 20, 2024).

²⁹ *Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of New York State Electric & Gas Corporation for Gas Service*, Case 19-G-0379, Joint Proposal at Appendix M (May 21, 2020).

³⁰ *Proceeding on Motion of the Commission as to the Rates, Charges, rules and Regulations of Consolidated Edison Company of New York, Inc. for Gas Service*, Joint Proposal at 98 (Feb. 16, 2023).

³¹ *Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of the Brooklyn Union Gas Company & KeySpan Gas East Corporation d/b/a National Grid for Gas Service*, Cases 23-G-0225 & 23-G-0226, Joint Proposal at 27-30, 39-46 (April 9, 2024).

respectfully incorporate that testimony here by reference.³² AGREE has also worked to advance networked geothermal systems and thermal energy networks as non-pipe alternatives, first in the Nimo rate case of 20-G-0381 and more recently through the Utility Thermal Energy Network and Jobs docket case 22-M-0429.³³ Finally, AGREE was involved in case 19-G-0678 which, among other issues, sought to address capacity needs in KEDNY/KEDLI's territory after the Williams Pipeline was denied environmental permits. This case considered widescale non-infrastructure options for meeting customer needs in lieu of new gas supply. In general, we have seen incremental improvements and commitments by utilities to slow down gas demand growth and consider NPAs. Utilities have come a long way since 2017 when they were still actively incentivizing, marketing, and facilitating gas expansion through oil-to-gas conversion incentives and neighborhood programs. However, we have not turned the corner from putting intentions on paper to more actively and aggressively reducing gas demand and gas investments. There are many barriers to NPAs to be sure, some of which are outside the utilities' and regulators' control. However, in our experience, utilities continue to have a major bias toward gas infrastructure and toward continuing to extol the virtues of gas and gas appliances to their customers and the public at large. These biases seem to prevent deeper commitments to NPAs and stronger NPA frameworks, and perhaps most importantly, execution of successful NPAs.

³² *Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Niagara Mohawk Power Corporation d/b/a National Grid for Electric and Gas Service.*, Case Nos. 24-E-0322 & 24-G-0323, Direct Testimony of Jessica Azulay (Sept. 26, 2024).

³³ *Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Niagara Mohawk Power Corporation d/b/a National Grid for Gas Service*, Case 20-G-0381, Joint Proposal 117-20 (Sept. 27, 2021).

B. The Need to Prioritize a Managed Downsizing of the Gas Distribution System (Questions 23, 24, 26)

23. What criteria makes a particular area of an LDC's service territory favorable for an NPA? What information is required to determine if a particular geographic area, cluster of customers, customer class, or use of natural gas is suitable for an NPA? Be specific in what would make an NPA especially beneficial in those locations, for a group of customers, or customer class. How should those benefits be measured?

24. What are the largest barriers to developing NPAs as an alternative to investing in gas distribution infrastructure?

26. What sort of process, if any, should be available for a customer, group of customers, municipality, town, or other entity to propose a managed transition towards full electrification from traditional utility gas service? What set of information is necessary to compile a complete proposal? What information should LDCs make available to customers regarding who might wish to develop such a proposal? How far in advance is the information needed? Do interested stakeholders need professional assistance in developing proposals? In your response, be as detailed as possible about the type and granularity of data needed from the LDC, including data related to time-to-construction, how the LDC can confirm the participants, etc.

The Commission should act swiftly to provide LDCs with clear guidance and next steps for developing an NPA framework as New York transitions toward a low-carbon future.

Achieving the CLCPA's ambitious targets requires dramatic reductions in gas use. The Scoping Plan highlights the necessity of reducing reliance on fossil natural gas by at least 33% by 2030 and 57% by 2035, with most gas customers fully electrifying by 2050.³⁴ Without timely action, continued investment in gas infrastructure risks driving substantial rate increases and creating stranded assets, particularly gas customers and consumption decline. As the cost of gas service rises and electrification becomes more accessible,³⁵ customers will leave the gas system, leading to steep rate increases for those who remain—disproportionately impacting low-income

³⁴ Scoping Plan at 350.

³⁵ See, e.g., NYSERDA, *Inflation Reduction Act: Homeowners*, <https://www.nyserda.ny.gov/All-Programs/Inflation-Reduction-Act/Inflation-Reduction-Act-homeowners> (last visited Sept. 27, 2024) (summarizing rebates and tax credits available for home electrification and efficiency).

customers, disadvantaged communities, and others who may lack the ability to electrify.³⁶ To avoid exacerbating financial burdens on ratepayers, particularly vulnerable communities, it is essential to minimize unnecessary gas infrastructure investments and plan for a managed downsizing of the gas system.

Proactive planning is crucial to prevent stranded costs from investments that outlive their usefulness, which will ultimately be borne by ratepayers. By prioritizing electrification and NPAs, the Commission can support an orderly transition away from fossil fuels that aligns with the state’s decarbonization goals, stabilizes rates, and prevents financial instability for utilities as the customer base shrinks. This approach ensures that the transition remains reliable, cost-effective, and equitable, protecting consumers and fostering a sustainable energy future.

A proactive approach to downsizing the gas system begins by avoiding non-critical expansions of the gas distribution system to prevent unnecessary pipeline buildout and further entrenching reliance on natural gas among new users. In areas of new housing developments or commercial projects, connecting these properties to the gas system locks them into a fossil fuel infrastructure that will become increasingly obsolete as New York progresses toward its climate goals. Furthermore, new gas connections have other system impacts. When they reach a high enough volume, the gas use of new customers creates strain on the existing system, requiring gas reinforcement investments which can be just as costly as the new connections themselves. New gas infrastructure expansions not only conflict with the state’s decarbonization targets but also create future stranded assets—pipelines and equipment that will have to be maintained, even as gas demand decreases, or prematurely decommissioned at a high cost. This burdens both new

³⁶ See CALIF. AIR RESOURCES BD., *2022 Scoping Plan*, Appx. F. Building Decarbonization (Nov. 2022), <https://ww2.arb.ca.gov/sites/default/files/2022-11/2022-sp-appendix-fbuilding-decarbonization.pdf>.

and existing customers with higher rates to pay for an infrastructure that will no longer serve the long-term energy needs of the state.

1. Utilities Should Select Strategic NPA Project Locations Geared Toward Downsizing the Gas System (Question 23)

All infrastructure projects should be evaluated for NPA treatment, regardless of project cost or timeframe (*see infra* Part C). In determining the priority level of different NPA projects, however, utilities should strategically identify project locations that would best serve the goal of overall system downsizing. In addition to avoiding non-critical expansions, all gas utilities should review their entire system by collecting and applying data like Pacific Gas and Electric's Gas Asset Analysis Tool³⁷ to identify locations best suited for NPA implementation. This geospatial analysis should consider qualities about a pipeline's status, location, and other conditions make it more likely to succeed as an NPA. NPAs that meet any of the criteria below may be less expensive than traditional pipeline investment, and in all cases they would avoid the potential risk of undepreciated assets and stranded costs in the future resulting from declining sales and customer defection from the gas system. LDCs should prioritize pipe segments with these criteria when pursuing NPAs:

- Status
 - Pipes that are targeted for accelerated replacement (e.g. "leak prone pipe"), because of the material (e.g. cost iron, steel) or age, especially those requiring high-cost replacements. This can include both gas mains and gas services.
 - Pipes that would otherwise require capacity expansion due to load growth or reliability in 18 months or more.
- Location

³⁷ See CPUC, *Order Instituting Rulemaking to Establish Policies, Processes, and Rules to Ensure Safe and Reliable Gas Systems in California and Perform Long-Term Gas System Planning*, Case R.20-01-007, Pacific Gas and Electric Company's Opening Comments on Amended Scoping Memo, Track 2A, Questions 2.1(B)-2.1(K)), in Case R.20-01-007, *Order Instituting Rulemaking to Establish Policies, Processes, and Rules to Ensure Safe and Reliable Gas Systems in California and Perform Long-Term Gas System Planning*, (June 15, 2022), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M485/K545/485545029.PDF>.

- Segments located at the end of a service branch (“dead-end” segments) that have no downstream impact on gas pressure.
- Locations with redundant pipe capacity where some customers could be served with an NPA and others can be cost-effectively transferred to another, redundant segment, allowing one of the redundant segments to be retired without replacement.
- Locations with ample headroom on the electric system for increased load from electrification in the near term; however, proactive electric system planning should prioritize expanding grid capacity in the locations where downsizing the gas system is feasible produces the most value.
- Locations well-suited for implementing thermal energy networks.
- Locations well-positioned to advance policy goals, such as those where targeted electrification efforts can effectively reduce disproportionate local air pollution burdens in disadvantaged communities.
- Characteristics of service or of customers being served
 - Residential and commercial buildings with adequate electrical infrastructure to handle heat pumps and other electrification technologies without extensive upgrades to building structures and electrical service.
 - Communities with potential partners to support or incentivize gas alternatives (e.g., local governments or community-based organizations).
 - Segments or clusters yielding the lowest gas revenues or a level of gas revenues that is not sufficient to cover costs.
 - Segments that serve a small number of decision-making entities³⁸ or customers (e.g., less than 10 residential buildings per 100 yards). These segments should generally be prioritized because they are more likely to be successful at gaining voluntary participation for all affected customers. LDCs should conduct a cost-effectiveness analysis that takes into account a customer density factor to help prioritize neighborhood electrification.

LDCs should be required to collect and analyze the infrastructure and customer characteristics described above. Once this information is collected for the entire system, the LDCs should follow standardized practices for measuring the benefits of each potential project (discussed more below) and strategically prioritize segments of pipe for NPA development. The sooner that data collection and analysis can start, the better, so that LDCs can begin the process of implementing NPAs before urgent system needs arise.

³⁸ In the case of some multi-family dwellings or building developments there may be many customers connected to the system but only a few decision-making entities who would need to consent to participating in an NPA.

2. Barriers to NPA Development Include an Underdeveloped Market, Lack of Customer Awareness of Opportunities, and Legacy Regulations that Favor Natural Gas Expansion (Question 24)

The current barriers to NPA development include barriers to developers, barriers to customers, and regulatory barriers.

Developers. For developers of NPA projects, inadequate project lead time is a significant barrier hindering pursuit of NPAs. Planning infrastructure projects only two years in advance makes it very difficult to pursue NPA opportunities. NPA assessment, development, and implementation takes time to carry out, especially since relevant experience is somewhat thin. More advanced project planning could provide more time to NPA developers, and more complete information about pipeline characteristics, e.g. publicly-available maps to pinpoint locations for targeted electrification and thus with a need for NPAs (similar to a system hosting capacity map), would allow developers to quickly mobilize to develop NPAs.

Another barrier to developers is lack of contractor training or know-how when it comes to electrification and other types of NPA projects. More training opportunities and pilot projects are needed to overcome this barrier.

Customers. On the customer side, lack of awareness and education about NPAs and lack of available funds for gas alternatives are significant barriers to NPA development. LDCs and state entities (such as NYSERDA) could reduce these barriers by conducting more extensive outreach, potentially leveraging existing programs and platforms,³⁹ further in advance of an NPA

³⁹ See, e.g., NYSERDA, *NY Regional Clean Energy Hubs* (last visited Sept. 27, 2024), <https://www.nyserdera.ny.gov/All-Programs/Regional-Clean-Energy-Hubs/Find-Your-Clean-Energy-Hub-Today> (providing resources on energy efficiency, clean heating and cooling, and opportunities for solar by region, as well as basic information about available technology and links to resources for incentives, services, and contacts); NY ENERGY ADVISOR, <https://energyadvisor.ny.gov/> (last visited Sept. 27, 2024) (providing energy-related assistance for income-eligible homeowners provided by utilities); NYSERDA, *Multi-family building program emails*, <https://www.nyserdera.ny.gov/multifamily> (last visited Sept. 27,

opportunity and more proactive communication and aggressive advertising about the benefits and long-term cost-savings of electrification or other non-pipeline options could play a substantial role in customer conversion. When an NPA opportunity arises, LDCs should engage the potentially affected customers to inform and educate them about the NPA opportunity and to answer questions. LDCs should also make customers aware of incentives and rebates available for electrification and energy efficiency. Furthermore, LDCs should not promote natural gas reliance, nor should they inappropriately promote alternative fuels to users in a manner inconsistent with the Scoping Plan and Commission policies. Multiple LDCs have committed to stop gas advertising or promotion,⁴⁰ and the Commission should hold utilities accountable to ensure that they fulfill these commitments, and should seek such commitments from all New York LDCs. Meanwhile, industry efforts like National Grid’s “Hydrogen House”—which would promote hydrogen use in residential buildings, despite safety and health risks and clear findings that electrification is a preferred solution for homes and buildings—should be discouraged.⁴¹

2024) (offering resources for multi-family building owners on energy efficiency, electrification, building operations and maintenance training, and opportunity for renewables); NYSERDA, *Featured Case Studies* (last visited Sept. 27, 2024), <https://www.nyserda.ny.gov/About/Publications/Featured-Case-Studies> (including case studies of energy efficiency, renewable, and emissions reducing projects for reference).

⁴⁰ See, e.g., *Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of the Brooklyn Union Gas Co. & KeySpan Gas East Corp. d/b/a National Grid for Gas Service*, Cases 19-G-0309 & 19-G-0310, Joint Proposal at 75-76 (May 14, 2021); *Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of N.Y. State Electric & Gas Corp. for Gas Service & Rochester Gas & Electric Corp. for Gas Service*, Cases 19-G-0379 & 19-G-0381, Joint Proposal, Appendix M at 3 (May 21, 2020).

⁴¹ See *Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of The Brooklyn Union Gas Co. for Gas Service & KeySpan Gas East Corp. d/b/a Nat'l Grid for Gas Service*, Cases 23-G-0225 & 23-G-0226, Direct Testimony of Ilissa Ocko on Behalf of EDF at 44 (Sept. 1, 2023); *id.*, Exhibit __ (IO-5), Nat'l Grid Response to Information Request WE ACT-063 (July 31, 2023); *id.*, Exhibit __ (IO-6), Nat'l Grid Response to Information Request WE ACT-0123 (Aug. 14, 2023).

Law & Regulations. The primary legal barrier to limiting NPA development is state laws that perpetuate, promote, and subsidize fossil gas use such as the statutory 100-foot rule and the utility obligation to serve gas,⁴² which creates an implicit entitlement to gas service. In particular, the obligation to serve requires utilities to provide gas service to any applicant upon request, which hinders the ability of the LDC to pursue—or gives the LDC a regulatory “out” from pursuing—an NPA if any of the customers on the relevant segment are unable or unwilling to convert their gas consuming equipment to electric or another alternative. This is an outdated requirement, since customers have ready access to electricity and to cost-competitive electric alternatives to gas.⁴³ In addition, NPAs usually involve multiple decision-making entities instead of just one (which is typical for single-family energy efficiency or fuel-switching programs)—and so the obligation to serve could derail an NPA if one of the decision-makers does not participate in the NPA. Consistent with the NY HEAT bill, the language in the relevant statutes should be adjusted such that gas utilities are no longer obligated to serve new customers.⁴⁴ Please refer to NRDC’s comments on Staff’s Straw Proposal on the 100-foot Rule for further recommendations.⁴⁵ Importantly, while state laws such as the obligation to serve and the 100-

⁴² N.Y. Trans. Corp. L. (TCL) §12; N.Y. Pub. Serv. L. Art. 2, Chap. 48, § 31(4).

⁴³ In general, modern gas-burning equipment requires electricity to operate, so it is reasonable to assume that these customers have access to electricity.

⁴⁴ NY Home Energy Affordable Transition Act, 2023-S2016A (Jan. 18, 2023).

⁴⁵ See *Proceeding on the Motion of the Commission in Regard to Gas Planning Procedures*, Case 20-G-0131, NRDC Comments on Staff Straw Proposal to Modify 16 NYCRR Part 230 (Sept. 20, 2024). NRDC notes that in the statutes the obligation to serve is closely tied to the 100-foot rule, which obligates LDCs to provide at least 100 feet of main or service from the nearest pipeline without cost to the requesting customer. This shifts the cost of gas expansion from the requesting customer onto ratepayers, effectively subsidizing the cost of a gas connection and adding new plant to overall rate-base. Limiting or removing the 100-foot rule would expose the new customer to the true cost of a gas connection which would discourage new gas connections and encourage electrification instead. While the 100-foot rule is not an obstacle to NPAs per se, the rule is creating problems that will need to be solved with things like NPAs in the future.

foot rule may present a barrier to effectively implementing NPAs at scale, they are not a barrier to planning for a strategic and well-managed downsizing of the gas system nor pursuing NPAs that represent low-hanging fruit for decommissioning discrete segments of the system.

3. Municipalities Can be Uniquely Impactful in Customer Outreach and Coordinated NPA Implementation (Question 26)

LDCs should develop a process through which customers, municipalities, and other entities can advocate for and pursue NPAs within their service area. Municipalities in particular could play a valuable role in decarbonization, as demonstrated by two European countries. Municipalities are often better suited than utilities at community organization and communication, and this capability could lend itself to organized neighborhood transitions to electrification.

The Netherlands and Switzerland provide examples of how municipalities and cantons are facilitating the phase-out of natural gas in their regions. Energy transition planning occurs at the regional level in the Netherlands and in Switzerland, allowing for region-specific solutions, strategies, and tangible near-term goals.⁴⁶ Swiss cantons and municipalities coordinate to develop building-level maps that compile data about building type, energy load, planned gas decommissioning, available gas alternatives, and much more. They are also responsible for implementing federal regulations and promoting their own energy programs.⁴⁷ In the Swiss cities

⁴⁶ SWISS FEDERAL OFF. ENERGY, *Cantons and municipalities*, <https://www.bfe.admin.ch/bfe/en/home/policy/cantons-and-municipalities.html> (last visited Sept. 27, 2024); *The natural gas phase-out in the Netherlands*, 22.210381.016, CE DELFT (Feb. 2022), https://ce.nl/wp-content/uploads/2022/04/CE_Delft_210381_The_natural_gas_phase-out_in_the_Netherlands_DEF.pdf; see also CITY OF AMSTERDAM, *Policy: Phasing out natural gas*, <https://www.amsterdam.nl/en/policy/sustainability/policy-phasing-out/>; OXFORD INSTIT. FOR ENERGY STUDIES, *The great Dutch gas transition* (July 2019), <https://www.oxfordenergy.org/wpcms/wp-content/uploads/2019/07/The-great-Dutch-gas-transition-54.pdf>.

⁴⁷ SWISS FEDERAL OFF. ENERGY, *Cantons and municipalities*, <https://www.bfe.admin.ch/bfe/en/home/policy/cantons-and-municipalities.html> (last visited Sept. 27, 2024).

Zurich and Winterthur, gas utilities have provided customers advanced notice and timelines for the discontinuation of gas service in specific neighborhoods, typically 10 years ahead of disconnection.⁴⁸ Similar to Switzerland, municipalities in the Netherlands “are obliged to develop individual neighborhood execution plans... in which they commit to a timeline and heating technology.”⁴⁹ These two examples demonstrate how regional-level planning can facilitate NPA implementation effectively at a large-scale.

To enable municipal-driven or customer-driven NPAs, LDCs need to inform local governments, customers, and other stakeholders about future infrastructure projects and opportunities for NPAs in a geographic format. At a minimum, LDCs should provide building maps showing gas service, the location and timing of planned infrastructure projects, pipeline pressure districts, NPA opportunities available at each customer connection point, and the location of low-income communities. LDCs should inform customers of potential planned infrastructure projects as soon as a need is identified (or a minimum of two years advanced notice prior to construction for routine projects, i.e., that are not responsive to imminent threats to safety) and provide customers with the opportunity to advocate for an NPA.⁵⁰ LDCs should also provide information about available funds and incentives for energy efficiency and electrification at the regional and individual level.

⁴⁸ *Non-Pipeline Alternatives: Emerging Opportunities in Planning for U.S. Gas System Decarbonization*, RMI & NATIONAL GRID (May 2024), https://www.nationalgridus.com/media/pdfs/other/CM9904-RMI_NG-May-2024.pdf.

⁴⁹ *The natural gas phase-out in the Netherlands*, 22.210381.016, CE DELFT, at 16 (Feb. 2022), https://ce.nl/wp-content/uploads/2022/04/CE_Delft_210381_The_natural_gas_phase-out_in_the_Netherlands_DEF.pdf.

⁵⁰ *Non-Pipeline Alternatives: Emerging Opportunities in Planning for U.S. Gas System Decarbonization*, RMI & NATIONAL GRID (May 2024), at 20, https://www.nationalgridus.com/media/pdfs/other/CM9904-RMI_NG-May-2024.pdf.

C. Structuring NPA Frameworks

Utilities should operate NPA programs that consider every stage of project planning and implementation, including an accurate reflection of gas demand needs in light of shifting energy policies and customer preferences, an inclusive project evaluation procedure that encourages competitive and innovative market solutions, and a commitment to transparency.

Every utility should pursue NPAs under a framework that: 1) identifies demand needs and aging infrastructure risks as early as possible; 2) considers how to meet those needs with efficiency, demand response, and electrification; 3) prioritizes demand-side NPAs as a preferred solution and treats gas infrastructure investments as an option of last resort; 4) seeks solutions and resources through an open request-for-proposals (“RFPs”) process or a utility program; 5) evaluates projects using, among many factors, the climate and health benefits of avoiding gas infrastructure; 6) maintains a robust and transparent record of its decision-making process in evaluating and implementing NPAs; and 7) makes cost recovery contingent on program success and otherwise includes appropriate incentives and disincentives needed to align utility investments with the greenhouse gas reduction and equity mandates of the CLCPA.

1. The Commission Should Reject Time and Cost Thresholds in NPA Eligibility Criteria & Require Utilities to Evaluate All Demand Needs or Infrastructure Projects for NPAs (Questions 27, 40)

27. How should NPA Suitability and Screening Criteria be applied by an LDC seeking to justify development of a gas transmission or distribution project?

40. Are there any infrastructure projects that should not be considered for NPA treatment? Please provide specific examples.

All traditional gas infrastructure projects (i.e., pipe replacement or expansion), traditional gas supply options (i.e., 20-year precedent agreements with major gas pipelines), and other supply investments (i.e. compressed natural gas, liquified natural gas, compressor station

projects) should be evaluated for NPAs. Suitability and screening criteria should not be a mechanism to ignore NPA solutions.

The Commission’s Gas Planning Order adopted a two-step process for NPA screening: 1) determine if a project is eligible for NPA consideration, and 2) if eligible, determine the feasibility of NPA implementation.⁵¹ The Commission defined NPA ineligibility as “projects that address immediate threats to public safety or system reliability,” or “where construction is expected to commence in less than 12 months.”⁵² Following this direction, utilities proposed NPA suitability criteria that would deem projects focused on load growth to be eligible for NPA consideration, while projects associated with “immediate system needs related to safety, reliability, and service obligation” would be ineligible for NPA consideration.⁵³ Most utilities also defined projects where construction would commence in less than 24 months as ineligible for NPA consideration, increasing the 12-month threshold laid out in the Order.⁵⁴

The Commission should revise its NPA framework guidance from the Gas Planning Order and reject any NPA framework proposal that establishes rigid time or cost thresholds as a

⁵¹ Gas Planning Order, at 37; *Proceeding on the Motion of the Commission in Regard to Gas Planning Procedures*, Case 20-G-0131, Staff Gas System Planning Process Proposal, at 18-20 (Feb. 12, 2021) [hereinafter Staff Planning Proposal].

⁵² Gas Planning Order, at 37; *see also* Staff Planning Proposal, at 18.

⁵³ *See Proceeding on the Motion of the Commission in Regard to Gas Planning Procedures*, Case 20-G-0131, Central Hudson Gas and Electric Proposals for Non-Pipe Alternative Screening and Suitability Criteria, at 4 (Aug. 10, 2022). *See also* National Fuel’s Proposals for Non-Pipe Alternative Screening and Suitability Criteria, at 3 (Aug. 10, 2022); Con Edison’s Proposals for Non-Pipe Alternative Screening and Suitability Criteria, at 3 (Aug. 10, 2022); Orange and Rockland’s Proposals for Non-Pipe Alternative Screening and Suitability Criteria, at 3 (Aug. 10, 2022); National Grid’s Proposals for Non-Pipe Alternative Screening and Suitability Criteria, at 3 (Aug. 10, 2022); New York State Electric and Gas Corporation’s and Rochester Gas and Electric Corporation’s Proposals for Non-Pipe Alternative Screening and Suitability Criteria, at 3 (Aug. 10, 2022); Liberty Utilities (St. Lawrence Gas) Corp.’s Proposals for Non-Pipe Alternative Screening and Suitability Criteria, at 3 (Aug. 10, 2022); Coning Natural Gas Corporation Proposals for Non-Pipe Alternative Screening and Suitability Criteria, at 2-3 (Aug. 9, 2022).

⁵⁴ *Id.*; Gas Planning Order at 37.

barrier to NPA consideration. These thresholds can severely limit the number of capital projects that undergo NPA evaluation. For example, an analysis that compares National Fuel Gas Distribution Corporation’s proposed a two-year eligibility threshold for NPAs against past capital project data reveals that the company has historically identified and completed expansion projects in 88 days, on average.⁵⁵ Thus, a two-year threshold would automatically disqualify much of National Fuel’s expansion projects from NPA consideration. Thresholds based on elements like time and cost run the risk of arbitrarily excluding large categories of projects. Similarly, vague ineligibility definitions like “reliability” could potentially allow many projects to avoid NPA consideration.⁵⁶ Instead, all projects should be eligible for NPA consideration and undergo a feasibility analysis for NPA implementation.

2. Utilities Should Develop Ongoing Programs for Common NPA Opportunities (Questions 27, 40 - Continued)

Certain capital projects are common occurrences for LDCs, such as leak-prone pipe replacement or main/service line extension to connect new customers—for such projects, a utility may be conducting and preparing for multiple such projects at any given time. For these common projects, utilities should develop standing programs to seek NPA solutions. For example, an obvious pathway to avoid installing main/service line extension to connect a single new customer is if that customer instead opts for electrification and forgoes gas service. It may not make sense to be issuing new RFPs to solicit NPA solutions for every new customer or every leak-prone pipe segment. Instead, it could be more resource-efficient for utilities to develop standing programs to respond to new customer connection requests, leak-prone pipe

⁵⁵ See Sullivan & Murphy, *Non-Pipeline Alternatives: Meeting Energy Demand Responsibly* at 19-21, EDF (Feb. 2024), https://www.edf.org/sites/default/files/2024-02/Non-Pipeline-Alternatives-Report_EDF_Feb2024.pdf.

⁵⁶ *Id.*

replacement, etc. While eventually the utility might need to issue an RFP if there are unique services needed to implement an NPA, the standing program would ensure that NPAs are sought for all such projects as a default choice.

For example, Con Edison agreed to “attempt to develop NPA projects focused on gas service line replacements under the existing NPA Framework,” to “proactively conduct outreach and educate customers who are planned recipients of a gas service replacement on the benefits of electrification,” and to “consider delays in associated main replacement work to support and facilitate electrification efforts, as long as there are no adverse safety or operational impacts to doing so.”⁵⁷ These type of efforts could be further strengthened and exist as standing programs within each LDC.

3. The Commission Should Require Utilities to Document and Disclose NPA Evaluation and Implementation Procedures and Results (Question 27a, b)

27a. Should an LDC be required to identify all projects in its current capital plan that meet the NPA Suitability and Screening Criteria, including when a NPA solicitation will likely be issued for those projects? What information about these projects and associated NPAs should be provided?

27b. Should an LDC include NPA Suitability and Screening Criteria information as part of the rate case process? For example, should an LDC include such information in capital expenditure workpapers, and, as part of the justification for traditional utility plant, explain the process and decision to move forward with a traditional project or NPA for projects that pass the Suitability and Screening Criteria?

Utilities should be required to maintain and publicly disclose robust documentation of NPA evaluation and implementation processes, including lookback information of prior NPA efforts and outcomes, and information about ongoing and future NPA projects and solicitations. The information below should be reported by LDCs on an annual basis, and some of this will be

⁵⁷ *Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Consolidated Edison Company of New York, Inc. for Gas Service, Case 22-G-0065, Joint Proposal at 98 (Feb. 16, 2023).*

rolling reporting that is updated and submitted annually. Annual reporting could be filed as part of the annual updates required by each LDC on their long-term plans, or another forum the Commission deems appropriate. The Commission should also require that this information be submitted when each utility files a rate case, so that any cost recovery sought in the rate case can be considered alongside the LDC's efforts to implement NPAs. Thus, LDCs would constantly maintaining these data sets and present them to the Commission and the public at regular intervals.

- Lookback information:
 - All past capital projects during the last 5 years, including:
 - Project type (i.e., expansion of the gas system, maintenance of existing infrastructure, leak-prone pipe replacement)
 - Project cost, including cost of total pipe and cost per foot of pipe, labor hours and aggregate labor cost, supervisory and engineering costs, permitting, training, etc.
 - Project location Project timeframe, including date or month of identification of project need, project commencement, and project completion
 - Project load relief (for expansion projects)
 - Identify which projects were evaluated against the utility's screening and suitability criteria (Note: Commenters recommend that *all* projects should be evaluated, but if the Commission does not require that, then it should require this reporting)
 - Detailed explanations for why a project was or was not selected for NPA treatment.
 - Status/Outcome of NPA solicitation and implementation
 - Estimated timing of NPA solicitation or other next steps
- Active NPA projects
 - All active NPA projects, capital projects, and supply solicitations
 - Steps taken to date to prioritize NPAs
- Future solicitation information should include:
 - All planned capital projects during the next 5 years
 - Identify which projects will be evaluated against the utility's screening and suitability criteria (Note: Commenters recommend that *all* projects should be evaluated, but if the Commission does not require that, then it should require this reporting)
 - Estimated timing of NPA solicitation or other next steps

This information would be most helpful to regulators and stakeholders in capital plans and in rate proceedings, which already publicly detail capital project expenditures. Consistent and granular reporting allows for stakeholder evaluation of individual utility progress and side-by-side comparisons across utilities. As recommended elsewhere in these comments, NPA assessment should be mandatory to receive cost recovery for traditional capital projects, and therefore detailed reporting on NPA evaluation and outcomes is needed to ensure accountability.

Staff ask whether LDCs should present information in capital expenditure workpapers “explain[ing] the process and decision to move forward with a traditional project or NPA for projects that pass the Suitability and Screening Criteria,” “as part of the justification for traditional utility plant.” If locating this information specifically in capital expenditure workpapers would be valuable for the above objectives, then it should be required.

Recent utility practices—both mandated and voluntary—have demonstrated that granular reporting on NPA evaluations is feasible and useful.

Consolidated Edison. Pursuant to a commitment in the Joint Proposal approved in 2020 by the Commission,⁵⁸ Consolidated Edison Company of New York, Inc. (“Con Edison”) developed an NPA framework, documenting the company’s “process for identifying, developing, implementing, and recovering costs and establishing performance incentives for NPA projects.”⁵⁹ Since 2022, the company has filed “an implementation and verification plan,

⁵⁸ *Proceeding on Motion of the Commission as to the Rate, Charges, Rules, and Regulation of Consolidated Edison Company of New York, Inc. for Gas Service*, Cases 19-E-0065 & 19-G-0066, Joint Proposal at 32 (Oct. 16, 2019); *Proceeding on Motion of the Commission as to the Rate, Charges, Rules, and Regulation of Consolidated Edison Company of New York, Inc. for Gas Service*, Cases 19-E-0065 & 19-G-0066, Order Adopting Terms of Joint Proposal and Establishing Electric and Gas Rate Plan (Jan. 16, 2020).

⁵⁹ *Proceeding on Motion of the Commission as to the Rate, Charges, Rules, and Regulation of Consolidated Edison Company of New York, Inc. for Gas Service*, Case 19-G-0066, Con Edison, Proposal

anticipated NPA costs, any costs of NPA projects incremental to the Company’s revenue requirement or which will displace a project subject to capital investment reconciliation, and a benefit-cost analysis[.]”⁶⁰ Con Edison issues its NPA Implementation Plan annually with updates on specific NPA projects currently under development.⁶¹ The most recent NPA Implementation Plan detailed the company’s Soundview Area Load Relief NPA portfolio, which received a “favorable RFP response.”⁶² The program, also detailed in its most recent Heat Pump Program Manual,⁶³ includes incentives for residential, multi-family, and small business customers to achieve a 1,136 peak day dekatherm load relief.

for Use of a Framework to Pursue Non-Pipeline Alternatives to Defer or Eliminate Capital Investment in Certain Traditional Natural Gas Distribution Infrastructure at 1 (Sept. 15, 2020).

⁶⁰ *Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Consolidated Edison Company of New York, Inc. for Gas Service*, Case 19-G-0066, Order Approving Non-Pipes Alternative Projects Amortization Period and Shareholder Incentive Mechanism for Specified Projects at 25 (June 17, 2022).

⁶¹ *See, e.g., Proceeding on Motion of the Commission as to the Rate, Charges, Rules, and Regulation of Consolidated Edison Company of New York, Inc. for Gas Service*, Case 19-G-0066, Con Edison Non-Pipes Alternatives Implementation Plan (July 22, 2024).

⁶² *Id.* at 24-25 (July 22, 2024).

⁶³ *New York State Clean Heat: Con Edison Heat Pump Program Manual*, Version 6 (Sept. 10, 2024), at 14.

Figure 2: Con Edison Soundview Service Area NPA Incentives⁶⁴

Customer Segment	Category	Unit/Sq ft	Clean Heat Base Unit Incentive	NPA Adder Unit Incentive
ASHP Single Family Home/Whole Building	2b	Whole Building	\$8,000	\$16,000
ASHP Residential 2-4 Family Home & Apartment	2b	Dwelling Unit	\$3,000	\$6,000
GSHP Residential	3	Building/Peak Dth/dy	\$25,000 outside DAC \$35,000 within DAC	\$8,240
Multi-Family	2c	Dwelling Unit	\$5,000	\$6,000
Small Business & Nonprofit	2d	<= 1,000	\$5,000	\$3,000
		1,001 - 1,500	\$7,500	\$4,000
		1,501 – 2,000	\$10,000	\$5,000
		2,001 – 2,500	\$12,500	\$5,500
	4	MMBTU/Peak Dth/dy	\$150	\$8,240

The incentives, shown in Figure 2, include “steam trap replacements, pipe insulation, various building envelope measures, and air- and ground-source space heating.”⁶⁵

Consolidated Edison has also established the “Electric Advantage” and “Energy Exchange” programs to implement NPAs instead of gas infrastructure and pipe replacement under the Company’s Gas Infrastructure Replacement or Reduction Program (GIRRP), and replacements of gas services installed before 1972, respectively.⁶⁶ The analysis for the Energy Exchange program’s initial portfolio of 100 customers indicates significant savings and a BCA

⁶⁴ *Id.* at 15.

⁶⁵ *Proceeding on Motion of the Commission as to the Rate, Charges, Rules, and Regulation of Consolidated Edison Company of New York, Inc. for Gas Service*, Case 19-G-0066, Non-Pipes Alternatives Implementation Plan at 24-25 (July 22, 2024).

⁶⁶ *Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Consolidated Edison Company of New York, Inc. for Gas Service*, Case 22-G-0065, Benefit Cost Analysis: Non-Pipes Alternative to Gas Infrastructure Replacement (July 23, 2024); *Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Consolidated Edison Company of New York, Inc. for Gas Service*, Case 22-G-0065, Benefit Cost Analysis: Non-Pipes Alternative to Gas Service Replacement (July 23, 2024).

of 1.39.⁶⁷ The Electric Advantage filing identifies 22 projects that are cost-effective.⁶⁸ In addition, as discussed in *infra* Part D, the current BCA handbook categories do not include critical, and quantifiable, benefits like reductions in criteria air pollutants from gas combustion, and it is not clear that the accounting for avoided gas use includes the upstream out-of-state impacts of methane leakage from its extraction and transport, as required by the CLCPA.

National Grid Rate Cases. Recent National Grid rate proceedings offer other examples of NPA evaluation reporting on the individual-project level. National Grid applied the NPA screening criteria that it proposed in August 2022 to its gas infrastructure project proposals in the 2023 KEDNY-KEDLI rate case.⁶⁹ National Grid evaluated 183 capital projects for NPAs, deemed nine to be eligible for NPAs, and ultimately proposed only five NPAs—four biomethane injection sites and a hydrogen-natural gas blending facility.⁷⁰ National Grid provided explanations for each of the 183 capital projects that it evaluated, citing one or multiple reasons for why a project was deemed either ineligible or eligible for NPA consideration. The most common explanation for why a project was deemed ineligible for NPA consideration was

⁶⁷ *Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Consolidated Edison Company of New York, Inc. for Gas Service*, Case 22-G-0065, Benefit Cost Analysis: Non-Pipes Alternative to Gas Service Replacement at 4 (July 23, 2024).

⁶⁸ *Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Consolidated Edison Company of New York, Inc. for Gas Service*, Case 22-G-0065, Benefit Cost Analysis: Non-Pipes Alternative to Gas Infrastructure Replacement at 5 (July 23, 2024).

⁶⁹ *Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of KeySpan Gas East Corp. d/b/a National Grid for Gas Service*, Cases 23-G-0225 & 23-G-0226, National Grid (KEDLI) Direct Testimony of Gas Infrastructure & Operations Panel at Exhibit 5 (April 28, 2023) [hereinafter KEDLI GIOP Direct Testimony]; National Grid (KEDNY) Direct Testimony of Gas Infrastructure & Operations Panel at Exhibit 5 (April 28, 2023) [hereinafter KEDNY GIOP Direct Testimony].

⁷⁰ *Id.*

“system reliability.”⁷¹ National Grid used this explanation 85 times to dismiss projects from NPA consideration.

KEDNY-KEDLI Rate Proceeding (23-G-0225 & 23-G-0226): Capital Project NPA Evaluations	
Explanation for Why a Project Is Not Eligible or Suitable for NPA Treatment	# Projects
Reliability	85
Time	44
NPAs not applicable	39
Mandated by regulation	34
This is an NPA	5
Eligible – depending on customer interest	4
<i>TOTAL PROJECTS CONSIDERED</i>	<i>183</i>

Similarly, the Company again cited “reliability” 27 times to deny NPA consideration to capital projects in the 2024 Niagara Mohawk rate case.

NMPC Rate Proceeding (24-G-0323): Capital Project NPA Evaluations	
Explanation for Why a Project is Not Eligible or Suitable for NPA Treatment	Total
Regulatory Mandate	35
Reliability	27
NPAs not applicable	14
Repairs in-service assets	13
Time	6
Lack of customer receptivity	3
Cost	1
No explanation given	1
This is an NPA	6
Eligible – NPA evaluation ongoing	3
<i>TOTAL PROJECTS CONSIDERED</i>	<i>97</i>

National Grid’s practice of reporting its NPA evaluations allows regulators and stakeholders to spot important trends and assess the efficacy of the company’s NPA framework. For example, the provided data indicates that National Grid declines to explore NPAs due to broad factors such as “reliability” and “time.” KEDNY-KEDLI justified dismissing 44 capital

⁷¹ KEDNY & KEDLI GIOP Direct Testimony, Exhibit 5.

projects from NPA consideration because they were scheduled to commence in less than 24 months. In 28 of those instances, the 24-month threshold was the sole reason for dismissal of NPA consideration. The Joint Environmental Commenters recommend that all demand needs and any possible infrastructure projects should be evaluated for NPAs—and NPAs should be prioritized as a preferred solution. If the Commission elects to maintain any such criteria, it should carefully scrutinize the 24-month threshold that was proposed by most utilities in August 2022, and require that any terms like “reliability” be clearly defined.

4. Issuing Requests for Proposals: Competitive Bidding Benefits Project Costs and Fosters Market Innovation (Questions 28, 29)

28. Should an LDC’s NPA solicitations involve proactive outreach to local municipalities and/or public interest groups about how NPAs in particular areas might be designed to help meet public policy objectives? Are there specific elements of outreach and communication, including specified timeframes, that should be standardized to effectuate the best outcome for ratepayers?

29. How should an LDC communicate eligibility requirements, or restrictions, to potential NPA providers in NPA solicitations?

Request for Proposals (“RFPs”) are an important tool in any NPA framework, as broad solicitation of project proposals to meet a demand need or main replacement program can inform cost-effectiveness evaluations and drive innovation in energy markets.⁷² Utilities should issue RFPs that are tailored to the area, cost, and timeframe for all demand needs and infrastructure programs. For projected energy demand increases, RFPs should invite submissions for any segment of the total load relief sought—this will allow utilities to combine multiple NPAs to

⁷² *Non-Pipeline Alternatives to Natural Gas Utility Infrastructure: An Examination of Existing Regulatory Approaches* at 22, STRATEGEN (Nov. 2023) (“Competitive solicitations are likely to lead to proposals on the leading edge of technology, capability, and price as providers are competing against each other.”).

satisfy the load relief needed. Additionally, competitive project bidding drives competition, which can lower the cost and timeframe of project implementation.⁷³

Utilities should also consider other outreach to alert service providers to the needs and solutions they are looking for, to drive interest and awareness in advance of RFPs. For example, after minimal engagement from third-party vendors in response to two RFPs for demand-side NPAs, National Grid shifted its outreach approach in 2022. Instead, the company instituted a request-for-information (“RFI”) process, which the Company claims “places less burden on respondents” and allows the utility to “identify NPA opportunities that vendors feel they may be able to address and can ensure that interested vendors are receiving the RFP.”⁷⁴ The practice has not yet proven effective—the Company recently reported higher levels of engagement from third-party vendors to an RFI (10 vendors), but the number of third-party responses to subsequent RFPs has remained consistently low (1 vendor).⁷⁵ However, the Company reports that the practice of issuing RFIs helps it “gain preliminary insight from the market and to align competencies between third parties and the Companies’ system needs,”⁷⁶ and the initial response from vendors to the RFIs shows promise.

⁷³ See Herman K. Trabish, *Xcel’s record-low-price procurement highlights benefits of all-source competitive solicitations*, UTILITY DIVE (June 1, 2021), <https://www.utilitydive.com/news/xcel-record-low-price-procurement-highlights-benefits-of-all-source-compe/600240/>.

⁷⁴ *Proceeding on Motion of the Commission as to the Rates, Charges, Rules, and Regulations of The Brooklyn Union Gas Company d/b/a National Grid NY for Gas Service*, Cases 19-G-0309 & 19-G-0310, Annual Demand-Side Management Filing of the Brooklyn Union Gas Company d/b/a National Grid NY and KeySpan Gas East Corporation d/b/a National Grid (June 30, 2023), at 14-15.

⁷⁵ *Proceeding on Motion of the Commission as to the Rates, Charges, Rules, and Regulations of The Brooklyn Union Gas Company d/b/a National Grid NY for Gas Service*, Cases 19-G-0309 & 19-G-0310, Annual Capacity Demand Metric Report for 2023 and Quarterly Report for Q1 2024 (April 30, 2024), at 13.

⁷⁶ *Id.*

The Commission should encourage LDCs to incorporate this practice to build a more robust network of third-party vendors statewide and strengthen utility understanding of alternative technologies and interventions available to meet energy demand. In addition, even if the LDC does not receive sufficient proposals from third-party vendors, the LDC itself should be required to assess and put forth an NPA solution.

5. The Commission Should Require that Utilities Update NPA Frameworks Consistently with Long-Term Plans (Question 27c, d)

27c. How should NPA Suitability and Screening Criteria be a standard part of each LDC's gas system long-term plan, and thus be reviewed, updated, and approved as appropriate?

27d. What is the most efficient and effective process to update the NPA Suitability and Screening Criteria?

The gas utility long-term planning process is intended to ensure that utility investments and supply plans are consistent with state climate objectives, which require major reductions in natural gas use in New York State.⁷⁷ NPAs are important tools to achieve these outcomes. NPA implementation should therefore be fundamental to the long-term planning process and utilities should be required to provide information in their long-term plans about their NPA frameworks. LDC long-term plans are updated on a three-year schedule.⁷⁸

The Commission should provide guidance on the development, contents, and application of the NPA framework document to ensure transparency and alignment with state and Commission policy. These framework standards should be issued by the Commission in the near term, based on the stakeholder comments and LDC information filed from its July 2024 solicitation. NPA framework documents should be consistent in terms of contents, structure and format across all LDCs. These framework documents should provide clear definitions and

⁷⁷ Gas Planning Order, at 4.

⁷⁸ *Id.* at 20.

parameters for modeling the business-as-usual case and provide detailed, up-to-date information on all types of NPA eligible technologies. These should be updated periodically to account for technological upgrades and market improvements—at minimum, framework documents should be revisited and updated as needed during each LDC’s long-term plan update, which will occur at three-year intervals.⁷⁹ Initially, the Commission may want to start by requiring that LDCs update their NPA framework documents on an annual basis, as program development moves quickly and programs take shape. Reporting on progress should be required annually, *see supra*, Part C(3).

D. Evaluating NPA Projects (Questions 25, 33, and 34)

25. Does the current Benefit-Cost Analysis (BCA) framework undervalue alternatives to traditional infrastructure? If so, what changes, and/or additional data, tests or measures could supplement the BCA framework to improve the analysis?

33. For the purpose of valuing an NPA, should the assumed amortization period for the non-NPA solution to which the NPA is compared be the shorter of the solution’s engineering useful life or 2050, i.e., the year set by the CLCPA for the reduction of economywide emissions to net zero?

34. How should the quantity of expected emissions reduction resulting from an NPA be estimated? Should that quantity be valued using the Social Cost of Carbon recommended by the Department of Environmental Conservation, by the allowance price assigned by the New York Cap and Invest program, or in some other way?

The BCA framework plays a critical role in evaluating investments in New York’s energy infrastructure, particularly as the state transitions toward achieving its ambitious climate and clean energy goals under the CLCPA. However, the current BCA framework⁸⁰ falls short in fully

⁷⁹ *Id.*

⁸⁰ *Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision*, Case 14-M-0101, Order Establishing the Benefit Cost Analysis Framework (Jan. 21, 2016); *Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision*, Case 14-M-0101, Staff White Paper on Benefit-Cost Analysis in the Reforming Energy Vision Proceeding (July 1, 2015).

capturing the value of alternatives to traditional gas infrastructure, such as NPAs, which are essential to meeting the state's emission reduction targets.

The Commission should require that LDCs develop and file documentation of the cost-benefit analysis. In this document, the LDC should include assumptions, inputs, and methodologies for assessing the costs and benefits of NPAs compared with other investment options. If an LDC uses its existing BCA Handbook, its methodologies must be updated to include, e.g., how traditional infrastructure will be valued and option value (discussed below). If the LDC does not plan to use its BCA handbook for NPAs, then it would need to justify any different methodologies and assumptions to be used for NPAs.

To ensure that the BCA effectively supports the state's climate and clean energy policies, it must be updated to account for a broader range of benefits, including avoided infrastructure costs, comprehensive greenhouse gas emissions accounting, public health impacts, and equity considerations. These changes will better align the BCA framework with the goals of the CLCPA, ensuring that the state prioritizes clean, cost-effective, and equitable energy solutions in its long-term planning and investment decisions.

1. The Commission Should Require Robust Documentation of Utility Cost-Benefit Analyses to Ensure the Selection of Strategic NPA Project Locations (Question 23)

Regarding BCAs, the Commission should require LDCs to follow standardized assumptions for the value of carbon and methane (accounting for methane leakage), the economic life of gas infrastructure (which should end in 2050 to comply with the CLCPA), the economic life of electrification measures, and the efficiencies of gas and electric appliances. LDCs should also follow standardized methodologies for calculating electric and gas price forecasts, gas load growth forecasts, grid emission rates, methane leakage rates from gas wells to customer sites, and reduction in leakage from electrification. The assumptions, methodologies,

and forecasts should be consistent across different proceedings and processes, such as gas and electric planning and rate cases, and should include electric sector impacts. Pertaining to load growth forecasts, the Commission should direct the LDCs to use common assumptions, data sources, and methods to calculate gas peak (including summer and winter), annual usage, and customer count forecasts over the near-term and long-term. Individual LDCs could request variation in assumptions and methodologies but should have the burden of proving that such variation is necessary.

To enable more precise measurement of impacts on different customer groups, LDCs should coordinate with electric utilities and NYSERDA to track and report information on electrification. Specifically, such reporting should include the extent to which customers in their service areas are electrifying end uses on average as well as specific customer segments, including hard-to-reach customers and customers in disadvantaged communities. This will also facilitate development of NPAs that more precisely target existing end uses.

2. NPAs Are Undervalued in the Current BCA Framework As Compared to Traditional Gas Projects

The current BCA framework undervalues NPAs when compared to traditional gas infrastructure projects. This undervaluation stems from several factors, including insufficient consideration of avoided infrastructure costs, incomplete GHG emissions accounting, and the exclusion of health impacts and option value.

Avoided Infrastructure Costs. The BCA framework does not fully capture the avoided costs of gas infrastructure that NPAs offer. To improve this, the avoided costs should reflect the pipeline capacity that the LDC would need 1) to build to carry the incremental gas anticipated from new customers and/or existing customers, or 2) to maintain to carry the expected gas usage from the existing customers based on its forecasts of peak day usage. Any outcomes from the

Avoided Cost of Gas working group regarding Marginal Cost of Service (MCOS) studies should be incorporated into the BCA handbooks to ensure consistency and accuracy in avoided cost calculations. Importantly, MCOS should only be applied to scenarios where infrastructure expansion is necessary due to growth, and not where system contraction or downsizing is possible.

Incomplete Methane and GHG Accounting. Incorporating CLCPA-compliant GHG emissions accounting in the BCA is essential because it ensures that all emissions are accurately measured and aligned with the state’s legally mandated emissions reduction targets, preventing underestimation of the true environmental and societal costs of traditional infrastructure projects. The LDCs’ current BCA Handbooks are inconsistent and often fail to include comprehensive methane accounting, particularly upstream methane leakage. Moreover, as NRDC has explained in detail in long-term planning proceedings,⁸¹ the CLCPA mandates a gross GHG accounting framework that is the foundation for multiple components of the CLCPA, including tracking and informing statewide emissions reduction limits and is critically important for its successful implementation. NYSERDA has issued guidance that recommends using net accounting for monetization of avoided GHG emissions as a simplifying assumption,⁸² which dramatically distorts the emission reduction benefits of biomethane, especially if the biomethane is imported from out of state. To align with the CLCPA's goals, gross accounting should be applied to all

⁸¹ See *In the Matter of a Review of the Long-Term Gas System Plans of The Brooklyn Union Gas Co. d/b/a Nat’l Grid NY, KeySpan Gas East Corp. d/b/a Nat’l Grid, and Niagara Mohawk Power Corp. d/b/a Nat’l Grid*, Case No. 24-G-0248, Comments of NRDC on National Grid’s Initial Long-Term Plan at 20-23 (Sept. 18, 2024).

⁸² NYSERDA, *Fossil and Biogenic Fuel Greenhouse Gas Emissions Factors*, Report No. 22-23, (revised May 2023), at 5.

GHG emissions, including upstream and downstream methane emissions, for both fossil fuels and biomethane.

Health Damages from Pollution. The current BCA framework does not fully account for the public health benefits of avoided air pollution, including nitrogen dioxide (NO₂) and other combustion-related pollutants. Properly valuing these health benefits, particularly in communities disproportionately affected by pollution, would improve the comparative advantage of NPAs.

Option Value. The option value of NPAs is often overlooked in traditional BCAs. Smaller, incremental investments in NPAs can provide flexibility by deferring large infrastructure investments, thus mitigating the risk of stranded assets and allowing for better-informed decisions based on future gas loads and other variables. This option value should be recognized in the BCA framework, particularly where NPAs can meet near-term capacity needs and delay the need for large-scale investments in gas infrastructure.⁸³

3. An Improved BCA Framework Acknowledges the Costs of Traditional Gas Infrastructure and Captures the Widespread Benefits of a Downsized Gas System

While the current BCA framework provides a foundational tool for comparing energy infrastructure investments, it does not adequately capture the full range of benefits that NPAs can deliver. In particular, it overlooks several critical factors that are necessary to accurately assess the true costs and benefits of NPAs in comparison to traditional infrastructure projects. The following considerations highlight key areas where the BCA framework must be improved to better reflect the value of NPAs and support the state's clean energy and climate goals:

⁸³ Asa Hopkins et al., *Gas Regulation for a Decarbonized New York: Recommendations for Updating New York Gas Utility Regulation*, NRDC (June 29, 2020), https://www.synapse-energy.com/sites/default/files/Gas_Regulation_Decarbonized_NY_19-082.pdf.

Amortization Period for Traditional Infrastructure Solutions. When valuing NPAs, the amortization period for the traditional infrastructure investment (the business-as-usual scenario) should reflect the reality that gas infrastructure may no longer be viable after 2050, given the CLCPA’s goal for net-zero emissions by that year. Therefore, the amortization period should be the shorter of the engineering useful life of the infrastructure or the year 2050. This change would more accurately reflect the deferral value and future risk of stranded assets associated with continued gas infrastructure investment.

Estimating and Valuing Emissions Reductions from NPAs. The quantity of emissions reductions resulting from an NPA can be estimated by comparing the GHG emissions under the NPA scenario with those from the traditional infrastructure project. Emissions reductions should be valued using the Social Cost of Carbon (SCC) as recommended by the Department of Environmental Conservation (DEC), given its alignment with CLCPA goals and emphasis on comprehensive societal impacts.

Equity Considerations in the BCA Framework. The current Societal Cost Test used in BCAs does not adequately capture equity impacts, especially in relation to how the benefits of NPAs are distributed across different communities. NPAs may offer significant equity benefits, particularly in disadvantaged communities, even if they produce lower BCA results compared to traditional infrastructure projects. These benefits should be considered explicitly in BCA evaluations, using metrics for non-energy benefits and community impacts. Projects that provide substantial equity benefits may warrant implementation even if they appear less cost-effective from a narrow financial perspective.⁸⁴

⁸⁴ *Non-Pipeline Alternatives: A Regulatory Framework and a Case Study of Colorado* at 28, STRATEGEN (Nov. 2023), <https://www.strategen.com/strategen-blog/non-pipeline-alternatives-framework>.

Benefits and Costs Categories. When applying the Societal Cost Test, NPAs should include at least the following benefits and costs:

Figure 3: NPA Societal Cost Test Benefits and Cost Factors⁸⁵

Benefits	Costs
Avoided gas transmission methane emissions	Program and participant costs
Avoided gas distribution methane emissions	Electric generation capacity
Avoided end-use methane emissions	Electric transmission capacity
Avoided end-use CO ₂ emissions	Electric distribution capacity
Avoided end-use criteria air pollutant emissions (i.e. SO ₂ , NO _x , PM2.5)	Electric O&M
Avoided commodity costs	Electricity consumption
Avoided gas O&M	Ancillary services (Frequency regulation and spinning reserves)
Avoided land use impact	Electric CO ₂ emissions
Avoided water impact	Electric criteria air pollutant emissions (i.e., SO ₂ , NO _x , PM2.5)
Workforce impacts	Land use impact
System reliability impacts (does not include benefits related to resolving a reliability issue that triggered the NPA)	Water impact
Avoided line extension subsidies	Gas workforce impact
Higher utilization of underutilized electric assets	Electric system reliability (restoration cost and outage cost)

Incorporating Federal Incentives as Benefits in the BCA. As Earthjustice and Sierra Club have recommended in long term planning proceedings,⁸⁶ federal electrification and energy efficiency (EE) programs offer significant financial incentives that can accelerate the transition to cleaner energy systems in New York. These federal incentives should be treated as a benefit to New York under the Societal Cost Test (SCT), rather than merely as a financial transfer. This distinction is critical because the cost of these federal programs is largely fixed at the national

⁸⁵ Non-Pipeline Alternatives: A Regulatory Framework and a Case Study of Colorado at 28, STRATEGEN (Nov. 2023), <https://www.strategen.com/strategen-blog/non-pipeline-alternatives-framework>.

⁸⁶ *In the Matter of a Review of the Long-Term Gas System Plan of National Fuel Gas Distribution Corporation*, Case 22-G-0610, Earthjustice & Sierra Club Response to National Fuel Gas Draft BCA Handbook (Mar. 25, 2024); *In the Matter of a Review of the Long-Term Gas System Plan of National Fuel Gas Distribution Corporation*, Case 22-G-0610, Earthjustice & Sierra Club Response to National Fuel Gas BCA Handbook (May 31, 2024).

level, but the degree of benefit New York can receive depends on how effectively state residents and businesses take advantage of these incentives. By increasing uptake, New York can secure more of the available federal funding, amplifying the state's progress toward achieving its climate goals. Therefore, categorizing these federal incentives as a benefit more accurately reflects their value to New York's society and economy, and aligns with the SCT's purpose of assessing societal benefits, rather than presenting New York as indifferent to federal incentive uptake.

Valuing Electric System Benefits. Consistent with recommendations that NRDC has made for measuring the benefits of all distributed energy resources, including energy efficiency and demand flexibility, for the BCA framework and for calculation of shareholder incentives, NRDC suggests an eventual transition to the Total System Benefit (TSB) metric to value electric system benefits and relevant environmental externalities.⁸⁷ The TSB equals the NPA measure's hourly use load shape times the hourly avoided costs for each year of the measure's effective life, summed across all measures in the NPA portfolio. The hourly avoided costs should include all the benefits of energy savings and how they vary with time. For example, the TSB for electrification measures is the sum of the gas TSB associated with decreased gas use and related emissions reductions, and the negative electric TSB associated with increased electric use and related emissions increase. Using the TSB will encourage deployment of measures that provide savings when they are most valuable to the electric or gas system.

Ultimately, the BCA framework for evaluating NPAs must be updated to account for the full range of avoided costs, health benefits, GHG emissions, and option value, while aligning

⁸⁷ Mohit Chhabra, *One metric to rule them all: A common metric to comprehensively value all distributed energy resources*, 35 ELECTRICITY J. 107192 (2022), <https://www.sciencedirect.com/science/article/abs/pii/S104061902200118X>.

amortization periods with the CLCPA’s 2050 goals. Additionally, equity considerations must overlay the evaluation process to ensure that NPAs are assessed not just on their immediate economic merits, but also on their potential to support the state’s broader climate and social equity objectives. Where NPAs present net benefits relative to traditional infrastructure, they should be prioritized for implementation. Even where BCAs show less favorable results, NPAs that align with CLCPA goals or deliver benefits to disadvantaged communities should be considered for further support and development.

E. Caution is Needed Regarding Certain Types of “NPAs”

Some projects that utilities are promoting as decarbonization pathways are not appropriate NPA solutions for all circumstances. Utilities have proposed hydrogen injection into the natural gas distribution system, as well as interconnecting biomethane (referred to by industry as “renewable natural gas” or RNG) into the distribution system, as purported NPA solutions.⁸⁸ While these projects might reduce demand for fossil natural gas by providing a different gaseous fuel source, they must be evaluated with caution, as they present significant risks and drawbacks.

First, hydrogen and biomethane injection should only be considered for NPA treatment if their proposed deployment is consistent with the New York State Scoping Plan and if the project represents a pathway to full decarbonization. The Scoping Plan is clear that electrification is the most cost- and energy-efficient pathway to decarbonizing nearly all residential and commercial buildings, while recognizing that some industrial gas users may not be able to electrify and may

⁸⁸ See, e.g., *Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of The Brooklyn Union Gas Co. d/b/a Nat’l Grid NY for Gas Service & KeySpan Gas East Corp. d/b/a Nat’l Grid for Gas Service*, Cases 23-G-0225 & 23-G-0226, KEDNY GIOP Direct Testimony, Exhibit __ (GIOP-5) at 267-75 (Apr. 28, 2024) (proposing RNG Interconnection projects as NPAs).

need gaseous energy sources.⁸⁹ The Scoping Plan states that “[b]efore considering using alternative fuels in the gas system, [the Commission should] ensure that safety considerations are addressed and that there are demonstrated air quality, health, and GHG benefits before implementation, including requirements to avoid localized pollution in Disadvantaged Communities.”⁹⁰ Blending small amounts of hydrogen and biomethane into the gas pipeline system achieve minor reductions in greenhouse gas emissions (if any, depending on the emissions profile of the energy production pathways) that cannot be scaled effectively. Biomethane faces significant supply limitations and emits significant GHGs and local pollution, while hydrogen would be extremely inefficient to produce at a large scale for use in buildings. In other contexts, EDF has proposed that decisionmakers must “[w]eigh the costs and benefits of any proposed hydrogen project as compared with its alternatives, including electrification and NPAs, as well as the status quo. The purposes must be sufficiently granular to allow evaluation of the various end uses and end users, to ensure cost effectiveness.”⁹¹

Second, for resources with limited supply like biomethane and hydrogen, a utility should have to demonstrate that the proposed project represents the best use of the energy. For example, generally injecting biomethane into the gas supply that is delivered to residential and commercial customers that are likely to electrify in the coming years is not a strategic use or viable decarbonization strategy. Instead, the Commission should consider deploying any unavoidable methane—i.e., existing societal sources of methane emissions like landfills—for hard-to-electrify

⁸⁹ See Scoping Plan at 350-63; see also *Id.* at Appendix G at 23.

⁹⁰ Scoping Plan at 361.

⁹¹ *In the Matter of a Review of the Long-Term Gas System Plans of The Brooklyn Union Gas Co. d/b/a Nat'l Grid NY, KeySpan Gas East Corp. d/b/a Nat'l Grid, and Niagara Mohawk Power Corp. d/b/a Nat'l Grid*, Case 24-G-0248, Comments of EDF on National Grid's Initial Long-Term Plan at 27 (Sept. 18, 2024).

customers that can be expected to rely on biogas or biomethane well into the future. Possible users could include hard-to-electrify heavy industry.

1. Hydrogen-Methane Blending Poses Safety, Climate, and Health Risks

Utilities are asserting that hydrogen-methane blending is worthwhile to reduce emissions, but there are numerous safety risks, the near-term emissions reductions are minimal, are partially offset by hydrogen leakage that itself contributes to climate warming, and do not represent a pathway to full decarbonization.

Methane, the primary component of natural gas, and hydrogen, are distinct molecules with unique properties and behaviors. Using pipelines and other infrastructure that was designed for natural gas to transport or use hydrogen can compromise their structural integrity, and there is not a technical consensus on a safe hydrogen-methane blend rate for natural gas infrastructure.⁹² A 2022 NREL report states that “[b]lending limit generalization is problematic because hydrogen compatibility depends on existing infrastructure component factors including specific equipment model, equipment condition, and material of construction.”⁹³ A study by the Fraunhofer Institute concluded that the blend rate should be set on a case-by-case basis depending on the limitations and differences of the local infrastructure.⁹⁴

Hydrogen itself is an indirect greenhouse that will cause warming when emitted into the atmosphere by increasing the concentrations of short-lived GHGs,⁹⁵ and due to its small

⁹² See Martin et al., *A review of challenges with using the natural gas system for hydrogen* at 2, ENERGY SCI. & ENGINEERING 2024;1-15 (Aug. 18, 2024), <https://doi.org/10.1002/ese3.1861>.

⁹³ Topolski et al., *Hydrogen Blending into Natural Gas Pipeline Infrastructure: Review of the State of Technology*, NREL (Oct. 2022), <https://www.nrel.gov/docs/fy23osti/81704.pdf>.

⁹⁴ Bard et al., *The Limitations of Hydrogen Blending in the European gas Grid*, FRAUNHOFER IEE (Jan. 2022), https://www.iee.fraunhofer.de/content/dam/iee/energiesystemtechnik/en/documents/Studies-Reports/FINAL_FraunhoferIEE_ShortStudy_H2_Blending_EU_ECF_Jan22.pdf.

⁹⁵ Ocko & Hamburg, *Climate consequences of hydrogen emissions*, 22 ATMOSPHERIC CHEM. & PHYSICS 9349 (2022), <https://acp.copernicus.org/articles/22/9349/2022/>.

molecule size and lower viscosity, hydrogen is expected to leak 1.3- to 3-times faster than natural gas.⁹⁶ Thus, hydrogen leakage could undermine potential climate benefits of hydrogen-methane blending.⁹⁷ According to a new analysis, blending 20% hydrogen (by volume) into the New York State natural gas system could reduce GHG emissions from gas-reliant buildings by 7.2%, but once hydrogen leakage is factored in, the 20% blending scenario would only cut 5.1% of emissions associated with natural gas-heated buildings.⁹⁸

Hydrogen-methane blending for use in homes and buildings is not a viable or scalable decarbonization pathway. In addition to the leakage risks identified above, it takes a significant amount of clean energy to produce climate-beneficial hydrogen, making it a substandard option when more efficient solutions like electrification are available. New analysis demonstrates that manufacturing enough green hydrogen to blend 20% hydrogen into New York State's methane gas distribution systems would require generating enough electricity to power all of New York City for a year, whereas building electrification via heat pumps could achieve the equivalent reduction in greenhouse gas emissions with 87.2% less electricity.⁹⁹ And hydrogen has just one-third the energy density per unit compared with natural gas, meaning that end users need to receive and combust more hydrogen gas to obtain the same amount of energy, and pipelines and compressors would need to increase their capacity to deliver this greater gas volume.¹⁰⁰

⁹⁶ M.R. Swain, *A Comparison of H₂, CH₄ and C₃H₈ Fuel Leakage in Residential Settings*, 17 INT'L J. HYDROGEN ENERGY 807 (1992), [https://doi.org/10.1016/0360-3199\(92\)90025-R](https://doi.org/10.1016/0360-3199(92)90025-R).

⁹⁷ Arun SK Reju, *Hydrogen Blending Impacts Study*, CAL. PUB. UTIL. COMM. (July 18, 2022), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M493/K760/493760600.PDF>.

⁹⁸ Shron et al., *Blending Hydrogen & Natural Gas: A Road to Nowhere for New Yorkers* at 22, SWITCHBOX (Sept. 12, 2024), <https://tinyurl.com/ykmj6e8x>.

⁹⁹ *Id.* at 15.

¹⁰⁰ See Martin et al., *A review of challenges with using the natural gas system for hydrogen*, ENERGY SCI. & ENGINEERING 2024;1-15 at 3, Table 1 (Aug. 18, 2024), <https://doi.org/10.1002/ese3.1861>.

Finally, hydrogen combustion is understood to generate higher emissions of nitrogen oxides (“NO_x”) compared with natural gas, and it is unclear whether current NO_x removal technologies are effective against NO_x generated from blended methane/hydrogen used in buildings.¹⁰¹ NO_x is a harmful pollutant that can have adverse effects on lung health.¹⁰² Using hydrogen or methane/hydrogen blends in buildings could increase health risks for people.

2. Biomethane Poses Climate Risks and Supply Limitations

Biomethane, a pipeline quality fuel produced from biogas, provides limited if any climate benefits and is not a viable decarbonization pathway for the building sector.¹⁰³ Biomethane is composed primarily of the potent GHG methane that has over 80 times the warming power of carbon dioxide on a 20-year timespan, and research estimates that methane leakage from biomethane production and biogas-to-biomethane upgrading facilities is in the 2-4% range, up to as much as 15%.¹⁰⁴ In fact, recent research indicates that the emissions associated with biomethane production have been significantly underestimated, and that supply chain emissions are comparable for biomethane and fossil gas.¹⁰⁵ Biomethane production emits GHGs at every

¹⁰¹ Wright & Lewis, *Emissions of NO_x from Blending of Hydrogen and Natural Gas in Space Heating Boilers*, 10 SCI. ANTHROPOCENE 00114 (2022), <https://online.ucpress.edu/elementa/article/10/1/00114/183173/Emissions-of-NOx-from-blending-of-hydrogen-and>.

¹⁰² *Nitrogen Dioxide*, AM. LUNG. ASS’N, <https://www.lung.org/clean-air/outdoors/what-makes-air-unhealthy/nitrogen-dioxide> (last visited Nov. 10, 2022).

¹⁰³ See Joe Rudek & Stefan Schwietzke, *Not all biogas is created equal*, EDF ENERGY EXCHANGE (Apr. 15, 2019), <https://blogs.edf.org/energyexchange/2019/04/15/not-all-biogas-is-created-equal/>; Sasan Saadat et al., *Rhetoric vs. Reality: The Myth of “Renewable Natural Gas” for Building Decarbonization* at 9, Earthjustice & Sierra Club (July 2020).

¹⁰⁴ Grubert, *At Scale, Renewable Natural Gas Systems Could be Climate Intensive: The Influence of Methane Feedstock and Leakage Rates*, 15 ENV’T RES. LETTERS 084041 (2020), <https://iopscience.iop.org/article/10.1088/1748-9326/ab9335>.

¹⁰⁵ See Wechselberger et al., *Methane Losses from Different Biogas Plant technologies*, 157 WASTE MGMT. 110 (2023), <https://www.sciencedirect.com/science/article/pii/S0956053X22006006>; Bakkaloglu et al., *Methane Emissions Along Biomethane and Biogas Supply Chains are Underestimated*, 5 ONE EARTH 724 (2022), <https://www.sciencedirect.com/science/article/pii/S2590332222002676>.

stage. First, transporting feedstocks to the production site can require the use of trucks or other heavy-duty vehicles, which can generate significant GHG emissions. Second, the anaerobic digesters used to produce biogas from those feedstocks emit significant amounts of methane.¹⁰⁶ A recent study found that wastewater treatment facilities that have anaerobic digesters emit three times as much methane than wastewater treatment facilities that do not.¹⁰⁷ Additionally, anaerobic digestion produces a byproduct called digestate, the leftover solids and liquids after biogas is generated from feedstocks such as manure, which can be a significant source of methane.¹⁰⁸ Third, when biogas is purified into biomethane, carbon dioxide is removed from biogas and is typically released.¹⁰⁹ The purification process also requires energy, which is often provided by onsite fossil fuel combustion—resulting in yet more GHGs. Especially if new biomethane is generated—for example, from wood product wastes or purpose-grown crops—subsequent leakage would increase overall atmospheric methane concentrations and be counterproductive to addressing climate change.¹¹⁰

In addition to the climate impact of leakage, biomethane combustion releases carbon dioxide and local pollution at the same rates as natural gas combustion.¹¹¹ The impact of harmful

¹⁰⁶ Wechselberger et al., *Methane Losses from Different Biogas Plant Technologies* 157 WASTE MGMT. 110 (2023), <https://www.sciencedirect.com/science/article/pii/S0956053X22006006>.

¹⁰⁷ Song et al., *Methane Emissions from Municipal Wastewater Collection and Treatment Systems*, 57 ENV'T SCI. & TECH. 2248 (2023), <https://pubmed.ncbi.nlm.nih.gov/36735881/>.

¹⁰⁸ Paolini et al., *Environmental Impact of Biogas: A Short Review of Current Knowledge*, 53 J. ENV'T SCI. & HEALTH 899 (2018), <https://pubmed.ncbi.nlm.nih.gov/29652205/>.

¹⁰⁹ Izzuddin Adnan et al., *Technologies for Biogas Upgrading to Biomethane: A Review*, 6 BIOENGINEERING 92, 9 (2019), <https://www.mdpi.com/2306-5354/6/4/92>.

¹¹⁰ See Baker et al., *Getting to Neutral: Options for Negative Carbon Emissions in California* at Fig. 15, Lawrence Livermore National Laboratory, LLNL-TR-796100 (Jan. 2020), <https://www.osti.gov/biblio/1597217>.

¹¹¹ Cooley et al., *Effects of Low-Carbon Fuel and energy Technologies on Co-Pollutant Emissions*, Memorandum, NYSERDA (updated Oct. 2022), <https://www.nyserda.ny.gov/>

air pollutants like NO_x from biomethane is equivalent to natural gas combustion—whereas this pollution could be eliminated by converting homes from gas combustion to electrification.

Supplies of unavoidable methane—i.e., existing societal sources of methane emissions like landfills—are limited and are best used onsite or allocated for hard-to-electrify sectors rather than blending into gas distribution systems for delivery to homes and buildings.¹¹² An NRDC analysis concluded that “ecologically sound biogas and synthetic gas” could replace just 3-7% of demand.¹¹³ A National Renewable Energy Laboratory analysis found that methane potential from landfill material, animal manure, wastewater, and industrial, institutional, and commercial organic waste in the U.S. is ~420 billion cubic feet, which would displace only 1.4% of U.S. gas demand (30.28 trillion cubic feet in 2021).¹¹⁴

IV. Conclusion

The Joint Environmental Commenters support the Commission and Staff’s determination to seek further information regarding approaches to effective NPA implementation, to inform a

[/media/Project/Nyserda/Files/EDPPP/Energy-Prices/Energy-Statistics/Co-Pollutant-Impacts-of-Low-Carbon-Fuels-and-Technologies.pdf](#)

¹¹² See NYSEDA, *Potential of Renewable Natural Gas in New York State*, Report No. 21-34 (April 2022), <https://www.nyserda.ny.gov/-/media/Project/Nyserda/files/EDPPP/Energy-Prices/Energy-Statistics/RNGPotentialStudyforCAC10421.pdf>; Sherri Billimoria & Mike Henchen, *Regulatory Solutions for Building Decarbonization*, ROCKY MOUNTAIN INST. (2020) at 21, <https://rmi.org/wp-content/uploads/2020/07/Regulatory-Solutions-Framework-Report-070820.pdf>; Scoping Plan, at 337.

¹¹³ See ICF, *Renewable Sources of Natural Gas: Supply and Emissions Reduction Assessment*, AM. GAS. FOUND. (Dec. 2019), <https://www.gasfoundation.org/wp-content/uploads/2019/12/AGF-2019-RNG-Study-Full-Report-FINAL-12-18-19.pdf>; NAT. RES. DEF. COUNCIL, *Issue Brief: A Pipe Dream or Climate Solution? The Opportunities and Limits of Biogas and Synthetic Gas to Replace Fossil Gas* at 5 (June 2020), <https://www.nrdc.org/sites/default/files/pipe-dream-climate-solution-bio-synthetic-gas-ib.pdf>.

¹¹⁴ NREL, *Biogas Potential in the United States* (Oct. 2013), <https://www.nrel.gov/docs/fy14osti/60178.pdf>; U.S. ENERGY INFO. ADMIN., *Frequently Asked Questions: How much natural gas is consumed in the United States?* (last updated May 11, 2022), <https://www.eia.gov/tools/faqs/faq.php?id=50&t=8>.

comprehensive NPA framework proposal. Staff should use the information provided by the Joint Environmental Commenters, the LDCs, and other stakeholders to develop robust NPA standards for all New York LDCs, to ensure robust pursuit of non-pipeline solutions that can manage costs and cut pollution. The Commission can set utilities on the right path by establishing clear and durable frameworks for evaluation and implementation of NPAs.

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Appendix 1 - Joint Environmental Commenters' Key Recommendations

The following is an abbreviated list of measures recommended by the Joint Environmental Commenters on how to structure effective, transparent, and enduring NPA frameworks that can best facilitate the downsizing of the natural gas system and help New York achieve its climate goals.

NPA Frameworks

Every utility should pursue NPAs under a framework that:

- 1) identifies demand needs and aging infrastructure risks as early as possible;
- 2) considers how to meet those needs with efficiency, demand response, and electrification;
- 3) prioritizes demand-side NPAs as a preferred solution and treats gas infrastructure investments as an option of last resort;
- 4) seeks solutions and resources through an open request-for-proposals (“RFPs”) process or an ongoing utility program
 - a. For capital projects that are common occurrences for LDCs, such as leak-prone pipe replacement or main/service line extension to connect new customers, utilities should develop standing programs to seek NPA solutions;
 - b. LDCs should issue RFPs that are tailored to the area, cost, and timeframe needs, but that allow address any segment of the total load relief sought for supply needs. This will allow utilities to combine multiple NPAs to satisfy the load relief needed.
- 5) evaluates projects using, among many factors, the climate and health benefits of avoiding gas infrastructure;
- 6) maintains a robust and transparent record of its decision-making process in evaluating and implementing NPAs; and
- 7) makes cost recovery contingent on program success and otherwise includes appropriate incentives and disincentives needed to align utility investments with the greenhouse gas reduction and equity mandates of the CLCPA.

Prioritization of Gas System Downsizing

In determining the priority level of different NPA projects, utilities should strategically identify project locations that would best serve the goal of overall system downsizing using this criterion:

- Status
 - Pipes that are targeted for accelerated replacement (e.g. “leak prone pipe”), because of the material (e.g. cast iron, steel) or age, especially those requiring high-cost replacements. This can include both gas mains and gas services.
 - Pipes that would otherwise require capacity expansion due to load growth or reliability in 18 months or more.
- Location
 - Segments located at the end of a service branch (“dead-end” segments) that have no downstream impact on gas pressure.
 - Locations with redundant pipe capacity where some customers could be served with an NPA and others can be cost-effectively transferred to another, redundant

segment, allowing one of the redundant segments to be retired without replacement.

- Locations with ample headroom on the electric system for increased load from electrification in the near term; however, proactive electric system planning should prioritize expanding grid capacity in the locations where downsizing the gas system is feasible produces the most value.
- Locations well-suited for implementing thermal energy networks.
- Locations well-positioned to advance policy goals, such as those where targeted electrification efforts can effectively reduce disproportionate local air pollution burdens in disadvantaged communities.
- Characteristics of service or of customers being served
 - Residential and commercial buildings with adequate electrical infrastructure to handle heat pumps and other electrification technologies without extensive upgrades to building structures and electrical service.
 - Communities with potential partners to support or incentivize gas alternatives (e.g., local governments or community-based organizations).
 - Segments or clusters yielding the lowest gas revenues or a level of gas revenues that is not sufficient to cover costs.
 - Segments that serve a small number of decision-making entities¹¹⁵ or customers (e.g., less than 10 residential buildings per 100 yards). These segments should generally be prioritized because they are more likely to be successful at gaining voluntary participation for all affected customers. LDCs should conduct a cost-effectiveness analysis that takes into account a customer density factor to help prioritize neighborhood electrification.

Reporting and Transparency

1. NPA Plan and BCA Framework

Utilities should be required to maintain and publicly disclose robust documentation of their NPA evaluation frameworks, as well as their BCA framework.

NPA framework documents should be consistent in terms of contents, structure and format across all LDCs. They should be updated periodically to account for technological and market improvements—at minimum, framework documents should be revisited and updated as needed during each LDC’s long-term plan update, which will occur at three-year intervals. Initially, the Commission may want to start by requiring that LDCs update their NPA framework documents on an annual basis, as program development moves quickly and programs take shape.

2. Reporting on NPA Progress

The information below should be reported by LDCs on an annual basis, and could be filed as part of the annual updates required by each LDC on their long-term plans, or another forum the Commission deems appropriate. The Commission should also require that this information be

¹¹⁵ In the case of some multi-family dwellings or building developments there may be many customers connected to the system but only a few decision-making entities who would need to consent to participating in an NPA.

submitted when each utility files a rate case, so that any cost recovery sought in the rate case can be considered alongside the LDC's efforts to implement NPAs.

- Lookback information:
 - All past capital projects during the last 5 years, including:
 - Project type (i.e., expansion of the gas system, maintenance of existing infrastructure, leak-prone pipe replacement)
 - Project cost, including cost of total pipe and cost per foot of pipe, labor hours and aggregate labor cost, supervisory and engineering costs, permitting, training, etc.
 - Project location Project timeframe, including date or month of identification of project need, project commencement, and project completion
 - Project load relief (for expansion projects)
 - Identify which projects were evaluated against the utility's screening and suitability criteria (Note: Commenters recommend that *all* projects should be evaluated, but if the Commission does not require that, then it should require this reporting)
 - Detailed explanations for why a project was or was not selected for NPA treatment.
 - Status/Outcome of NPA solicitation and implementation
 - Estimated timing of NPA solicitation or other next steps
- Active NPA projects
 - All active NPA projects, capital projects, and supply solicitations
 - Steps taken to date to prioritize NPAs
- Future solicitation information should include
 - All planned capital projects during the next 5 years
 - Identify which projects will be evaluated against the utility's screening and suitability criteria (Note: Commenters recommend that *all* projects should be evaluated, but if the Commission does not require that, then it should require this reporting)
 - Estimated timing of NPA solicitation or other next steps

Evaluating NPA Projects

- Utilities should develop individualized BCA Frameworks that value system downsizing and calculate the strategic value of each NPA location.

Shortfalls of Current BCA Framework:

- The BCA framework should capture the avoided costs associated with NPA implementation, including the avoided buildout needed to carry both the incremental gas anticipated from new and existing customers and the expected gas usage from the existing customers based on its forecasts of peak day usage.
- The LDC's current BCA Handbooks are inconsistent and often fail to include comprehensive methane accounting, particularly upstream methane leakage. To align with the CLCPA's goals, gross accounting should be applied to all GHG emissions, including upstream and downstream methane emissions, for both fossil fuels and RNG.

- BCA frameworks should fully account for the public health benefits of avoided air pollution, particularly in communities disproportionately affected by pollution.
- Smaller, incremental investments in NPAs can provide flexibility by deferring large infrastructure investments, thus mitigating the risk of stranded assets and allowing for better-informed decisions based on future gas loads and other variables. This option value should be recognized in the BCA framework.

Elements of an Improved BCA Framework:

- The amortization period for the traditional infrastructure investment (the business-as-usual scenario) should be the shorter of the engineering useful life of the infrastructure or the year 2050 in order to reflect the reality that gas infrastructure may no longer be viable after 2050 given the CLCPA's goal for net-zero emissions by that year.
- Emissions reductions from NPAs should be valued using the Social Cost of Carbon (SCC) as recommended by the Department of Environmental Conservation (DEC), given its alignment with CLCPA goals and emphasis on comprehensive societal impacts.
- The equity benefits of NPAs should be considered explicitly in BCA evaluations, using metrics for non-energy benefits and community impacts. Projects that provide substantial equity benefits may warrant implementation even if they appear less cost-effective from a narrow financial perspective.
- Federal electrification and energy efficiency (EE) programs offer significant financial incentives that should be treated as a benefit to New York under the Societal Cost Test (SCT), rather than merely as a financial transfer.
- BCA Frameworks should eventually transition to the Total System Benefit (TSB) metric to value electric system benefits and relevant environmental externalities.

The Commission Should be Skeptical of Hydrogen and Biomethane Projects Labeled As NPAs. Hydrogen and biomethane injection should only be considered NPAs if their proposed deployment is consistent with the New York State Scoping Plan and if the project represents a pathway to full decarbonization.