

October 2, 2024

Hon. Michelle L. Phillips, Secretary New York State Public Service Commission Three Empire State Plaza Albany, New York 12223-1350

VIA ELECTRONIC SUBMISSION

Subject: Case 20-G-0131 – Proceeding on Motion of the Commission in Regard to

Gas Planning Procedures

Dear Secretary Phillips:

In response to the Public Service Commission's (the Commission or PSC) Notice Seeking Further Comments issued July 3, 2024 (the Notice), as modified by the Notice Extending Comment Period issued September 27, 2024, the Institute for Policy Integrity at New York University School of Law (Policy Integrity) respectfully submits the following comments. Policy Integrity is a non-partisan think tank dedicated to improving the quality of government decisionmaking through advocacy and scholarship in the fields of administrative law, economics, and public policy. Policy Integrity has extensive experience advising stakeholders and government decisionmakers on the rational, balanced use of economic analysis, both in federal practice and at the state level, including in the context of cost-benefit analysis and natural gas utility regulation.

We are grateful for your consideration of these comments.

Sincerely,

/s/ Leila Safavi Leila Safavi, Ph.D Economic Fellow Institute for Policy Integrity

/s/ Elizabeth B. Stein
Elizabeth B. Stein
Institute for Policy Integrity
139 MacDougal Street
New York, New York 10012
(212) 992-8641
elizabeth.stein@nyu.edu

¹ Case 20-G-0131, *Proceeding on Motion of the Commission in Regard to Gas Planning Procedures*, Notice Seeking Further Comments (July 3, 2024) [hereinafter Notice].

² Case 20-G-0131, *Proceeding on Motion of the Commission in Regard to Gas Planning Procedures*, Notice Extending Comment Period (September 27, 2024).

³ This document does not purport to present the views, if any, of New York University School of Law.

POLICY INTEGRITY COMMENTS IN RESPONSE TO NOTICE SEEKING FURTHER COMMENTS

I. Introduction

In the Notice, the Commission states that "Staff has determined that more information from [local gas distribution companies (LDCs)] and stakeholders will assist it in developing a comprehensive NPA framework proposal," and poses a series of questions to the LDCs and to other stakeholders. Several of these questions concern how potential non-pipeline alternatives (NPAs) can be compared fairly to conventional infrastructure alternatives.

NPAs can serve many purposes, including facilitating economy-wide decarbonization. Some NPAs, including utility thermal energy networks and electrification, would facilitate decarbonization by transitioning customers away from natural gas consumption in favor of other energy sources. However, the benefit-cost analysis framework that the LDCs have been directed to use as the basis for their methodology has never been tailored for use on natural-gas-system-related projects, let alone analysis of large-scale fuel switching from the natural gas system to the electric grid. Given the steep and rapid decarbonization trajectory required by the Climate Leadership and Community Protection Act (CLCPA), and the increasing interdependency of gas and electric systems, the siloed approach of the existing benefit-cost analysis framework is illequipped to evaluate NPAs.

Requiring a more systematic, rigorous evaluation of NPA opportunities may help LDCs to shift their own financial resources, as well as their customers', away from investments that are likely to lock in high GHG emissions well past state deadlines for reductions, or become stranded. To do this, the Commission should require higher scrutiny of business-as-usual gas system investments and a prospective evaluation of the benefits of NPAs that better captures their emissions advantages in the near-, medium- and long-term. In these comments, Policy Integrity describes elements that the Commission should incorporate into an updated, holistic, and standardized benefit-cost analysis framework for the gas system transition. Overall, Policy Integrity recommends that:

- The Commission should clarify what gas-system information is minimally sufficient to consider for benefit-cost analysis of NPAs to provide meaningful insight.
- The Commission should ensure that benefit-cost analysis of NPAs includes full consideration of the interactions between NPAs and the electric system.
- The Commission should direct the development of a Gas System Transition BCA
 Framework that requires gas utilities to use a standardized benefit-cost analysis
 methodology that reflects current analytical needs.

II. Procedural Background

The Commission la	unched this g	gas planning pr	roceeding in	March 2020,	just months	after the
CLCPA became eff	ective, citing	gas utility mo	ratoria and	GHG impacts	as concerns	contributing

-

⁴ Notice at 2.

to the need for more transparent planning.⁵ The Commission described the customary approach to gas system planning as being out of step with both operational and policy realities.⁶

From the inception of this proceeding, the Commission recognized the importance of NPAs as a critical tool for gas utilities to meet customer needs while reducing the need for "gas infrastructure and investments." As such, it stated that the consideration of such solutions "should be built into the gas utility planning process, using criteria including reliability, practicality, environmental impact, avoided need for infrastructure investments, cost allocations over the appropriate time frame, emissions, and local community impacts."

During the subsequent several years, a multi-agency process set in motion by the CLCPA studied the details of how New York was to achieve its economy-wide emission limits, and that process ultimately identified electrification as a core strategy for mitigating gas-sector emissions. Specifically, the Climate Action Council (CAC)'s Draft Scoping Plan, issued in December 2021, and its ultimately adopted Scoping Plan, issued in December 2022, each included a "Gas System Transition" chapter that stated that the "the vast majority of current fossil… gas customers (residential, commercial, and industrial)" would transition to electricity by 2050.9

The Gas Planning Order, which was filed in May 2022 in this proceeding, while the CAC's process of finalizing the Scoping Plan was still ongoing, acknowledged that "meeting the CLCPA's emissions reductions targets for the entire economy will require emissions reductions from the gas distribution system." To that end, it noted that "the use of [non-pipeline alternatives (NPAs)] instead of building new infrastructure is [preferable] in light of CLCPA targets." The Gas Planning Order directed utilities to provide the marketplace with detailed information about the specific need that an NPA might satisfy, and specifically called upon utilities to identify opportunities to use NPAs to enable leak-prone pipe (LPP) to be retired rather than repaired or replaced.

To date, and under the current Commission process,¹⁴ the reductions anticipated in LDC gas plans are not necessarily of a magnitude that would enable achievement of the state's economy-

⁵ See Case 20-G-0131, Proceeding on Motion of the Commission in Regard to Gas Planning Procedures, Order Instituting Proceeding (Mar. 19 2020) [hereinafter Order Instituting Proceeding] at 1-4.

⁶ Id. at 2-3.

⁷ Id. at 7.

⁸ Id. at 7.

⁹ Climate Action Council, SCOPING PLAN: DRAFT REPORT (2021) [hereinafter Draft Scoping Plan] at 264; Climate Action Council, SCOPING PLAN; FULL REPORT (2022) [hereinafter Final Scoping Plan) at 350.

¹⁰ Cases 12-G-0297, Proceeding on Motion of the Commission to Examine Policies Regarding the Expansion of Natural Gas Service, and 20-G-0131, Proceeding on Motion of the Commission in Regard to Gas Planning Procedures, Order Adopting Gas System Planning Process (May 12, 2022) [hereinafter Gas Planning Order] at 4. ¹¹ Id. at 36.

¹² See Id. at 36.

¹³ Id. at 39.

¹⁴ See Id. at 10, 64-65 (requiring LDCs to file long-term gas plans every three years, on a staggered basis).

wide limits, ¹⁵ and the Commission lacks a clear yardstick for gauging such alignment. ¹⁶ Nor do the LDC-filed long-term gas plans necessarily contemplate significant declines in expected spending on gas system infrastructure. ¹⁷

Especially in the absence of a satisfactory yardstick for evaluating the adequacy of an LDC's anticipated emissions reductions, a more systematic, accurate evaluation of NPA opportunities may help LDCs to shift their own financial resources, as well as their customers' resources, away from investments that are likely to lock in high greenhouse gas emissions well past state deadlines for reductions, or become stranded. To do this will require higher scrutiny of business-as-usual gas system investments and more accurate assessment of electric system impacts and emissions outcomes in the context of the economy-wide energy transition and electric grid decarbonization. The changes to that evaluation process described in these comments would provide the basis for a more accurate analysis.

III. The BCA framework must be updated to accurately assess NPAs in the context of gas-system-specific considerations, fuel switching, electric-grid decarbonization, and the role of the electric grid in economy-wide decarbonization.

The Gas Planning Order continued a prior practice of requiring utilities to evaluate alternatives, including NPAs, using a BCA¹⁸ to be conducted based on the framework established in a 2016 order that was issued in connection with the Reforming the Energy Vision (REV) proceeding (the BCA Framework Order). In the Gas Planning Order, the Commission declined to reevaluate the BCA Framework, and left the gas LDCs to continue developing individual BCA

¹⁵ See, e.g., Case 22-G-0610, In the Matter of a Review of the Long-Term Gas System Plan of National Fuel Gas Distribution Corporation, Final Long-Term Plan (July 17, 2023) at 50-56; Case 23-G-0437, In the Matter of a Review of the Long-Term Gas System Plan of New York State Electric & Gas Corporation and Rochester Gas and Electric Corporation, Final Long-Term Plan (April 26, 2024) [hereinafter NYSEG/RG&E Final Long-Term Plan] at 104.

¹⁶ For example, the Commission decision on National Fuel Gas's long-term plan approached the question of whether GHG reductions anticipated in that plan were consistent with the CLCPA by generally balancing the expectation of *some* GHG emissions reductions against the ratepayers' need for receive safe and reliable service. *Se* Case 22-G-0610, *In the Matter of a Review of the Long-Term Gas System Plan of National Fuel Gas Distribution Corporation*, Order Implementing Long-Term Natural Gas Plan with Modifications (Dec. 14, 2023) at 59. Subsequently, Rochester Gas & Electric asserted that its long-term plan satisfies the PSC's "standards of being consistent with the CLCPA" because it provides for "significant GHG emissions reductions and makes meaningful contributions to the GHG emissions reduction goals of the CLCPA." Case 23-G-0437, *In the Matter of a Review of the Long-Term Gas System Plan of New York State Electric & Gas Corporation and Rochester Gas and Electric Corporation*, Reply Comments of New York State Gas & Electric Corporation and Rochester Gas and Electric Corporation (Jan. 19, 2024) at 6.

¹⁷ See NYSEG/RG&E Final Long-Term Plan; Case 23-G-0437, In the Matter of a Review of the Long-Term Gas System Plan of New York State Electric & Gas Corporation and Rochester Gas and Electric Corporation, Final Report: NYSEG and RG&E Long-Term Plan Assessment (prepared by Charles River Associates) (May 21, 2024) at 86

¹⁸ See Gas Planning Order at 12-13, 22.

¹⁹ See Id. at 12-13, 43-44. See generally Case 14-M-0101, Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision, Order Establishing the Benefit Cost Analysis Framework (Jan. 21, 2016) [hereinafter BCA Framework Order].

handbooks for gas system-related projects based on the framework established in the 2016 BCA Framework Order.²⁰

This comment responds primarily to <u>Question 25</u>, which refers to the "BCA framework." This comment uses the term "BCA Framework" to refer to Appendix C of the BCA Framework Order; however, to address the LDCs' prevailing BCA approach, this comment also refers to two of the most recent BCA-related documents filed by LDCs—the most recently updated BCA Handbook promulgated by an individual LDC, National Fuel Gas,²¹ as well as a long-term gas plan recently filed by National Grid, which includes a description of its approach to benefit-cost analysis of NPA opportunities.²² Finally, this comment uses the term "Gas System Transition BCA Framework" to describe a potential future BCA framework that would be tailored to the natural gas system and the gas system transition contemplated in the Scoping Plan, and incorporates elements needed to assess proposals that would involve fuel switching from natural gas end uses to the electric system. This comment also responds briefly to one aspect of <u>Question</u> 34.

<u>Question 25.</u> 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?

A. The Commission should clarify what gas-system information is minimally sufficient to consider for benefit-cost analysis of NPAs to provide meaningful insight.

The BCA Framework Order emphasized the importance of comparing alternatives to traditional solutions, citing "compar[ing] benefits and costs to traditional alternatives instead of valuing them in isolation" as a foundational principle. To this end, the BCA Framework instructs utilities to include in their BCA handbooks and system plans "sufficient" information to "inform the developing [alternative solutions] market of system conditions, needs, and granular marginal values so that any solicitations for alternative solutions will be robust." In this context, that means LDCs must make it possible for third parties to understand conventional gas system solutions that constitute the baseline in sufficient detail to propose tailored solutions that could conceivably obviate the conventional solution. The fact that the LDCs' long-term plans do not necessarily reflect any opportunities to decrease capital investment in the legacy system suggest that to date, this baseline has been insufficiently specified. In updating the BCA methodology at this juncture, the Commission has an opportunity to clarify what gas system information would be sufficient for LDCs to disclose in order to perform a meaningful benefit-cost analysis of NPAs.

²⁰ See Gas Planning Order at 43-44.

²¹ See generally Case 22-G-0610, In the Matter of a Review of the Long-Term Gas System Plan of National Fuel Gas Distribution Corporation, Benefit-Cost Analysis Handbook (Apr. 10, 2024) [hereinafter NFG BCA Handbook]. ²² See generally Case 24-G-0248, 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, Initial Gas System Long-Term Plan National Grid (May 31, 2024).

²³ BCA Framework Order at 2.

²⁴ BCA Framework Order, Appendix C at 9.

To provide the LDCs with adequate guidance on the evaluation of NPA opportunities, the Commission should amend its BCA methodology requirements to direct the LDCs, in their plans and BCA handbooks, to require that infrastructure costs and emissions baselines associated with a conventional gas-system approach be specified in a manner adequate to assess the proposed NPA's costs and emissions differentials. For example, consider a proposed NPA consisting of an energy efficiency program that installs residential and commercial heat pumps in an area with forecasted natural gas demand growth. The LDC proposes this program to lower gas consumption, including during times of peak demand, thus avoiding the need to increase gas supply and invest in capacity expansion such as additional gas main and storage facility improvements or compressor station upgrades to serve the anticipated higher future demand.²⁵ To evaluate this NPA, the LDC's benefit-cost analysis would need to compare gas distribution infrastructure, supply costs, and emissions outcomes, as well as a variety of costs and benefits unrelated to the natural gas system (as further discussed in the next section), to a baseline scenario in which there is no such program, and the LDC instead meets increased demand needs by making the above-listed traditional investments. The Commission should expressly require that this baseline scenario be described with sufficient specificity to support third parties' development of NPAs with high net benefits, and for the LDC to accurately evaluate an NPA's impact on the various costs that comprise part of the baseline.

To that end, the Commission should require LDCs to use well-specified baseline scenarios, consistent with the level of granularity in the long-term demand and supply forecasts described in the Gas Planning Order. Baseline scenarios should clearly state assumptions about demand growth "contributing factors" and location, as well as how the LDC would accommodate incremental peak load through traditional investments (absent the NPA). Requiring a properly-specified baseline scenario would help LDCs identify equipment types that will be less stressed as a result of load relief enabled by the NPA, so that the LDC can use the marginal cost of infrastructure specific to the location and equipment type to value the NPA-associated avoided infrastructure costs. As the Commission recognized and implemented in the electric context, the appropriate metric to evaluating infrastructure impacts is the granular, marginal costs of upgrade. ²⁸

Absent this information, an LDC uses a system—wide marginal cost of infrastructure, a metric that the BCA Framework notes "may significantly over- or under-value load modifications" when specific infrastructure costs may differ from portfolio averages. ²⁹ The Commission has assembled the Avoided Cost of Gas Working Group to develop more granular estimates of avoided gas-system-related costs through the utility Marginal Cost of Service (MCOS) studies. ³⁰ The Commission should clarify that when LDCs conduct benefit-cost analysis for NPAs, they must specify baseline scenarios with sufficient detail that they can use the granular estimates arising from MCOS studies, not system averages, to quantify avoidable costs.

6

²⁵ See Report: Non Pipeline Alternatives: A Regulatory Framework and a Case Study of Colorado (Prepared by Strategen for Lawrence Berkeley National Laboratory) (Oct. 2023) [hereinafter LBNL Report] at 12, available at https://perma.cc/OKT4-SW7C.

²⁶ See Gas Planning Order at 28-33.

²⁷ Id. at 28.

²⁸ See BCA Framework Order at 29; BCA Framework Order, Appendix C, at 8.

²⁹ BCA Framework Order, Appendix C at 8.

³⁰ See Gas Planning Order at 62-63.

B. The Commission should ensure that benefit-cost analysis of NPAs includes full consideration of the interactions between NPAs and the electric system.

Because electrification provides a viable, affordable alternative to natural gas for many applications, a BCA methodology for assessing electric-technology-related NPAs should include metrics and methods to evaluate inter-market effects. Policy Integrity explores some such effects below, such as changes to electric demand, emissions, and infrastructure investment. Given the widespread viability of electrification and the CAC's finding that the vast majority of current gas customers will fully electrify,³¹ a BCA methodology that omits full consideration of electric-system impacts would be incapable of identifying the full range of costs and benefits. The BCA Framework falls far short of providing for accurate evaluation of these impacts.

The existing BCA Framework was designed solely for the electric system, and provides no guidance for switching from electricity to other fuels or from other fuels to electricity, such as electric system impacts caused by potential NPAs. Case studies suggest that demand-side NPA programs can raise and lower electric load throughout the year, and that peak load impacts vary by project portfolio.³² Electrifying heating systems using high-efficiency heat pump systems, which raise load on the electric grid during winter, may decrease peak electricity demand in the summer by reducing electricity required for air cooling.³³ Even NPA projects that do not involve electrification can affect electricity demand. For example, efficiency improvements that affect overall building energy performance, such as building insulation or air sealing, reduce building users' need for both natural gas and electric energy.³⁴ A complete assessment of an NPA's electric system impact begins with identifying the project's effects on electricity consumption across both winter and summer systems, including system peaks.

The Commission should expressly amend the required benefit and cost categories to reflect NPAs' potential to affect electricity demand and consumption. The current lack of guidance leads to inconsistent practice across LDCs, which diverge in whether they treat potential electric-sector demand impacts of NPAs as benefits, costs, both, or neither. For example, the SCT benefit and cost categories listed National Fuel Gas's BCA Handbook include several electric system costs, but no electric system benefits, such as the potential reduced summer electric load discussed above. By contrast, the SCT definition used in a BCA in the recently-filed National Grid Long-Term Gas Plan includes electric-sector benefit *and* cost categories. For example, the SCT lists "Avoided Electricity Consumption" as a benefit and "Increased Electricity Consumption" as a cost. The Commission should update its methodology to specify the crossfuel benefit and cost categories to be included in the SCT for NPAs.

³¹ See Draft Scoping Plan at 264; Final Scoping Plan at 350.

³² *See* Abigail Lalakea Alter et al, RMI, Non-Pipeline Alternatives: Emerging Opportunities in Planning for U.S. Gas System Decarbonization (2024) [hereinafter RMI Report] at 10; LBNL Report at 29.

³³ See LBNL Report at 29.

³⁴ See generally Reyna, Janet L., and Mikhail V. Chester. "Energy efficiency to reduce residential electricity and natural gas use under climate change." *Nature Communications* 8.1 (2017): 14916.

³⁵ See NFG BCA Handbook at 28.

³⁶ See Case 24-G-0248, 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

Additionally, the Commission should standardize LDCs' evaluation of how gas-system-transition-related projects will affect electric transmission and distribution infrastructure. An NPA's locational and temporal electric demand effects may or may not give rise to a need for incremental electric system upgrades. Constraints on local electric distribution systems vary based on forecasted electricity demand, and, as the current BCA Framework currently emphasizes, the impact of additional electric load on these constraints will depend on whether expected load increases coincide with applicable local or system peaks.³⁷ A properly-tailored benefit -cost analysis, therefore, should also address whether and how LDCs should incorporate the cost of anticipated electric system upgrades in their benefit-cost analysis for NPAs under consideration.

Importantly, when assessing the possibility that NPAs will cause incremental electric-system costs, the incremental electric demand caused by electrification NPAs cannot be evaluated in a vacuum. The New York Independent System Operator (NYISO) projects that New York electric load will grow by 50-90% over the next 20 years, due to a building heating and electric vehicle charging.³⁸ Given forecasted long-run growth of electric load, electric utilities have begun planning accommodate projected load growth, including through various coordinated efforts overseen by the Commission.³⁹ It may be inappropriate to fully attribute electric transmission and distribution infrastructure costs to an NPA when the same or similar local capacity upgrades would likely have been needed by electric LDCs for reasons other than the NPA.⁴⁰ Ideally, therefore, the Commission should also provide guidance for how LDCs should consider the interaction between NPA-induced incremental electric load related to a particular NPA and other expected load growth. The Commission should update the BCA methodology to encourage gas LDCs, whether gas-only or part of a corporate family that also includes an electric utility in the same geographic location, to coordinate with relevant electric utilities to accurately analyze the impact on electric system costs, identified through short-term and long-term system planning, caused by NPA-induced incremental electric load.

In summary, the Commission developed the existing BCA Framework to support electric utilities transitioning away from conventional system investments to greater reliance on distributed energy resources. This BCA methodology contemplates the complexity of analyzing how non-traditional alternatives affect local electric distribution companies' investment in incremental

Power Corporation d/b/a National Grid. Initial Gas System Long-Term Plan National Grid (June 3, 2024) at 129-131. These benefit-cost categories were used in a benefit-cost analysis of several alternative scenarios in the National Grid Long-Term Plan. Although Policy Integrity did not locate a handbook that guided National Grid's analysis, National Grid states that it considers the analysis to be consistent with the original BCA Framework and gas industry best practice. Id. at 129.

³⁷ See BCA Framework Order, Appendix C at 8.

³⁸ See New York Independent System Operator, 2024 POWER TRENDS: THE NEW YORK ISO ANNUAL GRID AND MARKETS REPORT AT 5 (reporting that electrification of space heating and transportation is expected to transform the New York transmission system from a summer- to a winter-peaking system by the mid-2030s).

³⁹ See generally, Case 20-E-0197, Proceeding on Motion of the Commission to Implement Transmission Planning Pursuant to the Accelerated Renewable Energy Growth and Community Benefit Act, Order Approving a Coordinated Grid Planning Process (Aug. 17, 2023); Case 24-E-0364, In the Matter of Proactive Planning for Upgraded Electric Grid Infrastructure, Order Establishing Proactive Planning Proceeding (Aug. 14, 2024).

⁴⁰ See RMI Report at 18.

electric transmission and distribution infrastructure,⁴¹ but not the greater complexity of analyzing how fuel switching from the gas utility system to the electric utility system will affect incremental investments in both systems. When updating the methodology to provide direction to gas utilities regarding analysis of the full range of benefits and costs of NPAs under current and future policy cases, the Commission should include guidance on how to incorporate electric-system complexities, as well as additional factors regarding long-term electricity planning.

C. The Commission should direct the development of a Gas System Transition BCA Framework that requires gas utilities to use a standardized benefit-cost analysis methodology that reflects current analytical needs.

The Commission established the BCA Framework in an electric-sector-only proceeding. In the NPA context, that framework cannot reflect utilities' current BCA practice. Currently, each LDC develops its own BCA handbook, adapted from the BCA Framework. As discussed above, individual LDC approaches to using benefit-cost analysis to evaluate NPAs can diverge from one another in material respects. Some may do a better job than others of accurately capturing the costs and benefits associated with NPA alternatives to conventional gas infrastructure investments. Uniform guidance on how to evaluate questions relating to natural-gas-related costs and benefits in the context of the gas system transition, including whether NPAs are benefit-cost-justified, would provide a better foundation for ensuring that LDCs adopt best practices consistently. Overall, the nature of the benefit-cost analysis exercise required to assess the net benefits of NPAs in the context of economy-wide decarbonization and the gas system transition is sufficiently distinct from the exercise that was contemplated in the 2016 BCA Framework that it demands a substantially new methodology. To that end, the Commission should direct the development of a new Gas System Transition BCA Framework.

As discussed above, the NPA context requires a methodology that is capable of evaluating crossfuel costs and benefits in a robust manner. The BCA Framework would need comprehensive reworking to fully capture the cost and emissions implications of replacing some of what would otherwise have been natural gas use with non-natural-gas resources. The electric-system cost impacts of electrification discussed earlier can be complex—especially in the context of economy-wide decarbonization—and the BCA Framework does not provide gas utilities with direction regarding that complexity. The BCA Framework Order establishes that the Societal Cost Test (SCT) is the primary test, because "New York's clean energy goals are set in recognition of the effects of pollutants and climate change on society as a whole." Because GHG emissions are global pollutants that have the same warming impact regardless of their source, and reducing them is one of the most important public purposes that the Commission has expressed for requiring gas planning, the ability to accurately assess the emissions consequences of fuel switching is essential to a successful evaluation of NPAs under the SCT. Without accurate analysis of electrification that gives appropriate consideration to both gas-system and

9

⁴¹ See BCA Framework Order, Appendix C, at 8-10.

⁴² See Gas Planning Order at 12-13.

⁴³ BCA Framework Order at 12.

electric-system impacts, the SCT may fail to identify NPAs as having net benefits, even in circumstances where they would in fact have large net benefits.

The shortcomings of the existing BCA Framework in the fuel-switching context are also evident when one considers the Utility Cost Test (UCT) and Ratepayer Impact Measure (RIM). Those tests "serve in a subsidiary role to the SCT test and would be performed only for the purpose of arriving at a preliminary assessment of the impact on utility costs and ratepayer bills of measures that pass the SCT analysis." The direct impacts of fuel switching on the LDCs and on gas customer bills are essential to understand. However, the current tests consider gas-system-related investments and electric-system-related investments in entirely separate siloes. This is in a sense accurate because discrete sets of ratepayers and investors are responsible for gas-system and electric-system costs. Nonetheless, the omission, from the benefit-cost analysis used to evaluate NPAs, of any consideration of the financial impact on local electric distribution companies and their ratepayers (many of whom are also gas customers) means that the overall fiscal impact of NPAs cannot be accurately captured by the UCT and RIM tests.

At this juncture, with the regulatory and policy framework of the CLCPA having more fully taken shape, 45 especially given the Scoping Plan's finding that the LDCs should expect widespread electrification of their current customers, the time is ripe for the Commission to direct an overhaul of its BCA methodology. Such an overhaul could provide much-needed clarity as to how LDCs should analyze gas-system costs, including those that NPAs might avoid, fully enable robust cross-fuel comparisons in either direction, and lay the groundwork for more policy-aligned analysis. In addition to providing guidance for a more effective, policy-aligned SCT, a Gas System Transition BCA Framework could incorporate those the SCT and RIM in their conventional form, while adding sensitivities that consider impacts on other utility companies and their ratepayers (for example, downward pressure on electric rates as a result of higher electric asset utilization) as a result of fuel-switching.

<u>Question 34.</u> 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 Conservation, by the allowance price assigned by the New York Cap and Invest program, or in some other way?

For both global climate pollutant emissions and local emissions, the Commission should provide direction to the LDCs that ensures that benefit-cost analysis for NPAs recognizes the uninternalized externalities caused by pollution as a cost (or the uninternalized externalies caused by pollution avoidance as a benefit) reasonably accurately and symmetrically, regardless of whether future emissions arise from the natural gas system or the electric system or both.

With respect to local pollutants, the BCA Framework Order established a method that relies on "using 20 year forecasts of location-based marginal price (LBMP) energy prices produced from the Congestion Assessment and Resource Integration Study (CARIS) model managed by the [NYISO], which reflect the portion of the externality costs in the model through forecasts of the

⁴⁴ Id. at 12.

⁴⁵ See generally, e.g., Final Scoping Plan; Department of Environmental Conservation, ESTABLISHING A VALUE OF CARBON: GUIDANCE FOR USE BY STATE AGENCIES (rev'd Aug. 2023).

impacts of existing air emissions control programs (Approach 1)(CARIS LBMP)."⁴⁶ This LBMP-based method does not translate to the natural gas system at all. The most recent LDC BCA handbook takes a different tack, stating that for emissions reductions from the natural gas system, such emissions should be valued at "[a]n estimate of the cost to society associated with an incremental increase in pollutant (po) emissions in a given year measured in \$/ton"⁴⁷ and that for emissions associated with the electric system, "such emissions should be valued at "[a]n estimate of the cost to society associated with an incremental increase in pollutant (po) emissions in a given year."⁴⁸

While the handbook's reliance on values based on the harm to society represents a step forward from the CARIS LBMP approach, the handbook provides no additional information about the values it would use, stating merely that the analysis would rely on "generally accepted methodologies and sources for assessing avoided costs and be consistent with the valuation of other avoided emissions." It is important to recognize that the societal harms caused by local pollutants vary based on the precise location of the emissions as well as the time and season. The handbook recognizes that emissions intensity will vary based on project characteristics and location, but does not recognize that the amount of harm associated with an increment of pollution will also vary based on location and time. Various methodologies exist for arriving at more granular, accurate valuations for the externality values associated with local pollutants based on the location and time at which they occur. The Commission should direct its regulated entities to value emissions, or emissions reductions, in a manner that accurately reflects the uninternalized externalities associated with those emissions.

⁴⁶ See BCA Framework Order at 14, 19.

⁴⁷ NFG BCA Framework at 18.

⁴⁸ Id. at 22-23.

⁴⁹ Id at 19, 23.

⁵⁰ See Id at 18, 23.

⁵¹ This is evident from the fact that the handbook refers to "the cost to society associated with an incremental increase in pollutant (po) emissions *in a given year*." Id. at 18, 22-23 (emphasis added).

⁵² See, e.g., Jeffrey Shrader et al., Inst. for Pol'y Integrity, Valuing Pollution Reductions (2018), https://policyintegrity.org/files/publications/valuing_pollution_reductions2.pdf, and K. Baker et al, A database for evaluating the InMAP, APEEP, and EASIUR reduced complexity air-quality modeling tools, 28 DATA IN BRIEF (2020). See also Comments of the Institute for Policy Integrity to New York State Energy Research and Development Authority regarding Cost-Effectiveness of Energy Code Updates (Feb. 26, 2024), available at https://policyintegrity.org/documents/Policy_Integrity_Comments_-_Cost-Effectiveness_of_Energy_Code_Updates.pdf.