



August 22, 2022

**VIA ELECTRONIC MAIL**

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

**RE: Case 19-G-0309 – 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**

**Case 19-G-0310 – Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of KeySpan Gas East Corporation d/b/a National Grid for Gas Service**

**Case 20-E-0380 -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 Service**

**Case 20-G-0381 - 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**

Dear Secretary Phillips:

Pursuant to the Notice of Second Stakeholder Meeting for CLCPA Study issued on July 29, 2022, in the above referenced proceedings, Natural Resources Defense Council (“NRDC”) respectfully submits these Comments on the modeling inputs and assumptions of the CLCPA Study scenarios. NRDC’s comments include this Comment letter and NRDC’s Stakeholder Comment Form for CLCPA study assumptions workbook, which is an excel spreadsheet filed concurrent with this letter.

**I. National Grid must eliminate its “Clean Energy Vision” Scenario from the CLCPA Study**

As discussed in our comments in response to the CLCPA Study Draft Scoping Plan Materials filed on July 21, 2022, National Grid must eliminate its “Clean Energy Vision” (“CEV”) Scenario from the CLCPA Study. National Grid compromised the integrity of the CLCPA Study by preemptively promoting its “Clean Energy Vision,” which advocates for a decarbonization strategy heavily dependent on gas infrastructure and combustible fuels that does not achieve

**NATURAL RESOURCES DEFENSE COUNCIL**

40 W 20TH STREET | NEW YORK, NY | 10011 | T 212.727.2700 | F 212.727.1773 | NRDC.ORG

**NATURAL RESOURCES DEFENSE COUNCIL**

CLCPA targets. The Company should not turn the CLCPA Study into a customer-funded exercise to validate the gas infrastructure strategy articulated in the CEV; it should not go forward with—and customers should not fund—a flawed, biased analysis.

Moreover, National Grid’s CEV Scenario is not consistent with the purpose or intent of the CLCPA Study. The Joint Proposal in the 20-E-0380 and 20-G-0381 dockets requires the CLCPA Study to analyze impacts arising from “a range of strategies for achieving significant, quantifiable reductions in carbon emissions from the use of gas delivered by the Company in its service territory.”<sup>1</sup> During the August 9<sup>th</sup> stakeholder meeting, the Company’s consultant confirmed that while the modeling will achieve CLCPA compliant emissions reductions on an economy wide basis, the Company’s CEV will achieve significantly fewer emissions reductions from the Company’s gas system than the other two scenarios. This approach violates the intent and utility of the CLCPA, which is to determine the optimal strategy for achieving significant, quantifiable reductions in carbon emissions from the use of gas delivered by the Company in its service territory, not to serve as a basis for pushing emission reduction responsibilities to other sectors of the economy.

## **II. National Grid’s CLCPA Study is missing representation of crucial federal and local policies in assumptions, which will distort and bias the results**

### **a. All scenarios must include impacts of the Inflation Reduction Act programs and incentives because they affect the various sector-specific goals and transform the economics of electrification**

Enacted on August 16, 2022, the Inflation Reduction Act (IRA) is the most significant federal legislation in U.S. history to tackle the climate crisis. The IRA will lower energy costs for households and businesses, create jobs, and deliver a host of economic, environmental, and public health benefits to communities across New York. The IRA contains a host of building electrification incentives that will fundamentally alter the economics of electrifying the building sector in National Grid’s territories and around the state. A list of the building electrification incentives with discount type/amount, timeline, program, and explanatory notes are available from Rewiring America.<sup>2</sup> All of these building electrification incentives should be reflected in the cost assumptions used for the modeling.

In particular, there are thousands of dollars of tax credits for efficiency and electrification of homes, and up to \$5/square foot for commercial energy efficiency projects. In addition to financial support for building electrification, there are significant extensions and expansions of benefits for large scale and distributed clean energy generation and energy storage. The White House estimates that there will be an additional 220,000 households that install rooftop PV systems in New York as a result of these incentives, and additional electric sector cost reductions from new community solar tax credits.<sup>3</sup> There are also more and larger discounts for purchase of

---

<sup>1</sup> Joint Proposal, Cases 20-E-0380 & 20-G-0381 (Sept. 27, 2021), at 115.

<sup>2</sup> <https://www.rewiringamerica.org/app/ira-calculator>.

<sup>3</sup> White House, *State Fact Sheets: How the Inflation Reduction Act Lowers Energy Costs, Creates Jobs, and Tackles Climate Change Across America*, for New York, at <https://www.whitehouse.gov/wp-content/uploads/2022/08/New-York.pdf>.

new and used electric vehicles, electric transmission, contractor training, loan programs, U.S. manufacturing innovation, advanced building codes incentives, methane reduction programs, zero emission USPS vehicles, and dozens of other programs and funding streams that will all profoundly affect the cost, speed, and ease of achieving New York’s 2050 net zero carbon CLCPA goals.

For these reasons, the CLCPA Study must incorporate the Inflation Reduction Act into the common assumptions for all its scenarios and modeling. If National Grid and its consultants are not able to include the impacts of the IRA into their analysis due to the currently proposed timeline for the study, then the study should be delayed or canceled.<sup>4</sup> Not including the IRA data; however, will yield a report that is woefully out of date and entirely inaccurate before it is printed.

**b. New York City building policies are not reflected in the assumptions and scenario parameters**

New York City has long been a leader in local climate mitigation policies. The Climate Mobilization Act of 2019, and specifically its component law, Local Law 97 requiring carbon emission reductions for buildings larger than 25,000 square feet, will have a material impact on building energy use. In addition, Local Law 154 of 2021 bans the use of fuels which produce more than 25 kg of carbon dioxide per MMBtu when combusted. These important New York City policies must be reflected in the modeling parameters and assumptions. In particular, it is not clear that the CEV scenario for the KEDLI/KEDNY service areas is compliant with these local laws.

**III. The CLCPA Study assumptions workbook contains biased treatment of costs for the electric system versus the gas systems, which will distort results and invalidate the credibility of the modeling**

**a. The CLCPA Study assumptions workbook provides detailed costs for electric system infrastructure, but costs for gas system infrastructure are entirely absent**

The CLCPA Study assumptions workbook contains zero costs associated with new or retrofitted gas system infrastructure or for the gas system’s operation and maintenance, but it contains detailed corresponding costs for the electric transmission and distribution systems and for networked geothermal. The model must reflect capital costs for gas, biomethane, or hydrogen infrastructure required, including system extensions, pipe replacements and retrofits, and the interconnection of local supply facilities. It must also include operation and maintenance costs for all gas system infrastructure. The failure to include such costs in the CLCPA Study will invalidate its results.

Importantly, the model must account for the costs associated with the replacement or decommissioning of all the leak prone pipe that remains in New York. As of 2021, New York’s gas distribution system has 2,614 miles of Cast/Wrought Iron Pipelines, which represents 5.3% of

---

<sup>4</sup> See NRDC Comments on National Grid’s CLCPA Study Draft Scoping Plan Materials (July 21, 2022) at fn. 18 (explaining that Joint Proposal provisions have been triggered which establish that the Company will not undertake the CLCPA study if the Commission commences a generic proceeding to consider issues to be addressed in the CLCPA Study).

total main miles and a service count of 4,024.<sup>5</sup> New York’s distribution system also has 4,523 miles of bare steel, which represents 9.1% of the total main miles and a service count of 189,549.<sup>6</sup> New York’s transmission system has another 252 miles of bare steel, which represents 5.5% of the total miles.<sup>7</sup> Accordingly, New York has approximately 6,638 miles of distribution system leak prone pipe (14.4 % of the total main miles) that must either be replaced or decommissioned, and it has another 252 miles of transmission system leak prone pile that must be replaced. The costs associated with replacing or decommissioning leak prone pipe in each utility service territory must be accounted for in the modeling.

If the model does not include maintenance of existing fuel-based/gas infrastructure, and the costs of expansion and construction of additional infrastructure for hydrogen-only pipelines, the in-state interconnection of biomethane supplies for the high levels of biomethane utilization, and other related infrastructure needs for the combustion-based energy services that feature so heavily in the Company’s “Clean Energy Vision” (“CEV”) pathway, then outputs for the CEV scenario will be deeply biased and unacceptable.

#### **b. Hydrogen costs are incomplete**

The large role envisioned for dedicated hydrogen pipelines to deliver hydrogen for commercial and industrial uses (17-19% of non-residential heat is classified as “pure hydrogen” in the scenario slides) in the CEV scenario necessitates appropriate inclusion of costs for build out of a new, dedicated pipeline distribution system. As discussed above, the assumptions workbook does not appear to include any such cost. Hydrogen storage costs are not included in the “infrastructure technology costs” sheet, and it is not clear if geologic or tank storage is anticipated; if geologic, there should be a capacity constraint included. Similarly, hydrogen boiler costs are not included in the commercial buildings “equipment costs” sheet.

#### **c. Biomethane costs are incomplete**

The CLCPA Study assumptions workbook contains zero costs associated with infrastructure to interconnect RNG sources within New York state to the existing gas system; this implies that there is no in-state RNG production. Confirming this implication, the only RNG fuel cost is labeled “RNG Import”—of note this cost assumption appears to be approximately half of the cost in the referenced source document, but it is impossible to tell with precision because the workbook does not identify which of the 16 fuel price scenarios in the reference document that it plans to use.<sup>8</sup> Imported RNG must account for transmission costs as part of the supply costs, which appears to have been overlooked.

---

<sup>5</sup> U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration, Cast/Wrought Iron Gas Distribution Pipeline Inventory Reports, available at <https://www.phmsa.dot.gov/data-and-statistics/pipeline-replacement/cast-and-wrought-iron-inventory>.

<sup>6</sup> U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration, Bare Steel Pipeline Inventory Reports, available at <https://www.phmsa.dot.gov/data-and-statistics/pipeline-replacement/bare-steel-inventory>.

<sup>7</sup> *Id.*

<sup>8</sup> This type of incomplete/sloppy citations to source documents was common throughout the CLCPA Study assumptions workbook and served as an impediment to the review of the proposed assumptions.

Importantly, the assumption of no in-state RNG production does not comport with the CEV scenario's assumption of much larger reductions in methane produced from waste sectors, both from landfills and wastewater, than in the Integration Analysis scenarios. On the one hand, if RNG is not sourced from New York, it cannot be claimed to offset fugitive emissions within the state; on the other hand, if RNG is sourced in New York, then the model must account for the infrastructure cost associated with interconnecting the supply to the gas system.

**d. Only electric resources are constrained, while fuel supply has no constraints**

The CLCPA Study assumptions workbook provides detailed resource constraints for electric resources for many technologies, but contains no corresponding constraints for any fuels (fossil gas, biomethane, or hydrogen). This is particularly problematic for biomethane, given that even the most optimistic accounts acknowledge that supply potential is highly constrained, especially in the near and medium term. The modeling must include supply constraints for RNG, as it does for electric resources.

**e. The CLCPA Study assumptions are profoundly biased in favor of gas use**

The CLCPA Study assumptions workbook contains modeling inputs that are heavily biased against electrification and in favor of gas use. In many cases, there are detailed assumptions for electric system costs or constraints, but no corresponding costs or constraints for any fuels. It is also worth noting that the workbook is riddled with inaccurate or imprecise references, which presented a material challenge to our review.

Ultimately, the CLCPA Study assumptions workbook is grossly incomplete. This may be due to the highly rushed nature of the study, but even if this is the case, it serves to impede the ability of stakeholders to review all the relevant assumptions, which reinforces the process concerns that we and others raised in prior comments. The incomplete assumptions related to gas use are particularly problematic given National Grid's public statements about how the Company is "committing to decarbonize our gas network by transitioning it completely to renewable natural gas and hydrogen by 2050" and that the Company will actively participate in New York's proceedings and public feedback sessions related to developing the state's climate action plans by "highlighting the benefits of our [CEV] for all residents and businesses", which confirm that the Company will advocate for its preferred, gas-dominant plan.<sup>9</sup> With the CEV being so focused on combustible fuels, having incomplete cost inputs for those pathway components will not yield a valid scenario or a credible analysis.

**IV. The lack of a necessary feedback loop in upward rate pressure from decreased gas throughput and accelerated depreciation of gas infrastructure will mischaracterize the economics of building electrification**

In addition to this CLCPA Study, National Grid is also undertaking a depreciation study required under the Joint Proposals adopted in the above-referenced proceedings, which the

---

<sup>9</sup> See, e.g., National Grid Announces Historic Fossil-Free Plan, Launching Bold Clean Energy Vision for Massachusetts and New York, available at <https://www.nationalgridus.com/News/2022/04/National-Grid-Announces-Historic-FossilFree-Plan,-Launching-Bold-Clean-Energy-Vision-for-Massachusetts-and-New-York/>.

Company must complete at least three months before its next rate filing. The Commission has also required gas system depreciation studies under the *Proceeding on Motion of the Commission in Regard to Gas Planning Procedures* (“Gas Planning Proceeding”, Case No. 20-G-0131). The Commission order in that proceeding requires three gas system depreciation scenarios: (1) a scenario that fully depreciates all new gas plant installed beginning in 2022 by 2050; (2) a scenario that fully depreciates all gas plant by 2050; and (3) a scenario that assumes 50 percent of gas customers exit the gas system by 2040 and that 10 percent of gas customers remain after 2050.<sup>10</sup> These PSC-required depreciation studies assume, as demonstrated in the Climate Action Council’s extensive pathways modeling, that all gas infrastructure will not be used and useful for the entire effective useful life (EUL) of the infrastructure; and this will necessarily drive up delivery system costs for gas customers and accelerate heating electrification and quitting of the gas system by existing gas customers.

Without incorporating modeling around depreciation costs, those impacts on gas delivery costs, and the resultant customer electrification decisions, the CLCPA Study, as currently constrained, will also be grossly inaccurate.

Respectfully submitted,

Christopher Casey  
Senior Attorney  
ccasey@nrdc.org

Samantha Wilt  
Senior Policy Analyst  
swilt@nrdc.org

---

<sup>10</sup> New York Public Service Commission, Order Adopting Gas System Planning Process in Case No. 20-G-0131 “Gas Planning Order,” May 12, 2022.