STATE OF NEW YORK PUBLIC SERVICE COMMISSION

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In the Matter of Staff Investigation into a Moratorium on New Natural Gas Services in The Consolidated Edison Company of New York, Inc. Service Territory

Case 19-G-0080

COMMENTS OF THE ENVIRONMENTAL DEFENSE FUND

Pursuant to the New York Public Service Commission's ("Commission") February 7, 2019 Notice of Information Forums and Public Statement Hearings and February 15, 2019 Notice of New Case Number Relating to Moratorium on New Natural Gas Services in the Service Territory of Consolidated Edison Company of New York, Inc. ("Con Edison"), the Environmental Defense Fund ("EDF") respectfully submits these comments regarding Con Edison's January 17, 2019 Notice of Temporary Moratorium regarding new natural gas customers in Westchester County ("Moratorium"). In support thereof, EDF states as follows:

I. INTERESTS OF EDF

EDF is a membership organization whose mission is to preserve the natural systems on which all life depends. Guided by science and economics, EDF seeks practical solutions to resolve environmental problems. EDF uses the power of markets to speed the transition to clean energy resources, and consistent with its organizational purpose is engaged in activities to facilitate cost-effective and efficient energy market designs that encourage investment to modernize the energy grid so that it can support the ongoing deployment of renewable energy resources and energy efficiency. EDF works collaboratively with market participants sharing these goals. Before this Commission, EDF has highlighted the importance of harmonizing the Commission's natural gas policies with the state's ambitious climate goals, urging against pipeline buildout that undermines drivers for more efficient solutions and imposes long-term economic and environmental costs on ratepayers.¹

II. COMMENTS

EDF's February 13, 2019 Public Hearing Statement referenced data supporting the conclusion that there are supply constraints in downstate New York and its suburbs which are causing adverse environmental impacts.² The purpose of our comments below is to present and explain that referenced data as well as to provide recommendations regarding the need for thorough, reasonably transparent and effective gas supply planning in light of the moratorium.

A. Natural Gas Supply Constraints in New York Are Causing Adverse Environmental Impacts on an Episodic Basis

EDF conducted a detailed analysis of the 2018 cold spell and its impact on New York and New England prices, illuminating the interconnectivity of the natural gas markets in the larger northeast region. As demonstrated below, these data lead to the conclusion that, during periods of constraints, additional New York City gate capacity will relieve price pressure not only in New York but also New Jersey, Pennsylvania, and New England, and thus reduce emissions resulting from resources burning fuel oil.

See, e.g., EDF Letter to Secretary Burgess, Heightened Scrutiny of Precedent Agreements Supported by Affiliates, Case 93-G-0932 (November 29, 2016); *Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Niagara Mohawk Power Corporation for Electric and Gas Service*, Case 17-E-0238 and 17-G-0239, Testimony and Attachments of Simi Rose George on behalf of the Environmental Defense Fund (August 25, 2017).

² EDF's Statement asserts that the proponent(s) of any prospective natural gas supply infrastructure must demonstrate that such infrastructure conforms to, and is consistent with, State climate policy and greenhouse gas reduction goals.

EDF's analysis encompassed numerous market data points from several pipelines and pricing hubs, from the period of December 25, 2017 through January 8, 2018. As shown in the graph below, the most severe price spike occurred on January 5, 2018:³



The price spikes felt in New York directly impacted spot market prices in New England, but New York prices remained much higher than New England (compare the January 5, 2018 Millennium hub price of \$80/MMBtu and Algonquin City Gate price of \$79 to the \$140 observed at Transco Zone 6 New York):⁴

³ The source of the data is Natural Gas Intelligence's price series, except for Millennium Pipeline, which was obtained from SNL.

⁴ All prices listed are from Natural Gas Intelligence's price series, except for Millennium and TGP Zone 4 Marcellus, which are from SNL. All prices reflect the flow date of January 5, 2018.

S&P Global Market Intelligence



The first key observation from this data is that the extent of Northeast price spikes was driven less by New England pipeline capacity constraints than by New York City demand. This is demonstrated by the Millennium spot price (which serves both New England and New York) reaching a high of \$80/MMBtu, as compared to the Algonquin Citygate price of \$79. The very small price differential between Algonquin prices and one of its main sources of supply shows that limited Algonquin capacity was not the reason for the January 5 spike in New England gas prices. ISO New England Inc.'s ("ISO-NE") operational analysis confirms that at no time during this event was gas unavailable on the system.⁵ Rather, it appears that marketers and asset

⁵ *See, e.g.*, ISO New England, NEPOOL Participants Committee Report, Cold Weather Operation Questions, (February 2, 2018) (noting that gas resources were called to operate, and were committed, on January 7th).

supplies upstream into New York in order to profit from the arbitrage opportunity owing to the higher prices in the New York market.⁶

The second key observation is that, on an episodic basis, additional New York city gate capacity will relieve price pressure in New York and beyond. The high prices observed in Transco Zone 6 were not related to the availability of gas in Zone 6. This is demonstrated below in the "mass balance" chart for Transco Zone 6. The mass balance chart shows the sum of all scheduled receipts in a particular zone over a time period minus all scheduled deliveries in that zone over the same period:⁷



A positive number indicates there is an excess of receipts in the zone, meaning the gas has to

⁶ For example, increased receipts of vaporized LNG into the Boston market enabled displacement of gas on the Algonquin pipeline into the Iroquois pipeline in Connecticut which then were able to be delivered into the New York City market and sold at higher prices than those available in the Boston Market (i.e., the Algonquin city gate market). *See also* Matthew Oliver *et al.*, Natural Gas Expansion and the Cost of Congestion, International Association for Energy Economics at page 32 (2014) (explaining that non-pipeline owners of firm capacity capture rents in the unregulated secondary market for transportation services).

⁷ Greg Lander of Skipping Stone for the New Jersey Conservation Foundation, "Analysis of Regional Pipeline System's Ability to Deliver Sufficient Quantities of Natural Gas During Prolonged and Extreme Cold Weather (Winter 2017-2018) at 7 (February 11, 2018).

leave Zone 6 and proceed to Zone 5. Even on the day of highest prices, there was net southward export of Zone 6 receipts to Zone 5, suggesting that the root cause of the highest New York price was not related to the availability of gas in Zone 6. Rather, the data suggest the price spikes were the result of the inability of New York City to receive supplies from Transco at the pertinent Transco Zone 6 NY pricing locations.⁸

The third key observation is that due to pipeline constraints between the Transco Zone 6 Non-NY pricing location and the New York City gates (i.e., the Transco Zone 6 NY pricing locations), more of the dirtier fuel oils have been and will be burned across the eastern seaboard on an episodic basis. As reported by ISO-NE in its cold weather operations analysis, generator oil burn during the 15 days that comprised the Winter of 2017/2018 cold spell vastly exceeded oil amounts burned in all of 2016, as well as in all of 2017 prior to the cold snap (i.e., from January 1, 2017 to December 24, 2017):⁹

⁸ *Id.* at 7-8.

⁹ ISO New England, Cold Weather Operations December 24, 2017 – January 8, 2018 at slide 18 (January 12, 2018).



This increased oil burn dramatically shifted the resource mix of ISO-NE, with oil comprising 27% of the resource mix during the cold snap—because oil was less expensive than natural gas. The data suggest that high prices being experienced at the New York City gates caused a market reaction whereby the cost of supply increased across the northeast and into New England. The higher supply prices affected the relative economics for fuels used by electric generators with the net result being an increased oil burn, and consequently emissions:¹⁰

¹⁰ New England burns more residual (#6) oil than distillate (#2) oil. <u>https://www.eia.gov/dashboard/newengland/electricity</u> (showing more residual fuel oil than distillate oil held in stock for electric generation in New England). Residual oil has significantly higher emissions than natural gas. Institute for Policy Integrity, More Residual Risks: An Update on New York City Boilers at 2 (May 2010) (comparing emissions by fuel type), https://policyintegrity.org/files/publications/More_Residual_Risks.pdf. Therefore, increased oil use during extreme cold weather episodes leads to significant increases in air emissions. As reported by ISO-NE, "with extended days of burning oil, several resources



These data are also validated by the Eastern Interconnection Planning Collaborative's

Gas-Electric System Interface Study, the purpose of which was to evaluate the adequacy of the

interstate gas pipeline network to meet the coincident peak demands of local distribution

companies. Regarding the New York region, the study observes:

During the winter peak hour, nearly all pipelines in New York – Constitution, Empire, Dominion, Millennium, and Tennessee – run at 100% capacity to serve RCI loads in New York, New England, and Ontario. Constrained Transco segments in PJM also affect downstream New York generators. The quantity of affected gas-fired generation is reduced, but not eliminated, when high daily spot market gas prices place oil-fired generation, and, to a much lesser extent, coalfired generation, in merit.¹¹

In sum, episodic natural gas supply constraints in the downstate area including New York City

and its suburbs are causing adverse environmental impacts.

either had concerns about hitting federal and/or state emissions limitations or were impacted by emissions limitations." ISO New England, Cold Weather Operations December 24, 2017 – January 8, 2018 at slide 23 (January 12, 2018).

¹¹ Eastern Interconnection Planning Collaborative, Gas-Electric Interface Study Target 2 Report at page iv (March 9, 2015).

B. Significant Changes are Needed to Ensure Con Edison's Supply Planning is Effective and Transparent

This proceeding has illuminated the deficiencies in the current natural gas supply planning processes. As described by Con Edison, the current process is essentially a black box exchange between Staff and the Company.¹² Despite the fact that both Con Edison's 2010 Gas Long Range Plan¹³ and 2016 rate case testimony¹⁴ identified the need for construction of new interstate pipeline capacity, nearly a decade later, Con Edison has yet to address the need (or even propose a project), forcing the Company to announce a moratorium. The moratorium not only highlights the deficiencies of Con Edison's gas supply planning but also demonstrates the insufficiency of the state-wide processes that should be in place to protect against such occurrences.

¹² Letter from Con Edison to EDF re: EDF Request for Heightened Scrutiny of Precedent Agreements Supported by Affiliates, Case No. 93-G-0932 (December 27, 2016) (explaining that the Company submits "myriad redacted material" in response to Staff's inquiries on various gas supply matters).

¹³ Con Edison, Gas Long Range Plan, 2010-2030 at page 91 (December 2010), <u>http://158.57.189.31/publicissues/PDF/GLRP1210c.pdf</u> ("Con Edison recognizes that there is a need for the construction of new interstate pipeline capacity to serve growing demand for natural gas in the New York metropolitan area. Given the high utilization level of existing interstate pipeline capacity in the region, new pipeline capacity must be developed. Con Edison supports the construction of new interstate pipeline capacity.").

¹⁴ Ivan Kimball Gas Supply Testimony, Case No. 16-G-0061 at page 21, line 22 to page 22, line 9 (January 29, 2016) ("Our projected demand growth over the next few years indicates a need for new pipeline capacity to the NYC region. There are two means for meeting our demand: (1) either procure additional capacity from existing capacity holders or (2) become a shipper on new pipeline projects to the NYC citygates. Because of the limited availability of unsubscribed capacity on existing pipelines, and the long lead time of new pipeline projects to the citygate, the Company has started to explore and evaluate potential pipeline projects that come to the NYC region.").

EDF has repeatedly asked the Commission to harmonize its natural gas policies with the State's ambitious climate goals.¹⁵ At the same time that the State has promulgated aggressive 80 by 50 greenhouse gas emission goals, the policy framework relating to gas supply and expansion has remained static. These older policies were adopted when gas was viewed as a cost-effective and cleaner alternative to alternatives such as oil and kerosene, while its environmental downside was unknown or unacknowledged. For instance, the Commission's 2012 Policy Statement¹⁶ on natural gas is still a significant driving force in Staff's review of utility gas supply plans—where Staff asks utilities to detail all expansion projects, and if there are none, how this is justified "given the Commission's stated goal of expanding the natural gas system in New York State."¹⁷ These policies do not even begin to grapple with how gas supply planning and infrastructure decisions will be consistent with the State's climate goals.¹⁸ This disconnect must be addressed as the State revisits the sufficiency of its existing programs, policies, and procedures.

¹⁵ *See, e.g.*, Comments of the Environmental Defense Fund, Case No. 17-G-0606 at pages 2-4 (January 22, 2018).

¹⁶ Proceeding on Motion of the Commission to Examine Policies Regarding the Expansion of Natural Gas Service, Order Instituting Proceeding and Establishing Further Procedures, Case No. 12-G-0297 (November 30, 2012).

 ¹⁷ Con Edison Winter Supply Review Data Request, Case No. 18-M-0272 at page 26 (July 16, 2018).

¹⁸ According to the latest version of the State's 2015 greenhouse inventory, total GHG emissions in 1990, the baseline year for the 80x50 goal, were about 238 million metric tons of CO2-equivalent. An 80% reduction by 2050 would mean that less than 48 million metric tons of CO2-equivalent could be emitted in that year. And in 2015, GHG emissions associated with natural gas totaled over 76 million metric tons CO2-equivalent – already far more than the 48 million metric tons that can be allowed economy-wide in 2050. *See* New York State Greenhouse Gas Inventory: 1990-2015 (Final Report, Revised September 2018), Table S-2 at S-8 and S-9 and Figure S-4 at page S-7.

The Commission has the opportunity in this proceeding to address these deficiencies by:

- **Demanding transparent and comprehensive information from Con Edison.** As demonstrated by the moratorium, the current black box approach to gas supply planning is deficient. Con Edison and other utilities should be required to submit comprehensive and transparent information regarding their gas supply needs, including whether any pipeline projects will be supported by affiliated midstream developers. At a minimum, interested stakeholders should have access to this transparent and comprehensive information—as recently acknowledged by the Commission.¹⁹ Submitting information on a piecemeal basis in the Smart Solutions docket and in rate cases is not a sufficient substitute for this comprehensive submission.
- Holistically analyzing the impact of new infrastructure in and to New York City on Con Edison's supply needs. There are currently proposed projects that would increase capacity into New York City, such as the Northeast Supply Enhancement Project. This project and others could impact the amount of delivered services available to Con Edison, which in turn could decrease or eliminate the need for additional infrastructure into New York City. The Commission should holistically evaluate New York City's needs to understand the interdependencies between National Grid and Con Edison's systems to ensure that any new pipeline capacity is right-sized for the region.
- Obligating Con Edison to explicitly consider the impact of current and future State and City policies on its prospective demand and supply needs. Most critically, if Con Edison intends to propose natural gas supply infrastructure, it must demonstrate that such infrastructure conforms to and is consistent with State climate policy and greenhouse gas reduction goals. Future City policy goals should also be taken into account in the utility's planning efforts. For example, if the City adopts greenhouse gas reduction mandates for buildings, this will drive accelerated electrification and will impact gas capacity needs and uses.
- Requiring utilities to engage in more robust and transparent supply planning efforts, including the requirement to consider non-pipeline alternatives as part of a utility's long-term gas supply plans. Refinements to the gas supply planning process should also include consideration of non-pipeline alternatives, which should be integrated into utilities' formal planning and needs assessments. Identifying and assessing non-pipeline alternatives outside of a company's formal planning and needs assessment will tend to diminish deployment and could present missed opportunities to better align natural gas policy with the state's ambitious climate goals.

¹⁹ Petition of Consolidated Edison Company of New York, Inc. for Approval of the Smart Solutions for Natural Gas Customers Program, Order Approving with Modification the Non-Pipeline Solutions Portfolio, Case No. 17-G-0606 at 35 (February 7, 2019) ("Gas supply constraint solutions will need to involve greater visibility of the distribution planning process to stakeholders and local communities, to enable joint problem solving").

• Addressing the shortcomings of the Benefit Cost Analysis Framework by using a newly proposed paradigm, the Resource Value Framework, to develop a Benefit Cost Analysis Framework that supports New York State's policy environment. Using the Resource Value Framework to refine the Benefit Cost Analysis Framework would ensure that values relevant to achievement of the State's climate goals would be included in the analysis that is to be deployed when assessing the cost-effectiveness of new gas infrastructure. For further explanation and support for this issue, please refer to EDF's January 7, 2019 Comments in Case No. 17-G-0606 at pages 14-15.

III. CONCLUSION

Wherefore, the Environmental Defense Fund respectfully requests that the Commission

consider the foregoing comments in taking any action in this docket.

Dated: February 28, 2019

Respectfully submitted,

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