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Attachment #9.2
Return to Agenda

Public Service Commission
Rory M. Christian
Chair and
Chief Executive Officer

February 26, 2024

BY FAX AND REGULAR MAIL

Mr. Thomas Berkman, General Counsel New York State Department of Environmental Conservation 625 Broadway Albany, NY 12233 Thomas.Berkman@dec.ny.gov

Subject: DEC Application IDs: 3-1326-00211/00001 (Dover Compressor Station); 4-1922-00049/00004 (Athens Compressor Station)

Dear Mr. Berkman:

The Department of Public Service (DPS) submits this letter in response to a request, dated January 24, 2024, from the Department of Environmental Conservation (DEC) for additional information for consideration in furtherance of DEC's review of the Iroquois Enhancement by Compression Project (ExC Project), currently pending pursuant to the above-referenced applications. Pursuant to the review required under Section 7(2) of the Climate Leadership and Community Protection Act (Climate Act) and in the event DEC determines that the ExC Project is inconsistent with its regulations establishing statewide greenhouse gas emissions limits, DEC is seeking a detailed statement from DPS as to whether the ExC Project is justified with respect to supporting the safety and reliability of the New York gas system. DPS has reviewed the ExC Project from the perspective of its core statutory obligation to ensure the provision of utility service in a manner that is "safe and adequate and in all respects just and reasonable" (Public Service Law § 65(1)), and under the statutory obligation under Section 7(2) of the Climate Act. DPS determined that the ExC Project is justified based on the role it would play in ensuring gas system reliability in the service areas of both Consolidated Edison Company of New York, Inc. (Con Edison) and National Grid. 2

I. Gas System Planning and Criteria

DPS is responsible for, among other things, reviewing the preparedness of each gas utility in the State to reliably serve customers. DPS conducts an annual review that evaluates the

¹ Chapter 106 of the laws of 2019 (Climate Act) §7.

² National Grid serves customers through two operating utilities in the downstate region, The Brooklyn Union Gas Company d/b/a National Grid NY, and KeySpan Gas East Corporation d/b/a National Grid.

projected customer requirements (referred to as load or demand) associated with the potential weather conditions for the upcoming winter season and whether the utility's gas supplies and capacity are capable of meeting those customer requirements. DPS initiates the review by sending a questionnaire in May to each of the eleven gas utilities in New York State having at least 15,000 customers.³ In their responses, each of the gas utilities provides seasonal load forecasts for normal and "design day" weather conditions, as well as for design winter and an annual five-year load forecast for the design day and winters. The utilities also provide information on contracted amounts of capacity to serve that load. The capacity used to serve load includes contracts for daily deliverability on interstate pipelines, natural gas held in storage caverns and withdrawn in the winter, and peaking supplies that the utilities can call upon to meet customer demand.

DPS presents the results of this review at the October session of the Public Service Commission (PSC) as part of a presentation item, entitled "Winter Preparedness of the Natural Gas and Electric Systems." Because the acquisition and/or construction of some gas-supply assets related to addressing design day demand require significant lead times, the utilities engage in longer term planning to ensure that their systems will continue to be able to reliably serve customers on a design day in future years. At present, the appropriate planning criteria and the options to meet customer demand are being examined in the long-term gas plans filed by each gas utility. Con Edison filed its long-term plan in mid-2023 and National Grid will file its long-term plan in the Spring of 2024.

The load forecasts of all the State's gas utilities are examined by DPS in the context of gas utility rate cases; specifically, through determining whether the recovery of costs for capital projects associated with meeting load is justified. Gas system planning and forecasting is also the subject of management audits, which are conducted by law on a five-year cycle for the larger gas utilities. In addition, the costs of gas pipeline capacity, storage and commodity purchasing are reviewed by DPS annually as part of its review of the gas adjustment clause mechanism, and the results of DPS's analysis are presented to the Commission at the December session annually.⁶

A. Projection of Design Day Demand

Each utility bases the supply needs of its gas distribution systems on the peak demand – typically measured by the design day – of its system. On the demand side of the equation, the utilities generally apply best practices informed by actual operating history, the policies adopted by the Federal Energy Regulatory Commission (FERC) and the PSC, as well as industry standards. For example, "design day" is defined as a 24-hour period of demand used as a basis

³ Case 23-M-0230, *Report on the New York State Electric & Gas Supply Readiness for 2023-2024 Winter*, Con Edison Responses to Winter Supply Review Letter and Questionnaire (filed July 19, 2023); Case 23-M-0230, <u>supra</u>, National Grid Winter Supply Review (filed July 20, 2023).

⁴ The DPS Winter Supply Presentation can be found at: https://dps.ny.gov/winter-prep-2023-session-presentation.

⁵ Case 20-G-0131, *Gas Planning Proceeding*, Order Adopting Gas System Planning Process (issued May 12, 2022), p. 65; Case 23-G-0147, *Con Edison and Orange and Rockland Utilities, Inc. – Long-Term Gas System Plan*.

⁶ See, e.g., Case 22-G-0464, In the Matter of the Filing of Annual Reconciliation of Gas Expenses and Gas Cost Recoveries.

for planning gas capacity requirements.⁷ Gas utilities specify their design day as a 24-hour period with the coldest average temperature, or the highest number of "heating degree days" or "HDDs," for which a utility must ensure that its system can reliably meet customer demand.⁸

The HDD concept is based on the presumption that neither heating nor cooling is needed for an individual to be comfortable when the ambient temperature is 65°F. Under this presumption, HDDs are determined as follows:

- First, identify each day of a year for which the average of the highest and lowest temperature is less than 65°F.
- Second, for each such day, calculate the HDDs by (1) adding the highest and lowest temperatures and dividing the number by 2; and (2) taking the result from (1) and subtracting it from 65. By way of example, if the high temperature for a particular day was 33°F and the low temperature was 25°F, mean temperature for that day was: (33°F + 25°F) / 2 = 29°F. The number of HDDs for the day is thus: 65°F 29°F = 36.9

Utilities across New York plan for different "design day" weather based on the HDDs for the actual, historically experienced day for the lowest average temperature in their service territory. For upstate New York, some utilities use an HDD of 75 or greater as their design day, while Con Edison and National Grid in the New York City area use an HDD of 65, or an average temperature over a 24-hour period of 0°F. ¹⁰ The design day represents realistic actual operating conditions, even if such conditions are unlikely to occur in one or another particular winter. Specifically, the design day represents a day where heating equipment is to operate at maximum load to ensure availability of fuel for heating and hot water appliances, which are directly tied to the health and safety of utility customers. To calculate customer demand on the design day based on how much natural gas customers use per HDD, each gas utility uses metered load data from the past one to three years. While some utilities have more complex formulae and employ statistical analyses, at a high level each utility multiplies the customers' consumption per HDD by the number of HDDs for the "design day" to establish the highest anticipated demand of the utility's system.

Recent policies adopted at the State and New York City levels have reduced the overall growth of gas demand in New York City. However, for a portion of the area served by both Con

⁷ https://www.spglobal.com/commodityinsights/en/our-methodology/glossary; see also State of R.I. Div. of Publ. Utilities and Carriers, "Investigative Report: Summary Investigation Into the Aquidneck Island Gas Service Interruption of January 21, 2019" (Oct. 30, 2019) ("RI Investigative Report"), found at: https://www.spglobal.com/commodityinsights/en/our-methodology/glossary; see also State of R.I. Div. of Publ. Utilities and Carriers, "Investigative Report: Summary Investigation Into the Aquidneck Island Gas Service Interruption of January 21, 2019" (Oct. 30, 2019) ("RI Investigative Report"), found at: https://ripuc.ri.gov/sites/g/files/xkgbur841/files/eventsactions/AI Report.pdf. pp. 42-43.

⁸ https://www.eia.gov/energyexplained/units-and-calculators/degree-days.php.

⁹ https://www.weather.gov/key/climate heat cool.

¹⁰ Case 23-M-0230, *supra*, National Grid Winter Supply Review (filed July 20, 2023), p. 1 (National Grid uses 65 HDD for its design day in its downstate service territories and 75 HDD in its upstate service territory); Case 23-M-0230, <u>supra</u>, Con Edison Responses to Winter Supply Review Letter and Questionnaire (filed July 19, 2023), p. 3 (Con Edison uses "a design criterion of zero-degree Temperature Variable," or 65 HDD, for its design day).

Edison and National Grid, gas demand has continued to grow, albeit at a slower pace. ¹¹ For example, the All Electric Building Act (AEBA), ¹² enacted by the State in 2023 and effective in 2026, is expected to decrease growth in natural gas demand for new buildings but some growth in natural gas demand is still anticipated. ¹³ This is because the AEBA limits the use of natural gas in new construction, consequently a number of existing buildings in New York City and Long Island that rely on fuel oil for heating may choose to convert to natural gas. ¹⁴ Similarly, New York City Local Laws 97 and 154 impose limits on greenhouse gas emissions from buildings but both laws have phase in periods during some buildings may choose to convert to natural gas in the near term. While legislative proposals under consideration at the State level, such as the Affordable Gas Transition Act included in the FY2024-2025 Executive Budget, as well as PSC-led actions included as part of the Gas Planning Proceeding and the proceeding regarding Implementation of the Utility Thermal Energy Network and Jobs Act, ¹⁵ are designed to drive additional reductions in gas demand, these changes will take place over the medium term. Efforts to maintain the safety and reliability of the gas delivery systems during the transition remain paramount.

Another area of consideration regarding gas demand relates to the use of gas by interruptible customers. Con Edison and National Grid rely on almost 3,000 interruptible natural gas customers in the downstate area who pay discounted rates in exchange for agreeing to switch to alternate fuels, typically low sulfur diesel, when called upon to undertake the fuel switch generally during the coldest days of the year. This general practice frees up gas for use as fuel for heat and hot water. However, when fuel oil prices are high, or there are delivery disruptions associated with fuel oil resulting from bad weather, some interruptible customers typically continue to use gas even when they are required to switch to their alternate fuel. ¹⁶

¹¹ Case 23-G-0147, *supra*, Revised Long-Term Plan (filed September 25, 2023), p. 44; Case 19-G-0309 and 19-G-0310, *National Grid – Gas Rates*, PA Consulting's Review of National Grid's Greenpoint Vaporizer 13 & 14 Report (filed October 27, 2022), p.14.

¹² Chapter 56 of the Laws of 2023, Part RR.

¹³ Case 23-G-0147, *supra*, Revised Long-Term Plan (filed September 25, 2023), p. 44; Case 19-G-0309 and 19-G-0310, *supra*, PA Consulting's Review of National Grid's Greenpoint Vaporizer 13 & 14 Report (filed October 27, 2022), p.14.

¹⁴ The U.S. Census Bureau's American Community Survey (https://data.census.gov/) identifies approximately 743,000 households using fuel oil or kerosene for heating fuel in New York City and Nassau and Suffolk Counties in 2022.

¹⁵ See, e.g., Case 20-G-0131, supra, Order Adopting Gas System Planning Process (issued May 12, 2022) (directing the filing of long-term gas system plans that seek to minimize new gas infrastructure, requiring utilities to develop non-pipeline alternative frameworks and implement such alternatives to avoid the need for additional gas infrastructure); Case 22-M-0429, Implementation of the Utility Thermal Energy Network and Jobs Act, Order Providing Guidance on Development of Utility Thermal Energy Network Pilot Projects (issued September 14, 2023) (explaining the current status of the seven utilities' proposed pilot projects while providing guidance and a pathway for the projects' further development and implementation).

¹⁶ Although some interruptible customers may use gas during interruptions, the utilities' tariffs impose penalties in the form of charges for unauthorized use of gas, when interruptible customers fail to interrupt when required. *See*, *e.g.*, Gas Tariff of Con Edison, P.S.C. No. 9, Leaf 302.

Taking these issues into account, in their most recent filings made in Case 23-M-0230 (*see* p. 2, n. 3), both Con Edison and National Grid are projecting growth in design day demand over the next five years. ¹⁷ Based on a consideration of historical growth and the likelihood of continued growth in gas demand the short term (while changes to building codes limiting new natural gas connections are implemented), and for the other reasons noted above, DPS finds that these forecasts are reasonable.

B. Design Day Supply

Today's gas utilities rely on a combination of assets to meet design day demand. These assets include pipeline gas in the form of capacity contracts and delivered services, as well as certain peaking assets. Once a utility presents a forecast of load for design day for the current customer mix, the utility determines whether its existing assets are capable of meeting demand and, if not, the additional assets that must be acquired to meet the shortfall. In examining supply, the utility must also undertake a risk analysis in case of the unavailability of an asset. It is unusual for any single event to affect all of a utility's capacity assets, particularly given the availability of supply resources in the mid-Atlantic region upon which New York's gas utilities rely. However, as explained below, weather events can and often do cause a core gas supply asset to be unavailable.

There are two components to pipeline natural gas supply. The first is the physical natural gas commodity purchased from producers, and the second is capacity, or available space, on the pipeline network to transport that supply from the producers to the gas utility distribution system. In order to move the natural gas to the gas utility's distribution system there needs to be both space (i.e., capacity on the interstate pipeline for the volume contracted) and compressor stations along the way to push the gas through the pipeline to a point of delivery. Gas utilities have longstanding arrangements for capacity on the pipeline network, in many cases dating back to when the pipelines were first constructed. Since the 1990s, FERC has encouraged competition on the interstate pipeline system. ¹⁸ Now, numerous entities in addition to distribution utilities contract with pipelines for capacity, including electric generators and energy marketers.

In New York City, Con Edison and National Grid operate the New York Facilities System (NYFS), which can be thought of as a wheel that surrounds the New York City metropolitan area. ¹⁹ The NYFS is a high-pressure pipeline system that connects to interstate pipelines, namely Iroquois, Transcontinental, Texas Eastern and Tennessee. ²⁰ Each of these pipelines is fully contracted, meaning there is no available capacity on any of them in the winter.

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¹⁷ Case 19-G-0309 and 19-G-0310, *supra*, PA Consulting's Review of National Grid's Greenpoint Vaporizer 13 & 14 Report (filed October 27, 2022), p.14 (Explaining that after conducting an independent review of National Grid's design day demand forecast, PA Consulting concludes that design day demand will continue to grow into the 2030s, albeit at a slower rate than during the past decade.); Case 23-G-0147, *supra*, Revised Long-Term Plan (filed September 25, 2023), p. 44 (Forecasting continued growth in design day demand through 2028, with declining design day demand thereafter.).

¹⁸ FERC Order No. 636, 59 FERC 61,030 (issued April 8, 1992).

¹⁹ Case 23-G-0147, supra, Revised Long-Term Plan (filed September 25, 2023), p. 20.

²⁰ *Id*.

All of these pipelines also deliver natural gas to New England, except Transcontinental, which ends in the downstate New York region. Additionally, all of these pipelines begin in the Gulf of Mexico region, except for Iroquois, which starts at the New York-Canadian border.

The majority of the capacity on these pipelines is held by local gas distribution companies in New York, New England, and other states, although in southern states electric utilities also hold capacity on interstate pipelines for their generation facilities. The gas utilities also rely on delivered services, that is, capacity held by energy marketers, who bundle pipeline capacity with commodity and sell it at market prices.²¹ When weather is very cold in the winter or very hot in the summer, high levels of competition for the capacity held by these energy marketers drives up commodity prices at various points in the northeastern United States, and a gas utility's ability to secure sufficient supply from the delivered services market is not guaranteed.

During most of the year, each gas utility relies entirely on gas obtained through the interstate gas pipeline system; however, during the winter, gas obtained through the interstate gas pipeline system accounts for meeting only about 50% of total gas demand. The downstate gas demand has significantly grown over the last two decades as customers have shifted from fuel oil to natural gas. Between 2010 and 2020, the number of gas customers served by Con Edison and National Grid's downstate affiliates increased by 83,623 and 123,574, respectively, with some of the customers representing the largest buildings in the downstate region. ²² During this same period, Con Edison and National Grid's downstate affiliates have seen an increase in gas demand of 43.4% and 15.7%, respectively.

Two traditional mechanisms used by interstate pipeline companies to meet this increased demand is the addition of gas compression and the construction of parallel pipelines to increase the ability to serve customer growth. However, proposals to construct new pipelines in the northeast states have not advanced. As a result, New York's gas utilities are becoming increasingly reliant on contracting with marketers with existing contracted capacity in order to obtain enough incremental supply to meet demand on their distribution systems. The available capacity owned by marketers and provided as "delivered services" – a peaking asset – is uncertain, especially in the future, resulting in gas utilities moving to nontraditional and less reliable supply options to meet demand on the design day.

When the weather gets very cold, the utilities rely on peaking assets. For New York utilities, peaking assets are comprised of delivered services (*i.e.*, capacity on the interstate pipeline system held by others such as marketers and electric generators), on-system storage such as liquified natural gas (LNG), and/or trucked gas in the form of compressed natural gas (CNG). Utilities typically purchase delivered services, provided by marketers that hold interstate pipeline capacity, in increments of 45 days or less during a winter season. The utilities procure delivered services through a request for proposals process at the beginning of each winter, although some

²¹ Case 20-G-0131, *supra*, Order Instituting Proceeding (issued March 19, 2020), pp. 7-8.

²² The increase in gas customers is determined by comparing the reports filed by the utilities in 2010 and 202, which can be found at: https://dps.ny.gov/completed-annual-reports-regulated-utilities.

contracts last multiple years. A few electric generators have agreements with the utilities to release pipeline capacity in the winter when electric demand is low; however, a generator can end these agreements with short notice and when a generator has a new owner this is more likely.²³ Delivered service contracts are reliable generally because they rely on the same pipeline capacity of which the utilities take advantage but, because they are short-term contracts, they cannot be relied on to always be available.

Gas utilities also generally have access to LNG as a peaking asset. Such facilities create the LNG by liquefaction of pipeline gas during the summer months when demand is low; however, it takes most of the year to fill onsite LNG storage tanks, as the liquefaction process is slow, and the tanks can be run dry in just a few days if the output is maximized.²⁴ Because the utility directly controls the LNG, and volume is limited, utilities typically use LNG only when they have already maximized the use of all other available assets.

Another peaking asset generally relied upon by the gas utilities is CNG. However, because CNG is delivered by truck and releases to gas injection sites, reliance on this asset can be problematic when it is needed most on the coldest days of the year, which can correspond with major snowstorms or high wind events. At minimum, such weather events can make delivery of CNG risky and, at most, impossible if the weather event results in the closing of bridges or other transportation routes used to access gas injection sites.²⁵

C. Potential Consequences of Inadequate Design Day Supply

It is critically important for each utility to ensure that its gas system can operate safely and adequately on the design day given the utility's role in ensuring the health and safety of New York State residents who rely on natural gas for heating and hot water during the coldest days of the year. Should the gas system not have adequate supply and capacity to meet design day demand, the results can be catastrophic. To avoid potential unsafe operating conditions, the gas utility would need to curtail customers' usage by shutting off parts of its system. If such curtailments extend to residential customers, those customers would be without their primary – and potentially only – source of heat on what would invariably be one of the coldest days of the year.

Unlike the restoration of electric service, which can happen quite quickly after an interruption, an interruption of gas service to residential customers can take weeks and even

²³ Cases 19-G-0309 and 19-G-0310, *supra*, Order Denying Cost Recovery for the Vaporizers 13 & 14 Project (issued March 16, 2023), pp. 10, 24-25.

²⁴ Cases 19-G-0309 and 19-G-0310, *supra*, National Grid Greenpoint Vaporizers 13 & 14 Long Term Capacity Project Report (filed August 29, 2022), pp. 23-24.

²⁵ Cases 19-G-0309 and 19-G-0310, *supra*, PA Consulting's Review of National Grid's Greenpoint Vaporizer 13 & 14 Report (filed October 27, 2022), p. 28; "Winter at the MTA," https://new.mta.info/guides/weather-service-guide/winter-weather (Explaining that winter weather can result in "reduced road capacity or closures" and speed restrictions or intermittent closures" on bridges.); "A Look at a Few Times the Verrazzano-Narrows Bridge was Closed" (SILive.com December 2, 2020), https://www.silive.com/news/2020/12/at-look-at-a-few-times-the-verrazzano-narrows-bridge-was-closed.html (Reporting on the complete closure of the Verrazzano-Narrows Bridge on Monday, November 30, 2020 due to high winds.).

months to restore in a safe manner. The reason for the lengthy time of restoration is because utility personnel must go from building-to-building to ensure all appliances are turned off prior to restarting gas service. Otherwise restoration of service could result in gas spreading into a building, resulting in a significant fire hazard and risk to public health. For this reason, it is critically important to maintain gas system reliability at all times. With that said, the existing assets relied upon by Con Edison and National Grid have little to no headroom for design day growth and, as discussed next, these utilities are already overly relying on CNG – an inherently unreliable source of gas during the cold winter months.

II. The ExC Project is Needed to Maintain System Safety and Reliability

The ExC Project is sponsored by the owner of the Iroquois Gas Pipeline (Pipeline), a 414-mile interstate pipeline that begins in Canada, traverses south-southwest across New York, crosses into Connecticut near Dover Plains, crosses the Long Island Sound into Long Island where it delivers gas into the New York Facilities System, the transmission system jointly operated by Con Edison and National Grid in the New York City metropolitan area. Upon entering Long Island, some gas is diverted to a spur connected into the Pipeline that provides gas to National Grid's customers through a meter station located in South Commack. From the South Commack area, the Pipeline traverses back offshore and terminates at a meter station located at Hunts Point, Bronx, where it provides gas to Con Edison's customers. The proposed ExC Project would, among other things, increase compression capability at two existing compression stations; the first located in Athens, New York, and the second located in Dover Plains, New York. The ExC Project would result in increasing the firm delivery capacity of the Pipeline by an additional 125,000 dekatherms (Dth) per day to the downstate New York natural gas market, with the additional capacity evenly split (62,500 Dth/day each) between National Grid's and Con Edison's downstate gas delivery systems.²⁷

The ExC Project would enable Con Edison and National Grid to offset most of the need for CNG, a peaking option of last resort, during the winter season and diversify the gas supply into New York City to mitigate against potential interstate pipeline curtailments. For example, during periods of high demand, to supplement gas supplies from the interstate pipeline system, National Grid relies on approximately 79,000 Dth/day of CNG, a supply that carries a relatively high risk of failure.²⁸ By the winter of 2025-2026, to maintain adequate gas system pressures on the coldest days of the year, National Grid would potentially need over 200 tanker trucks per day

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²⁶ For example, on January 21, 2019, the Narragansett Electric Company, known to its customers as National Grid, shut down a significant portion of its natural gas distribution system in Newport and Middletown on Aquidneck Island, resulting in a seven-day outage to over 7,000 natural gas customers. Governor Gina Raimondo declared a state of emergency as a result. *See* RI Investigative Report. The RI Investigative Report explains the danger to customers that would occur from the "sudden return of flow into pilot-driven appliances that had lost gas." *Id.*, p. 33. The report notes that a "virtual army of technicians and staff descended on the Newport area to complete the restoration process meter by meter in difficult conditions." *Id.*, p. 67.

²⁷ FERC Docket No. CP20-48-000, Enhancement by Compression Project, Abbreviated Application of Iroquois Transmission System, L.P. for a Certificate of Public Convenience and Necessity (filed January 31, 2020), pp. 8-12.

²⁸ Case 19-G-0309 and 19-G-0310, *supra*, PA Consulting's Review of National Grid's Greenpoint Vaporizer 13 & 14 Report (filed October 27, 2022), p. 28.

to inject CNG into its distribution system. As noted, CNG is a peaking option of last resort given that weather conditions on the coldest days of the year may make CNG deliveries unreliable. Indeed, the coldest days of the year when CNG is used often corresponds with dangerous road conditions, and potentially road closures. On top of the unreliability of CNG truck delivery there are also GHG emissions associated with delivering CNG by tanker trucks that are avoided through pipeline delivery of such fuel.

A gas supply disruption event that occurred on Christmas Eve in 2022 during Winter Storm Elliott – a bomb cyclone – illustrates the risks of over-relying on gas supply from interstate pipelines located to the south of New York City and CNG during severely cold winter weather. During the event, a fast-moving cold front swept across the eastern seaboard causing temperatures to fall from the 50s into the single digits, which, in turn, caused icy conditions that impacted equipment on the natural gas system. Because of low temperatures, electric generators along the Eastern U.S. experienced higher demand than anticipated. While generators in New York have the capability to use alternatives to gas as fuel during such events, that capability does not exist in other northeastern states. Thus, Winter Storm Elliott resulted in electric generators withdrawing more gas from the interstate gas system than available under contract, resulting in less available gas supply for customers of Con Edison and National Grid.

During Winter Storm Elliott, Con Edison called on its CNG vendor to bring in those peaking supplies to ensure adequate gas pressure. ²⁹ DPS, however, is aware that Con Edison did not receive the full expected volume of CNG. As a result, Con Edison and National Grid mobilized personnel in the field in preparation for curtailment of potentially thousands of firm heating customers. In the end, the two utilities were barely able to provide adequate supply during Winter Storm Elliot until the temperatures increased, and weather improved. Specifically, the systems were able to maintain enough gas pressure to avoid customer curtailments. Of note, while the temperatures in New York City reached a low of 7°F, ³⁰ Winter Storm Elliott did not come near the design day for either utility. In other words, had the weather been colder, the utilities would likely have been unable to avoid thousands and potentially millions of gas outages. The Winter Storm Elliott event thus demonstrates the risks associated with over-reliance on CNG to address the need for supplements to a utility's gas supply, as well as the need to diversify the utilities' gas supply resources into the downstate region to maintain safety and reliability, even as State and local actions reduce demand pressures on the system over time.

FERC carried out an investigation into Winter Storm Elliott and issued a report in November 2023 (FERC Report).³¹ FERC noted at the outset of its report that Winter Storm Elliott "was the fifth [storm] in the past 11 years in which unplanned cold weather-related

²⁹ FERC, *Inquiry into Bulk-Power System Operations During December 2022 Winter Storm Elliott* (published October 2023), pp. 12, 21.

³⁰ According to the National Weather Service, in New York City, the minimum temperature on December 23, 2022 was 8°F, the maximum temperature on December 24, 2022 was 15°F and the minimum temperature was 7°F. See, National Weather Service "NOWData" accessible at https://www.weather.gov/wrh/Climate?wfo=okx.

³¹ See FERC, Winter Storm Elliott Report: Inquiry into Bulk-Power System Operations During December 2022, dated November 7, 2023 (Elliott Report), found at: https://www.ferc.gov/media/winter-storm-elliott-report-inquiry-bulk-power-system-operations-during-december-2022.

generation outages jeopardized grid reliability" and, "while some changes were implemented in response to previous cold weather events, generators and natural gas supply and infrastructure remain vulnerable to extreme cold weather." FERC found that "Winter Storm Elliott caused unplanned outages of natural gas wellheads due to wellhead freeze-offs and other frozen equipment" and "[w]eather-related poor road conditions prevented necessary maintenance." FERC concluded that this confluence of circumstances resulted in "significant natural gas production decreases," with the greatest declines experienced "in the Marcellus and Utica Shale formations, where it dropped by 23 to 54 percent during the Event." ³⁴

FERC's findings related to the downstate region of New York merit special emphasis:

Con Edison "faced reliability threatening low pressures at its citygate on all the interstate natural gas pipelines that it relies upon. Con Edison maintained its natural gas local distribution system pressure by using its own liquified natural gas (LNG) facility, among other measures. Had Con Edison not activated its LNG facility and taken its other emergency measures, or had the cold weather lasted longer, it could have faced large scale outages."³⁵

FERC explained that individual dwellings would have been catastrophically impacted had Con Edison lacked access to its own source of gas: "[F]or the natural gas local distribution system to return system outages to normal operation, workers must go house-to-house and individually light every pilot light. Con Edison estimated it would have taken months to restore service, even with mutual assistance from other utilities, had it experienced a complete loss of its system." Had Con Edison lacked access to its own LNG facilities or temperatures been lower during the event, potentially millions of New Yorkers would have been without heat and hot water during the coldest winter months. The FERC Report contained several recommendations to address future weather events like Winter Storm Elliott, including consideration of whether "additional natural gas infrastructure needs, if any, [are] needed to ensure the continued reliability of the electric and natural gas systems, and the preferred locations of such infrastructure, if applicable, including pipeline infrastructure, natural gas storage, and other supporting systems."

As an agency with responsibility for ensuring that the State's utilities maintain the reliability of their energy systems, DPS takes seriously the findings and recommendations made in the FERC Report and believes that the report's findings and recommendations are directly relevant to the proposed ExC Project. As applied here, the ExC Project would provide for greater diversity with respect to firm gas pipeline supplies into New York by building upon the existing

³² Elliott Report, pp. 5-6, 9.

³³ *Id.*, p. 9.

³⁴ *Id*.

³⁵ *Id.*, p. 12.

³⁶ *Id*.

³⁷ *Id.*, p. 143.

Iroquois system, which provides service from the north with supply located in Canada, rather than the southern Marcellus and Utica supply areas impacted by Winter Storm Elliott.

The ExC Project would also enable Con Edison and National Grid to avoid their overreliance on short-term delivered services contracts provided by marketers. These contracts are available through FERC's capacity release markets, which allow short-term contracts such as these to be priced at whatever the market will bear and are not guaranteed to be available to New York's utilities when needed. If Con Edison and National Grid are unable to successfully negotiate continuation of their peaking supply contracts, customers would be at risk of losing gas service on cold days. Iroquois transports gas from the north and west, whereas most other pipelines serving the region originate south of New York. Thus, supply on Iroquois diversifies the mix of gas sources available to Con Edison and National Grid and the ExC project would add to that diversification.³⁸

In sum, based on its review of the FERC Report and current understanding of the gas supply system for New York City and Long Island, DPS identified two separate reliability-related problems that need to be addressed as soon as practicable: (1) Con Edison and National Grid are over-relying on CNG and other delivered services, neither of which may be available on the coldest days of the year; and (2) there are winter-related risks associated with gas supplies provided from delivery systems located to the south of New York City. The ExC Project would address both of these existing reliability problems by both adding firm capacity into the downstate region, which would offset Con Edison's and National Grid's reliance on third parties for CNG and delivered services, and providing operational flexibility in case of supply decreases from pipelines located to the south of New York City in emergency situations, such as what occurred during the Christmas Eve 2022 supply event.

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³⁸ DPS's determination regarding the need to diversify the gas supply into the Citygate takes into account a gas pipeline project recently completed by the Tennessee Gas Pipeline Company that added 115,000 Dth/day of firm transportation capacity to Con Edison. The transmission line at issue with respect to that project provided increased gas supply from areas south of New York City. *See* https://www.federalregister.gov/documents/2021/09/30/2021-21265/tennessee-gas-pipeline-company-llc-notice-of-availability-of-the-final-environmental-impact.

In conclusion, DPS has reviewed the proposed ExC Project and the impacts it would have on the operation of the gas systems run by Con Edison and National Grid. Based on that review, DPS has determined that the ExC Project is necessary to ensure Con Edison's and National Grid's continued provision of safe, adequate, and reliable gas service to customers in the downstate region.

Respectfully submitted by,

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