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February 8, 2022

VIA ELECTRONIC MAIL

Aida Camacho-Welch
Secretary of the Board
New Jersey Board of Public Utilities
44 South Clinton Avenue
Trenton, NJ 08625

Re: In the Matter of Natural Gas Commodity and Delivery Capacities In the State of New Jersey – Investigation of the Current and Mid-Term Future Supply and Demand
BPU Docket No. GO19070846

Dear Secretary Camacho-Welch:

In accordance with the New Jersey Board of Public Utilities January 6, 2022 notice issued in this proceeding, enclosed for filing are the Comments of South Jersey Gas Company and Elizabethtown Gas Company (the "Companies").

The Companies appreciate the opportunity to submit the enclosed Comments and look forward to working with all the stakeholders in this proceeding.

Thank you for your attention to this matter.

Respectfully submitted,

Deborah M. Franco
Deborah M. Franco

DMF/caj
Enclosures

STATE OF NEW JERSEY
BOARD OF PUBLIC UTILITIES

In the Matter of Natural Gas	**:**	
Commodity and Delivery Capacities	**:**	**BPU Docket No. GO19070846**
In the State of New Jersey -	**:**	
Investigation of the Current and	**:**	
Mid-Term Future Supply and Demand	**:**	

COMMENTS OF SOUTH JERSEY GAS COMPANY AND ELIZABETHTOWN GAS COMPANY

Introduction

South Jersey Gas Company ("SJG") and Elizabethtown Gas Company ("ETG") (collectively, the "Companies") submit these comments in response to the New Jersey Board of Public Utilities ("Board") January 6, 2022 Public Notice ("January 6 Notice") issued in this proceeding. SJG and ETG appreciate the opportunity to submit these comments to supplement the verbal testimony offered on behalf of the Companies at the January 25, 2022 stakeholder meeting ("January 25 Meeting") and to respond in greater detail to the London Economics International Report ("LEI Report") and related questions set forth in the January 6 Notice.

Communications and correspondence concerning these proceedings should be sent as follows:

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Background

By Order dated February 27, 2019, the Board directed its Staff ("Board Staff") to initiate this stakeholder process to explore issues related to whether there is sufficient natural gas capacity to serve New Jersey firm customers. With the January 6 Notice, the Board seeks stakeholder feedback to guide the next phase of the investigation, requesting that stakeholders comment on the conclusions of the recently issued LEI Report.

Specifically, Board Staff seeks comment on Non-Pipeline Alternatives ("NPA") that could be utilized by the State in the event of a gas capacity constraint. The LEI Report identified a total of eight NPAs that the State of New Jersey ("State") could explore. These included demand-side NPAs and supply-side NPAs. Board Staff is seeking comment on these potential NPAs, including their viability and potential implementation.

The LEI Report also included recommended best practices and a playbook that could be utilized in the event of a gas capacity shortfall. The playbook provided three scenarios based upon the degree of the shortfall. The LEI Report also contains several recommended strategies that could be implemented during an alert, including coordination strategies (across agencies and across gas and electric operators); equipment (*e.g.,* smart thermostats, winterized equipment, and hardened infrastructure); pre-event communications platforms and protocols; and enforceable regulations based on penalties and rewards in place ahead of time. Staff is seeking comment on the best practices and playbook, including their viability and potential implementation.

The Companies welcome the opportunity to provide input on the issues raised by the LEI Report and related questions in the January 6, 2022, Notice.[1]

[1] The Companies incorporate herein by reference the previously filed SJG and ETG comments in this proceeding dated May 13, 2021, and October 22, 2019.

Discussion

Commitment to Our Customers and to the State's Clean Energy Objectives

SJG and ETG serve as lifeline utility providers who are responsible for acquiring gas supply for more than 700,000 residential and business customers. Our customers rely on us to provide them with safe, reliable, affordable, and clean natural gas service to heat their homes and businesses and to support their critical operations, particularly on peak winter days. In our role as a statutory provider of last resort, we take seriously our responsibility to ensure the adequacy of gas supplies and associated pipeline capacity to serve our customers.

As an organization, SJI, the parent of SJG and ETG, is committed to investing in new technologies that will safely, reliably and affordably deliver low carbon energy to the more than 700,000 families and businesses that we serve across our State. As New Jersey focuses on the most cost-effective means to achieve its clean energy goals, the continued availability of natural gas represents a safe, reliable, affordable, and clean solution for our customers.

The Companies recognize the importance of New Jersey's Energy Master Plan development efforts, the mandates contained in the Clean Energy Act of 2018[2] and the State's related environmental goals, including reducing carbon emissions, promoting energy efficiency and enhancing the deployment of clean energy technologies. As part of commitment to the environmental goals of the State, SJI has set forth benchmarks to achieve a 70% carbon reduction of operational emissions and consumption by the year 2030 and 100% reduction by 2040. Moving forward, SJI is committing at least 25% of annual capital expenditures on sustainability projects. Under this plan, capital expenditures will include the installation of solar panels on SJI facilities, the replacement of aging transmission pipes to reduce "fugitive" emissions, upgrading leak

[2] N.J.S.A. 48:3-51-87.

detection technologies and completing the conversion of service vehicles to low carbon-density fuels such as compressed natural gas ("CNG"). In addition, we are committing to a series of investments aimed at reducing fossil fuel consumption by its more than 700,000 natural gas utility customers at SJG and ETG. These investments include our Board approved energy efficiency programs, providing consumers new tools to reduce energy consumption, and investing in several clean and renewable energy technologies such as renewable natural gas ("RNG") and green hydrogen. We are excited about the vital role we will play in the clean energy future of New Jersey and the investments we will make to do so to ensure that we safely, reliably and affordably deliver low carbon energy to the families and businesses that we serve across our State.

Non-Pipeline Alternatives

Given our clean energy commitment, we are pleased about the LEI Report's interest in non-pipeline solutions to explore the implementation of appropriately designed NPAs to accommodate a growing demand for gas service and contribute to the achievement of New Jersey's environmental goals. We support well designed non-pipeline solutions that are supported by smart technology. At the same time, we caution that they cannot and should not serve as a full substitute for pipeline capacity.

Demand Side NPAs

The Companies are very supportive of any automated programs that can be launched and used to provide more accurate and real time data and ensure that the State can meet the needs of natural gas customers in a variety of circumstances and conditions. We agree with the demand side solutions that can help offset the need for incremental pipeline capacity like energy efficiency and demand response programs, including the addition of smart meters and Advanced Metering Infrastructure ("AMI"). Smart thermostats and AMI technology hold the potential to be an integral

part of New Jersey's clean energy transition and to benefit customers seeking to better understand and control their own energy usage. Opportunities to deploy smart thermostats and AMI in New Jersey can offer many benefits and these benefits will complement SJG's and ETG's strong commitment to the continued delivery of safe, reliable, affordable and clean natural gas to their customers.

There is enormous potential for smart thermostats and AMI to facilitate carbon reductions, lower costs for customers, and enhance utility response to outages. Deploying smart technologies across our State can provide many benefits to Gas Distribution Companies ("GDCs") and their customers in both the residential and commercial sector, including improved capacity planning and distribution management, reduced labor costs, more accurate billing, reduced lost and unaccounted for gas, increased energy efficiency and peak demand reduction, reduction in CO2 emissions, real time monitoring of potential abnormal operating conditions, improved leak detection, and enhanced customer experience.

Guided by these considerable benefits, the Companies respectfully submit that all New Jersey utilities, including gas utilities, should be encouraged to invest in smart thermostats and AMI technology and should be provided with regulatory certainty with respect to cost recovery of such investments, which is consistent with the approach applied in other states. Many other jurisdictions have recognized the potential to deliver widespread benefits to GDCs and their customers by approving the deployment and cost recovery of smart thermostats and AMI technology on natural gas distribution systems. Recent examples of state commissions that have approved AMI deployment and cost recovery in the natural gas sector include New York, California and Maryland, where, like New Jersey, furthering the state's energy conservation goals are a top priority. Notably, in New York, the Public Service Commission ("PSC") has solidified

certainty around cost recovery for AMI by approving these investments through the utility base rate case process where the PSC applies a forward-looking test year policy and is therefore, akin to approval of an Infrastructure Investment Program (IIP)-like mechanism for AMI investments. Following and building on the initiatives taken in other jurisdictions with respect to AMI for natural gas systems will continue to position New Jersey as an innovative leader in this field and will ensure that AMI meets its full promise in the State.

The ultimate success of a peak demand reduction program will largely be driven by regulatory support for smart technology coupled with customer education. We can expect optimal results when demand response is combined with smart devices like smart thermostats and AMI, which will not only help achieve better participation and peak usage savings but offer a myriad of other benefits described above. In addition, simple consumer awareness through effective messaging that provides insight into how demand response can be beneficial to them will help further drive positive results. The more consumers understand the issue, the more prone they are to participate in the solution.

A well-designed gas demand response program that optimizes smart technologies can also be a useful tool to avoid emergency situations where customer usage is expected to exceed available supply. Both customers and utilities alike will benefit from a properly structured, coordinated demand response program over the unpredictability and potential costly impacts of a government emergency shutdown.

While peak demand programs will certainly help strengthen reliability of the natural gas system, they will not be an entire substitute for capacity. It is still critical that new, incremental pipeline capacity projects targeting New Jersey growth are supported and encouraged to ensure

that we continue to meet forecasted demand in a manner that allows us to provide safe and reliable service to our customers without interruption.

Supply Side NPAs

Equally as important are supply side solutions like an expansion of current on-system peaking services through liquified natural gas ("LNG") projects and the addition of RNG, hydrogen and other clean energy solutions that help to decarbonization our footprint and facilitate New Jersey's clean energy goals. As recent weather events and cyber issues in other states have informed, it is also critical to have adequate levels of redundancy, which beyond capacity, include a diverse mix of supply and local production including LNG and RNG.

Whether a demand or supply side solution, these alternatives have the potential to provide reliable alternatives to traditional gas capital projects and, as such should be treated like any other capital project, allowing for full and timely cost recovery, including the recovery of all related O&M and capital investments at the utility's authorized rate of return. We very much look forward to working with the parties to develop a full panoply of supply and demand side solutions that make sense for our customers and the State of New Jersey.

Concerns About the LEI Report

While we appreciate the thoughtfulness and thoroughness of LEI's work, SJG and ETG have serious concerns about some of the findings contained in the LEI Report. Specifically, we are apprehensive about the LEI Report's approach to Design Day planning and its apparent overstatement regarding sufficiency of capacity. Critical to fulfilling our commitments is the need to ensure the adequacy of New Jersey's natural gas supplies for customers. As the Companies have indicated previously in this proceeding, while there currently is sufficient available capacity to meet SJG's and ETG's design peak day needs and while both companies anticipate meeting

forecasted demand in the next five years, this assumes that market conditions for both capacity and demand will remain consistent with today's environment. However, the availability of pipeline capacity to meet peaking requirements has started to decline and the cost of available capacity has not only increased but shifted to a more costly price index. Therefore, with shrinking availability of pipeline capacity, rising pricing of peaking supplies and the increased time it takes to get new capacity approved and built, it is critical that new, incremental pipeline capacity projects targeting New Jersey growth are supported and encouraged to ensure that we continue to meet forecasted demand in a manner that allows the Companies to provide safe and reliable service to our customers without interruption.

FERC and NERC Express Concerns over Pipeline Infrastructure

Of course, the need to maintain a safe, reliable and consistent supply of natural gas transcends the borders of the State of New Jersey. Notably, the importance of maintaining a national, reliable supply of natural gas for the American people as a whole, has become a prevalent topic in Washington, D.C.

Recently, Federal Regulatory Energy Commission ('FERC") Chairman Richard Glick ("Chairman Glick") appeared at the Hearing on Securing our Energy Infrastructure: Legislation to Enhance Pipeline Reliability. Chairman Glick noted the interplay between natural gas supply and the electric grid: "In 2021, natural gas-fired electric generating facilities accounted for approximately 37 percent of U.S. electricity generation.[3] If a pipeline failure or cyber-attack disrupts gas supplies, electric generation capacity dependent on that pipeline could be lost, possibly

[3] U.S. Energy Information Administration, Short-Term Energy Outlook (released Dec. 2021), https://www.eia.gov/outlooks/steo/pdf/steo_full.pdf.

leading to blackouts on the electric grid." [4] The Chairman then pointed to last year's Texas blackouts as a prime example of this interdependence:

> This is more than a hypothetical situation. As described in a report released on November 16, 2021, FERC staff and NERC staff engaged in a joint inquiry into last year's massive blackouts across Texas and limited power outages in surrounding states during Winter Storm Uri. Although the joint inquiry identified several factors that contributed to these events, one of the primary causes was the lack of natural gas available for electric generation.[5]

Although Chairman Glick's comments were primarily focused on reliability, they underscore the need for a consistent supply of natural gas to ensure the reliability of both electric and gas powered facilities.

The North American Electric Reliability Corporation ("NERC") seemingly shares Commissioner Glick's concerns over the constraints on natural gas capacity. In its 2021-2022 Winter Reliability Assessment, NERC issued the following warning:

> Natural gas supply disruptions in **infrastructure-limited** areas have the potential to affect winter reliability: Disruptions to pipeline natural gas supplies and natural gas production sites, as observed in Texas RE-ERCOT in February 2021, can have the potential to affect power system reliability in winter. Although New England and the U.S. Southwest have sufficient planning reserves, fuel supplies to generators in those areas can be vulnerable during cold weather conditions. In NPCC-New England, the capacity of natural gas transportation infrastructure can be constrained when cold temperatures cause peak demand for both electricity generation and consumer space heating needs. Potential constraints on the fuel delivery systems and limited inventory of liquid fuels may exacerbate the risks for fuel-based generator outages and reductions. Southern California and the U.S. Southwest have limited natural gas storage and lack redundancy in supply infrastructure. As a result, electricity generators face the risk of fuel supply curtailment or disruption from extreme winter weather events. A ruptured interstate natural gas pipeline in August has caused an outage that reduces the amount of natural gas flowing into California. Natural gas storage levels in the area will decline during periods of high demand while the outage persists. Electricity reliability would not be affected in average

[4] https://www.ferc.gov/news-events/news/ferc-chairman-glick-discusses-pipeline-reliability-house-subcommittee
[5] Federal Energy Regulatory Commission, North American Electric Reliability Corporation, Regional Entity Staff Report, The February 2021 Cold Weather Outages in Texas and the South-Central United States (Nov. 2021), https://www.ferc.gov/media/february-2021-cold-weather-outages-texas-and-south-central-united-states-fercnerc-and (Report)

> temperatures and conditions, however prolonged periods of cold temperatures could result in curtailment of natural gas fuel to generators.[6] (emphasis added)

Clearly, having abundant natural gas resources is useless if there is not adequate infrastructure in place to deliver the physical resource and economic benefits to the end-user. An extensive pipeline infrastructure is essential to delivering natural gas from the extraction point to its destination. Unfortunately, large areas of the United States are lacking sufficient pipeline infrastructure, regions such as the Northwest and New England contain very little pipeline infrastructure; this forces these regions to import and purchase natural gas at a premium cost.[7]

Moreover, environmentalists often argue that the economic benefits of a strong pipeline infrastructure do not outweigh the risks. However, with today's modern pipeline safety requirements, this argument does not stand up. According to the United States Department of Transportation Pipeline and Hazardous Materials Safety Administration:

> Pipelines are the safest, most environmentally-friendly and most efficient and reliable mode of transporting natural gas." Further, natural gas utility companies spend over $22 billion dollars a year to enhance and maintain our nation's pipelines. Pipelines are not only the safest mode of transportation; they also make the most economic sense. It would take nearly 750 tanker trucks constantly shipping out every two minutes, non-stop, 24/7 to transport the equivalent of a small to medium diameter pipeline.[8]

Lessons Learned from New York and New England

New England's lack of pipeline infrastructure has forced the region to continue its reliance on foreign LNG. New England is currently importing most of its LNG from Trinidad & Tobago, and these imports are causing extreme price volatility and high costs to residential customers.[9] In 2018, the Independent System Operator New England (ISO-NE) looked at 23 different scenarios

[6] 2021-2022 WRA (nerc.com)
[7] https://www.americanactionforum.org/research/u-s-natural-gas-pipelines-infrastructure-crisis/#ixzz7JTsa8u4q
[8] Id.
[9] http://www.bloomberg.com/news/articles/2016-07-12/pipeline-phobia-keeps-new-england-s-unlikely-trade-route-open

for future electricity supplies and how those results could affect the grid's ability to deliver reliable electricity in the winter of 2024–25. It found that New England "could be headed for significant levels of emergency actions, particularly during major fuel or resource outages." It also found that "in almost all future resource combinations, the power system was unable to meet electricity demand and maintain reliability without some degree of emergency actions." Without new pipeline capacity, the grid operator would, in 19 of the 23 scenarios, be required to impose "rolling blackouts or controlled outages that disconnect blocks of customers sequentially.[10]

As recently as January 4, 2022, electricity prices in New England soared as a frigid start to the day spurred demand. New England is one of the most sensitive regions to gas supply constraints because it is geographically at the end of the massive U.S. pipeline network. Attempts to build more pipelines to increase the flow have failed, and the region must compete with places like Europe and Asia to lure cargoes of the fuel.[11]

Moreover, over the last decade, environmental regulators in New York have continuously rejected applications for permits needed to construct new interstate pipeline capacity. Two of the largest GDCs in downstate New York – The Brooklyn Union Gas Company d/b/a National Grid NY and KeySpan Gas East Corporation d/b/a National Grid (collectively "National Grid") – have had occasion to declare moratoria on processing new customer applications in parts of their service territories.[12]

These are just a small sampling of examples where constrained gas infrastructure has operated to the detriment of customers. New Jersey has the benefit of hindsight from these and the other similar situations that have played out in Texas, New York and New England.

[10] ISO New England (ISO-NE), "Operational Fuel-Security Analysis," Jan. 17, 2018
[11] World Oil
[12] *See Case 19-G-0678, Proceeding on Motion of the Commission to Investigate Denials of Service Requests by National Grid USA, The Brooklyn Union Gas Company d/b/a National Grid NY and KeySpan Gas East Corporation d/b/a National Grid*, "Order Instituting Proceeding and To Show Cause" (October 11, 2019).

New Jersey has the opportunity to learn from the past errors of others to mitigate the risks that could contribute to a shortfall of gas in the State by ensuring there is sufficient incremental capacity that will be needed to serve further growth in demand and mitigate any risk that the State will encounter gas shortfall situations, like those that have occurred in gas infrastructure constrained jurisdictions.

Flawed Assumptions in The LEI Report

The Companies have serious concerns about LEI's findings and conclusions regarding the sufficiency of capacity. SJG and ETG believe that the conclusions by LEI are faulty and must be recalibrated utilizing the correct factual inputs, prior to the Board considering those conclusions and results in relation to future gas capacity resource policies in New Jersey.

First, LEI's framework for forecasting design day growth relies on a very limited data set, which, by itself, leads to potential for sizeable forecast error. A much more robust forecast would be produced by forecasting demand using Forecast Pro™ or a similar modelling system and combining the customer and use per customer forecasts for each of the rate classes to produce sendout by rate class. The rate class then can be combined and used to inform the Design Day forecast.

Second, LEI improperly concludes that SJG's and ETG's design day forecasts do not correctly reflect future energy efficiency impacts when, in fact, the forecasts do reflect energy efficiency trends. The forecasts used by SJG and ETG are based on actual historical use factors by customer class which capture actual (historical) energy efficiency trends which are included in the sales forecasting calculation.

When examining available supplies, the LEI assessment does not properly consider the future supply resources of SJG. LEI mistakenly reports (Figure 11) 70% overstated storage capacity on Transco for SJG assets used in the capacity evaluation, that, as shown, is a combination of South Jersey Resources ("SJRG") and SJG contracted maximum storage volume. Furthermore, the table which identifies Delivery capacity at New Jersey GDC city gates and other points (Figure 64) includes capacity which is not under contract by SJG and ETG and therefore cannot be assumed to be available to meet a New Jersey Design Day.

LEI's analysis of scenarios for a "perfect storm" is a system-wide broad-brush analysis that may not accurately reflect the likelihood of supply disruption for the Companies, especially during a stress event such as a design day. As we have previously indicated in this proceeding, as it relates to SJG and ETG, while there currently is sufficient available capacity to meet our design peak day needs and while we anticipate meeting forecasted demand in the next five years, this assumes that market conditions for both capacity and demand will remain consistent with today's environment. That said, the pipeline capacity market relative to peaking services has started to decline and the cost of available capacity has not only increased but shifted to a more costly price index and LEI acknowledges there is the risk these peaking contracts might not be available at all in the future. Therefore, with shrinking availability, rising pricing and the increased time it takes to get new capacity approved and built, it is critical that new, incremental pipeline capacity projects targeting New Jersey growth are supported and encouraged to ensure that we continue to meet forecasted demand in a manner that allows us to provide safe and reliable service to our customers without interruption.

Fourth, there is the uncertainty as to the amount of interstate pipeline capacity available to New Jersey customers. There have been several pipeline expansion projects that are only

laterals providing firm capacity with no access to any supply basin and therefore should not be included in any capacity evaluation. Additionally, not all the gas capacity from these projects is reserved for New Jersey and the in-service dates are subject to delay, postponement, or cancelation for any number of reasons.

Best Practices Playbook

The LEI Report also included recommended best practices and a playbook that could be utilized in the event of a gas capacity shortfall. The Companies agree with LEI that there is value in establishing best practices and a playbook for responding to emergencies in the event of large disruption of supply, particularly on a design day, but that playbook also needs to incorporate company specific practices that account for and address the uniqueness of each of the GDCs that operate in New Jersey. While we may not necessarily agree with a uniform set of guidelines or LEI's specific recommendations, we found enormous benefits to the tabletop pilot light exercises that we undertook with the Board after the Spectra incident and there is value in creating a guide to mitigate some of the danger and cost that can occur under these circumstances.

Conclusion

The Companies appreciate the opportunity to provide these comments and look forward to working with all stakeholders in this proceeding to ensure the continued provision of safe, reliable, affordable, and clean natural gas service to our customers.

Respectfully submitted,

South Jersey Gas Company
Elizabethtown Gas Company

By: 

Deborah M. Franco, Esq.
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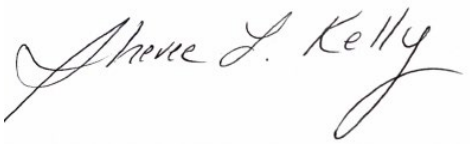

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