August 30, 2023

Ms. Sherri L. Golden RMC Secretary of the Board New Jersey Board of Public Utilities 44 S. Clinton Ave. 1st Fl POB 350 Trenton, NJ 08625-0350

RE: Docket No <u>GO23020099</u> In the Matter of the Implementation of Executive Order (EO) 317 Requiring the Development of Natural Gas Utility Emission Reduction Plans

Dear Ms. Golden

Thank you for the opportunity to comment on the above referenced docketed matter. We appreciate all the time and effort that the BPU staff have put into setting up the Technical Conference on the above referenced matter. The comments below are intended to assist in that ongoing process to help BPU develop and implement natural gas utility reduction plans.

First some known facts

It is clear looking at the New Jersey greenhouse gas (GHG) emission that New Jersey cannot get to the goal of a 50% reduction in GHG emissions by 2035, as set forth in EO 274; or the requirement of a 80% reduction in GHG emissions by 2050, as set forth in the Global Warming Response Act (GWRA) without significant reductions in natural gas usage among all sectors.¹ It is also clear that New Jersey cannot achieve 100% clean energy by 2050, as set froth in the 2019 Energy Master Plan and Executive Order 28; or 100% clean electricity by 2035, as set forth in EO 316 without significant reductions in natural gas usage among all sectors.

Given the current advances in the efficiencies and cost effectiveness of solar, offshore wind and storage, New Jersey will achieve the transition to 100% clean electricity by 2035. However, per NJDEP's 2022 GHG inventory, the electric sector only accounts for 20% of the State's GHG emissions. New Jersey would need to achieve an additional 30% reduction in GHG emissions to achieve the 2030 goals and another 60% reduction to achieve the 2050 requirement. However, while the transportation sector accounts for 37% of the State's GHG emissions, it is not likely that EVs will be 80% of all vehicles on the road by 2030 to achieve the 50% GHG emissions reduction in EO 274.

The majority (over 80%) of New Jersey GHG emissions are generated by the combustion of natural gas and gasoline. If you look at fuel types instead of sectors, to achieve the 50% reduction goal by 2030 requires that New Jersey GHG significantly reduce the combustion of natural gas and gasoline. Natural gas combustion is responsible for 45% of New Jersey fossil fuel GHG emissions, of which 20% is from the generation of electricity, with the remainder used in buildings. The combustion of gasoline accounts for approximately 30% of the State's GHG emissions. Again, with the State achieving the 100% clean electricity by 2035, 100% of its light

¹ See the 2019 NJ Energy Paster Plan at <u>https://www.nj.gov/emp/</u>, the NJDEP 80 x 50 Report at <u>https://www.nj.gov/dep/climatechange/mitigation/index.html#:~:text=The%20GWRA%2080x50%20Report%20was</u>, <u>their%202006%20levels%20by%202050</u>. And the NJDEP 2022 Mid-Cycle GHG Inventory Report at <u>https://dep.nj.gov/wp-content/uploads/ghg/2022-ghg-inventory-mcu_final.pdf</u>

duty vehicles (LDV) on the road by 2030 would have to be electric to achieve the 50% reduction goal.

Because of these facts, there needs to be a significant reductions in natural gas usage in the residential and commercial building sectors and the industrial sectors by 2030 to achieve the 2030 GHG reduction goal set forth in EO 274.

The following are comments and suggestions related to the questions listed in the EO 317 and the Notice of the Technical Conference:

1. Competitive market mechanisms to drive the lowest cost method for reducing total GHG emissions with the natural gas sector.

The natural gas distribution companies (GC) are a monopoly that have a significant competitive advantage in the marketplace with guaranteed returns on their investment, unlike true competitive entities. Relying solely on competitive market mechanism for a fully regulated monopoly would not be appropriate. The gas distribution companies (GDC) can amortize their cost over 50, 70 or 100 years, unlike competitive entities that need a return on investment in 3 to 5 years.

Competitive market forces work well when there is a level economic playing field and all entities are playing by the same rules. To make this a level economic playing field, requires that the significant competitive advantage of the GDC be reduced. The GDC are hiding behind cost effectiveness language and cost effectiveness test requirements that do not account for their competitive advantage. Incentives and subsidies help to level that field.

At the transmission level, the BPU should rely more heavily on competitive market mechanisms. This would include lowering or eliminating the incentives for Grid Supply Solar and Community Solar. The economic benefits of these technologies should mean that subsidies can be reduced. The BPU could revise the subsidies for these solar sectors to one similar to the Offshore Wind subsidies in which the energy and capacity revenues are returned in part to the ratepayer to "payback" the ratepayer's subsidies. In a net sum gain these "freed up" incentive budgets can be used to level the economic playing field in the transition from fossil fuel heating systems to energy efficient cold climate heat pump technologies.

2. Ensuring reliable operations and long-term financial viability of natural gas public utilities and the business models needed to keep the gas system intact while accounting for a shrinking customer base.

It is absolutely clear that the natural gas distribution system must provide for the long term safe and reliable delivery through the transition of a shrinking customer base. It is not even a question that the BPU needs to do this. But that does not mean the GDC structure must remain unchanged.

The solution is relatively simple and has been done in the past. Set up a long-term transition fund similar to the Landfill Closure Fund, the Manufactured Gas Plant Closure Fund and the Nuclear Plant Decommissioning Fund. Most of these funds were established by EDECA in the societal benefits charge (SBC) set forth at N.J.S.A. 48:3-61. These prior funds were established late in the process after the landfills and manufactured gas plants contaminated the groundwater, or the nuclear plants were permitted and operational. In this case, the BPU has 30 to 50 years to address this issue if it implements a Natural Gas Transition Fund now.

Through a proceeding the BPU can determine the future costs to manage the natural gas distribution systems with a dwindling customer base and determine the relatively small charge needed to secure those funds for the future closure over the next 30 to 50 years. As the customer base dwindles, this fund would ensure a safe and reliable system with a reasonable cost to the natural gas ratepayers thanks to compounded interest over 30 years if that fund is implemented now.

This transition fund could continue on the electric customer's bill to help reduce and remove the now unneeded and unused natural gas infrastructure. A model for this is the transition funds developed in EDECA and set up by the BPU to transition the natural gas and electric markets to competitive transmission and generation energy markets.

3. Alternate programs and investments that could provide natural gas utilities with new revenue streams and promote good-paying jobs.

One could answer this sarcastically. One could say the increase in health workers and infrastructure construction workers would be good paying jobs; if we continue to emit greenhouse gas emissions from the continued combustion of fossil fuels like natural gas that are causing climate change, this will impact New Jersey citizen's health and damage infrastructure from extreme weather; but that is not the answer.

The GDC work force expertise in addition to delivering safe and reliable energy, is in the development, implementation and maintenance of their underground infrastructure. This expertise is unlike the electric system infrastructure which is mostly above ground and subject to extreme weather events.

I was told by an EDC President after Sandy, Irene and Ida and dozens of tropical storms and nor'easters, "we know how to restring wires – they come down and we put them back up." But the question is how many times do we need to pay to do this same task over and over again. It is time to start putting the electric system underground, where appropriate.

The EDC should hire the GDC for their expertise in underground infrastructure. As the natural gas distribution system shrinks the EDC could employ the GDC to begin to install the electric distribution system underground. This would provide a new revenue stream for the GDC expertise and continue the current good paying jobs during the transition as the natural gas infrastructure shrinks over the next 30 years.

4. Elimination of subsidies that encourage unnecessary investments in natural gas infrastructure that is likely to result in stranded costs to ratepayers.

Yes. This needs to be done over time in a reasonable manner. One step would be to start to reduce the infrastructure amortization schedules over the next 30 years.

5. Log-term impacts on residential, commercial and industrial customers who fail to or are unable to switch away from natural gas

We assume this only apply to GDC customers and not the natural gas transmission customers which should stay as part of the competitive energy market The BPU should split out this question to a distribution and a transmission issue in the future since they are different issues.

Again, for the natural gas distribution customer, this is a 30-year plan if implemented now. It is not tomorrow. The BPU has started a reasonable and effective process that will be developed over the next 30 years to transition from fossil fuel heating to energy efficient cold climate heat pump technology. All one has to do is look back over energy transition histories for a partial answer.

Coal heating was replaced by manufactured gas or town gas in the cities and in some cases, oil in more rural areas. In addition, in more recent times, low Btu manufactured gas was transitioned to higher Btu natural gas. Look back on these transitions for a relatively good road map. The natural gas utilities that replaced or absorbed town gas companies provided a subsidy and incentive, at ratepayer costs, to switch to natural gas equipment from town gas equipment. This switch in equipment was needed because of the increase in Btu content and efficiencies of the equipment which is similar to the transition today from fossil fuel heating to more efficient heat pump equipment. Also, the switch from town gas to natural gas included the expansion of the gas distribution system to parts of New Jersey outside the cities. Similar to the need to expand the electric system.

By starting early, the BPU and its ratepayers can reduce, mitigate and possibly eliminate longterm impacts by using the past transitions as a roadmap.

6. Electric grid readiness to handle electrification of building heating and cooling, cooking as well as transportation.

New Jersey should be commended on its progress towards its clean energy goals, but currently EVs are less than 10% of the new vehicle registration market in New Jersey and the cold climate heat pump market is less than 1%. Based on the 2019 Energy Master Plan the goal of electrification is a 30-year plan.

Just look back in time to develop the future road map. In the last 30-years New Jersey doubled its electricity usage with increases in AC, central AC and more electronic equipment. During this time the State transitioned from a vertically integrated utility system to a competitive energy market for generation and transmission. It also weathered some extreme weather events that stressed to energy systems.

Did the EDCs deliver safe and reliable electric energy during this 30-year expansion? Yes, and even improved and enhanced its reliability. Did anyone notice that the BPU with the EDC were significantly expanding the system? No and credit for this goes to the work and planning of the BPU Division of Energy and the Division of Security and Reliability in working and appropriately planning with the EDC over the last 30-years. The BPU and the EDC managed a very good transition to double electricity usage over the last 30-years.

Prior to the energy deregulation of 1999, the BPU and EDC had extensive planning requirements with Integrated Resource Planning (IRA). The BPU needs to implement Integrated Distribution Planning (IDP) for both the EDCs and the GDCs NOW. This question is easily address with the implementation of IDP.

This issue has been discussed and evaluated at every NARUC, MARUC, NASEO and MASEO meeting over the last 10 years. Just simply require the EDC and GDC to submit IDP that cover the next 5, 10 30 years and address the appropriate transition.

7. Future Technical Conferences

i. How did the BPU set up the Landfill Closure Fund, the Manufactured Gas Plant Clean-up Fund and the Nuclear Plant Decommissioning Fund; and How can BPU establish the Natural Gas Distribution Transition Fund?

This should include a linkage to the reasonable reduction in the natural gas amortization timeframes.

ii. What is needed and required in an IDP by both the EDCs and the GDCs to plan for an appropriate and reasonable increase in the electric distribution systems and a reduction in the natural gas distribution systems over the next 5, 10 and 30 years?

This should include the costs and benefits to provide safe and reliable service over the next 5, 10 an 30 years as the electric system increases and the natural gas systems decrease.

iii. How can the EDCs employ the GDC's expertise to put the current electric above ground infrastructure underground as the natural gas distribution system and customer base shrinks to provide a new revenue stream and good paying jobs?

Thank you for the opportunity to provide comments on this very important clean energy issue. We commend the BPU for being forward thinking to start this process now with the ability to plan for the next 30-year.

Very Truly Yours

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