



NY GEOTHERMAL ENERGY ORGANIZATION

VIA E-MAIL

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

July 1, 2024

Re: – Filing NY-GEO Comments Regarding the National Fuel PUR program in Proceeding 22-G-0610

Dear Secretary Phillips:

Please accept for filing NY-GEO's comments to the Commission in proceeding 22-G-0610 relative to the National Fuel Gas PUR (Partnership for Urban Revitalization) program.

Sincerely,

Christine Hoffer
Executive Director, NY-GEO
518-746-0407
christine@ny-geo.org

The New York Geothermal Energy Organization (NY-GEO) is a non-profit trade organization representing geothermal heat pump (GHP) installers, manufacturers, distributors, drillers, consultants and industry stakeholders from throughout New York State and beyond.

The Commission and the Department of Public Service staff have been consistent in insisting on technology neutrality in its decisions and initiatives. The basic thrust has been to identify goals and invite all technologies to meet those goals on equal footing. It will be important for the next phase of the NENY process to ensure that incentives and initiatives do not preclude effective technologies in a biased or exclusive manner.

A current example of that can be found in the National Fuel Gas (NFG) Long Range Plan (LRP) which received a critical response from the Commission, Charles River Associates - the consultant the Department of Public Service hired to evaluate the plan - and several of the parties to the NFG LRP. On December 14, 2023, the Commission issued its *Order Implementing Long-Term Natural Gas Plan with Modifications* in Case 22-G- 0610. Point 8 of the Commission’s order stated:

“8. National Fuel Gas Distribution Corporation is directed to file with the Secretary to the Commission, within 90 days of this Order, a proposal explaining how it will revise its Partnership for Urban Revitalization in Western New York to encourage electrification and remove any incentives for additional natural gas usage.”

In its March 13, 2024 *Proposal to Revise Partnership for Urban Revitalization in Western New York Program*,¹ (Hereinafter referred to as PUR), NFG proposes a technology specific program for its Western NY customers, stating:

“In its focus on these three types of properties / residential structures in DAC neighborhoods, the revised PUR program will seek to implement weatherization, electrification, and resiliency measures as outlined in the table below.”²

	Weatherization	Electrification	Resiliency
Vacant Lot/New Construction	Insulation	1. ccASHP (preferred) 2. Hybrid Heating System (if ccASHP not feasible)	Install standby generator
Substantially renovated/Gut rehab	Insulation	1. ccASHP (preferred) 2. Hybrid Heating System (if ccASHP not feasible)	Install standby generator
Existing occupied structure/customer	Insulation & air sealing	1. Hybrid Heating System	Install standby generator

The company also notes: *“Additionally, the Company’s proposal to modernize its PUR program will also target existing homes within DACs by offering financial incentives for home weatherization measures, installing energy efficient Hybrid Heating Systems (“HH*

¹ NFGDC PUR-WNY Proposal (22-G-0610) (3.13.24).pdf – item #60 - <https://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=22-G-0610&CaseSearch=Search> accessed 2024 05 12

² Ibid., page 4.

Systems”), and natural gas back-up power generators. A HH System is defined as an electric air source heat pump (“ASHP”), cold climate ASHP (“ccASHP”), or mini-split heat pump (“Mini-Split”) paired with a furnace or boiler heating system utilizing natural gas or a mixture of natural gas, renewable natural gas, or hydrogen to meet a customer’s heating needs.”³

National Fuel’s PUR plan is NOT technology neutral. It specifies air source heat pumps. A technology neutral specification might set a standard for heating units that are CO₂e emission free on-site. This standard would meet the Commission’s interest in reducing GHG emissions while essentially giving customers a choice between air source and ground source heat pumps.

In the table above, all 3 categories (new construction, gut renovation and owner occupied) can easily be served by a geothermal system alone, without a need for a hybrid option. Thousands of geothermal installations in New York State, as well as multiple NYSEERDA monitored studies, have confirmed the ability of geothermal systems to function without any operational issues despite extreme weather conditions, and, without significant impact on the peak load on the grid.

In addition, the specification of gas-fired standby generators serves the company’s interest in extending or maintaining gas service to each property, but works against ratepayers by building in unnecessary and expensive gas infrastructure they will be paying for over several decades, as well as any other technology that could meet that standard.

NY-GEO requests the following changes in the PUR program and requests the NENY program to address issues of technology neutrality in programs that may otherwise render geothermal heat pumps ineligible.

1. Change the PUR program so customers are given a choice of either ground source or air source heat pumps. Incentives can be structured so that ground source heat pumps would receive a rebate in the amount designated for installing a hybrid heating system on the property (estimated to be on average \$12,000 to \$15,000).⁴ The customer would be presented with a document laying out the relative upfront cost of the ccASHP system, the hybrid heating system, and a geothermal system minus the PUR payment, NYS Clean HEAT rebate payment, IRA rebate and applicable tax credits tailored to the customer’s tax liability. In addition, they would be presented with data on the relative operating costs of a ccASHP or hybrid heating system vs. a GSHP system over 25 years, including the cost of replacing the ASHP system and the gas heating system after their effective useful life. The PUR program’s exclusion of a geothermal option seems be predicated on a false set of assumptions on the affordability of geothermal

³ Ibid., page 5

⁴ Ibid., page 11

installations. As NY-GEO has filed in a related proceeding⁵, when all factors are accounted for, geothermal installations can be cost competitive with air source and hybrid systems. The geothermal option can be especially helpful for LMI New Yorkers, because it can provide lower monthly bills, which is where the rubber meets the road for many LMI ratepayers.

2. Make the offer of a standby electricity generator to be technology neutral by allowing the same amount estimated for a gas generator on the site (estimated to be an average of \$8,000-\$10,000 per installation)⁶ to be applied to generators using other fuels or other technologies such as batteries.
3. As a gas utility, National Fuel has an interest in pushing options that maintain the need for their expensive gas distribution infrastructure. As electrification takes hold, New York has the opportunity to substantially reduce that infrastructure as it becomes unnecessary, potentially saving billions for NY's ratepayers. Data filed by the utilities in the Gas Planning proceeding yields a potential \$33 Billion dollar savings if a high electrification path is taken over a moderate electrification path. We recommend the Regional Clean Energy Hubs be given a strong role in carrying out the PUR, as well as any similar programs across the state, helping ratepayers evaluate their options and making their choice, providing a buffer between their interests and the interests of the utility.

While giving the customer a choice and bringing the NY Energy Hubs into play would complicate logistics for the program administrator and participants, it is essential to maintain longstanding PSC practice, and is only fair to customers who will be taking on the operating and replacement costs of the systems. As National Fuel notes there must be a certain amount of flexibility, and by extension, complexity in the PUR program.

*"To successfully achieve these objectives, the PUR program must be flexible to address variations in the DAC homes, customers' expectations, and changing market conditions. The program requires flexibility in the funding incentives offered to each project. The program's budget considers the potential variations in costs to weatherize the building shells and install hybrid heating systems and natural gas back-up generators. Individual project costs will likely vary and require less or more funding than estimated. The Company will capture and report on the variations."*⁷

Looking past this individual example it is important to note that geothermal heat pumps meet several of the goals important to New York State, including saving energy, reducing greenhouse gas emissions, minimizing peak electricity use, and affordability over the useful life of the installation. Geothermal has been hampered by the fact the state's goals are usually pursued on a one or two goal-per-program basis. For example, NENY is focused primarily on energy savings and affordability. In the NENY

⁵ NY-GEO NYSEG RGE Long Term Gas Plan Comments - item 41 June 21, 2024

<https://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterSeq=71419&MNO=23-G-0437>
accessed 2024 07 01

⁶ Ibid., page 11

⁷ Ibid., page 7

example, because other important goals such as peak shaving and reducing GHG emissions are omitted or assumed by extension, the benefits in the benefit/cost ratio for geo installations are not fully reflected and geothermal can be undervalued.

Affordability is a key responsibility of the Commission. With technological advances in recent decades, a path to the elimination of the expensive gas infrastructure is now possible. The ability of heat pumps, both geothermal and air source to replace gas space and water heating, along with the superiority of induction stoves, makes gas replaceable in our homes. We simply cannot afford to pay for two energy infrastructure grids (gas and electric), especially when so much of the gas system is leaking or leak prone and in need of replacement. Investing heavily in gas infrastructure, as gas usage decreases and expenses to operate and maintain are shouldered by fewer and fewer gas ratepayers, is a recipe for disaster. And, as NY's Climate Action Scoping Plan make clear, gas emissions in the building sector need to be virtually eliminated.

Focusing on one grid, which can be made smart and primarily needs to be maintained and build out, as opposed to replaced, is the most cost effective option to move forward.

Moving forward, NY-GEO urges the Commission to develop a program that more fully integrates the State's goals as policy and incentives are set. In the next decade, avoiding peak electricity use will become far more important and immediate as the transportation and heating sectors successfully electrify and increase stress on the grid. A housing sector program that completely and explicitly integrates the goals of reducing electric peak, cutting greenhouse gas emissions and minimizing costs for ratepayers will be more helpful at pointing to constructive solutions.