July 20, 2018

Honorable Kathleen H. Burgess
Secretary
New York State Department of Public Service
Three Empire State Plaza, 19th Floor
Albany, NY 12223

Re:    Case 18-E-0138 – Proceeding on Motion of the Commission Regarding Electric Vehicle Supply Equipment and Infrastructure

Dear Secretary Burgess,


1. **Combined Heat and Power (“CHP”) Applications Could Improve Economics and Alleviate Electric Rate Design Issues**

   Distribution shares the state agency petitioners’ concerns regarding the transportation sector emissions and believes the use of natural gas should be included as part of the solution. Distribution believes CHP could be the solution to several issues currently being considered in this electric vehicle proceeding.3

   By using natural gas-fired CHP to generate electricity on-site, reliability is added to charging stations, transmission losses from the bulk power system are avoided, the need to add to/upgrade the electric utility infrastructure can be alleviated, and concerns surrounding electric utility rate design can be ameliorated. In addition, to the extent CHP becomes a value stack eligible technology, the same CHP system generating electricity for charging stations could also

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1 Case 18- E-0138 – Joint EV Petition, filed on April 13 2018, by the New York Power Authority, New York State Department of Environmental Conservation, New York State Department of Transportation, and New York State Thruway Authority.

2 The May 2018 Notice established a 60 day public comment period for the Joint EV Petition.

3 One item currently open for public comment, and for consideration by the Commission in Case 15-E-0751, is adding CHP to the list of technologies currently eligible for value stack compensation. While this is being considered in a separate proceeding, this is important to note here.
potentially be used to generate and export electricity back to the grid. Value stack compensation could be earned for the electricity sent to the grid, helping to improve the overall economics of charging stations and their owners. Thus, there is a two-fold benefit: (1) the structure would encourage investment in DCFC’s by providing value stack compensation for operators, and (2) the natural gas consumed in DCFC generation essentially replaces diesel/gasoline and is far cleaner than the use of diesel/gasoline in the transportation sector.

It is also important to note that the benefits of CHP are aligned with several Reforming the Energy Vision (“REV”) goals, as well as the goals of the 2015 New York State Energy Plan. Generally speaking, CHP positively impacts the health of local economies and supports state and national policy goals in a number of ways:

- Improving energy efficiency by capturing heat that is normally wasted;
- Enhancing energy security by reducing energy requirements, and helping businesses weather energy price volatility and supply disruptions;
- Advancing climate change, environmental and emissions goals;
- Improving business competitiveness by increasing energy efficiency and managing costs;
- Increasing the resiliency of energy infrastructure by limiting congestion and offsetting transmission losses;
- Develop more reliable inventories of backup power; and
- Diversifying energy supply, by enabling a further integration of domestically produced and renewable fuels.

In application, CHP systems are capable of using renewable fuels such as biogas, bio-methane, and renewable natural gas. In particular, renewable natural gas has several benefits, including but not limited to: significant reductions in greenhouse gas emissions, increased domestic energy production, improved waste management (including reductions in groundwater contamination and run-off into local waterways), new revenue sources for American farmers, and innovative domestic job creation opportunities that provide superior wages for employees involved in source energy production. CHP can also operate on fuel cells, which use an electrochemical process to convert hydrogen to electricity and water. Boiler/steam turbine CHP systems can utilize nearly any type of gas, liquid, or solid fuel, but the technology is typically used when low cost fuels are available (including biomass or process waste).

2. Stated REV Policy Goals

The scope of this proceeding should be aligned with the Commission’s stated REV policy goal of fuel and resource diversity. As noted in the Company’s April 18, 2018 comments in this proceeding, the most efficient use of time and resources would be to facilitate a proceeding that addresses all aspects of the transportation sector contemporaneously. As part of such a proceeding, the Commission could potentially consider the environmental benefits of the

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5 Case 14-M-0101 – Order Adopting a Ratemaking and Utility Revenue Model Policy Framework, issued and effective May 19, 2016, at pages 111, 112 and Appendix A.
enhanced use of natural gas vehicles (“NGV” or “NGVs”), as a complementary technology that can make meaningful contributions to the stated goals of the New York State Energy Plan.  

Natural gas is the cleanest burning alternative transportation fuel available today that can economically power light, medium, and heavy-duty vehicle applications, as well as many non-road applications, such as rail and marine vehicles. Whether in the form of compressed natural gas (“CNG”) or liquefied natural gas (“LNG”), natural gas is a proven alternative fuel that significantly improves local air quality and reduces greenhouse gas emissions. Today, NGVs are delivering superior emissions compared to what was achievable just a few years ago. NGVs have been characterized by the United States Environmental Protection Agency (“EPA”) as the cleanest commercially available internal-combustion vehicle on the planet, and as such, the technology has received the American Council for an Energy-Efficient Economy’s (“ACEEE”) title of “Greenest Vehicle” for several years (including a span of eight consecutive awards). Compared to its gasoline-burning counterpart, recent NGV models produce lower emissions of non-methane hydrocarbons, NOx (which contributes to ozone depletion), and carbon monoxide.

Beyond light-duty passenger cars, there are many options to choose from when considering a NGV. Numerous manufacturers in the United States produce a variety of models of light, medium, and heavy-duty NGVs and engines. These vehicles include refuse trucks, transit buses, shuttle vans, and a variety of vocational work trucks. These larger vehicles are often placed in service in fleets that consume a lot of fuel and accumulate more miles than the average consumer vehicle. This means these vehicles are reducing even more pollution than if they were used in applications that accumulate fewer miles and use less fuel.

Simply put, natural gas is ready, and NGVs: positively impact the health of local economies; support state and national policy goals in a number of ways; advance environmental and emissions goals; improve business and supply chain competitiveness by increasing energy efficiency and managing costs; create new jobs and business opportunities, while making energy more affordable for all New Yorkers; have transparent supply chains; and diversify energy supplies by enabling further integration of domestically produced and renewable fuels.

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8 Electric vehicles are often thought of as low emissions or zero emissions, because the emissions measurement cited is typically from the on-board source of power. In practice, these vehicles are not truly low or zero emissions, when considering the fuels used for electric generation. The New York State Independent System Operator’s (“NYISO”) Daily Fuel Mix Chart demonstrates that dual fuel, natural gas, and nuclear are typically used to generate electricity mid-day, when electric vehicles would be refilling.
Conclusion

The Company appreciates the opportunity to submit these comments in response to the Joint EV Petition and the May 2018 Notice. Any questions you may have regarding this filing can be directed to the undersigned at (716)-857-7440 or at crahene@natfuel.com.

Respectfully submitted,

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