December 3, 2022

Internal Revenue Service
CC:PA:LPD:PR (Notice 2022-58)
Room 5203
P.O. Box 7604
Ben Franklin Station
Washington, DC 20044

Submitted electronically via the Federal eRulemaking Portal at www.regulations.gov

Re: Notice No. 2022-58, Request for Comments on Credits for Clean Hydrogen and Clean Fuel Production

National Grid appreciates the opportunity to respond to Notice No. 2022-58 on Sections 45V and 45Z clean fuels tax incentives included in the Inflation Reduction Act. National Grid also supports the comments filed by the Edison Electric Institute and the American Gas Association.

National Grid is a gas and electric utility delivering power and heat to more than 20 million people in New York and Massachusetts. With almost 9,000 miles of electric transmission lines, 70,000 miles of electric distribution circuits, and 36,000 miles of gas pipelines in the US, we help heat and power homes and businesses and connect communities to the energy they need. Our 17,000 employees, two-thirds of whom belong to a union, are at the heart of transforming our electricity and natural gas networks with smarter, cleaner, and more resilient energy solutions to achieve our net-zero by 2050 ambition.

Consistent with the best available climate science, National Grid's Climate Transition Plan aims to cut our GHG emissions in half by 2030 and reduce them to zero by 2050, including so-called "scope 3 emissions" attributable to our customers' energy use. Achieving these ambitious but essential goals will require transforming the way we produce, move, and consume energy across every segment of the economy.

In addition to our core regulated business, National Grid also owns and operates National Grid Ventures. National Grid Ventures is our competitive business that operates outside of National Grid's core regulated businesses in the UK and US where it develops, operates and invests in energy projects, technologies and partnerships to accelerate the development of our clean energy future.

This year, National Grid and National Grid Ventures each announced plans to further our net-zero ambition. National Grid Ventures' Clean Energy Vision positions our communities to become clean energy capitals. One example is on Long Island where we are working to connect solar, offshore wind, clean hydrogen, battery storage and transmission. We also operate generation plants fueled by oil and gas and are interested in replacing some of that infrastructure to create power plants run on clean hydrogen made from renewable energy sources. Our ultimate goal is to provide clean, reliable power generation scaled to match the needs of the region.

In April 2022, National Grid released our vision for a fossil-free future for clean heat. Our aim is to fully eliminate fossil fuels from our U.S. gas and electric networks no later than 2050. While energy efficiency measures and electrification through air-source and ground-source heat pumps are the cornerstones of our fossil-free vision, we know that between 30% and 70% of buildings within the urban areas of Boston and New York City and between 5% and 40% outside those major cities will be technically difficult or impossible to electrify by 2050. That's why our vision for fossil-free heat targets a hybrid approach, repurposing existing natural gas infrastructure to deliver a blend of low-carbon fuels like renewable natural gas (RNG) and clean hydrogen.

Today, heating is the largest segment of the energy economy in Massachusetts and New York, responsible for 39% of the states' GHG emissions – more than the electric power sector or the transportation sector. Heat is essential for life, especially in cold climates like the Northeast. Natural gas networks deliver the majority of heat energy to the roughly 10 million households in Massachusetts and New York, where nearly 6 million (57%) have a gas furnace or boiler, 2.5 million (25%) use an oil or propane-fueled boiler, and just 1.4 million (14%) use electricity. On a peak day in winter, natural gas networks deliver three times as much energy as the electric grid. Decarbonizing heat will be a monumental task but reaching net zero by 2050 will be impossible if we fail to accomplish it.

Clean hydrogen is an important component of National Grid's vision for fossil-free clean heat. We aim to reduce our gas customers' demand for heat by 30% through energy efficiency measures, and our analysis shows that it is achievable to meet 50% or more of remaining demand through electrification. But fully abating emissions from heating in Massachusetts and New York – including buildings and industry – will require meaningful use of low-carbon fuels including clean hydrogen. There is a growing body of evidence that blending hydrogen into existing gas networks is an effective way to lower the carbon intensity of building heat in the short run, and in combination with renewable natural gas can enable full decarbonization of National Grid's gas customers' consumption by 2050.

We have already started piloting the hydrogen blending portion of our vision in the Town of Hempstead, New York, where we announced a joint project to build one of the first and largest clean hydrogen projects in the U.S. The HyGrid Project will help decarbonize local networks by blending clean hydrogen into the existing distribution system, and, when complete, will heat approximately 800 homes and fuel 10 municipal vehicles. National Grid also supports the Northeast regional Hydrogen Hub proposal, and seeks to develop, demonstrate, and deploy clean hydrogen technologies for a variety of end uses, including industry, transportation, and buildings, in support of the Hydrogen Hub program's objectives. Our analysis shows that hydrogen has the potential to contribute meaningfully to economy-wide decarbonization, and that utilities like National Grid are uniquely positioned to help bridge the gap between clean hydrogen producers and end users across sectors to enable the market for clean hydrogen to scale up.

National Grid is at the forefront of the clean energy transition and as a key RNG and hydrogen customer and potential hydrogen producer in the Northeast. With that background in mind, we respectfully submit the following comments on Sections 45V and 45Z for your consideration.

Section 45V: Credit for Production of Clean Hydrogen

(1) Clean Hydrogen. Section 45V provides a definition of the term "qualified clean hydrogen." What, if any, guidance is needed to clarify the definition of qualified clean hydrogen?

We expect that the GREET model will be used to calculate emissions intensity for the purposes of determining whether a hydrogen source is "clean." As the GREET model is usually used for the transportation sector, we would like further clarification and confirmation that the same methodology would be applied to the power sector.

Section 45Z: Clean Fuel Production Credit

As detailed above, National Grid plans to use RNG to replace natural gas in our distribution networks, enabling us to provide fossil free fuels to our customers in a reliable and affordable manner. Based on the Congressional Record, it is Congress's intent that Section 45Z be used to "incentivize production of biofuels of a certain quality, usable as fuel for highway vehicles or aircrafts, but not limited only to fuels which are actually used in highway vehicles or aircrafts."[1] We ask the Treasury Department to confirm that Section 45Z can be applied to RNG when used for heating, cooking, water heating, and other residential, commercial and industrial end uses, and provide any relevant guidance to support these use cases.

Replacing natural gas with fossil free fuels like RNG and green hydrogen will be a critical part of the clean energy transition and meeting the Biden Administration, our states, and our company's net zero ambitions. As noted above, we expect that up to 75% of our customers will electrify fully or use a hybrid gas-electric system in their homes or businesses. However, we will continue to have an obligation to serve the 25% of customers who cannot or do not want to electrify. These customers include manufacturers, biopharma labs, hospitals and residential customers who cannot afford to or are otherwise unable to replace their heating system. Continuing to serve these customers, particularly those who are low income, is critical and part of the just transition we all support.

We are working with our states and external stakeholders to electrify as much of the economy as possible, but decarbonizing our entire economy in one of the coldest regions in our country cannot be done with electricity alone and needs to be affordable for all of our customers. The Section 45Z credit, when applied to the production of RNG for heating, cooking, water heating and other building uses will drive down the cost of RNG and make it an even more cost-effective and reliable replacement for natural gas in our distribution network.

We look forward to reviewing the guidance as we work to make certain that our ongoing clean energy transition is fair, affordable, and equitable for our customers and communities. Thank you for the opportunity to provide comments, and please do not hesitate to contact us with questions. We thank the Treasury Department in advance for considering our and others' comments on the Notice.

Sincerely,

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[1] Ron Wyden (OR). *Congressional Record*, Vol. 186, No. 133, (Senate-2022) p. S4166.