Gas Turbine Association

October 26, 2020

The Honorable Paul Tonko
United States House of Representatives
Washington, D.C. 20515

Dear Representative Tonko,

The Gas Turbine Association (GTA) applauds the proposed Clean Hydrogen Deployment Act and its goal to advance major applications utilizing clean hydrogen. As laid out in the included summary document, the higher cost of low-emissions hydrogen is hampering widespread adoption of green, blue, and other eligible hydrogen in a variety of applications.

The bill currently calls for at least one each of the following applications: (1) using hydrogen as a feed stock in an industrial application; (2) using hydrogen as a fuel in an industrial application; and (3) using hydrogen as a fuel in a transportation application. GTA suggests the addition of a fourth application using hydrogen as a fuel in a gas turbine for power generation. You have been an outstanding advocate for gas turbines as a key component of the future energy model. Including a gas turbine application would strengthen the bill's impact since the hydrogen demand created would be substantial, a key element of bringing costs down. Furthermore, the gas turbine application might provide a convincing demonstration project for clean hydrogen utilization with staying power beyond the five-year program window.

With regard to including at least one power generation project, GTA suggests you consider adjusting the Contract For Difference model to use natural gas as the baseline. If power producers were to use green hydrogen and to receive the CFD offset based on grey hydrogen costs, the energy produced would be too expensive and would likely never be dispatched. But if the producer could recover the difference between clean hydrogen and market rate for natural gas, this would allow the resulting energy to be on an equal footing with other energy producers in the system.

A proposed gas turbine project would face other hurdles beyond energy cost differences. This bill could help to advance development of several critical gas turbine technologies:

- New gas turbine combustion technology that mitigates flashback and combustion dynamics while avoiding excess NOx emissions;
- Development hydrogen-capable advanced materials and thermal barrier coatings (TBCs) needed for gas turbines and power plants;
- New safety standards and equipment, and associated accessory systems.

While GTA recognizes that the scope of the bill is aligned to the Energy and Commerce subcommittee purvey, we recommend incorporation of language encouraging funding for the Department of Energy

Office of Fossil Energy to enable these and other key technologies necessary for a hydrogen-burning gas turbine.

With these suggested changes, GTA believes that the Clean Hydrogen Deployment Act will be more effective in advancing deep decarbonization efforts in the United States. We welcome the opportunity to support a further dialogue with you on this bill.

Please do not hesitate to contact us directly with any questions, comments or concerns.

Sincerely,

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