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TESTIMONY BEFORE THE ENERGY, UTILITIES AND TECHNOLOGY COMMITTEE

An Act to Establish a Clean Hydrogen Pilot Program L.D. 1775

GOVERNOR'S ENERGY OFFICE May 2, 2023

Senator Lawrence, Representative Zeigler, and Members of the Joint Standing Committee on Energy, Utilities and Technology (EUT): My name is Caroline Colan, and I am the Legislative Liaison for the Governor's Energy Office (GEO).

The GEO testifies neither for nor against L.D. 1775.

In 2019, Governor Mills signed L.D. 1679 into law which set ambitious climate action goals and created the Maine Climate Council to develop strategies to achieve those goals. The Council was charged with developing a four-year Climate Action Plan to put the state on a trajectory to decrease greenhouse gas emissions by 45 percent by 2030 and 80 percent by 2050, and additionally to achieve carbon neutrality by 2045. The plan outlines the urgency with which Maine must slow the effects of climate change while at the same time, detailing how addressing climate change presents transformational economic opportunities, such as from the growth of clean energy sources and incentives for significant consumer, business and industrial investment in energy efficiency through weatherization, cutting-edge building materials, and alternative energy sources.

Generally, the state has taken a two-pronged approach towards emission reductions: to convert our large energy sectors like transportation and buildings from high emitting fossil fuels to electricity (what we call "beneficial electrification"), and to decarbonize our generation sources. But it's clear that there are several areas that will be particularly challenging to electrify, at least in the near term, for example, energy-intensive industries like heavy-duty trucking and industry.

The GEO has begun to explore the potential role that clean hydrogen could play in Maine's decarbonization efforts as a fuel, as energy storage, or as a feedstock, recognizing its attractiveness due to its flexibility and potential to be used in multiple different ways and across sectors. Maine joined a multi-state Northeast consortium to explore funding opportunities through the U.S. Department of Energy's (DOE) *Regional Clean Hydrogen Hubs* initiative, a program of the Bipartisan Infrastructure Law. The states of New York, Rhode Island, Connecticut, New Jersey, Massachusetts, Vermont, and Maine, as well as a diverse set of public and private hydrogen ecosystem partners from across the region, worked together to submit an application in early April of this year. We expect to hear from DOE regarding a potential grant award later in 2023.

This Northeast coalition has focused on the integration of renewables, such as onshore and offshore wind, hydropower, and solar – as well as nuclear power – into clean, electrolytic hydrogen production, and the evaluation of clean hydrogen for use in transportation, heavy industry, and storage applications

or other appropriate uses consistent with decarbonization efforts of partner states in tandem with electrification.

The GEO recognizes that the hydrogen landscape and its potential use cases are quickly evolving and has interest in studying or developing future programs for clean hydrogen development in Maine. As the Committee considers this legislation, a few suggestions to ensure the use of hydrogen supported by a state program is contributing to emission reductions in the state:

- Target end uses of hydrogen to difficult to decarbonize sectors, such as industry and heavyduty trucking rather than for use in space heating or light and medium-duty vehicles which are sectors that should be targeted for electrification.
- Encourage maximization of federal incentives from the Inflation Reduction Act. While additional guidance from the IRS is still needed regarding evaluation of lifecycle analysis to access increasing levels of production tax credits, legislation should encourage hydrogen production that focuses on the integration of renewables through clean, electrolytic hydrogen production.

Additionally, the scale and cost of a pilot should be carefully considered, taking into account other existing opportunities for research and incentives. While the GEO recognizes that electricity costs represent the majority of costs of a hydrogen production project, the dollar value of the proposed exemption is likely significant. We would like to better understand the existing gap in project financing of clean hydrogen projects given the other opportunities and incentives available to the industry to more appropriately scale a potential incentive to support applications of this innovative technology. The GEO is willing to work with the sponsor on this legislation should the Committee move it forward.

Thank you for your consideration.

Caroline Colan, Legislative Liaison

Governor's Energy Office