FCHEA
Fuel Cell & Hydrogen Energy Association

May 4, 2023

The Honorable Lily Batchelder
Assistant Secretary for Tax Policy
Department of Treasury
1500 Pennsylvania Avenue, NW
Washington, D.C. 20220

Re: Section 45V Credit for Production of Clean Hydrogen and Additionality

Dear Assistant Secretary Batchelder,

On behalf of the Fuel Cell and Hydrogen Energy Association (FCHEA) and the undersigned organizations, we are contacting you regarding the implementation of the Section 45V Clean Hydrogen Production Credit enacted by the Inflation Reduction Act of 2022 (IRA) and the lifecycle analysis calculation requirements being developed by the Department of Treasury (Treasury) and other federal agencies**.** FCHEA is the national industry association representing over 90 leading companies and organizations that are advancing innovative, clean, safe, and reliable hydrogen technologies and solutions.

It is the view of the undersigned companies and organizations that the lifecycle analysis calculation must include the use of market-based mechanisms such as renewable energy credits (REC), power purchase agreements (PPAs), or energy attribute certificates (EACs) without any additionality restrictions. The concept of additionality suggests that hydrogen producers can recognize clean electricity and feedstocks used in their processes only if it is derived from new projects. To do so would significantly stifle the clean hydrogen market by adding unreasonable costs and delays for clean hydrogen producers, running counter to the IRA and undermining its economic, jobs, and environmental benefits.

In principle, the clean hydrogen industry has the same end goal as additionality proponents: increasing deployment of clean energy. The issue is the proposed mechanism. The timelines for clean hydrogen scale up and siting are not the same as the timelines for new solar, wind or biogas installations, let alone nuclear and hydropower facilities, and to link their implementation negates the independent path clean hydrogen needs to complement these other resources in the drive to decarbonize. This approach defeats the goal of additionality by delaying the clean hydrogen roll out, which is much farther behind than deployment of renewables. It is better to incentivize both clean hydrogen and renewables separately, and let the increased capacity of both technologies work to drive decarbonization faster.

The intent of the IRA to grow the hydrogen industry and its potential for large-scale decarbonization will be unfulfilled should additionality requirements be implemented. Hydrogen is the only option available to many hard-to-abate sectors and hindering clean hydrogen production through additionality requirements will significantly delay industry's ability to decarbonize the economy. In particular, the development of Regional Clean Hydrogen Hubs enabled by the Infrastructure Investment and Jobs Act of 2021 (IIJA) being planned across the country may be undermined if these programs and policies are not implemented correctly.

<u>Singling out the Clean Hydrogen Sector</u>

A megawatt hour of electricity dedicated to electrolysis is no different than a megawatt of power dedicated for heat pumps or battery electric vehicle charging. All of these technologies are incentivized

by the federal government and it would be arbitrary and unfounded to presume hydrogen to have any more detrimental impact to the efforts to decarbonize than any other electric load. In its final guidance, Treasury should ensure that it is providing an equitable approach to all clean energy sectors and not adding undue restrictions to any one individual sector. Adding an additionality requirement for the clean hydrogen sector alone would unfairly single out and burden the development of clean hydrogen. This approach is contrary to the intent of the legislation and the fair development of guidance.

Increasing Costs for Clean Hydrogen Production

Even most additionality supporters recognize that these requirements would add significant costs for clean hydrogen producers.[1] Congress enacted the credit for production of clean hydrogen to incentivize the cleanest hydrogen pathways, in recognition of the much higher costs for electrolysis and other production methods. Any requirements that diminish the value of the credit for electrolyzers would slow development of clean hydrogen production.

Potential Economic and Job Loss

The United States has seen a massive interest and proposed investment in clean hydrogen manufacturing and production since the enactment of this credit. Unlike other interventions in the rest of the world, these investments are predicated on the premise that this credit would be simple to implement. Should the credit be implemented in a way that provides unnecessary restrictions, such as additionality, there could be potential to reverse some of these manufacturing initiatives, resulting in a significant loss of economic growth, clean manufacturing, and good-paying jobs, diminishing the impact of the IRA as intended.

Additionality is Not a Solution to More Clean Resources

Nearly 40% of United States electricity production is already derived from carbon-free resources like nuclear and renewable energy.[2] Requiring additionality would devalue these assets and restrict their contribution to clean hydrogen production. Furthermore, the current interconnection process is already a limiting factor to the number of new renewable projects that can come online. A recent analysis by Lawrence Berkeley National Laboratory showed that only 14% of projects requesting interconnection between 2000 and 2017 reached commercial operations by 2022[3]. Limiting hydrogen producers to procure EACs/PPAs solely from new renewable projects will not alleviate the interconnect bottleneck. Instead of the narrow focus on additionality, all proponents of more clean resources should direct unified attention to reducing barriers to access.

Putting Hydrogen Regulations Abroad in Context

The European Commission recently released its proposal for what they define as 'renewable hydrogen'. The proposal is expected to be voted on and adopted in the coming months. It is important to recognize that these requirements were debated for a long time and ultimately significantly scaled back from its initial planned restrictions in recognition of the harm it would do to the growth of this industry in the region and its impact on decarbonization goals. However, even this scaled back approach would

[1] Minimizing emissions from grid-based hydrogen production; January 2023. https://iopscience.iop.org/article/10.1088/1748-9326/acacb5/pdf

[2] EIA – US utility-scale electricity generation by source; Feb. 2023. https://www.eia.gov/tools/faqs/faq.php?id=427&t=3

[3] Queued Up: Characteristics of Power Plants Seeking Transmission Interconnection; April 2023. Lawrence Berkeley National Lab

significantly harm market growth, adding significant costs, as well as delaying project construction and development.

We would be happy to arrange a meeting to further discuss the detrimental impact that an additionality requirement for clean hydrogen would apply to our sector. Should you wish to contact me, I can be reached by email at fwolak@fchea.org or by phone at 202-355-9463.

Sincerely,

Frank Wolak
President & CEO
Fuel Cell and Hydrogen Energy Association

Company and Organization Signatories

3M

ADL Ventures

Air Liquide Hydrogen Energy U.S. LLC

American Center for Mobility (ACM)

Baker Hughes

Ballard Power Systems, Inc.

BayoTech

Bloom Energy

Business Council for Sustainable Energy

California Hydrogen Business Council

CF Industries

Constellation Energy

Cummins Inc.

Douglas County Public Utility District

ENGIE North America, Inc.

FirstElement Fuel, Inc.

FRIEM America

FuelCell Energy

General Motors LLC

GKN Hydrogen

Honeywell International Inc.

Howard Energy Partners

HyAxiom, Inc. – A Doosan Company

Hyundai Motor America

IHI Turbo America, Co.

ImaGEN Inc.

Infinity Fuel Cell and Hydrogen, Inc.

JERA Americas

John Cockerill

Methanol Institute

Mitsubishi Power Americas, Inc.

Monolith

National Hydropower Association

Nebraska Public Power District

Nel Hydrogen

Nikola Corporation

Nuclear Energy Institute

OCI Global

PDC Machines LLC

Phillips 66

Plug Power Inc.

Proteum Energy LLC

Puget Sound Energy

Renewable Innovations

Renewable Hydrogen Alliance

Robert Bosch LLC

Swagelok Chicago | Milwaukee | St. Louis

Taylor-Wharton

Terrestrial Energy USA

Toyota Motor North America

Twelve Benefit Corporation

U.S. Chamber of Commerce

W. L. Gore & Associates

ZeroAvia