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February 26, 2024

The Honorable Janet Yellen
Secretary
U.S. Department of the Treasury
Internal Revenue Service
1500 Pennsylvania Ave, NW
Washington DC 20220

Mr. John Podesta
Senior Advisor to the President for Clean Energy Innovation and Implementation
The White House
1600 Pennsylvania Avenue NW
Washington, DC 20500

RE: IRS REG–117631–23 Proposed Rule, Section 45V Credit for Production of Clean Hydrogen; Section 48(a)(15) Election To Treat Clean Hydrogen Production Facilities as Energy Property

Dear Secretary Yellen and Senior Advisor Podesta,

The Pacific Northwest Hydrogen Hub (PNWH2) agrees with the intent of the proposed Section 45V regulations to promote investment in new, carbon-free resources to support hydrogen production. In particular, PNWH2 is aligned with the goal of displacing the incremental growth of fossil fuel combustion on the grid that may be necessary to meet increased electrolytic hydrogen loads. PNWH2, and many of its constituent member companies, are principally located and do business in Washington and Oregon, states which have enacted two of the most stringent clean energy standards for electric power delivery in the country.

Despite our alignment with the goal of the proposed regulations, we have concerns that the application of the "three pillar" approach would cause significant complications for the economic viability of the PNWH2, and more generally to electrolytic hydrogen development at scale in the Pacific Northwest. Simply, the approach lacks a mechanism to account for the unique energy generation and balancing characteristics of the Pacific Northwest, and the policy environment that hydrogen infrastructure owners and end-users must comply.

Washington and Oregon Clean Energy Policies: Suggestion for Closer Alignment with States Leading the Clean Energy Transformation

The policy environment for infrastructure owners and hydrogen end users in Washington and Oregon differs from that of operators in many other states. Specifically, the PNWH2 must operate within the robust clean electricity and GHG emissions limitations of these states. Washington's Clean Energy Transformation Act (CETA) and Climate Commitment Act (CCA) act together to ensure that new loads will be served with clean electricity sources and that overall emissions, including emissions from imported electricity, will not increase. Oregon's HB 2021 has similar restrictions, limiting GHG emissions associated with electricity from major providers, with no exception for new loads such as hydrogen production.

Broadly, these state policies are intended to decarbonize electric power delivery to ratepayers by the 2040s. The targets established in these laws are aggressive, and require that the region's electric utilities more than double current system capacity of non-emitting resources by 2030; and more than triple these resources by 2045.

The state policies focus on decarbonization at a grid level, and they place the onus on electric utilities and major industrial customers to pursue least-cost, policy-compliant resources that will benefit all utility ratepayers. The policies also tacitly assume that the region's abundant supply of private- and federally-operated hydropower power generation – which supplies approximately two-thirds of the region's power – will continue to support and shape electric power deliveries and the addition of new carbon-free resources on the grid.

As proposed by the U.S. Department of Treasury ("Treasury"), incrementality and temporal matching, specifically hourly matching, requirements do not recognize the contribution of abundant, carbon-free power in the Pacific Northwest, and will drive over-build in the region that will result in project delays and substantial increases in the cost of producing hydrogen.

As it relates to cost, the sum impact of the "three pillar" approach is estimated to add approximately 45% to 300% more cost to hub projects. In addition to the increased cost, the project would also face significant delays in the region's transmission queue, which currently averages four to six years for new projects. Delays of this magnitude in the Pacific Northwest mean that a hydrogen producer is incentivized to cannibalize existing carbon-free projects in the transmission queue for use in qualifying Section 45V hydrogen generation – not for broader grid decarbonization.

PNWH2 suggests that Treasury strongly consider a mechanism that accommodates hydrogen producers that operate in states with strong decarbonization policies. Under such an accommodation, producers would be deemed to have satisfied the "three pillars", if the project owner and its partnering suppliers (including electric utilities) meet the following conditions:

a) The state in which the Section 45V facility is located has enacted an enforceable 100% clean electricity standard;
b) That the date of such enforceable compliance standard is no later than 2050; and
c) Electricity used to meet the facility's hydrogen production meets the tax credit carbon intensity requirement on an annual basis.

PNWH2 also suggests two specifics changes in addition to the recommendations above:

a) Allow Section 45V producers the ability to use the 45VH2-GREET model in effect at the beginning of construction for the entirety of the credit's applicability or the model in effect the first day of the taxable year in which the hydrogen it produced. Locking in such certainty as to the credit's value is critical. The model should also use statewide averages for carbon intensity, instead of interconnect-wide average values.
b) Utilize current FERC power markets as the basis for regional energy sources, instead of the NREL Transmission Study. The FERC power markets – specifically, the WECC in the Pacific Northwest region1 – provide a more suitable standard, as these regions more accurately capture the market activities taking place in a region. In the Pacific Northwest, utilities and power purchasers regularly schedule energy delivery from more diverse geographic regions, where renewable generation capacity factors may align better with the load profile of end users.

Absent a mechanism that deems producers in states with strong, enacted decarbonization policies to have satisfied the requirements of the Section 45V's suggested three pillar approach, the tax policy proposed prevents the development of electrolytic hydrogen development at-scale in the Pacific Northwest and places hydrogen producers in direct competition with residential, commercial and industrial electric ratepayers in the region for the same carbon-free resources.

PNWH2 is committed to unlocking the potential of electrolytic hydrogen that can support decarbonization in the Pacific Northwest. That is why our constituent companies joined forces through the PNWH2 and have committed to invest billions of dollars over the years to come. Specifically, together our constituent companies intend to:

- Eliminate **1.7 million metric tons** of carbon dioxide equivalent emissions per year (MMT CO2e/year) – **more than 1.5%** of regional carbon emissions.
- Create more than **10,000** new high-paying jobs in the clean energy economy.
- **Create economic and criteria pollution benefits to** hard-hit (legacy fossil fuel and industrial sites) and historically impacted **communities** (near ports, coal plants, and other locations) by transition to new clean hydrogen production and use.
- Spur development of new **critical infrastructure** to decarbonize **hard-to-abate sectors** such as heavy-duty transportation, long duration energy storage for peak power

[1] *Ibid. "The West includes the Northwest Power Pool (NWPP), the Rocky Mountain Power Area (RMPA) and the Arizona, New Mexico, Southern Nevada Power Area (AZ/NM/SNV) within the Western Electricity Coordinating Council (WECC), a regional entity. These areas contain many balancing authorities (BAs) responsible for dispatching generation, procuring power, operating the transmission grid reliably and maintaining adequate reserves. Although the BAs operate autonomously, some have joint transmission-planning and reserve-sharing agreements.*
The NWPP is composed of all or major portions of the states of Washington, Oregon, Idaho, Wyoming, Montana, Nevada and Utah, a small portion of Northern California and the Canadian provinces of British Columbia and Alberta. This vast area covers 1.2 million square miles. It is made up of 20 BAs. The peak demand is 54.5 GW in summer and 63 GW in winter. There are 80 GW of generation capacity, including 43 GW of hydroelectric generation."

generation, port operations, and industrial operations such as datacenters, fertilizer production, and clean fuel refining for sustainable aviation fuel, low carbon diesel, and other clean fuels.

Better alignment of Section 45V with our region's aggressive carbon reduction policies will help provide the certainty that the Pacific Northwest can participate in, and lead, the clean hydrogen economy. We thank you for your consideration of this important matter, and appreciate the opportunity to provide comments. For additional questions, data, or clarification of a suggestion made herein, please contact chris.green@commerce.wa.gov or Janine.BENNER@energy.oregon.gov

Sincerely,

Board Chair
Pacific Northwest Hydrogen Association

cc: The Honorable Jennifer Granholm, Secretary of Energy