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VIA ONLINE PORTAL

https://www.regulations.gov/commenton/IRS-2023-0066-0001

CC:PA:LPD:PR (REG-117631-23)
Room 5203
Internal Revenue Service
P.O. Box 7604
Ben Franklin Station
Washington, DC 20044

RE: Renewable Hydrogen Alliance (RHA) Comments on Proposed Rule 88 FR 89220 26 CFR 1; Docket REG-117631-23

To Whom It May Concern:

Thank you for providing the opportunity to comment on the proposed rules under Section 45V of the Inflation Reduction Act (IRA).

The Standard Hydrogen Corporation (SHC) is a New York State small business focused on the development and deployment of our proprietary hydrogen-based Energy Transfer System™ (ETS). The ETS has been designed to produce hydrogen from renewably generated and/or grid-delivered power using a Proton Exchange Membrane (PEM) water electrolyzer, to store it in vessels until it is used, and to deploy it for generation of electricity using an on-site fuel cell and/or for direct refueling of hydrogen powered vehicles.

SHC is a signatory to the United Nation's 24/7 Carbon Free Energy compact. We agree that the most beneficial way of producing hydrogen is via electrolysis powered by zero emission electricity. Our company was founded to enable markets for hydrogen as an energy carrier to help decarbonize many aspects of our energy system – aligned with the US Department of Energy Hydrogen @ Scale plan. Our market strategy is gaining traction because we look beyond the molecule, and instead focus on the energy vectors enabled by using hydrogen as a means for energy storage.

SHC believes the current proposed rules under paragraph 45V of the Inflation Reduction Act (IRA) will significantly slow and perhaps prevent the development of clean hydrogen projects, and thereby slow the transition of our energy systems to a carbon-free basis. Instead, as written, the current rules may have the opposite effect, and shackle the US hydrogen industry to the currently utilized production methods of steam reformation via natural gas.

Our comments herein focus primarily on the draft rules provisions related to incrementality, temporal matching and deliverability requirements for Energy Attribute Certificates (EACs)(S. 1.45V-4).

1) General Comments

We believe that our electric power system must transition rapidly and substantially to an emissions free generation basis; in other words, we need to rapidly replace conventional forms of electric power generation with renewable and carbon-free sources such as wind power, solar power and hydroelectric power. The proposed rules should be amended to include best practices from those markets where similar clean energy transitions are underway. Similarly, the rules should avoid pitfalls of early adopters of clean energy transition projects. For example, the State of Hawaii transitioned too quickly to a large fraction of renewable power generation resulting in well documented grid instability, grid outages and significant curtailment of new renewable resources. Similarly, in California, to mitigate the effects of the so-called "duck curve" (oversupply of renewably generated electricity) to the power grid, the state built and operated a new fleet of natural gas powered peaker plants. California's actions helped to prevent the grid outages and instability that Hawaii experienced but introduced significant new emissions as a result. In both cases, zero emission electrical energy storage would have enabled the transition to these renewable energy power sources while preventing the negative side effects that each state experienced.

SHC was founded and operates in New York State. We are members of the New York Battery and Energy Storage Technology Consortium (NY-BEST). This organization has been developing the case for, and the market to support, grid-scale energy storage as part of the portfolio of solutions to enable New York to meet its nation leading clean energy goals. Our company's analysis shows that the many gigawatts of energy storage required to deploy these renewable resources must be available to the grid ***before*** the renewable resources they support are activated.

2) Specific Comments Regarding Section 1.45V-4 Incrementality

SHC's POSITION:
For purposes of determining if a producer is eligible for the 45V production tax credit, the Treasury Department should deem hydrogen projects to have met the incrementality requirement if they are built and operated in states that have a statutory mandated clean energy climate policy.

New York State has some of the nation's most aggressive goals for making the transition to clean energy. Analysts who have been studying how to make a successful change have cited the need to avoid pitfalls of status such as Hawaii (grid instability and significant curtailment) and California (required new fossil-fuel resources).

In New York State, the need for grid-scale energy storage has been well established as the means to enabling the greatest penetration of renewable power generation sources while preventing further emissions from fossil-fuel based dispatchable resources.

Without the recommended exception above, the incrementality requirement will prevent clean hydrogen energy storage resources from providing the flexibility to the grid that is required to establish the intermittent renewable generation resources that we need.

3) Specific Comments Regarding Section 1.45V-4 Temporal Matching

SHC's Position:
For purposes of determining if a producer is eligible for the 45V production tax credit, the Treasury Department should deem hydrogen projects to have met the temporal matching requirement if they are built and operated in states that have statutory mandated clean energy climate policy.

Financial instruments such as Power Purchase Agreements (PPAs) have enabled rapid deployment of solar power installations on taxpayers' rooftops and in community installations. The restrictions imposed by Temporal Matching would prevent these PPAs from being applied to energize clean hydrogen projection projects.

4) Specific Comments Regarding Section 1.45V-4 Deliverability

SHC's Position:
For purposes of determining if a producer is eligible for the 45V production tax credit, the Treasury Department should deem hydrogen projects to have met the deliverability requirement if they are built and operated in states that have statutory mandated clean energy climate policy.

Geographic flexibility in generation and movement of power is just as important as temporal flexibility, especially in the early years as the fleet of energy storage assets is being developed. Especially in the case of hydrogen, where moving the molecules is much more costly than moving the power used to generate the molecules, this deliverability requirement should be revisited, abounded, or at least amended to enable projects in states that have statutory mandated clean energy climate policy to quality automatically.

In summary, we believe the rules as current proposed are too restrictive and will prevent clean hydrogen projects from delivering the potent climate benefits that we need as we embrace the energy transition.

Very Truly Yours,

Paul F. Mutolo, Ph.D.
CoFounder and CEO