



Hydrogen Fuel Cell Bus Council

Commissioner Danny Werfel
Internal Revenue Service
1111 Constitution Avenue, NW
Washington, D.C. 20224

Re: Comments from the Hydrogen Fuel Cell Bus Council on the proposed rule for Section 45V Credit for Production of Clean Hydrogen (REG-117631-23)

Dear Commissioner Werfel:

The Hydrogen Fuel Cell Bus Council (HFCBC) is an organization representing public transit agencies, original equipment manufacturers, hydrogen fuel suppliers, and other interested parties to educate and advocate for hydrogen fuel cell electric buses in the public transit sector. The HFCBC appreciates the opportunity to provide the following comments on the U.S. Department of Treasury's proposed regulations for the Section 45V hydrogen production tax credit. We respectfully submit the following comments for your consideration.

General Comments

Hydrogen fuel cell electric buses are critical to meeting the zero-emission goals set by the Biden Administration. As the transit industry transitions to zero emission vehicles, many of these public agencies are discovering the limits of battery electric buses, including range and extreme weather limitations. In response to those concerns, many transit agencies are purchasing hydrogen fuel cell buses, which can seamlessly replace diesel and CNG buses on longer bus routes. A significant hurdle to this transition is the price of hydrogen, which plays a significant factor in the operating cost of a bus. Public transit agencies are boxed in by their operating budgets and cannot afford excessive fuel prices. This tax credit is critical to expanding the hydrogen fuel cell bus fleet and filling an important gap that battery electric buses cannot easily handle, the longer distance routes.

In the December 22, 2023 press release, Treasury explains their goal is to create good-paying jobs, strengthen energy security, spur private-sector investment to build the clean energy economy, and combat the climate crisis. Unfortunately, this proposed rulemaking misses the mark on supporting that goal and will impose unnecessary burdens on a critical fuel supply to expand the zero emission bus market.

Incrementality

Permitting and financing new clean power projects is difficult and there is a significant backlog. The proposed regulations will only add to that backlog and delay the availability of affordable hydrogen fuel for offtakers such as public transit agencies. According to a report [https://emp.lbl.gov/sites/default/files/queued_up_2022_04-06-2023.pdf] from the Lawrence

Berkeley National Laboratory (April 2023), the average clean energy project spends 5 years just waiting its turn in the interconnection queue. HFCBC is concerned that hydrogen producers will struggle to tie themselves to solar or wind projects coming online and be eligible for the credit in a timely manner. The HFCBC suggests that the final rules account for the 5 year delay identified by the Lawrence Berkeley National Laboratory, the necessary timeframe for environmental permitting, and typical construction timelines. Hydrogen fuel needs to be affordable for public transit agencies and other off takers to invest in the infrastructure of an hydrogen economy.

Temporal Matching

While our members are pleased to see that hourly matching requirements will be delayed until 2028 in favor of annual matching, it is the Council's position that annual or daily matching should be the system used throughout the lifecycle of the production tax credit. Small producers such as our transit agency members produce more solar electricity during the day than they use, while their hydrogen electrolyzers operate 24 hours a day. Since they bank clean energy on the grid, benefiting everyone in their community, they should be able to receive the tax credit for evening hours when they are drawing electricity from the grid.

The recommendation from the Treasury of temporal matching will make hydrogen production during certain periods of the day or year uneconomical, and hydrogen production will decrease for a regulated facility. These recommendations slow the pace of clean hydrogen growth and thereby slows hydrogen cost reduction and end-use deployment. We also believe that these systems have not been put into practice and will be challenging to administer for small to medium sized producers.

A possible alternative to temporal matching would be to mimic net energy monitoring (NEM) that is used for photovoltaics. This provides a good example to follow for hydrogen production and has been successfully put into practice by regulators and private industry. NEM was essential to accelerating the deployment of residential and commercial solar in the early 2000s by using the aggregation of the grid to provide consumers with positive cash flow, paying them retail rates no matter the time of day of production or use. Clean hydrogen is at a comparable commercial maturity stage in 2024 as solar was in 2005 (the year the Energy Policy Act of 2005 became law) and could benefit from similar treatment. This would support the Biden Administration's goal of securing a fully decarbonized grid by 2035 because it will allow for greater investment in hydrogen generation. This would also create consistency between sectors of the renewable energy industry. Making implementation easier for the stakeholders involved.

Deliverability

The HFCBC supports the IRS's proposal to align electricity production with a hydrogen production facility within geographic regions as derived from the National Transmission Needs Study. It could be helpful to provide some flexibility to allow projects to span adjacent regions where a project location reduces the need for transmission.

Verification

The HFCBC requests that the Treasury issue clear and concise guidance on the verification methods, procedures, and third-party observers that entities must use in order to claim the 45V credit, on how entities will use the 45VH2 GREET model to determine their eligibility for applicable percentages of the 45V credit, and on the taxpayer forms required to claim the 45V credit. We also suggest that the Treasury offer a streamlined version of verification, the GREET model, and tax forms for small producers of hydrogen that will use the hydrogen themselves.

Small Scale Hydrogen Producers

The HFCBC supports the comments filed by Lewis County Public Transportation Benefit Area (LC Transit) that seek a small-scale hydrogen producer de minimis exception to the lifecycle greenhouse gas emissions rate requirements to receive 100% of the PTC. Obtaining the maximum PTC rate is crucial for small production facilities and encouraging a proliferation of smaller producers around the nation will broaden the market for small off takers like transit agencies operating hydrogen fuel cell buses.

Conclusion

The transportation industry cannot achieve its decarbonization goals without the availability of affordable hydrogen fuel. In sum, the HFCBC asks the Treasury to encourage the rapid build-out of infrastructure for full decarbonization, rather than restricting growth. Having zero-carbon goals and excellent tracking systems in 2035 will mean nothing if we have not built the carbon-neutral energy system in time to avert overwhelming climate disasters.