



February 22, 2024

Submission VIA the Federal eRulemaking Portal at [www.federalregister.gov](http://www.federalregister.gov)

Internal Revenue Service  
CC:PA:LPD:PR (REG-132569-17)  
Room 5203  
P.O. Box 7604, Ben Franklin Station  
Washington, DC 20044

**Re: REG-117631-23: Section 45V Credit for Production of Clean Hydrogen; Section 48(a)(15) Election To Treat Clean Hydrogen Production Facilities as Energy Property**

Dear Ladies and Gentlemen:

Ballard Power Systems appreciates the opportunity to submit the following comments in response to the proposed regulations published by the Internal Revenue Service and the U.S. Treasury Department regarding Internal Revenue Code Section 45V Credit for Production of Clean Hydrogen (Clean Hydrogen PTC) and the energy credit, as established and amended by the Inflation Reduction Act of 2022, Public Law 117-169, 136 Stat. 1818 (August 16, 2022).

Ballard Power Systems was founded in 1979 by Geoffry Ballard with the singular mission of replacing the internal combustion engine with zero emissions fuel cell engines. Ballard designs and manufactures fuel cells for this purpose at its headquarters in Burnaby, British Columbia, and manufactures its fuel cell modules for zero emissions transit buses in Bend, Oregon. Ballard employs over 1,100 employees globally, including at its US manufacturing facility in Bend. We have achieved annual revenue of over \$100M/year, and in the United States this is driven primarily by fuel cell electric bus sales to transit agencies. Fuel cell electric bus sales have increased in the US by over 50% year over year, and our business strategy depends on this continued growth to increase production volumes, in order to achieve production costs low enough to succeed in the much larger but more cost constrained trucking market.

Our customers have enjoyed excellent reliability for our fuel cell systems, and while bus capital costs approach battery electric costs for far greater capability, our customers cannot proceed with their fuel cell bus deployments if they cannot see a reasonable path to low cost, low carbon hydrogen. Fleets have struggled to secure low-carbon hydrogen supplies from industrial gas suppliers that have dedicated only marginal capacity, leaving prices to fluctuate wildly as supply diminishes. New fuel cell electric bus deployments in Stockton, California and Reno, Nevada, for example, are unable to begin deployment today because of hydrogen fuel shortages, and others are struggling to find supply options.

We have assured these customers that federal "Hydrogen Shot" efforts like hydrogen hubs and the 45V tax credits will increase supply and drive down costs, but agencies have only seen average prices steadily increase over the past 5 years. For some agencies fuel cell electric buses are the only viable zero emissions option, but if the fuel is not affordable, their ability to comply with ZEV mandates will be severely compromised. We are expecting to see the same with truck fleet operators.

Ballard is extremely concerned by the positions outlined within the proposed rulemaking and its potential impact both on our business and the domestic clean hydrogen market as a whole. If implemented, prices for clean hydrogen may not lower soon enough for pilot fleets to continue operation,



discouraging other potential fleets, and slowing the pace of hydrogen production scaling. This could slow the pace of our expansion in Bend, and delay or halt our plans for the new fuel cell MEA, stack and engine GW production facility in the US for which Ballard has applied for DOE funding. It is therefore critical at this time to incentivize clean hydrogen production in as many low-carbon methods as possible, particularly regarding incrementality, deliverability and time matching.

If the proposed rule is implemented, there is significant risk that the United States (U.S.) will not achieve its stated goals of clean hydrogen production, preventing significant decarbonization potential and economic growth. In particular, we are alarmed by the onerous restrictions proposed for grid-connected clean hydrogen projects using energy attribute credits (EACs). The so-called three pillar restrictions – incrementality, temporal matching, and regionality – are not enshrined in the Inflation Reduction Act and run counter to legislative intent. Taken together, these pillars would handicap the nascent clean hydrogen sector before it is able to scale through added compliance costs that could make many use cases of hydrogen uneconomical, delay projects for months or possibly years, and would risk U.S. technology leadership, significant decarbonization potential across the economy, and the development of the Biden Administration’s announced Regional Clean Hydrogen Hubs.

It is Ballard’s position that we continue to raise strong concerns with any implementation of the proposed three pillars. However, should Treasury insist on moving forward with some level of these requirements, we offer the following proposed policy preferences. First, grandfathering provisions should be provided for first mover projects that begin construction before January 1, 2033 that exempts these projects from the three pillars. Second, the implementation of the three pillars should be deferred until at least January 1, 2033. In addition, the hourly matching requirement should not be implemented until after the Department of Energy has verified that an hourly EAC market is commercially available. The regionality requirement should be broadened to the North American Electric Reliability Corporation (NERC) Regions and should incorporate interregional EACs. Finally, for incrementality, Treasury should provide exemptions for incrementality for nuclear and hydropower generators, and if not, support the full suite of options for incrementality compliance for these existing clean power generators.

To the extent that Treasury considers applying the three pillars to renewable natural gas, fugitive methane, and other feedstocks, we ask that grandfathering and deferred implementation of these pillars are similarly applied to this sector if appropriate. We also strongly support the inclusion of book and claim for these applications.

Ballard supports the broader details and policy preferences outlined by the Fuel Cell and Hydrogen Energy Association (FCHEA). Thank you again for the opportunity to share these critical perspectives with you. Please contact me with any questions or comments.

Thank you for your consideration,

A handwritten signature in black ink, appearing to read "Randy MacEwen", with a long horizontal flourish extending to the right.

Randy MacEwen  
President and CEO  
Ballard Power Systems