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TACOMA PUBLIC UTILITIES

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VIA ONLINE PORTAL

https://www.regulations.gov/commenton/IRS-2022-0029-0001

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

RE: Tacoma Public Utilities Comments on Proposed Rule 88 FR 89220 26 CFR 1; Docket REG-117631-23

To Whom It May Concern:

I am writing to urge your thoughtful consideration of the proposed regulations relating to the Clean Hydrogen Production Tax credit (PTC) under the Inflation Reduction Act (IRA). The Clean Hydrogen Production Tax Credit (also referred to as the section 45V credit) is needed to develop and accelerate the production of low carbon domestic hydrogen. Tacoma Public Utilities (TPU) welcomes the opportunity to provide comments and address selected questions related to the draft 45V regulations.

The Biden Administration's support of two powerful laws – the Bipartisan Inflation Law (BIL) and Inflation Reduction Act (IRA) provide historic levels of investment in climate action and low-carbon energy technologies, including the production and use of clean hydrogen. Many consider clean hydrogen to be the cornerstone of decarbonizing emissions from carbon-intensive sectors.

The BIA provided more than \$9.5 billion in funding for clean hydrogen, including \$7 billion for the regional clean hydrogen hubs program to fund and support clean hydrogen production near major consumers. As you know Washington state, along with Oregon and Montana, was selected as a Clean Hydrogen Hub. Our regional hub is eligible to receive up to \$1 billion to support clean hydrogen projects. We understand that new clean hydrogen producers, including Pacific Northwest Hydrogen Hub projects will need access to the 45V PTC very soon to attract investment and become economically viable. Hub projects will provide real-world examples of clean hydrogen end uses.

Background

Tacoma Power, a division of Tacoma Public Utilities, serves more than 400,000 residents in the City of Tacoma, several surrounding cities, Joint Base Lewis McChord, and unincorporated Pierce County. Tacoma Power's resource portfolio is 97 percent renewable and carbon free. Most of Tacoma Power's "carbon ledger" is driven by both our and the Bonneville Power Administration's (BPA) participation in the wholesale electricity market, which is necessary to maintain grid reliability, integrate renewable generation, and lower costs.

Washington state has also adopted numerous climate-focused policies, many of which will spur the demand side of the clean hydrogen economy:

- Climate Commitment Act: an economy-wide GHG cap-and-invest program
- Clean Fuel Standard: a market-based program designed to decrease the carbon intensity of transportation fuels
- Clean Energy Transformation Act: a sweeping statute requiring that electric utilities become GHG-neutral by 2030 and GHG-free by 2045
- Zero-emission vehicle mandate: adopts California's zero-emissions mandate
- Targeted tax exemptions: Extension of sales and use tax exemptions available for renewable energy projects to H2 producers

Resource Adequacy

Maintaining reliability, while also maintaining our affordable, reliable, and nearly carbon-free electricity service to our customers is becoming more challenging. The Northwest came perilously close to experiencing blackouts during the 2024 Martin Luther King, Jr. holiday weekend. California experienced blackouts in the summer of 2020 and nearly had a blackout in 2023. This situation will become even more dire due to climate change, loads increasing from electrification, and retirement of baseload generating resources. The addition of large new industrial loads such as green hydrogen production may increase the challenge¹.

Renewable generation such as wind and solar will play an important role in the energy transition. However, *without the availability of "clean firm" capacity, it may be impossible to meet decarbonization objectives without material adverse impacts to affordability and reliability*. To address this gap, policy makers should consider:

• Maintaining existing "clean firm" Federal generating capacity (such as the Lower Snake River Dams) is critical to maintaining reliability. Without the Lower Snake River dams, the region would have experienced blackouts over the 2024 Martin Luther King, Jr. holiday weekend.

• Prioritizing reforms to transmission siting and permitting. Additional transmission that improves linkages between regions like the Pacific Northwest and Desert Southwest will unlock valuable "diversity benefits", increasing reliability and lowering costs.

¹ Green hydrogen loads may have significant flexibility which could help mitigate the need for capacity depending on how the technology is used and deployed, it has the potential to become an asset to grid stability.

• Providing additional Federal support for emerging "clean firm" technologies such as iron air batteries, flow batteries, and advanced nuclear reactors.

Failure to address the "clean firm" capacity gap will impede the energy transition and make developing a clean hydrogen economy difficult.

Three Pillars Comments

We appreciate that the Treasury Department and the IRS are seeking comments on alternative approaches or modifications to the "Three Pillars" draft requirements below:

Incrementality

• **Avoided Retirements**: Would allow existing clean power generators to qualify if they would otherwise be decommissioned.

• Zero or Minimal Induced Grid Emissions: Would allow existing clean power generators to qualify if the local grid is already sufficiently low-emission and there are state climate policies in effect.

• **Formulaic Approach**: Would allow a fixed percentage of electricity from all existing clean power generators to qualify for hydrogen production based on expected curtailment rates (5-10%).

• Uprate: This would allow a generating facility that had an uprate (i.e., an increase in its rated capacity in nameplate megawatts) within the 36-month period by which a generating facility must have been placed in service to meet incrementality requirement. Only the proportion of additional power generated by the uprate would be eligible to be considered qualified power.

TPU is supportive of all these approaches being available to hydrogen producers to help them meet the incrementality requirement.

The Zero or Minimal Induced Emission approach is TPU's preference and very similar to an alternative put forward by Washington state Governor Jay Inslee. This approach exempts states that have adopted climate policies from the Three Pillars additionality requirement. The Zero or Minimal Induced Emissions alternative provides protection from concerns that clean energy resources will flow to hydrogen producers and then be backfilled by dirty power. That is not possible in states with clean energy or carbon reduction regulations. This approach also has the benefit of not decreasing the value of existing clean electricity generation such as hydropower, nuclear, wind and solar in the fight to reduce carbon emissions. The Department of Energy's selection of a Pacific Northwest Hydrogen Hub was predicated on the abundance of hydropower and other existing renewables. This approach seems easy to implement and verify by referencing 100 percent clean energy laws. Verification could be readily achieved through applicable state fuel mix reports or carbon emissions reports.

The formulaic approach would be more meaningful if its upper limit was set at 10 percent.

Deliverability

Deliverability restrictions require qualified clean power to be sourced from the same region as the hydrogen production facility. The proposed requirements ask for comments on how the implementation could include application of inter-regional EAC's or purchase of electricity from outside the United States, e.g., Canada, based on a deliverability system. TPU believes that the geographic deliverability areas should be as flexible as possible to help hydrogen producers find low-cost energy and EACs. The BPA supplies a significant amount of legacy hydropower to the region and that production has been larger than the proposed Pacific Northwest region for decades. There are 37 balancing authorities across the Western Electricity Coordinating Council (WECC). Meanwhile, BPA has transmission lines into both the Pacific Northwest and other areas of the WECC. BPA transmission serves California, Utah, Montana, Wyoming, Utah, and Nevada, in addition to Washington, Oregon and Idaho. The WECC also includes Canada which is a critical part of the WECC system. Carving out the Pacific Northwest from the WECC bifurcates the electric transmission system that is already in place. Tracing deliverability back to the federal government's own transmission studies could help identify workable area boundaries.

Temporal matching

The proposed rule seeks comment on whether 2028 is an appropriate date to begin implementation of a time-matching requirement based on current industry practices, predicted timelines for development of hourly tracking mechanisms, and predicted timeline for development of hourly EACs.

TPU recommends that for purposes of determining if a producer is eligible for the 45V production tax credit, the Treasury Department should deem hydrogen projects in states that have statutory mandated clean energy and clean fuel climate policy to have met the temporal matching requirement.

We also ask that the Treasury consider a delay of this requirement. More research is needed to determine if hourly matching is necessary or sufficient for ensuring carbon neutrality. It may not be feasible for many hydrogen projects to operate their load to match the output from variable energy resources like wind and solar.

Conclusion

TPU appreciates the opportunity to provide comments on the draft 45V clean hydrogen regulations. We look forward to a continued national and regional dialogue to ensure that utilities can enable the energy transition while maintaining reliability and affordability. We also support application of 45V requirements in a manner that is consistent with congressional intent and provides clean incentive signals to produce hydrogen from the cleanest sources of electric generation. Modification will be necessary to ensure that the 45V PTC supports rather than delays the BIA and IRA's clean hydrogen goals, including the support of clean hydrogen hubs such as the Pacific Northwest clean hydrogen hub.

Sincerely,

DocuSigned by: Jackie Dare

Jackie Flowers Director of Utilities Tacoma Public Utilities 02/23/2024