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February 26, 2024

The Honorable Janet Yellen
Secretary
Department of the Treasury
1500 Pennsylvania Ave, NW
Washington DC 20220

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:

Puget Sound Energy, Inc. (PSE) appreciates the opportunity to provide comments on the U.S. Department of the Treasury’s (Treasury) Notice of Proposed Rulemaking REG-117631-23, which proposes regulations applicable to sections 1.45V-1 *et. seq.* under Section 45V, the credit for production of clean hydrogen. These proposed regulations have far-reaching implications for the development of the clean hydrogen industry, and, particularly, for Pacific Northwest utility service providers such as PSE.

PSE is a public utility serving customers in the State of Washington (Washington). PSE provides electric power service to approximately 1.2 million customers and natural gas service to 900,000 customers across ten counties in Western Washington. PSE’s current electric energy supply resources consist of approximately 6,500 MW of generating capacity, which includes 3,300 MW of company-controlled resources and 3,200 MW of contracted resources.

Today, PSE owns a diversified mix of energy generation resources, including natural gas, wind, solar, hydropower, and coal. As we diversify and decarbonize our electric system— both to comply with Washington’s Clean Energy Transformation Act (CETA)¹ and advance our own Beyond Net Zero goals²— PSE projects a need for more than 6,700 MW of new, carbon-free electric generating

¹ See Ch. 19.405 RCW.

² Puget Sound Energy, *Together We’re Creating a Clean Energy Future*, <https://www.pse.com/en/pages/together>.

capacity just to meet our 2030 compliance targets. By 2045, PSE expects the need for new, carbon-free resources to total more than 15,000 MW of nameplate capacity. The seismic shift required to decarbonize our part of the grid cannot be overstated and, our resource planning has concluded that we must have viable and economically prudent energy options beyond solar and wind. To this end, PSE is a proud member of the Pacific Northwest Hydrogen Hub (PNWH2, or “Hub”) which is working to accelerate the development of a Pacific Northwest electrolytic hydrogen (“green hydrogen”) economy.

PSE understands that Treasury’s proposed rule adopts the “three pillars” test to support the addition of new, carbon-free assets on the nation’s electric grid while working to ensure that there is not a corresponding increase in grid-induced emissions. PSE is aligned with this goal and, in Washington, we are bound by stringent greenhouse gas regulations including CETA, the Climate Commitment Act³, and the Clean Fuel Standard⁴, which are also aligned in principle with Treasury’s proposed rule. Following careful review, however, we have concluded that the proposed rule will materially impede our regional efforts to develop a green hydrogen economy in the Western Electricity Coordinating Council (WECC), the power market in which Washington and the Pacific Northwest region are located.⁵ It is through this lens that we offer the following comments.

Misalignment of the “Three Pillars” with Washington Law

In the proposed regulations, PSE understands that Treasury intends to indirectly regulate power generation and the development of carbon-free energy resources by restricting the power sources that would qualify for the proposed tax credit. In Washington, where PSE operates, grid decarbonization is already occurring through existing federal, state and local laws. In the last five years, Washington has carefully designed and implemented policy statutes and policy choices that directly regulate carbon emissions from power resources over the coming decades and the deliverability of those resources to meet customer loads. These highly technical policy choices also integrated consideration on how to efficiently manage resource deployments within Pacific Northwest region at reasonable cost and in an equitable way. Indirect interference with the development of power resources via tax incentives has not been analyzed in the proposed rule and may very well be at cross-purposes with existing federal and state laws developed by the actors and agencies directly charged with regulating the development of power resources. Even where not at cross-purposes, inconsistencies between Treasury’s specification of valid power resources for the purposes of Section 45V and federal or state laws designed to develop those resources have again not been adequately evaluated and may arise.

For context, CETA requires that PSE *and all utilities in the State*:

- Remove from customer rates all coal-fired generation deliveries by 2025;
- Achieve a carbon-neutral electric supply by 2030; and

³ Ch. 70A.65 RCW.

⁴ Ch. 70A.535 RCW.

⁵ Federal Energy Regulatory Commission (FERC), *Electric Power Markets*, <https://www.ferc.gov/electric-power-markets>.

- Deliver 100% carbon-free electricity delivery by 2045 and every year thereafter.

CETA's targets are aggressive and among the strongest in the nation. These stringent targets require that PSE, and all of the state's electric utilities, equitably decrease carbon emissions across the state's entire power grid. When combined with the hydrogen economy's demand for new renewable power, the inevitable result will be competition in the marketplace for resources and transmission access that is already regionally constrained. In effect, the "three pillar" specification of valid power resources, if applied as proposed, for the purposes of achieving full-optimization of the proposed Section 45V credit would create ongoing and persistent challenges of obtaining clean energy in an equitable and cost effective manner within the Pacific Northwest. State regulators, including the Washington Utilities and Transportation Commission and the Washington Department of Commerce, place the onus on electric utilities to pursue lowest reasonable cost, policy compliant resources that will benefit all utility ratepayers.

CETA also tacitly assumes that the Pacific Northwest's private- and federally-operated hydropower power generation – which currently supplies nearly two-thirds of Washington's power – will be leveraged to support and shape the integration of new renewable resources like wind and solar on the grid. This is a critical feature of CETA. The hydropower assets in Washington, and the WECC more broadly, allow the region's numerous balancing authorities to efficiently integrate new, intermittent generation resources without compromising reliability. Despite the benefits that existing hydropower resources supply Washington's power grid, utilization of these resources would not qualify for tax credits for under the proposed regulations because they fail the additionality pillar and, perhaps, the hourly matching requirement. The rules, as proposed, therefore, will substantially increase the cost of green hydrogen production in our region because they would require a level of renewable energy resource "over build" that would render currently proposed green hydrogen production projects uneconomical.

In the short time since publication, PSE has worked with industry partners to quantify the proposed rule's potential economic and equity impacts. While we continue to analyze these issues, we estimate that the proposed regulations have the potential to increase the cost of green hydrogen production by 45-300%. The range of potential cost increases requires more time and better study to ensure that the induced effects of the rule will not defeat the very goal of providing a tax credit: enabling economically viable green hydrogen production. In addition to cost concerns, under the proposed rule, projects in the Pacific Northwest would not qualify for tax credits because *existing* transmission constraints limit the ability to add new resources to the grid. Specifically, new renewable energy projects currently average four to six years in the transmission queue for new project interconnection. If adopted as proposed, under Treasury's new rules an electrolytic hydrogen developer would be incentivized to obtain, for their exclusive power needs, zero-emission projects that are already in the transmission queue. This practice would put Washington utilities who are aggressively working to comply with CETA in direct competition for new resources thereby driving up energy costs and exacerbating energy equity concerns. In this regard, PSE believes that incentivizing developers to use wind or solar projects rather than existing

hydropower has no basis in the statute, no support in the legislative history to the statute and directly conflicts with our common clean energy goals.

As constructed, the “three pillars” proposal would introduce counterproductive, inefficient, and inequitable carbon-free resource competition in our region. It is possible that without changes to the proposed rule, electrolytic hydrogen developers will be incentivized to move operations to states that have not enacted stringent clean energy standards. This is a significant concern to PSE, which needs access to a viable hydrogen economy to meet our company’s compliance targets and continue to serve our customers with safe, affordable, and reliable energy solutions. PSE notes that Washington has enacted a suite of policy incentives and standards⁶ intended to accelerate hydrogen deployment in the state. In particular, the Washington Department of Commerce has identified green hydrogen development as a manufacturing opportunity for Washington industry, and directed “utilities, industrial firms, federal agencies and other stakeholders to accelerate the development of hydrogen production” as a critical action item for the Washington Department of Commerce.⁷ Again, Treasury’s proposed rules would work to frustrate these important policy goals.

Suggested Revisions to the Proposed Rules

1. Acknowledge the Alignment Between the “Three Pillars” Test and Washington’s 100% Carbon-Free Electric Standard: CETA

To align the “three pillars” policy objectives with CETA’s aggressive carbon-reduction policies, and to preserve the ability of the Pacific Northwest to develop an electrolytic hydrogen industry, PSE strongly urges Treasury to revise the proposed rules to provide that electrolytic hydrogen producers are deemed to have satisfied the requirements of the “three pillars” test if:

- a) The project is operated in a state that has enacted an enforceable compliance standard for electric utilities that requires that 100% of electric power delivery to customers is from non-emitting resources by a date certain; and
- b) The date of the enforceable compliance standard is no later than 2050;

Without such a mechanism, the “three pillars” test seems to disincentivize investment in the very states that are leading the nation in decarbonization. Further, requiring that hydrogen producers in states with stringent carbon-free standards demonstrate compliance with the “three pillars” test in

⁶ State laws and policies promoting the use of hydrogen can be found on the U.S. DOE’s Energy Efficiency & Renewable Energy (EERE) Alternative Fuels Data Center. Washington policies can be found at: <https://afdc.energy.gov/fuels/laws/HY?state=WA>. Oregon policies can be found at: <https://afdc.energy.gov/fuels/laws/HY?state=or>

⁷ Washington State Department of Commerce, *Washington 2021 State Energy Strategy* at p. 101, available at <https://www.commerce.wa.gov/wp-content/uploads/2020/12/Washington-2021-State-Energy-Strategy-December-2020.pdf> (last accessed Feb 22, 2024).

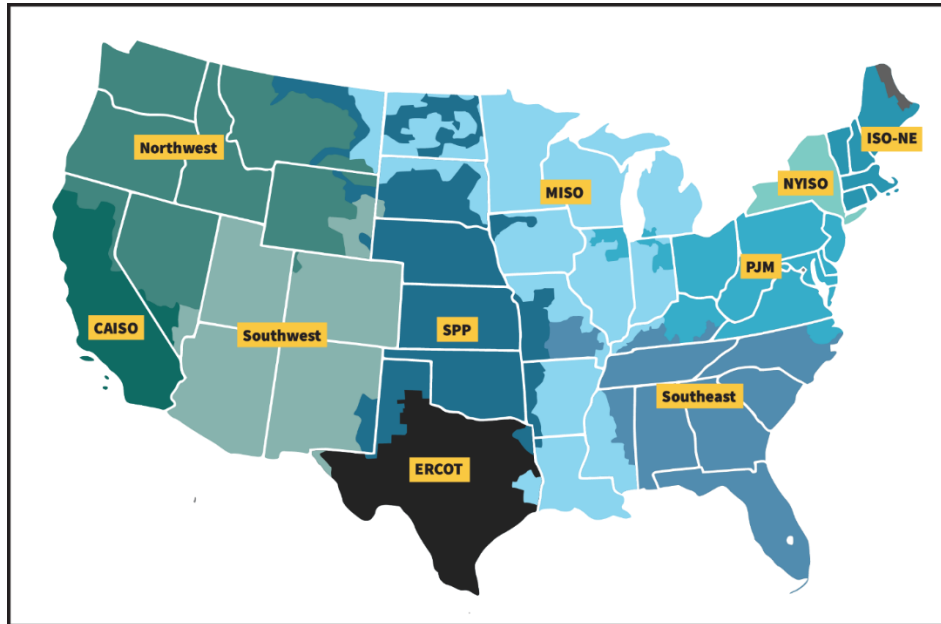
order to satisfy the regulations as proposed, places those producers in direct competition with residential, commercial, municipal and industrial electric ratepayers of the state for the same carbon-free resources that would otherwise benefit grid operations as a whole. This creates a substantial energy equity problem well into the 2040s.

2. Utilize Recognized Federal Energy Regulatory Commission (FERC) and Industry Standards in Assessing Deliverability Pillar

PSE requests that Treasury utilize current Federal Energy Regulatory Commission (FERC) power markets⁸ – presented for ease of reference in the map below – as the basis for “deliverability” pillar identification. The proposed regulations utilize the National Renewable Energy Laboratory (NREL) Transmission Study as the current basis for geographic deliverability. The deliverability regions identified in the NREL study are not recognized industry standards for assessing power deliverability. The FERC power markets – specifically, the WECC in the Pacific Northwest region⁹ – 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 profiles may align better with the load profiles of end users.

⁸ FERC, *Electric Power Markets*, available at <https://www.ferc.gov/electric-power-markets> (last accessed Feb 22, 2024) (“Traditional wholesale electricity markets exist primarily in the Southeast, Southwest and Northwest where utilities are responsible for system operations and management, and, typically, for providing power to retail consumers. Utilities in these markets are frequently vertically integrated – they own the generation, transmission and distribution systems used to serve electricity consumers. They may also include federal systems, such as the Bonneville Power Administration, the Tennessee Valley Authority and the Western Area Power Administration. Wholesale physical power trade typically occurs through bilateral transactions...”).

⁹ *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.”



Reference: FERC Electric Power Markets map; see accompanying footnotes for further detail.

Image Source: <https://www.ferc.gov/electric-power-markets>

By using the NREL Transmission Study as the basis for the regionality pillar, hydrogen developers would be limited in their ability to source incremental renewable power. Competition for transmission access and new renewable power would increase, driving up costs for producers and utility customers alike. Furthermore, renewable generation has a more limited production profile within a constrained geographic area, leading to limitations on when an electrolyzer could run, driving up production costs even higher.

Conclusion

PSE is working aggressively to meet or exceed our state-mandated clean energy targets, and we view hydrogen as a potentially powerful resource to help meet peak demands and integrate increasingly more intermittent energy resources like wind and solar onto the power grid. Our company supports and directly aligns with the comments submitted on IRS REG-117631-23 by the PNWH2. Further, PSE also agrees with additional comments provided by the Edison Electric Institute (EEI); the American Clean Power Association (ACP); and the Renewable Hydrogen Association (RHA).

PSE thanks Treasury for the opportunity to provide these comments, and appreciates your careful consideration of our recommendations regarding this important tax credit. We ask for particular analysis and review of our first proposal – acknowledgment through a “deemed to have complied” ruling to provide access to the full value of the tax credits for producers in 100% clean energy mandate states - as our state has the ability to lead in hydrogen development, but would be specifically disadvantaged by the proposed regulations. The development of a stable supply of

clean hydrogen fuel, and continued investment toward a flourishing hydrogen industry will be critical to PSE's success. For questions, clarification, or additional information please contact Steve Schueneman (Steven.Schueneman@pse.com) or myself. PSE will provide written or verbal responses to inquiries as necessary.

Sincerely,

A handwritten signature in black ink that reads "Josh Jacobs". The signature is written in a cursive, flowing style.

Josh Jacobs
Vice President, Clean Energy Strategy and Planning
Puget Sound Energy