

**CALIFORNIA-NEVADA CONFERENCE OF OPERATING ENGINEERS**  
*OF THE INTERNATIONAL UNION OF OPERATING ENGINEERS*

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1121 L STREET, SUITE 206 • SACRAMENTO, CALIFORNIA 95814  
AREA CODE (916) 440-8710



**DAN REDING**  
President

**RONALD SIKORSKI**  
Vice-President

**EDWARD CURLY**  
Secretary-Treasurer

**MATT CREMINS**  
Director of Education  
and Research

February 26, 2024

The Honorable Janet Yellen  
Secretary of the Treasury  
U.S. Department of the Treasury  
1500 Pennsylvania Avenue NW  
Washington, DC 20220

Mr. John Podesta  
Sr. Advisor to the President for Clean  
Energy Innovation and Implementation  
The White House  
1600 Pennsylvania Avenue NW  
Washington, DC 20500

**RE: REG–117631–23: Feedback Regarding the Internal Revenue Service’s Proposed Regulations to Implement the Section 45V Credit for the Production of Clean Hydrogen**

Dear Secretary Yellen and Senior Advisor Podesta:

Please accept these comments on behalf of the California-Nevada Conference of Operating Engineers. It is our diverse workforce that stands at the ready to build the hydrogen infrastructure that will allow California and the nation to meet the climate crisis. Our apprenticeship programs are already training apprentices who will get the opportunity to work on the front line of hydrogen innovation and, in doing so, earn their path to the middle class. The Department of Energy’s (DOE) selection of ARCHES as one of the nation’s hydrogen hubs will allow us to welcome hundreds of new apprentices into our programs around the state. This will mean a life-changing opportunity for these apprentices.

Our concerns with 45V are based on our overwhelming concern for how this policy will affect the viability of the projects within ARCHES, which then creates a domino effect impacting California’s ability to meet the climate crisis, embrace our state’s trademark innovation, and bring thousands of additional people into our apprenticeship programs. We understand that the draft Section 45V is not intended to impact California’s ability to lead in hydrogen development negatively, but as drafted, that will be the result. We have spearheaded many policy initiatives to create incentives to build more renewable power generation and understand that, at the core, that is what draft Section 45V intends to do. However, creating a policy framework that does not take into account California’s leadership in renewable power generation will, in effect, create requirements that will hamper, if not squelch, California’s ability to deploy the amazing innovation contained within the ARCHES project and is not consistent with our shared goals of seeing a hydrogen-powered future in the United States.

As written, the proposed section 45V criteria of incrementality, time matching, and deliverability will push projects out of California and possibly toward non-electrolytic fossil-fuel-derived hydrogen production, with significant adverse impacts for California, the ARCHES Hydrogen Hub and ecosystem, and its associated economic, environmental, and social benefits including an estimated 200,000 family-sustaining careers and \$3 billion dollar a year in economic activity. With all energy, it's important to ensure that the policy creates market conditions that will incentivize the development of clean technologies and not create market conditions that will

create a cost to produce that will create a market disadvantage. In this case, as drafted, 45V will make it nearly impossible to create fuel that can be competitive with diesel. This not only creates a situation where hydrogen will be at a competitive disadvantage as far as developing a commercial customer base, but it will also create a barrier to attracting private investment in the ARCHES projects and future hydrogen projects. And, even with the generous award from the DOE to ARCHES, to bring hydrogen to market at scale, we will need to attract billions of dollars in private investment.

Generally, we align ourselves with the technical comments provided by ARCHES, including:

**1. Incrementality (Incremental power generation) – § 1.45V–4(d)(3)(i)**

We appreciate the intent of incentivizing the use of renewable power to support hydrogen production, but as drafted 45V-4(d)(3)(i) does not realize California’s already robust clean power production, the role that strategic power storage can play, how the ARCHES projects will affect the power portfolio as they begin to come online and the renewable power production that will be brought online in California in the next decade.

**2. Temporal Matching – § 1.45V–4(d)(3)(ii).** This criterion calls for annual matching through 2027 and hourly matching in subsequent years. In RPS states like California, with significant renewable resources, hourly matching imposes a cost that will likely stymie financial investment in the ARCHES and other hydrogen projects. We are in the infancy of hydrogen generation and production, and therefore, we need to be very careful to ensure we are creating a marketplace that works for private investment and that will support the financing that will be required even with the generous grants by the DOE and the State of California. Section 45V accounting should require clean hydrogen production facilities in California (and other similarly situated states) to apply the same temporal matching system that those states apply to other carbon-free technologies (*e.g.*, batteries).

**3. Deliverability – § 1.45V–4(d)(3)(iii)** The proposed deliverability criteria would require qualifying EACs to use electricity produced by a renewable electricity generating facility that is in the same “region” as the relevant hydrogen production facility. We appreciate the strong interest in creating power in-state, and in California, we have been supportive of policies that incentivize in-state production where we can ensure that high-road environmental and labor practices are employed.

We appreciate the work that went into Section 45V as drafted and respect the thought and effort employed to attempt to come up with a one-size-fits-all approach. While this approach might work well for other hubs, for the reasons summarized above, we fear it will not work in California and will jeopardize the success of our hub. We would appreciate an alternative pathway for California that recognizes our unique position as far as renewable power generation, planned additional resources, aggressive climate goals, and our state’s experience in adopting and enforcing environmental and labor safeguards that are more stringent than the federal framework. California’s hydrogen infrastructure will be built if an alternative compliance pathway is supported that will allow our projects to utilize grid-connected projects that are committed to renewable generation as we move further towards fully connected renewable generation.

**Recommendation 1: Amendment to § 1.45V–4: Procedures for determining lifecycle greenhouse gas emissions rates for qualified clean hydrogen.**

We propose minimally invasive revisions to the draft regulations through the addition of the following italicized and underlined text in section 1.45V-4(d):

....The requirements of this paragraph (d)(1) apply regardless of whether the electricity generating facility is grid connected, directly connected, or co-located with the hydrogen production facility. *However, the requirements of this paragraph shall not apply, and a taxpayer shall not be required to acquire and retire qualifying EACs, for hydrogen production facilities where all of the following*

conditions exist and are verified in accordance with section 45V-5(g)(6):

(i) The hydrogen production facility is located in a state with mandatory requirements that clean electricity supply 100 percent of all retail sales to end-use customers a state with mandatory requirements for the production of 100% clean electricity by a date certain and in no circumstances later than December 31, 2050;

(ii) Any hydrogen production facility relying on grid power has the capability to increase or decrease electricity consumption on demand to follow grid needs; and

(iii) The hydrogen production facility's electricity demand is fully accounted for in the state's energy planning system, including applicable system-level, state-mandated time-matching and deliverability requirements.

**Recommendation 2:** Amendment to §1.45V-5: Procedures for verification of qualified clean hydrogen production and sale or use.

We propose that the aforementioned alternative compliance pathway can be verified by adding the following new subsection to section 1.45V-5(g):

*... (6) If the taxpayer claims an exemption from acquiring and retiring EACs pursuant to section 45V-5(d)(1), a statement that the hydrogen production facility meets the three conditions described in sections 45V-5(d)(1)(i)-(iii).*

We do not doubt that we all share the same goals: to fully embrace and incentivize the development of our hydrogen infrastructure and additional renewable power generation, to meet the climate crisis, and to create hundreds of thousands of good, family-sustaining jobs in the new energy sector. It will take all of us working together to bring this to fruition. We remain committed to a partnership with our projects, the State of California, and federal agencies to ensure that we deliver on these projects for our workforce, our apprentices, and future generations. We are hopeful that our comments and suggestions can help further form this important policy. Please feel free to contact me at (916)- 440-8710 regarding our comments.

Sincerely,



**Matt Cremins**  
**Director**  
**California-Nevada Conference of Operating Engineers**