LevelTen Energy

February 26, 2024

Our comments to the U.S. Department of the Treasury and Internal Revenue Service (IRS) regarding the December 22 Notice of Public Rulemaking (NPRM) regarding Section 45V Credit for Production of Clean Hydrogen are grounded in LevelTen Energy's experiences over the past six years in supporting the evolution of marketplaces for renewable energy procurement.

LevelTen Energy's mission is to accelerate the clean energy transition. In 2018, we launched the first marketplace for power purchase agreements (PPAs). Today, LevelTen Energy ("LevelTen") is the world's largest hub for carbon-free energy transactions and insights, serving over 50 energy advisors and retail electricity partners and over 900 developers across 28 countries in North America and Europe.

As we've helped drive the boom in corporate PPAs, we've heard from buyers (and the sellers who serve them) about the need for new tools to accelerate decarbonization and ensure accurate hourly emissions tracking and verification. **Granular certificates (GCs) are a form of energy attribute certificates (EACs) that are stamped with time and location data to provide granular accounting of electricity carbon emissions** (see EnergyTag for details on the GC standard: https://energytag.org/). As a result of these conversations and the opportunity to effectuate this standard for GCs, we convened the GC Trading Alliance, which was publicly announced on December 14, 2023 (the "Alliance").[1] Information about the Alliance is available at https://www.leveltenenergy.com/alliance.

Before the Inflation Reduction Act was enacted or hourly matching for 45V was being discussed as a possibility, Alliance members were confident that the transition to GCs was possible and timely in support of corporate 24/7 clean energy objectives. The Alliance was organized to build a GC exchange, with expected launch in 2024. We anticipate that this exchange will also be utilized by clean hydrogen developers. LevelTen and the Alliance look forward to sharing best practices with registries, policymakers, clean energy developers, and buyers that wish to replicate our successes.

Treasury should strongly consider enabling flexibility on both hourly matching and incrementality in the 45V qualification rules. Doing so will provide hydrogen producers a cost-effective path to carbon-free energy procurement that does not encourage over-contracting of renewable resources. As the industry matures, we expect that a robust market for GCs will drive incremental resources to be widely available. Transparent pricing and a liquid market will allow financiers to build renewable generation projects (as well as energy storage projects) with less reliance on upfront, long-term offtake agreement.

While hourly matching is not available today in many parts of the U.S., it does not invalidate the feasibility of a transition to hourly matching by 2028. Through our efforts with the Alliance, LevelTen is

[1] These comments are submitted by LevelTen on its own behalf. The comments are not submitted on behalf of, and should not be construed as representing the views of, the Alliance or any of its members or supporters.

finding pathways forward amid the existing U.S. registry system, which consists of a patchwork of independent registries with no common oversight, rules, access requirements, or fee schedules. Most registries are non-profits with limited and inconsistent funding sources, are generally under-staffed (especially on the software/engineering side), and operate on outdated technology platforms. The transition to hourly accounting requires significant work. And it is possible.

Treasury should strongly consider supporting standardization of registry rules related to GC issuance that include transparency, interoperability, API access features, and cybersecurity standards. EnergyTag provides a standard that could be used to form the basis for such standardization efforts in the U.S. As registries move toward hourly functionality, carbon-free energy projects could use existing EACs with hourly data to verify hourly matching.

Once regulatory requirements are in place under Section 45V, the registries will be able to dedicate resources toward developing functionality that meets compliance requirements, just as they routinely do for updates to state clean energy programs. Federal and/or public-private funding could further catalyze rapid, widespread development of this functionality.

Treasury should clarify the requirement that hydrogen producers must simply "retire" the GC to qualify for the 45V tax credit, and should also specifically describe an intent that, in the future, qualifying hydrogen producers will be able to issue "clean hydrogen certificates." Voluntary buyers played a critical role in driving the maturity of today's renewable energy market, and we anticipate them playing a similar role in spurring this new market through demand for clean hydrogen certificates (e.g. HEAC). With that in mind, 45V must include language specifying that the renewable energy GC must be retired to the benefit of the hydrogen facility (as opposed to the benefit of the facility owner's general registry account) to avoid a potential double-count scenario if a clean hydrogen certificate is later issued.

There are important, open questions regarding how energy storage can effectively participate to support hourly time-matching. **Treasury should clarify if and how it plans to leverage third-party standards for energy storage,** such as EnergyTag's storage guidelines, versus issuing its own guidelines. A February 2024 hourly case study from Quinbrook shows the feasibility of extending the EnergyTag standard to a utility scale storage project.

We applaud Treasury's efforts to build a robust clean hydrogen energy economy in the United States and look forward to serving a critical role in its success.

Thank you for your consideration.