February 26, 2024

Douglas W. O'Donnell
Deputy Commissioner for Services and Enforcement
CC:PA: LPD:PR (REG–117631-23)
Room 5203
Internal Revenue Service
P.O. Box 7604
Ben Franklin Station
Washington, DC 20044

RE: Section 45V Credit for Production of Clean Hydrogen; Section 48(a)(15) Election to Treat Clean Hydrogen Production Facilities as Energy Property, Notice of Proposed Rulemaking and Notice of Public Hearing, 88 Fed. Reg. 89,220 (Dec. 26, 2023)

Dear Mr. O'Donnell:

Clean Energy Fuels Corp. urges the IRS to amend its guidance to include additional feedstocks in the GREET 45V Model. In addition, we encourage the IRS to adopt the mass balance & verification methodologies already in use by the RNG industry; not to tie a single RNG plant to a single hydrogen source; to allow for individual plant GREET model inputs; and not to preclude 45V eligible hydrogen from participating in other programs like the California Low Carbon Fuel Standard (LCFS).

Clean Energy is the leading distributor of RNG for transportation, and an active investor in RNG production.

Clean Energy is the largest provider of renewable natural gas ("RNG") for the heavy and medium-duty commercial transportation sector in North America. Clean Energy owns and/or operates over 600 fueling stations throughout the U.S. and Canada. We operate two existing hydrogen stations in California, and recently completed construction of one of the largest hydrogen fueling stations in the country. Clean Energy is also focused on developing, owning, and operating dairy and other livestock waste RNG projects and

supplying RNG (procured from owned projects or from third parties) to customers throughout its fueling station network.

Clean Energy has participated in the alternative vehicle fuels industry for over 25 years and our sales of RNG for transportation have increased from 13 million gasoline gallon equivalents ("GGEs") in 2013 to 225 million GGEs in 2023. We source this from more than 70 RNG plants and deliver it under the Renewable Fuel Standard (RFS).

In addition to our market leading distribution platform, Clean Energy has established joint ventures with bp and TotalEnergies to develop, own and operate RNG production facilities in the United States. Through these ventures we have committed more than a half a billion dollars of equity capital across multiple projects.

The 45VH2-GREET model must include additional RNG feedstocks and pathway specific calculations.

Clean Energy is supportive of the GREET model for lifecycle emissions. Our industry has successfully used the model to calculate lifecycle emissions for RNG projects under the California LCFS, and we support the legislative directive to use the GREET model for the Section 45 tax credits. However, the 45VH2-GREET model must include additional pathways for RNG to hydrogen beyond landfill gas – especially biogas from Anaerobic Digestion of Animal Waste. To be consistent with the original legislative intent, the model should include pathways for RNG from all possible waste streams including municipal solid waste and agricultural waste.

The model should also include the ability to generate project specific emissions rates. This will accommodate the different technology, location, and energy usage of each RNG plant. RNG projects at dairy farms capture existing methane emissions and put it to beneficial use. As such, they have negative carbon intensity or emissions rates under the Argonne GREET model.

By expanding the GREET model to accommodate more feedstocks and inputs, the US Department of the Treasury can also limit the administrative burden to review Provisional Emissions Rates.

The Treasury department should leverage the existing verification and mass balance system for compliance under GREET models.

Clean Energy delivers more than 20 million gallons of RNG per month to transportation customers across the US. The US natural gas pipeline system is interconnected and utilizes mass balancing. We utilize the natural gas pipeline chain of custody and monthly mass balancing to match existing RNG supplies with RNG consumption in transportation. We also verify this information under the EPA's Renewable Fuel Standard. The EPA outlined the existing tracking system in its letter dated December 20, 2023. The US Treasury Department should permit flexible use of a chain-of-custody accounting system under Section 45V, consistent with other RNG procurement programs and Congressional intent.

Verification of the GREET model calculations is a distinct process from the mass balancing of fuel volumes. Fortunately, there is readily available regulatory precedent and professional verification accreditation systems under the California Low Carbon Fuel Standard (which uses a GREET model) and the federal RFS program. The 45V Proposed Rule recognizes verification bodies under the California LCFS program as "qualified verifiers" for verifying the amount of qualified clean hydrogen claimed under the Section 45V program. We encourage the US Treasury Department to leverage these existing regulatory frameworks, and to allow accredited third-party verification of the GREET model calculation to be relied on for claiming the Section 45V tax credits.

The final Section 45V Tax Credit regulation should not preclude participation in other Federal, State or Local Incentive Programs, and should not limit RNG sales to a single hydrogen plant.

We do not believe it is the intent of the Section 45V rule to limit or preclude RNG from participation in other federal, state, or local programs that may also seek to achieve environmental benefits. For example, hydrogen produced from RNG should not be barred or limited from participating in a state LCFS program if the RNG-derived hydrogen is being used as a transportation fuel or to make a transportation fuel. These programs should work together. EPA, for example, has long recognized that other federal and state programs support the RFS program by promoting production and use.

Clean Energy is also concerned about the potential for qualifying RNG feedstocks to inadvertently be limited to a single hydrogen production facility. Once a RNG production facility has met the requirements under the Section 45V rules, they should be free to contract with different hydrogen producers for some or all of their production. In our experience as a large RNG distributor, the fluctuations in consumer demand from

hydrogen production and fluctuations in production levels at dairy RNG projects necessitate a portfolio approach to balancing volumes. It also creates commercial flexibility for both hydrogen and RNG producers to utilize different contract prices and structures.

We thank you for the opportunity to comment on the Proposed Rule, and we look forward to discussing these comments at your earliest convenience.

Best regards,

Andrew J. Littlefair
President and CEO


Clean Energy