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December 2, 2022

**RE: Response to Treasury Department Notice 2022-58 – Request for Comments on Credits for Clean Hydrogen and Clean Fuel Production**

The Department of the Treasury (Treasury Department) and the Internal Revenue Service (IRS) issued Notice 2022-58 requesting comments on questions arising under new § 45V of the Internal Revenue Code (IRC), as added to the IRC by legislation commonly known as the Inflation Reduction Act of 2022 (IRA).

**XTS Energy LLC (“XTS”)** is a US owned and based development company focused on renewable energy and in particular blue hydrogen and blue methanol production in the US Gulf Coast.

XTS offers the following comments for consideration.

1. Regarding Section 2.01 of Notice 2022-58 which notes “A taxpayer may not claim a § 45V credit for qualified clean hydrogen produced at any facility that includes carbon capture equipment for which a credit is allowed to any tax payer under § 45Q for the taxable year or any prior taxable year” the guidance is needed to clarify whether after the expiration of the 10 year term for § 45V tax credits a facility that qualifies for § 45Q credits could claim the § 45Q credits for the 12 year period currently available for § 45Q credits

2. Regarding Section 3.01(1) of Notice 2022-58, the following guidance is needed to clarify the definition of “qualified clean hydrogen”:

- a. Hydrogen produced in synthesis gas (“syngas”) which otherwise meets the definition of “qualified clean hydrogen” provided in § 45V and which is used to produce hydrogen-carrier fuels such as methanol and ammonia, should be considered “qualified clean hydrogen”
- b. This is consistent with the Department of Energy’s (DOE’s) proposed Clean Hydrogen Production Standard (CHPS), which was developed to meet the requirements of the Infrastructure Investment and Jobs Act of 2021
  - i. DOE’s CHPS is statutorily required to “support clean hydrogen production from each source described in section 16154(e)(2) of this title” (e.g., including but not limited to fossil fuels with carbon capture, utilization, and sequestration (CCUS); hydrogen-carrier fuels (including ethanol and methanol); renewable energy resources, including biomass; nuclear energy);
  - ii. DOE’s proposed CHPS contemplates the use of steam methane reforming which produces syngas, noting that “fossil fuel systems that employ high rates of carbon capture ... are all generally expected to be capable of achieving 4.0 kgCO<sub>2</sub>e/kgH<sub>2</sub> on a lifecycle basis using technologies that are commercially

deployable today. For example, a steam methane reformer with ~95% carbon capture and sequestration (CCS) could achieve ~4.0 kgCO<sub>2</sub>e/kgH<sub>2</sub> lifecycle emissions by using electricity that represents the average U.S. grid mix and ensuring that upstream methane emissions do not exceed 1%.”

3. Regarding Section 3.01(1)(b)(i) of Notice 2022-58, the determination of how lifecycle greenhouse gas emissions are allocated to co-products from the clean hydrogen production process should be made on a case-by-case basis

- c. Given the complexities arising from the various methods used to produce qualified clean hydrogen, no single allocation approach is likely to be the most appropriate for all circumstances. Therefore, the allocation method should be determined by considering the specific circumstances of each case

4. Regarding Section 3.01(1)(d) of Notice 2022-58, if a facility is producing qualified clean hydrogen during part of the taxable year, and also produces hydrogen that is not qualified clean hydrogen during other parts of the taxable year, the facility should be eligible to claim the § 45V credit but only for the qualified clean hydrogen it produces

5. Regarding Section 3.01(4)(f) of Notice 2022-58, indirect book accounting factors that reduce a taxpayer’s effective greenhouse gas emissions (also known as a book and claim system), including voluntary carbon offsets, and including voluntary carbon offsets from carbon offset natural gas and the carbon intensity from certified natural gas should be considered when calculating the § 45V credit.

Sincerely,



Robert C. Kelly  
Managing Director  
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