November 30, 2022

Mr. Chuck Rettig, Commissioner
Internal Revenue Service
CC:PA:LPD:PR (Notice 2022-58)
Room 5203, P.O. Box 7604
Ben Franklin Station
Washington, DC 20044

RE: Request for Comments on Credits for Clean Hydrogen and Clean Fuel Production

Dear Mr. Rettig,

On behalf of NW Natural, I am pleased to submit comments in response to the Internal Revenue Service's (IRS) request for comments on the tax credits for clean hydrogen and clean fuel production. We are a publicly traded utility headquartered in Portland, Oregon. We are primarily a natural gas company that is committed to providing clean and reliable energy to our more than 2.5 million customers across the Pacific Northwest, including residential, commercial, and industrial customers. We are also required by Oregon law to reduce our GHG emissions by 90% by 2045. We believe the tax credits for clean hydrogen and fuel production will play an important role in our decarbonization.

Section 3(.01)(1)

In this section, the notice inquires as to which specific steps and emissions should be included within the well-to-gate system boundary for clean hydrogen production from various resources. **The well-to-gate analysis should exclude any emissions around construction and installation of the primary source energy infrastructure**, such as solar panels, natural gas wells, and wind turbines, as including these emissions will make attaining the highest tax credit tier of 0.45kgCO2/kgH2 nearly impossible. The

analysis should include provisions for varying feedstock carbon intensities, including solar, wind, nuclear, electricity, and varying types of natural gas with differing carbon intensities. For example, Responsibly Sourced Gas (RSG) can have significantly lower emissions than standard fossil gas. In addition, the transmission infrastructure can play a role in calculating carbon intensity, as different electrical efficiencies and pipeline leakage rates exist throughout the country. Averages should be avoided.

Additionally, the notice asks whether a facility producing both qualified clean hydrogen and not qualified clean hydrogen at different parts of the year should still be eligible to claim the § 45V credit only for the qualified clean hydrogen it produces. **We believe that any amount of clean hydrogen produced at a facility for any portion of the year should be eligible to claim the § 45V credit.**

Regarding this section's question as to what granularity of time matching of energy inputs used in the qualified clean hydrogen production process should be required, **we at NW Natural believe that calendar year time matching should be used and that no averages should be used.** For example, if RECs align with onsite generation for 90% of the year, 90% of the hydrogen produced at a facility should be eligible for the § 45V credit. When using grid power or varying sources of natural gas, the percentage of various feedstocks should be able to be parsed out to evaluate the carbon intensity of the hydrogen and therefore relevant credit level. For example, if grid mix included 75% zero emission solar electricity for a 1GWh of annual energy delivery and 25% fossil, 0.75GWh should be used to evaluate credits at one level, and 0.25GWh should be used to evaluate the balance.

Section 3(.01)(2)

In this section, the notice observes that the Clean Hydrogen Production Standard (CHPS) establishes a target lifecycle greenhouse gas emissions rate for clean hydrogen of no greater than 4.0 kilograms CO2-e per kilogram of hydrogen, which is the same lifecycle greenhouse gas emissions limit required by the § 45V credit. The notice then asks the definition or specific boundaries of the well-to-gate analysis should be for the purposes of the § 45V credit. **Ideally, the specific boundaries of the well-to-gate analysis should be from the source of the original energy feedstock (e.g., solar or wind farm, nuclear plant, hydro dam, natural gas well, etc.) to the hydrogen delivery point where custody is taken by another party.** This transfer point could be a truck, pipeline, factory, etc.

Section 3(.01)(4)

As for this section's question regarding indirect book accounting factors, **we believe that any indirect book accounting factors should be factored into the emissions calculations that determine the § 45V credit**.

This section further asks what considerations should be included in determining the greenhouse gas emissions rate of book accounting factors if they reduce a taxpayer's

effective greenhouse gas emissions. **We argue that no temporal matching requirement should be applied to indirect book accounting factors save for taking place over one calendar year.** Lower time resolution significantly increases the accounting and energy matching expenses and will inhibit hydrogen production growth. No location requirements should be applied save for taking place in the United States for verification purposes. Greenhouse gas emissions are global emissions and do not consider borders; therefore, policy should reflect this to make hydrogen production as efficient and low-cost as possible.

Section 3(.01)(6)

In this section, the notice seeks to understand § 45V's coordination with § 45Q. Specifically, it asks if there are any circumstances in which a single facility with multiple unrelated process trains could qualify for both the § 45V credit and the § 45Q credit, despite the prohibition in statute that prevents § 45V credit with respect to any qualified clean hydrogen produced at a facility that includes carbon capture equipment for which a § 45Q credit has been allowed. **There are circumstances in which a facility could qualify for both credits.** For example, a hydrogen production facility that includes on-site carbon capture and sequestration in a class VI well that includes a separate injection interconnection from mobile source (e.g., CO2 transport trucks) into the same well would have two different process trains that should qualify for both the 45Q and 45V credits. The 45V credits would be applied to the hydrogen production, and the 45Q credits would apply to the CO2 receipt point from external sources.

Conclusion

As NW Natural continues to strive to provide clean and reliable energy for our customers and decarbonizing our pipeline system, we hope that our comments can help to inform the issuance of guidance that is beneficial to the clean energy goals of companies like our own and the country at large.

Sincerely,

Nels Johnson
State & Federal Affairs Manager
NW Natural