February 26, 2024

Department of the Treasury
Internal Revenue Service
Ben Franklin Station
Washington, DC 20044.

Re: Comments on Section 45V (Credit for Production of Clean Hydrogen), per Notice of Proposed Rulemaking and Notice of Proposed Public Hearing, 88 Fed. Reg. 89, 220 (December 26, 2023)

To Whom It May Concern:

Peaks Renewables ("Peaks") appreciates the opportunity to respond to the Internal Revenue Service's Notice and request for public comment on the implementation of Section 45V Credit for Production of Clean Hydrogen.

The Inflation Reduction Act (IRA) is a landmark piece of legislation that fundamentally changes the opportunity to invest in clean hydrogen that will reduce the United States' greenhouse gas emissions and strengthen the nation's energy security.

Peaks is a renewable energy development company specializing in the development of low carbon, carbon-neutral, and carbon-negative fuels like renewable natural gas and green hydrogen. Our goal is to help states, communities, utilities, homeowners, and industries reduce emissions while creating economic growth and providing access to clean, safe, reliable, and affordable energy solutions. We are a subsidiary of Summit Utilities, Inc., focused on investing in innovative technologies and developing projects that will drive down emissions in the thermal energy sector throughout the United States. We are proud to be chosen as one of 23 companies awarded funds in 2021 from the U.S. Department of Energy (DOE) to develop the nation's first, on-system biomethane hydrogen pilot at our dairy digester Renewable Natural Gas (RNG) project in Clinton, Maine. This is just one of the ways Peaks is leading the way in investing in innovative technologies to reduce emissions and decarbonize the thermal energy sector.

Peaks is very interested in expanding our decarbonization efforts in the Northeast through electrolytic hydrogen production using zero carbon electricity generated in New England. In the notice of proposed rulemaking REG-117631-23, Treasury requested comments on "*whether and under what circumstances electricity generated by an existing electricity generating facility (that is, with a less recent COD) that is dedicated to hydrogen production may be treated as satisfying the incrementality requirement.*" **Peaks strongly encourages Treasury to adopt a formulaic exception to the Incrementality requirement of at least 5%-10%** in Maine and any other region of the country with a carbon cap-and-trade program and a renewable energy portfolio standard (RPS) or clean energy standard (CES) that has a total compliance obligation of 75% or more of annual retail sales by 2030.

Background & Summary

Strictly applied, the three pillars of incrementality, temporal matching and deliverability would be almost impossible to achieve in the New England region for a baseload process like electrolytic production of hydrogen. This would penalize Maine, even though the State and the New England region have moved far ahead of other regions of the U.S. with respect to grid decarbonization efforts.

Treasury indicates that, in consultation with the EPA and the DOE, *"…it would be reasonable and consistent with the EPA's precedent for the Treasury Department and the IRS to determine that* ***induced grid emissions are an anticipated real-world result of electrolytic hydrogen production that must be considered in lifecycle GHG analyses for purposes of the section 45V credit***." Peaks agrees with this concern but points out that the risk of induced emissions is not uniform across the country.

Peaks recommends that Treasury and the IRS consider adopting a formulaic exception for facilities located in regions of the United States that satisfy both of the following:

1) the facility is located in a state participating in The Regional Greenhouse Gas Initiative or similar carbon cap-and-trade program.
2) the facility is located in a state with a Renewable Portfolio Standard or Clean Energy Standard requirement covering at least 75% of electric retail sales by 2030.

The combination of the Regional Greenhouse Gas Initiative and Maine's RPS addresses Treasury's concern about unintended induced grid emissions. A formulaic exemption will be significantly easier for the IRS to administer than either an "Avoided Retirements" approach or a "Modeling or Other Evidence" approach.

Administration would be further simplified by allowing 100% of existing zero-carbon resources to qualify under a formulaic exception where appropriate. Peaks believes allowing 100% of existing zero-carbon resources to qualify under the formulaic exception is appropriate if it is limited to regions of the US that, like Maine, have a declining regional cap on carbon emissions as well as increasing renewable portfolio standards or clean energy standards that reach at least 75% by 2030.

Regional Greenhouse Gas Initiative

Maine has been part of the Regional Greenhouse Gas Initiative (RGGI) since 2007.[1] RGGI is a well-established cap-and-trade program that imposes a cap on absolute carbon emissions from the electricity sector in the participating states. When the RGGI program took effect in 2009, Maine's cap on carbon emissions from the electricity sector was 6 million short tons of CO2 per year. The cap allowed under RGGI is reduced each year and is set at 2.488 million short tons in 2024 and will decline to 1.996 million short tons in 2030.

Each of the six New England states participate in RGGI and is part of the regional electric grid managed by the Independent System Operator of New England (ISO-NE).[2] All regulated generators of electricity in ISO-NE[3] must hold one RGGI allowance for every short ton of CO2 emitted. One RGGI CO2 allowance represents a one-time authorization to emit one short ton of CO2.

The primary concern Treasury seeks to address with the incrementality pillar for electrolytic hydrogen production is that new electrical load, interconnected to the grid, could induce new carbon emissions if zero carbon generators are shifted from serving legacy consumers to serving new electrolyzer loads.

[1] https://www.rggi.org/
[2] https://www.iso-ne.com/
[3] All fossil fuel electric power generators in ISO-NE greater than 25 MWs in capacity are subject to RGGI.

Given that statewide emissions are subject to an absolute cap under RGGI, and the emissions cap declines each year, new electrolytic loads in Maine and other RGGI states will not induce significant new carbon emissions over time.

Maine Renewable Portfolio Standard & Greenhouse Gas Emission Reduction Statues

Maine has one of the most aggressive RPS mandates in the country.[4] Maine law requires that 80% of electricity consumed in the State be from zero carbon or efficient resources by 2030 with a goal of 100% by 2050.[5]

In addition, Maine has economy-wide carbon reduction requirements. The State is required to reduce gross greenhouse gas emissions at least 45% below 1990 levels by 2030 and at least 80% below 1990 levels by 2050. Furthermore, Maine has set a target to be 100% carbon neutral by 2045.[6] To meet these aggressive carbon reduction goals, Maine established the Maine Climate Council and tasked the Council with developing climate action plans and tracking progress against the State's goals.[7]

Taken together, the Maine RPS and greenhouse gas emission reduction statutes provide significant protection against induced electric grid emissions. All manufacturing facilities in the State fall under the economy-wide greenhouse gas emission statutes and shifting legacy zero carbon power generation from a legacy electric load to a new electrolytic hydrogen manufacturing facility load will not reduce the obligation for the entire state's electricity sector, including legacy electric loads, to satisfy the RPS requirements.[8]

Retirement & Curtailment Risk in New England

Many zero carbon generators in the ISO-NE region are facing retirement and/or curtailment risk. For example, New England has seen multiple nuclear facilities retire or threaten to close prematurely due to wholesale market pricing dynamics driven by natural gas supply in the Mid Atlantic. The Maine Yankee nuclear plant in Wiscasset, Maine shut down in 1997 due to economic pressures. More recently, Vermont Yankee in Vernon, Vermont retired in 2014 and the Pilgrim nuclear station in Plymouth, Massachusetts retired in 2019. The two remaining nuclear stations that serve New England, Seabrook Station in Seabrook, New Hampshire and Millstone in Waterford, Connecticut, have both asserted in recent regulatory proceedings that they are at risk of retirement. The states of Connecticut and Massachusetts have implemented out-of-market measures to provide each nuclear facility better price certainty and above market payments for a portion of generation from the facilities, but these incentives do not cover 100% of generation and may not be sufficient to keep the facilities open in the long run without additional state-sponsored support.

The retirement of legacy zero carbon generators is a particular concern as New England electrifies its space heating and transportation. Given Maine's northern latitude, solar generation is very limited in the winter months and insufficient to meet increasing electricity requirements driven by heat pumps on cold winter nights. Nuclear, onshore wind, offshore wind, and hydroelectric generators will be critical for serving nighttime and winter electrical loads. Unfortunately, new nuclear and hydropower have proven

[4] https://www.maine.gov/mpuc/regulated-utilities/electricity/renewable-programs/rps

[5] Maine Statute (M.R.S. 35-A §3210) requires 30% of Maine load be satisfied by existing renewable electricity generation (Class II) and 10% of Maine load in 2017 and beyond be satisfied by new renewable resources (Class I), and increasing amounts of Class IA and thermal renewable energy credits (TRECs) starting 2020 and 2021, respectively. By 2030, 40% of Maine load must be satisfied by Class IA resources and 4% by TRECs. Chapter 311 of the Commission rules implements the RPS.

[6] https://www.mainelegislature.org/legis/statutes/38/title38sec576-A.html

[7] https://www.maine.gov/future/climate/council

[8] The State offers limited exemptions for certain facilities under the current Pine Tree Zone program and the upcoming Dirigo Business Incentive Program.

almost impossible to build at scale in New England and initial offshore wind development in the region has been significantly hindered by recent macroeconomic factors.

In addition to the retirement risk, curtailments of zero carbon generation including solar, wind and hydroelectric facilities will increase as New England accelerates the integration of intermittent generation resources over the next decade to meet the rapidly increasing RPS requirements across five of the six states in the region.

A formulaic exception to the incrementality requirement would simultaneously recognize the growing issue of renewable generation curtailments, as new wind and solar capacity is constructed to satisfy the regional RPS requirements, as well as the significant risk that the region's legacy zero carbon generation facilities – including both nuclear and legacy hydro - shut down for economic reasons.

Summary

For the reasons outlined above, Treasury's concern about induced carbon emissions from new load placed on the electric grid in Maine are mitigated under a formulaic exception.

Peaks strongly encourages Treasury to include a formulaic exception to the incrementality requirement in Section 45V Credit for Production of Clean Hydrogen. Without this exception it will be all but impossible to find incremental, hourly matched, zero carbon EACs, produced within New England, during the winter months.

A formulaic exception to the incrementality requirement is appropriate for facilities located in states participating in RGGI, or similar carbon cap-and-trade programs, and having an RPS or CES covering at least 75% of retail electric sales by 2030. The state of Maine satisfies both standards and is also located in a region with legacy nuclear, hydroelectric and wind generators that are subject to increasing levels of curtailment and economic retirement.

A formulaic exception in the 5% to 10% range is likely to require the creation of a new class of energy attribute certificates (EAC) in each of the regional attribute tracking systems. A new EAC class could be designed to allow stakeholders to validate that EACs used to satisfy the 45V requirement include only the designated percentage of production from a specific facility (on either an annual or an hourly time scale). To simplify the auditing and compliance process for a formulaic exception, Peaks recommends that 100% of generation from legacy zero-carbon resources be deemed to qualify in regions of the country that have declining carbon caps (e.g. RGGI) and RPS or CES requirements that reach at least 80% by 2030. This approach would avoid the need to establish new EAC classifications in each of the regional attribute tracking systems. For the reasons outlined above, allowing 100% of legacy zero-carbon resources to qualify for 45V in states like Maine will not create significant induced greenhouse gas emissions.

Peaks sincerely appreciates the Internal Revenue Service's proactive effort to engage the public on the implementation of section 45V of the IRA. At Peaks, our mandate is to help decarbonize the gas system. The IRA provides a historic opportunity to spur the energy transition needed to address this challenge head on. We thank you for your time and consideration, and eagerly await your response.

Respectfully,

DocuSigned by:
Angus King
2473ACBF12764E0...

Angus King
President
Peaks Renewables