February 23, 2024

Submitted electronically via www.regulations.gov

Department of the Treasury
Internal Revenue Service
Office of Chief Counsel
Reg-117631-23

Subject: *Response to Request for Comments to Reg-117631-23* - Section 45V Credit for Production of Clean Hydrogen, Section 48(a)(15) Election to Treat Clean Hydrogen Production Facilities as Energy Property

To Whom It May Concern,

TC Energy Development Holdings Inc. (together with its affiliates, TC Energy) and The Chemours Company FC, LLC (Chemours) (collectively, the "Project Team") are providing this letter of comment to the Department of Treasury and Internal Revenue Service surrounding REG-117631-23 and the contained proposed regulations on the 45V Clean Hydrogen Production Credit. As a member of the Appalachian Regional Clean Hydrogen Hub (ARCH2) currently under negotiation for a funding award by the U.S. Department of Energy, the Project Team is aligned with the objectives of the ARCH2 program, including enablement of widespread deployment of infrastructure for clean hydrogen production, transport, and end-use in the Appalachian Basin States of West Virginia, Ohio, Kentucky, and Pennsylvania and concurrent impact on adjacent eastern U.S. and midwestern states with support from the host communities.

Given the importance of the 45V Clean Hydrogen Production Credit to the financial performance of projects, and enabling meaningful progress on the path to the U.S. Department of Energy's Energy Earthshots Initiative to reduce the cost of clean hydrogen by 80% to $1 per kilogram in one decade, the Project Team, in the context of the development project being considered, is providing the following commentary on the proposed regulations governing the Inflation Reduction Act's Section 45V Clean Hydrogen Production Credit.

On Deliverability for Electrolysis-based H_2:

a. *The Project Team views the deliverability standard for renewable energy certificates (RECs) or energy attribute certificates (EAC) applicability as potentially counterproductive to the interregional transmission enhancement goals of the National Transmission Needs Study (NTNS). By requiring generation within the same region as consumption, paired with the incrementality requirements, this could create increased congestion as opposed to encouraging the opportunity for a new-build generation project to be leveraged from outside the region where it could be constructed more efficiently.*
b. *With respect to the NTNS Regions, and their relationship to the existing commercial marketplace, is each U.S. Balancing Authority linked to a NTNS Region? This is of particular interest around NTNS Region boundaries that do not precisely overlap with the majority overlapping U.S. Balancing Authority. The 45VH2 GREET User Manual states that these two boundary areas will be linked, and the Project Team requests this be formally written into updated Internal Revenue Service Guidance.*

On Incrementality and Temporal Matching for Electrolysis-based H_2:

a. *With respect to the 36-month reference period guidelines, referred to as the Incrementality requirement, the Project Team views the structure as unnecessarily restrictive and generative of additional owners' risk at the time of final investment decision. The presently proposed structure creates a viable scenario in which a final investment decision must be made without complete awareness of eligible renewable generation projects committed to the project. Such a risk increases with the duration of construction on any given project. The preferred structure would reference Electrolyzer Start of Construction as opposed to Electrolyzer in-service date when defining the starting point of look-back, and would allow project teams to identify and secure EAC procurement and renewable generation partnership opportunities earlier in the project timeline.*
b. *Unless H_2 producers intend to self-develop or form renewable development partnerships – both paths made increasingly difficult when combined with the proposed temporal-matching requirements – the primary resource to meet these incrementality criteria will be the electrical utility serving the project. Quantification of the tariff impact for such a utility taking on the burden of renewable power RFPs and the associated temporal-matching considerations is forthcoming through consultation with partner utilities.*

Suggested Alternatives:

a. *Establishment of a threshold higher than 5% from existing generation sources, ideally based on logic tied to circumstances such as avoided retirement, expected curtailment rates, and modeling of zero or minimal induced grid emissions. Further, the Project Team is seeking confirmation that the CI scores of these resources shall accordingly be included in the baseline grid CI for GREET model evaluation.*
b. *Allowance for annual matching for clean hydrogen facilities that begin construction before 2030; and shift to monthly time matching for facilities that begin construction in or after 2030; and grandfather the matching rules for projects that begin construction before 2030 for the life of the tax credit claiming period.*
c. *Ensure the location of a generation source and the location of a hydrogen production facility is based on the U.S. Balancing Authority to which it is electrically interconnected (not its geographic location), and where there is a discrepancy between the NTNS region and Balancing Authority, the Balancing Authority should prevail.*

In conclusion, without a readily achievable and reliable framework for regulations governing the Inflation Reduction Act's Section 45V Clean Hydrogen Production Credit, the risk for investment in projects seeking to qualify will be great, and in some cases, insurmountable. The Project Team requests consideration of an approach as outlined above that meets the commercial market where it currently stands to enable a rapid clean H_2 market liftoff with an ultimate goal of the U.S. Department of Energy's Energy Earthshot Initiative to reduce the cost of clean hydrogen by 80% to $1 per kilogram in one decade.

TC Energy and Chemours appreciate the opportunity to comment and look forward to clarified guidance.

Sincerely,

Rachid Medarhri

Name: Rachid Medarhri
Title: VP Commercial Marketing
Company: TC Energy Development Holdings Inc.

W. P. Raiford

Name: William P. Raiford, Ph.D.
Title: Sr. Director Technology
Company: The Chemours Company FC (LLC)

TC Energy has over 70 years of experience and is a leader in the responsible development and reliable operation of North American energy infrastructure, including NG pipelines (57,900 miles, 25% of North American NG pipelines), liquid pipelines (3,000-mile network), power generation (4,200 MW), and gas storage facilities (653 Bcf). Today, our 7,000+ energy problem solvers are taking action to make energy more sustainable and more secure. We're innovating – including lowering the cost and increasing the speed of H_2 delivery – to reduce emissions from our business and industry. TC Energy's U.S. power and emissions commercial trading and marketing business provides customers with various physical and financial products, with a measured approach to risk management and a focus on financial discipline, compliance, and operational excellence. Additionally, TC Energy has entered into joint development agreements for the development of H_2 hubs across North America.

Chemours and TC Energy have executed a Memorandum of Understanding (MOU) to jointly pursue the development, construction, ownership, and operation of two electrolysis-based hydrogen production facilities each at Chemours' chemical manufacturing sites in Wood (Washington Works site) and Kanawha (Belle site) Counties in West Virginia. Production is being scaled to meet the native facility demand of Chemours, through fuel gas blending to existing steam boilers, a process which was successfully piloted in December 2022.