



CLEVELAND-CLIFFS INC.
200 Public Square, Suite 3300, Cleveland, OH 44114
P 216.694.5700 clevelandcliffs.com

February 26, 2024

CC:PA:LPD:PR (REG-117631-23)
Room 5203
Internal Revenue Service
P.O. Box 7604
Ben Franklin Station
Washington, DC 20044

Re: IRS and REG-117631-23

Dear Internal Revenue Service,

Cleveland-Cliffs Inc. ("Cliffs") appreciates the opportunity to provide comments to the U.S. Department of Treasury's Internal Revenue Service (the "Treasury") in support of changes to the 45V hydrogen production tax credit guidance issued on December 22, 2023.

Cliffs is the largest flat-rolled steel producer in North America. Founded in 1847 as a mine operator, Cliffs also is the largest manufacturer of iron ore pellets in North America. Cliffs is vertically integrated from mined raw materials, direct reduced iron, and ferrous scrap to primary steelmaking and downstream finishing, stamping, tooling, and tubing. Cliffs is the largest supplier of steel to the automotive industry in North America and serves a diverse range of other markets due to its comprehensive offering of flat-rolled steel products. Headquartered in Cleveland, Ohio, Cliffs employs approximately 28,000 people across its operations in the United States and Canada.

Cliffs has adopted a comprehensive sustainability strategy, which includes the commitment to leverage hydrogen to decarbonize our iron and steel production processes when hydrogen becomes commercially available. This could include adopting the use of hydrogen in furnace technologies used to produce both iron and Direct Reduced Iron (DRI). Cleveland-Cliffs has the capacity to consume large volumes of clean hydrogen at our iron and steel facilities located in the Midwest. By incorporating hydrogen into our iron and steel operations, we aim to reduce greenhouse gas emissions associated with traditional iron and steelmaking. Recent milestones related to our hydrogen trial program at Indiana Harbor #7 (the largest blast furnace in the Western Hemisphere) following our 2023 successful hydrogen trial at Middletown Works in Ohio, serves as evidence that we are leading the way to be ready to utilize hydrogen to decarbonize the domestic steel industry. These achievements not only underscore our current leadership but also position us at the forefront of a transformative era in the domestic steel industry. Cliffs also sees growth opportunities from the deployment of hydrogen infrastructure which will require steel in renewable energy projects, hydrogen electrolyzers, and associated pipelines. The growth in domestic hydrogen production should avoid relying upon imported steel or steel containing products from countries like China. Reasonable 45V guidance will support the first movers of the clean hydrogen sector and build our domestic supply chains for electricity-based and gas-based clean hydrogen.

We appreciate the ongoing efforts of the United States Congress, Department of Energy and the Treasury in addressing climate change and fostering the transition to low carbon hydrogen production by way of the Inflation Reduction Act and the Regional Clean Hydrogen Hub program.

The 45V guidance should help not hinder deployment of clean hydrogen at these early stages and be supportive of multiple hydrogen production routes. Delays in deployment of hydrogen production or higher hydrogen prices as a result of producers' inability to qualify for the tax credit will ultimately delay scaled implementation of hydrogen at Cliffs.

Gas-based Clean Hydrogen Production

Cliffs is a key potential consumer of hydrogen from the MachH2 Hydrogen Hub, which includes a strategically located large-scale hydrogen project being planned near our locations in Northwest Indiana. Cliffs is also engaging with potential gas-based clean hydrogen suppliers for other potential future projects across its operational footprint. In order for this clean hydrogen supply to be cost competitive, the Treasury must implement the congressional intent of a technology neutral hydrogen production tax credit supporting all production pathways.

Fair treatment of different sources of low carbon hydrogen supply is vital for cultivating a decarbonized steel industry. The narrow guidance proposed by the Treasury on the hydrogen production tax credit (45V) may hamper the development of a clean hydrogen market integral to our strategy. Therefore, we respectfully request that the final 45V rules reflect congressional intent by enabling an “all of the above” technology approach, which would include provisions for equal treatment of hydrogen production pathways that use methane or renewable natural gas (RNG):

1. Implementing an RNG book and claim system that leverages assurance mechanisms already in use by industry that allow for a robust approach to compliance following existing industry standards, and differentiates based on the carbon intensity of different RNG sources;
2. Ensuring fair treatment of RNG by recognizing differences of RNG compared with electrical power (e.g. different time matching needs), and similarities such as equivalent “incrementality” provisions (first productive use, vs. 3-year lookback); and
3. Ensuring a technology neutral approach within the 45VH2-GREET model that accommodates low-carbon innovations possible within technology pathways. For example, removing a blanket prohibition on co-product steam credits in some pathways, reflecting leading-edge technology innovations.

Electricity-based Clean Hydrogen Production

The Treasury's guidance as written would preclude existing clean power including Nuclear for hydrogen production. Nuclear power's high-capacity utilization factor in concert with renewable electricity and gas-based hydrogen production will help ensure stable hydrogen supply is available to industrial consumers like the iron and steel industry. The Treasury, in coordination with the Department of Energy, should consider grandfathering projects and set a threshold exempting initial capacity of hydrogen production from the incrementality requirements. This ensures that first mover projects – those willing to take on the risk of early investment into a nascent, yet developing, market – are built; and this will support establishment of domestic production capacity and availability to meet requirements of early adopting end users. Grandfathering also provides enough baseload electrolyzer manufacturing demand to stimulate US-based manufacturing and supply chains; supply chains that will rely upon critical materials like domestically produced iron and steel.

The proposed temporal matching is too aggressive for the early phases of the clean hydrogen industry. Projects that are installed on, or after, January 1, 2028, should begin temporal matching at less frequent cadences such as monthly, rather than hourly, to give the industry time to develop the required tracking technology and continue building out the renewable energy assets that are currently in the interconnection queues around the country. While some regions may have very nascent hourly matching capabilities, in the near term, this transition period ensures more equal access to local, clean hydrogen generation than the current guidelines provide, without compromising the carbon footprint of clean hydrogen projects.

Add a market review step to evaluate readiness for more granular temporal matching: Similar to the European Union framework, beginning on January 1, 2030, the Treasury should undertake a holistic market review to determine the effectiveness of temporal matching. During this review the Treasury will

February 26, 2024

Page 3

evaluate whether temporal matching is likely to achieve the objectives of the Administration and Congress, and whether technology and markets are available for more granular matching. Specific metrics the Treasury should apply include the carbon intensity of the grid regions, electricity prices and availability and accessibility of Energy Attribute Certificates, and the credibility of production matching products available in the marketplace. The Treasury should also evaluate the uptake and cost impact of hourly matching on proposed projects. The Treasury should phase in more granular temporal matching, if and only if, the markets are ready to transition.

The United States has the unique opportunity to lead the world in providing clean steel as a result of the Regional Hydrogen Hub program and the 45V tax credit. Your support and collaboration with the domestic steel industry and the hubs will be instrumental in realizing this vision.

Thank you for your time and consideration. We look forward to the Treasury's support in advancing clean energy solutions and stand ready to contribute to these efforts.

Respectfully,

A handwritten signature in black ink, appearing to read 'Traci L. Forrester', written in a cursive style.

Traci L. Forrester
Executive Vice President, Environmental & Sustainability