

May 2, 2023

Senator David Koehler
Illinois Senate
Room 309-M, Capitol Building
401 S. Second St., Springfield, IL 62706

Representative Terra Costa Howard
Illinois House of Representatives
Rm. 246-W, Stratton Office Building
401 S. Spring St., Springfield, IL 62706

Dear Senator Koehler and Representative Costa Howard:

With the passage of the Infrastructure Investment and Jobs Act (IIJA) and the Inflation Reduction Act (IRA), the United States is at a critical juncture to ensure it becomes the world leader in the production of clean hydrogen. The IIJA provided billions of dollars for clean hydrogen production in the U.S. with the potential for extended support through the IRA, and Illinois should position itself to contend for those resources. Key among those programs are the Clean Hydrogen Hub program through the U.S. Department of Energy, and the 45V production tax credit. Both programs could grow the production of clean hydrogen in the U.S. if properly implemented. Complementing those efforts, Illinois is considering an end user tax credit to encourage consumers to use clean hydrogen and to support jobs and a supply chain that will foster a robust, affordable clean hydrogen economy in the Midwest.

It is critical Illinois designs this tax credit for success. SB1711/HB2051, however, raises some concerns as currently written. The bill would require hourly time matching, meaning that the clean energy that powers the hydrogen production process must be produced in the same hour it is used to qualify for the tax credit. This disadvantages renewable-electricity produced hydrogen, or “green” hydrogen, relative to nuclear derived hydrogen, or “pink” hydrogen, as renewable power cannot be generated on a constant hourly basis due to the ebbs and flows of wind and solar outputs. Hourly matching forces producers to suspend production when the renewable generation is not available, discouraging consumers by prohibiting producers from providing a constant, steady volume of hydrogen supply.

Added investment in electricity storage can help, but even it will not solve the larger issue of energy intermittency. These added costs increase the price of green hydrogen relative to pink hydrogen. Stated differently, the bill as currently written advantages pink hydrogen over other forms of clean hydrogen production.

The undersigned companies represent producers and users that are keen to advance production of renewable-electricity that, with effective policy implementation, will be helping to grow a clean hydrogen industry in Illinois. We recommend that to leverage the potential for green hydrogen in Illinois, specifically in these early stages, Illinois should implement a longer period for time matching requirements to allow this nascent industry to grow. For example, the ability to match renewable energy generation to hydrogen production over an annual basis would provide the most flexibility. Annual matching in the near term will support the growth of a nascent industry to transition to more stringent requirements as renewable power penetration increases.

Further, arguments that hydrogen derived from natural gas with carbon capture and storage (CCS), or “blue” hydrogen, could benefit from annual time matching are not applicable in Illinois. SB1711/HB2051 requires generation for the production of zero-carbon hydrogen to come from specific resources –

nuclear, wind, solar, geothermal, or existing hydropower¹. Blue hydrogen will not qualify under this legislation.

The undersigned companies urge policymakers to consider the impacts hourly time matching will have on the pace of large-scale decarbonization and the growth of green hydrogen production. There is currently a rule-making underway at the U.S. Department of Treasury to decide this question. To not get ahead of the Biden Administration, the General Assembly could draft SB1711/HB2051 to comply with the rules of the hydrogen production tax credit available under 25 U.S.C. Section 45V in determining the time matching requirements.

We commend the goals of this bill and believe that state-level tax credits will help make Illinois competitive for hosting clean hydrogen projects and as a recipient of Federal Hydrogen Hub grants.

Sincerely,

Apex Clean Energy Holdings, Inc.

bp America Inc.

Clearway Energy Group LLC

Invenergy, LLC

LanzaTech, Inc.

NextEra Energy, Inc.

¹ [Illinois General Assembly - Full Text of SB1711 \(ilga.gov\)](https://www.ilga.gov/legislation/2021/bills/0100/0100_01711_01.htm)