

Decision No. C23-0576

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

PROCEEDING NO. 23I-0426EG

IN THE MATTER OF THE INVESTIGATION INTO THE IMPLEMENTATION OF HOUSE BILL 23-1281 CONCERNING MEASURES TO ADVANCE THE USE OF CLEAN HYDROGEN IN THE STATE AND PURSUANT TO SECTION 2, INITIATE AN INVESTIGATORY PROCEEDING NO LATER THAN SEPTEMBER 1, 2023

**COMMISSION DECISION OPENING INVESTIGATORY
PROCEEDING**

Mailed Date: August 30, 2023

Adopted Date: August 30, 2023

I. BY THE COMMISSION

A. Statement

1. By this Decision, the Colorado Public Utilities Commission (Commission) opens an Investigatory Proceeding to gather information and data that will enable it to promulgate appropriate rules for the implementation of clean hydrogen projects, and to consider the requirements for and the analysis of applications for clean hydrogen projects by investor-owned utilities, including at least that information with the provisions of § 40-2-138(2)(a)-(p), C.R.S. This Proceeding will serve as a repository for relevant information and data, including consultant reports procured by the Commission.

B. Background and Discussion

2. The Colorado General Assembly noted that it is Colorado’s goal to reduce greenhouse gas pollution by more than 90 percent by 2050.¹ Further, the Colorado Greenhouse Gas Pollution Reduction Roadmap, published by the Colorado Energy Office, states that “[c]lean hydrogen may be an important resource to lower greenhouse gas emissions from sectors that are harder to decarbonize, such as heavy-duty transportation and heavy industry.”²

3. On May 22, 2023, Governor Jared Polis signed into law House Bill (HB) 23-1281, which sets out measures to advance the use of clean hydrogen in Colorado.³

4. In support of HB 23-1281, the General Assembly observes that Colorado has partnered with three other states to pursue funding from the U.S. Department of Energy (DOE) to establish a regional hydrogen hub.⁴ According to the DOE, hydrogen hubs will “create networks of hydrogen producers, consumers, and local connective infrastructure to accelerate the use of hydrogen as a clean energy carrier”⁵ In addition, the General Assembly expects hydrogen to play a key role in the resilience of the state’s electric grid and for dispatchable electricity generation complementing the use of wind and solar resources, as well as helping achieve the Governor’s goal of 100 percent renewable electricity generation by 2040, as Colorado moves to diversify and decarbonize its energy economy.⁶ However, the General Assembly also recognized the uncertainties and potential environmental and other impacts of clean hydrogen projects, and

¹ HB23-1281, at Section 1(1)(a)(III).

² *Id.*

³ Codified at § 40-2-138, *et seq.*

⁴ *Id.* at subsection (d).

⁵ <https://www.energy.gov/oced/regional-clean-hydrogen-hubs>

⁶ *Id.* at subsection (e).

as we discuss further below, set forth requirements that these uncertainties and impacts be more fully considered through a robust regulatory process.

5. HB 23-1281 thus sets forth three specific activities the Commission must undertake. First, by September 1, 2023, the Commission must initiate an investigatory proceeding to gather information on a list of specific issues related to clean hydrogen development and deployment.⁷ This requirement forms the basis for, and is met by, this Proceeding. Second, by June 1, 2024, the Commission shall allow an investor-owned utility to file a standalone application for which it has applied for federal hydrogen hub funding.⁸ Third, unless the Colorado Energy Office files a notice with the Commission that DOE has extended or otherwise altered the deadline for hydrogen hub funding, the Commission must promulgate rules for utilities to file applications for clean hydrogen projects by December 1, 2024.⁹

6. By this Decision, we open the statutorily required investigatory proceeding. This investigatory proceeding must find and assemble information on a number of items related to health and the environment, markets and the Colorado economy, utilities and their customers, and technical issues. The scope of the information includes but is not limited to: the potential for clean hydrogen projects operated by investor-owned utilities (IOUs) to contribute to meeting greenhouse gas emission reduction goals as set forth in § 25-7-102(2)(g), C.R.S.; the impact of clean hydrogen projects on the emission of air pollutants other than greenhouse gases and human health; potential markets for clean hydrogen; the potential for clean hydrogen projects to create

⁷ § 40-2-138(2), C.R.S.

⁸ § 40-2-138(4)(a), C.R.S.

⁹ § 40-2-138(3)(a), C.R.S.

or sustain jobs; the potential impact of clean hydrogen projects on ratepayers, including bills, rates, tariffs, and options to avoid cross-subsidization and cost-shifting; processes and data necessary for an IOU to conduct a cumulative impact analysis (CIA) of a clean hydrogen project and any process necessary to avoid adverse cumulative impacts on disproportionately impacted communities, if any. Additionally, the Commission is to collect “any data or information necessary or available to evaluate a clean hydrogen project against alternative projects, including how to measure, track, and report lifecycle greenhouse gas emissions rates, cumulative impacts, and the cumulative impacts and individual impacts on jobs, local economic benefits, and water use by clean hydrogen projects under the [C]ommission’s jurisdiction.”¹⁰ The Investigatory Proceeding may also collect information on any other issues that the Commission determines are relevant to consider.

7. In furtherance of this statutory charge, we find it necessary to open an Investigatory Proceeding in order to gather the information and data consonant with the provisions of § 40-2-138(2)(a)-(p), C.R.S. and to acquire the information and tools necessary to ultimately implement appropriate rules in preparation for applications for clean hydrogen projects filed by IOUs. The information gathered from the Investigatory Proceeding will inform the determination of the best practices and processes in order to move forward with the Commission’s statutory responsibilities in as efficient and expeditious manner as possible. This Investigatory Proceeding shall serve as a repository for information gathered by the Commission necessary to develop rules and best methods to consider the myriad issues that will encompass the process of implementing clean hydrogen in Colorado.

¹⁰ *Id.*

8. The Commission will employ various means to accomplish its statutory responsibilities, including hiring third-party consultants to provide research and analysis that will assist the Commission to consider applications for clean hydrogen projects and ultimately to promulgate rules for this complex and emerging area.

9. In addition, the Commission anticipates that it will open a Miscellaneous Proceeding in the coming months to allow for legal briefs and stakeholder comments on threshold issues related to the implementation of HB23-1281 as well as on the information assembled in this Investigatory Proceeding. Stakeholders should not file comments in this Investigatory Proceeding, but rather, should wait until the upcoming Miscellaneous Proceeding is opened. The Commission will provide ample opportunity for comments, legal briefs, and submissions of additional information and data, in the Miscellaneous Proceeding.

10. In order to assist in compiling the information required pursuant to § 40-2-138(2)(a)-(p), Commission Staff has proposed engaging three consulting groups: Strategen Consulting, Inc. (Strategen), Rocky Mountain Institute (RMI), and Abt Associates (Abt). Those three consulting groups will work individually to amass data and information concerning the elements of clean hydrogen and clean hydrogen project development pursuant to § 40-2-138(a)-(p), C.R.S., including: Technical Research to develop an understanding of:

- the potential for clean hydrogen (CH) projects to contribute to greenhouse gas (GHG) reduction goals;
- potential markets;
- the potential impacts on water quality and quantity in Colorado;
- potential impact of pipeline leakage and best practices for mitigation;
- the costs, capabilities and market availability for CH technology, including pipeline investments;
- measurement of Lifecycle GHG emissions rates, including hourly matching of electricity usage;

- tracking the additionality of renewable energy used in CH production;
- a determination of when at least 200 MW of electrolyzers are operational in the state;
- any data or information necessary or available to evaluate a CH project against alternative projects, including how to measure, track, report lifecycle GHG emissions rates.

Health Research to develop an understanding of:

- the impact of CH projects on emissions of air pollutants other than GHG;
- a cumulative impact analysis for a CH project and any process necessary to avoid adverse cumulative impacts on Disproportionately Impacted communities, which may include, the timeframe to be considered, the geographic scope and comparisons to alternative projects.

Economic and Rate related research to develop an understanding of:

- the cumulative and individual impacts on jobs;
- the appropriate roles of an Investor-Owned Utility in production, sale or use of CH, as well as the appropriate vehicle for cost recovery;
- potential impact of IOU investments in CH projects on ratepayers, including bill impacts, rates and rate stability, and options for avoiding cross-subsidization and cost shifting across rate classes;
- principles and requirements for any tariffs for the sale of CH to third-parties, including requirements to ensure costs from development, production, transport, and delivery of CH under tariffs are not borne by customers who do not take service from those tariffs;
- the potential job creation as a result of CH projects;
- local economic benefits of CH projects;
- opportunities to encourage non-utility production of CH in Colorado, including opportunities for an IOU to propose a tariff for the sale of renewable energy that would otherwise be curtailed.

11. Each of the three consulting groups has been assigned elements of § 40-2-138(a)-(p), C.R.S. in order to research these topics with the goal of completing the investigation by early April 2024 to inform the Commissioners of the complexities of implementing HB23-1281, which will in turn inform the processes for moving forward with a subsequent Miscellaneous Proceeding and the future promulgation of rules regarding CH.

12. We therefore adopt this Decision opening an Investigatory Proceeding for the purposes outlined above. We further approve the retention of Strategen, RMI and Abt as consultants for the purposes stated above.

II. ORDER

A. The Commission Orders That:

1. Consistent with the discussion above, the Commission opens an Investigatory Proceeding to receive information and data on the development of processes and standards for the development of Clean Hydrogen Projects operated by investor-owned utilities subject to Commission jurisdiction, as well as the impacts to communities, health, environment, and rates of a clean hydrogen project, and including the development of a Cumulative Impact Analysis of a Clean Hydrogen Project.

2. The Commission approves the retention of Strategen Consulting, Inc., Rocky Mountain Institute, and Abt Associates for the purposes set forth in this Decision.

3. This Decision is effective upon its Mailed Date.

**B. ADOPTED IN COMMISSIONERS' WEEKLY MEETING
August 30, 2023.**

(SEAL)



ATTEST: A TRUE COPY

A handwritten signature in cursive script that reads "Rebecca E. White".

Rebecca E. White,
Director

THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

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Commissioners