SENATE BILL NO. 451–SENATORS SPEARMAN; HAMMOND, HANSEN AND STONE

APRIL 17, 2023

Referred to Committee on Growth and Infrastructure

SUMMARY—Directs the Joint Interim Standing Committee on Growth and Infrastructure to conduct a study concerning certain subjects related to hydrogen. (BDR S-32)

FISCAL NOTE: Effect on Local Government: No.
Effect on the State: Yes.

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EXPLANATION – Matter in ***bolded italics*** is new; matter between brackets **[**~~omitted material~~**]** is material to be omitted.

AN ACT relating to energy; directing the Joint Interim Standing Committee on Growth and Infrastructure to conduct a study during the 2023-2024 interim concerning certain subjects relating to hydrogen; and providing other matters properly relating thereto.

**Legislative Counsel's Digest:**

Existing law authorizes the Joint Interim Standing Committee on Growth and Infrastructure to evaluate, review and comment upon matters related to energy policy within this State. (NRS 218E.815) This bill directs the Committee to conduct a study during the 2023-2024 interim concerning: (1) the production and storage of hydrogen; (2) the use of stored hydrogen as a potential energy resource in this State; and (3) the development of hydrogen technologies. This bill requires the study to include, without limitation: (1) a review of the opportunities for students enrolled in an institution within the Nevada System of Higher Education to study subjects concerning hydrogen; and (2) an assessment of the feasibility of using hydrogen as an energy resource in this State. Finally, this bill requires the Committee to submit a report of the results of the study and any recommendations for legislation to the Director of the Legislative Counsel Bureau for transmittal to the 83rd Session of the Nevada Legislature.

WHEREAS, Senate Bill No. 254 of the 2019 Session of the Nevada Legislature (Chapter 323, Statutes of Nevada 2019, at page 1970) established a statewide goal of reducing greenhouse gas emissions to 28 percent below the 2005 level of such emissions by

2025, to 45 percent below the 2005 level of such emissions by 2030 and to zero or near-zero by 2050; and

WHEREAS, The State Climate Strategy establishes a plan for achieving the targets established by Senate Bill No. 254 for the reduction of greenhouse gas emissions and has identified clean hydrogen and clean hydrogen technologies, including, without limitation, hydrogen fuel cell vehicles and hydrogen fueling stations, as opportunities to reduce greenhouse gas emissions in this State; and

WHEREAS, Global economic activity involving the production, processing, delivery, storage and use of clean hydrogen is currently valued at more than $100 billion per year in 2022 and is expected to grow across the world as demand for clean energy increases; and

WHEREAS, The emergence of end-use applications for energy produced from clean hydrogen, including, without limitation, in transportation, seasonal energy storage and the global energy trade, provide an opportunity for this State to meet its targets for the reduction of greenhouse gas emissions while at the same time enhancing economic development, job creation and the collection of tax revenue in this State; and

WHEREAS, Encouraging the expansion of the use of clean hydrogen will decrease the emission of greenhouse gases in this State, which will have the effect of improving the health of Nevadans through the improvement of air quality, especially for economically disadvantaged Nevadans and communities of color; now, therefore,

THE PEOPLE OF THE STATE OF NEVADA, REPRESENTED IN SENATE AND ASSEMBLY, DO ENACT AS FOLLOWS:

**Section 1.** (Deleted by amendment.)

**Sec. 2.** 1. During the 2023-2024 interim, the Joint Interim Standing Committee on Growth and Infrastructure shall conduct a study concerning the production and storage of hydrogen, the use of stored hydrogen as a potential energy resource in this State and the development of hydrogen technologies.

2. In conducting the study, the Joint Interim Standing Committee on Growth and Infrastructure shall consult with and solicit input from:

(a) The Nevada System of Higher Education;

(b) The National Renewable Energy Laboratory;

(c) Existing energy industries in this State;

(d) Developers of clean energy;

(e) Nongovernmental organizations that focus on energy conservation;

(f) Utilities that provide gas and electric services; and

(g) Professionals with expertise regarding the use of hydrogen and stored hydrogen and the development of hydrogen technologies.

3. The study must include, without limitation:

(a) A review of the opportunities for students enrolled in an institution within the Nevada System of Higher Education to study subjects concerning hydrogen, including, without limitation:

(1) The process for the production and storage of hydrogen and any methods and technology used in such a process; and

(2) Hydrogen technologies; and

(b) An assessment of the feasibility of using hydrogen as an energy resource in this State, including, without limitation, consideration of:

(1) The potential for hydrogen and stored hydrogen to enable the operation of zero-emission light- and medium-duty vehicles, trucks, buses, locomotives, off-road equipment, aircraft, industrial equipment and watercraft;

(2) The potential for using wastewater and wastewater treatment facilities for the production of hydrogen;

(3) Methods for incentivizing the use of hydrogen and stored hydrogen as energy resources in this State;

(4) Economic and regulatory barriers to the implementation of hydrogen and stored hydrogen as energy resources, including, without limitation, whether policies incentivizing the production and storage of hydrogen as energy resources and hydrogen technologies are comparable to policies incentivizing the production of other energy resources and applicable technologies in this State;

(5) Opportunities for federal and nongovernmental grants that may be available for the purposes of producing and storing hydrogen in this State;

(6) The potential for using hydrogen microgrids, stored hydrogen microgrids and hydrogen coupled with distributed energy resources to strengthen the resilience of the electric power grid;

(7) The impact of hydrogen production on water resources in this State;

(8) The impact of limited water resources on the production of hydrogen in this State and its potential as an energy resource; and

(9) The long-term impact of various methods of hydrogen production on the air, water and other natural resources of this State and the potential for hydrogen to assist with efforts to decarbonize this State.

4. To complete the study, the Joint Interim Standing Committee on Growth and Infrastructure may enter into a contract or other agreement with the University of Nevada, Reno, the

University of Nevada, Las Vegas, or the Desert Research Institute to:

(a) Gather data concerning the feasibility of hydrogen and stored hydrogen as energy resources; and

(b) Produce a cost-benefit analysis of hydrogen as an energy resource.

5. On or before January 1, 2025, the Joint Interim Standing Committee on Growth and Infrastructure shall submit a report of the results of the study, including, without limitation, any recommendations for legislation, to the Director of the Legislative Counsel Bureau for transmittal to the 83rd Session of the Nevada Legislature.

6. For the purposes of this section, "hydrogen technologies" means technology used in the production, storage and distribution of hydrogen and stored hydrogen.

**Sec. 3.** This act becomes effective upon passage and approval.

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