AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
GPO

Calendar No. 151

105TH CONGRESS, *1st Session* | SENATE | REPORT 105–69

HYDROGEN FUTURE ACT OF 1996

SEPTEMBER 2, 1997.—Ordered to be printed

Mr. MURKOWSKI, from the Committee on Energy and Natural Resources, submitted the following

REPORT

[To accompany S. 965]

The Committee on Energy and Natural Resources, to which was referred the bill (S. 965) to amend title II of the Hydrogen Future Act of 1996 to extend an authorization contained therein, and for other purposes, having considered the same, reports favorably thereon without amendment and recommends that the bill do pass.

PURPOSE OF THE MEASURE

Title II of the Hydrogen Future Act of 1996 (Public Law 104–271) authorized a $50 million competitive, cost-shared fuel cell demonstration project for fiscal years 1997 and 1998, with funds to remain available through September 1999. S. 965 would amend the Hydrogen Future Act to allow the $50 million authorization to span fiscal years 1998, 1999, 2000, and 2001, with funds to remain available through September 2002.

BACKGROUND AND NEED

Hydrogen fuel cells combine hydrogen and atmospheric oxygen to produce electricity in a process in which water is the only emission. As a consequence, they are highly regarded as an environmentally friendly energy production system.

More broadly, hydrogen is widely regarded as an energy carrier with the potential to join electricity as a key component of a future sustainable energy system. Unlike coal, oil, or natural gas, hydrogen cannot be directly mined or produced—it must be extracted from hydrogen-rich materials such as natural gas, biomass, or even water. While there are significant technical and economic barriers that prevent the near-term, widespread use of hydrogen as an en-

ergy carrier, the eventual promise of hydrogen is compelling. Over the near-term, however, the high costs of hydrogen extraction and the high unit cost of hydrogen fuel cells make their widespread use uneconomic.

Proponents of hydrogen energy contend that the unit costs of fuel cells would decline from current levels of roughly $3000/kilowatt to $1500/kilowatt if a demonstration program of sufficient size was undertaken to result in a substantial order of 600 or more fuel cells. As a consequence, Congress adopted title II of the Hydrogen Future Act of 1996 which authorized a $50 million competitive, cost-shared fuel cell demonstration program. To date, no funding has been appropriated for this purpose.

S. 965 would not increase the total authorization but would extend the period in which funds could be appropriated and spent. Existing law authorizes such a program for fiscal years 1997 and 1998, with funds to remain available through September 1999. S. 965 would allow the $50 million authorization to span fiscal years 1998, 1999, 2000, and 2001, with funds to remain available through September 2002.

LEGISLATIVE HISTORY

In the 104th Congress, the Hydrogen Future Act, H.R. 655, was introduced by Congressman Walker on January 24, 1995. A companion version, S. 1077, was introduced in the Senate by Senator Harkin on July 26, 1995. In addition, S. 1153, a related measure to provide for a hydrogen fuel cell demonstration project, was introduced by Senator Burns on August 10, 1995.

H.R. 655 passed the House on May 2, 1995. Hearings were held on S. 1077, S. 1153 and H.R 655 before the Senate Energy and Natural Resources Subcommittee on Energy Research and Development on March 20, 1996. On September 13, 1996, the Committee favorably reported H.R. 655 to the Senate with an amendment in the nature of a substitute. The substitute incorporated much of the language of H.R. 655 and S. 1077 as title I, and included elements of S. 1153 related to the fuel cell demonstration project as title II.

H.R. 4138, a measure identical to the Committee-reported substitute, was introduced in the House of Representatives by Representative Robert Walker on September 24, 1996. The House passed H.R. 4138 on September 26, 1996. The Senate passed it without amendment by unanimous consent on September 28, 1996; and it was signed by the President on October 9, 1996 as Public Law 104–271.

In the 105th Congress, S. 965 was introduced by Senator Murkowski on June 26, 1997. At the business meeting on July 30, 1997 the Committee on Energy and Natural Resources ordered S. 965 favorably reported without amendment.

COMMITTEE RECOMMENDATION AND TABULATION OF VOTES

The Committee on Energy and Natural Resources, in open business session on July 30, 1997, by unanimous vote of a quorum present, recommends that the Senate pass S. 965, without amendment.

The rollcall vote on reporting the measure was 20 yeas, 0 nays as follows:

YEAS	NAYS
Mr. Murkowski	
Mr. Domenici	
Mr. Nickles	
Mr. Craig	
Mr. Campbell [1]	
Mr. Thomas	
Mr. Kyl	
Mr. Grams	
Mr. Smith	
Mr. Gorton	
Mr. Burns [1]	
Mr. Bumpers	
Mr. Ford	
Mr. Bingaman [1]	
Mr. Akaka	
Mr. Dorgan	
Mr. Graham	
Mr. Wyden	
Mr. Johnson	
Mrs. Landrieu [1]	

[1] Indicates vote by proxy.

COST AND BUDGETARY CONSIDERATIONS

The following estimate of costs of this measure has been provided by the Congressional Budget Office:

U.S. CONGRESS,
CONGRESSIONAL BUDGET OFFICE,
Washington, DC, July 31, 1997.

Hon. FRANK H. MURKOWSKI,
Chairman, Committee on Energy and Natural Resources, U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for S. 965, a bill to amend Title II of the Hydrogen Future Act of 1996 to extend an authorization contained therein, and for other purposes.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contacts are Kathleen Gramp (for federal costs) and Pepper Santalucia (for the state and local impact).

Sincerely,

JUNE E. O'NEILL, *Director.*

Enclosure.

S. 965—A bill to extend title II of the Hydrogen Future Act of 1996 to extend an authorization contained therein, and for other purposes

S. 965 would extend the time period for which funds are authorized to be appropriated for demonstration projects related to the integration of fuel cells with hydrogen production systems. Current

law authorizes the appropriation of a total of $50 million through 1998 for these activities. This bill would extend that authorization through 2001, subject to the terms and conditions specified in current law.

S. 965 would not change the amount of funding authorized for fuel cells demonstration projects with hydrogen production systems—but by extending the period of authorization, the bill may make it more likely that the authorized amount of $50 million will be appropriated. To date, no such funds have been appropriated, and none are included in appropriation bills for 1998 that are currently pending in the Congress. The legislation would not affect direct spending or receipts; therefore, pay-as-you-go procedures would not apply.

The bill contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act of 1995, and would not impose any costs on state, local, or tribal governments. State and local governments, including public universities, would be eligible to apply for the authorized funds. Recipients of the funding would be required to pay at least 50 percent of the cost of the development or demonstration portion of the projects.

The CBO staff contacts for this estimate are Kathleen Gramp (federal costs) and Pepper Santalucia (for the state and local impact). This estimate was approved by Robert A. Sunshine, Deputy Assistant Director for Budget Analysis.

Regulatory Impact Evaluation

In compliance with paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee makes the following evaluation of the regulatory impact which would be incurred in carrying out S. 965.

This bill is not a regulatory measure in the sense of imposing Government established standards of significant economic responsibilities on private individuals and businesses. No personal information would be collected in administering the program. Therefore, there would be no impact on personal privacy. Little if any additional paperwork would result from the enactment of S. 965.

Executive Communications

There have been no executive communications with respect to S. 965.

Changes in Existing Law

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, changes in existing law made by the bill S. 965, as ordered reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italic, existing law in which no change is proposed is shown in roman):

Hydrogen Future Act of 1996

* * * * * * *

TITLE II—FUEL CELLS

* * * * * * *

SEC. 202. AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated, for activities under this section, a total of $50,000,000 for fiscal years [1997 and 1998, to remain available until September 30, 1999] *1998, 1999, 2001, and 2001, to remain available until September 30, 2002.*

* * * * * * *

○