(b) Membership

(1) Members

The Technical Advisory Committee shall be comprised of not fewer than 12 nor more than 25 members. The members shall be appointed by the Secretary to represent domestic industry, academia, professional societies, government agencies, Federal laboratories, previous advisory panels, and financial, environmental, and other appropriate organizations based on the Department's assessment of the technical and other qualifications of Technical Advisory Committee members and the needs of the Technical Advisory Committee.

(2) Terms

The term of a member of the Technical Advisory Committee shall not be more than 3 years. The Secretary may appoint members of the Technical Advisory Committee in a manner that allows the terms of the members serving at any time to expire at spaced intervals so as to ensure continuity in the functioning of the Technical Advisory Committee. A member of the Technical Advisory Committee whose term is expiring may be reappointed.

(3) Chairperson

The Technical Advisory Committee shall have a chairperson, who shall be elected by the members from among their number.

(c) Review

The Technical Advisory Committee shall review and make recommendations to the Secretary on—

(1) the implementation of programs and activities under this subchapter;

(2) the safety, economical, and environmental consequences of technologies for the production, distribution, delivery, storage, or use of hydrogen energy and fuel cells; and

(3) the plan under section 16153 of this title.

(d) Response

(1) Consideration of recommendations

The Secretary shall consider, but need not adopt, any recommendations of the Technical Advisory Committee under subsection (c).

(2) Biennial report

The Secretary shall transmit a biennial report to Congress describing any recommendations made by the Technical Advisory Committee since the previous report. The report shall include a description of how the Secretary has implemented or plans to implement the recommendations, or an explanation of the reasons that a recommendation will not be implemented. The report shall be transmitted along with the President's budget proposal.

(e) Support

The Secretary shall provide resources necessary in the judgment of the Secretary for the Technical Advisory Committee to carry out its responsibilities under this subchapter.

(Pub. L. 109–58, title VIII, §807, Aug. 8, 2005, 119 Stat. 849.)

§ 16157. Demonstration

(a) In general

In carrying out the programs under this section, the Secretary shall fund a limited number of demonstration projects, consistent with this subchapter and a determination of the maturity, cost-effectiveness, and environmental impacts of technologies supporting each project. In selecting projects under this subsection, the Secretary shall, to the extent practicable and in the public interest, select projects that—

(1) involve using hydrogen and related products at existing facilities or installations, such as existing office buildings, military bases, vehicle fleet centers, transit bus authorities, or units of the National Park System;

(2) depend on reliable power from hydrogen to carry out essential activities;

(3) lead to the replication of hydrogen technologies and draw such technologies into the marketplace;

(4) include vehicle, portable, and stationary demonstrations of fuel cell and hydrogen-based energy technologies;

(5) address the interdependency of demand for hydrogen fuel cell applications and hydrogen fuel infrastructure;

(6) raise awareness of hydrogen technology among the public;

(7) facilitate identification of an optimum technology among competing alternatives;

(8) address distributed generation using renewable sources;

(9) carry out demonstrations of evolving hydrogen and fuel cell technologies in national parks, remote island areas, and on Indian tribal land, as selected by the Secretary;

(10) carry out a program to demonstrate developmental hydrogen and fuel cell systems for mobile, portable, and stationary uses, using improved versions of the learning demonstrations program concept of the Department including demonstrations involving—

(A) light-duty vehicles;

(B) heavy-duty vehicles;

(C) fleet vehicles;

(D) specialty industrial and farm vehicles; and

(E) commercial and residential portable, continuous, and backup electric power generation;

(11) in accordance with any code or standards developed in a region, fund prototype, pilot fleet, and infrastructure regional hydrogen supply corridors along the interstate highway system in varied climates across the United States; and

(12) fund demonstration programs that explore the use of hydrogen blends, hybrid hydrogen, and hydrogen reformed from renewable agricultural fuels, including the use of hydrogen in hybrid electric, heavier duty, and advanced internal combustion-powered vehicles.

The Secretary shall give preference to projects which address multiple elements contained in paragraphs (1) through (12).

(b) System demonstrations

(1)[1] In general

As a component of the demonstration program under this section, the Secretary shall

[1] So in original. No par. (2) has been enacted.

provide grants, on a cost share basis as appropriate, to eligible entities (as determined by the Secretary) for use in—

(A) devising system design concepts that provide for the use of advanced composite vehicles in programs under section 16122 of this title that—

(i) have as a primary goal the reduction of drive energy requirements;

(ii) after 2010, add another research and development phase, as defined in subsection (c), including the vehicle and infrastructure partnerships developed under the learning demonstrations program concept of the Department; and

(iii) are managed through an enhanced FreedomCAR program within the Department that encourages involvement in cost-shared projects by manufacturers and governments; and

(B) designing a local distributed energy system that—

(i) incorporates renewable hydrogen production, off-grid electricity production, and fleet applications in industrial or commercial service;

(ii) integrates energy or applications described in clause (i), such as stationary, portable, micro, and mobile fuel cells, into a high-density commercial or residential building complex or agricultural community; and

(iii) is managed in cooperation with industry, State, tribal, and local governments, agricultural organizations, and nonprofit generators and distributors of electricity.

(c) Identification of new program requirements

In carrying out the demonstrations under subsection (a), the Secretary, in consultation with the Task Force and the Technical Advisory Committee, shall—

(1) after 2008 for stationary and portable applications, and after 2010 for vehicles, identify new requirements that refine technological concepts, planning, and applications; and

(2) during the second phase of the learning demonstrations under subsection (b)(1)(A)(ii), redesign subsequent program work to incorporate those requirements.

(d) Authorization of appropriations

There are authorized to be appropriated to carry out this section—

(1) $185,000,000 for fiscal year 2006;
(2) $200,000,000 for fiscal year 2007;
(3) $250,000,000 for fiscal year 2008;
(4) $300,000,000 for fiscal year 2009;
(5) $375,000,000 for fiscal year 2010; and
(6) such sums as are necessary for each of fiscal years 2011 through 2020.

(Pub. L. 109–58, title VIII, §808, Aug. 8, 2005, 119 Stat. 850.)

§ 16158. Codes and standards

(a) In general

The Secretary, in cooperation with the Task Force, shall provide grants to, or offer to enter into contracts with, such professional organizations, public service organizations, and government agencies as the Secretary determines appropriate to support timely and extensive development of safety codes and standards relating to fuel cell vehicles, hydrogen energy systems, and stationary, portable, and micro fuel cells.

(b) Educational efforts

The Secretary shall support educational efforts by organizations and agencies described in subsection (a) to share information, including information relating to best practices, among those organizations and agencies.

(c) Authorization of appropriations

There are authorized to be appropriated to carry out this section—

(1) $4,000,000 for fiscal year 2006;
(2) $7,000,000 for fiscal year 2007;
(3) $8,000,000 for fiscal year 2008;
(4) $10,000,000 for fiscal year 2009;
(5) $9,000,000 for fiscal year 2010; and
(6) such sums as are necessary for each of fiscal years 2011 through 2020.

(Pub. L. 109–58, title VIII, §809, Aug. 8, 2005, 119 Stat. 851.)

§ 16159. Disclosure

Section 13293 of this title shall apply to any project carried out through a grant, cooperative agreement, or contract under this subchapter.

(Pub. L. 109–58, title VIII, §810, Aug. 8, 2005, 119 Stat. 852.)

§ 16160. Reports

(a) Secretary

Subject to subsection (c), not later than 2 years after August 8, 2005, and triennially thereafter, the Secretary shall submit to Congress a report describing—

(1) activities carried out by the Department under this subchapter,[1] for hydrogen and fuel cell technology;

(2) measures the Secretary has taken during the preceding 3 years to support the transition of primary industry (or a related industry) to a fully commercialized hydrogen economy;

(3) any change made to the strategy relating to hydrogen and fuel cell technology to reflect the results of a learning demonstrations;

(4) progress, including progress in infrastructure, made toward achieving the goal of producing and deploying not less than—

(A) 100,000 hydrogen-fueled vehicles in the United States by 2010; and

(B) 2,500,000 hydrogen-fueled vehicles in the United States by 2020;

(5) progress made toward achieving the goal of supplying hydrogen at a sufficient number of fueling stations in the United States by 2010 including by integrating—

(A) hydrogen activities; and

(B) associated targets and timetables for the development of hydrogen technologies;

(6) any problem relating to the design, execution, or funding of a program under this subchapter;

[1] So in original. The comma probably should not appear.