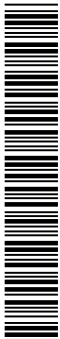


**TITLE XVIII—STUDIES**

## TITLE XVIII—STUDIES

- Sec. 1801. Study on inventory of petroleum and natural gas storage.
- Sec. 1802. Study of energy efficiency standards.
- Sec. 1803. Telecommuting study.
- Sec. 1804. LIHEAP Report.
- Sec. 1805. Oil bypass filtration Technology.
- Sec. 1806. Total integrated thermal systems.
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- Sec. 1808. Report on energy integration with Latin America.
- Sec. 1809. Low-volume gas reservoir study.
- Sec. 1810. Investigation of gasoline prices.
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- Sec. 1813. Backup fuel capability study.
- Sec. 1814. Indian land rights-of-way.
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- Sec. 1821. Overall employment in a hydrogen economy.
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- Sec. 1828. Study of link between energy security and increases in vehicle miles traveled.
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- Sec. 1833. Study of feasibility and effects of reducing use of fuel for automobiles.
- Sec. 1834. Study on the benefits of economic dispatch.
- Sec. 1835. Renewable energy on Federal land.
- Sec. 1836. Increased hydroelectric generation at existing Federal facilities.
- Sec. 1837. Split-estate Federal oil and gas leasing and development practices.
- Sec. 1838. Resolution of Federal resource development conflicts in the Powder River Basin.



1 **SEC. 1801. STUDY ON INVENTORY OF PETROLEUM AND**  
2 **NATURAL GAS STORAGE.**

3 (a) DEFINITION.—For purposes of this section “pe-  
4 troleum” means crude oil, motor gasoline, jet fuel, dis-  
5 tillates, and propane.

6 (b) STUDY.—The Secretary of Energy shall conduct  
7 a study on petroleum and natural gas storage capacity and  
8 operational inventory levels, nationwide and by major geo-  
9 graphical regions.

10 (c) CONTENTS.—The study shall address—

11 (1) historical normal ranges for petroleum and  
12 natural gas inventory levels;

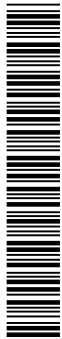
13 (2) historical and projected storage capacity  
14 trends;

15 (3) estimated operation inventory levels below  
16 which outages, delivery slowdown, rationing, inter-  
17 ruptions in service, or other indicators of shortage  
18 begin to appear;

19 (4) explanations for inventory levels dropping  
20 below normal ranges; and

21 (5) the ability of industry to meet United  
22 States demand for petroleum and natural gas with-  
23 out shortages or price spikes, when inventory levels  
24 are below normal ranges.

25 (d) REPORT TO CONGRESS.—Not later than 1 year  
26 after the date of enactment of this Act, the Secretary of



1 Energy shall submit a report to Congress on the results  
2 of the study, including findings and any recommendations  
3 for preventing future supply shortages.

4 **SEC. 1802. STUDY OF ENERGY EFFICIENCY STANDARDS.**

5 The Secretary of Energy shall contract with the Na-  
6 tional Academy of Sciences for a study, to be completed  
7 within 1 year after the date of enactment of this Act, to  
8 examine whether the goals of energy efficiency standards  
9 are best served by measurement of energy consumed, and  
10 efficiency improvements, at the actual site of energy con-  
11 sumption, or through the full fuel cycle, beginning at the  
12 source of energy production. The Secretary shall submit  
13 the report to Congress.

14 **SEC. 1803. TELECOMMUTING STUDY.**

15 (a) **STUDY REQUIRED.**—The Secretary, in consulta-  
16 tion with the Commission, the Director of the Office of  
17 Personnel Management, the Administrator of General  
18 Services, and the Administrator of NTIA, shall conduct  
19 a study of the energy conservation implications of the  
20 widespread adoption of telecommuting by Federal employ-  
21 ees in the United States.

22 (b) **REQUIRED SUBJECTS OF STUDY.**—The study re-  
23 quired by subsection (a) shall analyze the following sub-  
24 jects in relation to the energy saving potential of telecom-  
25 muting by Federal employees:



1           (1) Reductions of energy use and energy costs  
2           in commuting and regular office heating, cooling,  
3           and other operations.

4           (2) Other energy reductions accomplished by  
5           telecommuting.

6           (3) Existing regulatory barriers that hamper  
7           telecommuting, including barriers to broadband tele-  
8           communications services deployment.

9           (4) Collateral benefits to the environment, fam-  
10          ily life, and other values.

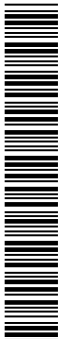
11          (c) REPORT REQUIRED.—The Secretary shall submit  
12          to the President and Congress a report on the study re-  
13          quired by this section not later than 6 months after the  
14          date of enactment of this Act. Such report shall include  
15          a description of the results of the analysis of each of the  
16          subject described in subsection (b).

17          (d) DEFINITIONS.—As used in this section:

18           (1) SECRETARY.—The term “Secretary” means  
19           the Secretary of Energy.

20           (2) COMMISSION.—The term “Commission”  
21           means the Federal Communications Commission.

22           (3) NTIA.—The term “NTIA” means the Na-  
23           tional Telecommunications and Information Admin-  
24           istration of the Department of Commerce.



1           (4) TELECOMMUTING.—The term “telecom-  
2           muting” means the performance of work functions  
3           using communications technologies, thereby elimi-  
4           nating or substantially reducing the need to com-  
5           mute to and from traditional worksites.

6           (5) FEDERAL EMPLOYEE.—The term “Federal  
7           employee” has the meaning provided the term “em-  
8           ployee” by section 2105 of title 5, United States  
9           Code.

10 **SEC. 1804. LIHEAP REPORT.**

11           Not later than 1 year after the date of enactment  
12 of this Act, the Secretary of Health and Human Services  
13 shall transmit to Congress a report on how the Low-In-  
14 come Home Energy Assistance Program could be used  
15 more effectively to prevent loss of life from extreme tem-  
16 peratures. In preparing such report, the Secretary shall  
17 consult with appropriate officials in all 50 States and the  
18 District of Columbia.

19 **SEC. 1805. OIL BYPASS FILTRATION TECHNOLOGY.**

20           The Secretary of Energy and the Administrator of  
21 the Environmental Protection Agency shall—

22           (1) conduct a joint study of the benefits of oil  
23           bypass filtration technology in reducing demand for  
24           oil and protecting the environment;



1           (2) examine the feasibility of using oil bypass  
2           filtration technology in Federal motor vehicle fleets;  
3           and

4           (3) include in such study, prior to any deter-  
5           mination of the feasibility of using oil bypass filtra-  
6           tion technology, the evaluation of products and var-  
7           ious manufacturers.

8   **SEC. 1806. TOTAL INTEGRATED THERMAL SYSTEMS.**

9           The Secretary of Energy shall—

10           (1) conduct a study of the benefits of total inte-  
11           grated thermal systems in reducing demand for oil  
12           and protecting the environment; and

13           (2) examine the feasibility of using total inte-  
14           grated thermal systems in Department of Defense  
15           and other Federal motor vehicle fleets.

16   **SEC. 1807. RELIABILITY AND CONSUMER PROTECTION AS-**  
17                           **SESSMENT.**

18           Not later than 5 years after the date of enactment  
19           of this Act, and each 5 years thereafter, the Federal En-  
20           ergy Regulatory Commission shall assess the effects of the  
21           exemption of electric cooperatives and government-owned  
22           utilities from Commission regulation under section 201(f)  
23           of the Federal Power Act. The assessment shall include  
24           any effects on—



1 (1) reliability of interstate electric transmission  
2 networks;

3 (2) benefit to consumers, and efficiency, of  
4 competitive wholesale electricity markets;

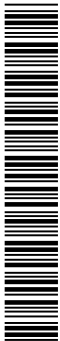
5 (3) just and reasonable rates for electricity con-  
6 sumers; and

7 (4) the ability of the Commission to protect  
8 electricity consumers.

9 If the Commission finds that the 201(f) exemption results  
10 in adverse effects on consumers or electric reliability, the  
11 Commission shall make appropriate recommendations to  
12 Congress pursuant to section 311 of the Federal Power  
13 Act.

14 **SEC. 1808. REPORT ON ENERGY INTEGRATION WITH LATIN**  
15 **AMERICA.**

16 The Secretary of Energy shall submit an annual re-  
17 port to the Committee on Energy and Commerce of the  
18 United States House of Representatives and to the Com-  
19 mittee on Energy and Natural Resources of the United  
20 States Senate concerning the status of energy export de-  
21 velopment in Latin America and efforts by the Secretary  
22 and other departments and agencies of the United States  
23 to promote energy integration with Latin America. The  
24 report shall contain a detailed analysis of the status of  
25 energy export development in Mexico and a description of



1 all significant efforts by the Secretary and other depart-  
2 ments and agencies to promote a constructive relationship  
3 with Mexico regarding the development of that nation's  
4 energy capacity. In particular this report shall outline ef-  
5 forts the Secretary and other departments and agencies  
6 have made to ensure that regulatory approval and over-  
7 sight of United States/Mexico border projects that result  
8 in the expansion of Mexican energy capacity are effectively  
9 coordinated across departments and with the Mexican gov-  
10 ernment.

11 **SEC. 1809. LOW-VOLUME GAS RESERVOIR STUDY.**

12 (a) STUDY.—The Secretary of Energy shall make a  
13 grant to an organization of oil and gas producing States,  
14 specifically those containing significant numbers of mar-  
15 ginal oil and natural gas wells, for conducting an annual  
16 study of low-volume natural gas reservoirs. Such organiza-  
17 tion shall work with the State geologist of each State being  
18 studied.

19 (b) CONTENTS.—The studies under this section  
20 shall—

21 (1) determine the status and location of mar-  
22 ginal wells and gas reservoirs;

23 (2) gather the production information of these  
24 marginal wells and reservoirs;





1           (3) estimate the remaining producible reserves  
2           based on variable pipeline pressures;

3           (4) locate low-pressure gathering facilities and  
4           pipelines;

5           (5) recommend incentives which will enable the  
6           continued production of these resources;

7           (6) produce maps and literature to disseminate  
8           to States to promote conservation of natural gas re-  
9           serves; and

10          (7) evaluate the amount of natural gas that is  
11          being wasted through the practice of venting or flar-  
12          ing of natural gas produced in association with  
13          crude oil well production.

14          (c) DATA ANALYSIS.—Data development and anal-  
15          ysis under this section shall be performed by an institution  
16          of higher education with GIS capabilities. If the organiza-  
17          tion receiving the grant under subsection (a) does not have  
18          GIS capabilities, such organization shall contract with one  
19          or more entities with—

20                (1) technological capabilities and resources to  
21                perform advanced image processing, GIS program-  
22                ming, and data analysis; and

23                (2) the ability to—

24                    (A) process remotely sensed imagery with  
25                    high spatial resolution;



1 (B) deploy global positioning systems;

2 (C) process and synthesize existing, vari-  
3 able-format gas well, pipeline, gathering facility,  
4 and reservoir data;

5 (D) create and query GIS databases with  
6 infrastructure location and attribute informa-  
7 tion;

8 (E) write computer programs to customize  
9 relevant GIS software;

10 (F) generate maps, charts, and graphs  
11 which summarize findings from data research  
12 for presentation to different audiences; and

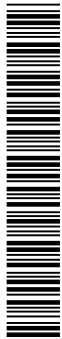
13 (G) deliver data in a variety of formats, in-  
14 cluding Internet Map Server for query and dis-  
15 play, desktop computer display, and access  
16 through handheld personal digital assistants.

17 (d) AUTHORIZATION OF APPROPRIATIONS.—There  
18 are authorized to be appropriated to the Secretary of En-  
19 ergy for carrying out this section—

20 (1) \$1,500,000 for fiscal year 2006; and

21 (2) \$450,000 for each of the fiscal years 2007  
22 through 2010.

23 (e) DEFINITIONS.—For purposes of this section, the  
24 term “GIS” means geographic information systems tech-



1 nology that facilitates the organization and management  
2 of data with a geographic component.

3 **SEC. 1810. INVESTIGATION OF GASOLINE PRICES.**

4 (a) INVESTIGATION.—Not later than 90 days after  
5 the date of enactment of this Act, the Federal Trade Com-  
6 mission shall conduct an investigation to determine if the  
7 price of gasoline is being artificially manipulated by reduc-  
8 ing refinery capacity or by any other form of market ma-  
9 nipulation or price gouging practices.

10 (b) EVALUATION AND ANALYSIS.—The Secretary  
11 shall direct the National Petroleum Council to conduct an  
12 evaluation and analysis to determine whether, and to what  
13 extent, environmental and other regulations affect new do-  
14 mestic refinery construction and significant expansion of  
15 existing refinery capacity.

16 (c) REPORTS TO CONGRESS.—

17 (1) INVESTIGATION.—On completion of the in-  
18 vestigation under subsection (a), the Federal Trade  
19 Commission shall submit to Congress a report that  
20 describes—

21 (A) the results of the investigation; and

22 (B) any recommendations of the Federal  
23 Trade Commission.

24 (2) EVALUATION AND ANALYSIS.—On comple-  
25 tion of the evaluation and analysis under subsection



1 (b), the Secretary shall submit to Congress a report  
2 that describes—

3 (A) the results of the evaluation and anal-  
4 ysis; and

5 (B) any recommendations of the National  
6 Petroleum Council.

7 **SEC. 1811. ALASKA NATURAL GAS PIPELINE.**

8 Not later than 180 days after the date of enactment  
9 of this Act, and every 180 days thereafter until the Alaska  
10 natural gas pipeline commences operation, the Federal  
11 Energy Regulatory Commission shall submit to Congress  
12 a report describing—

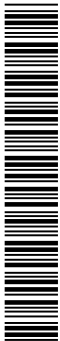
13 (1) the progress made in licensing and con-  
14 structing the pipeline; and

15 (2) any issue impeding that progress.

16 **SEC. 1812. COAL BED METHANE STUDY.**

17 (a) STUDY.—

18 (1) IN GENERAL.—The Secretary of the Inte-  
19 rior, in consultation with the Administrator of the  
20 Environmental Protection Agency, shall enter into  
21 an arrangement under which the National Academy  
22 of Sciences shall conduct a study on the effect of  
23 coalbed natural gas production on surface and  
24 ground water resources, including ground water



1 aquifers, in the States of Montana, Wyoming, Colo-  
2 rado, New Mexico, North Dakota, and Utah.

3 (2) MATTERS TO BE ADDRESSED.—The study  
4 shall address the effectiveness of—

5 (A) the management of coal bed methane  
6 produced water;

7 (B) the use of best management practices;  
8 and

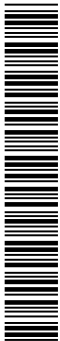
9 (C) various production techniques for coal  
10 bed methane natural gas in minimizing impacts  
11 on water resources.

12 (b) DATA ANALYSIS.—The study shall analyze avail-  
13 able hydrologic, geologic and water quality data, along  
14 with—

15 (1) production techniques, produced water man-  
16 agement techniques, best management practices, and  
17 other factors that can mitigate effects of coal bed  
18 methane development;

19 (2) the costs associated with mitigation tech-  
20 niques;

21 (3) effects on surface or ground water re-  
22 sources, including drinking water, associated with  
23 surface or subsurface disposal of waters produced  
24 during extraction of coal bed methane; and



1           (4) any other significant effects on surface or  
2           ground water resources associated with production  
3           of coal-bed methane.

4           (c) RECOMMENDATIONS.—The study shall analyze  
5           the effectiveness of current mitigation practices of coal bed  
6           methane produced water handling in relation to existing  
7           Federal and State laws and regulations, and make rec-  
8           ommendations as to changes, if any, to Federal law nec-  
9           essary to address adverse impacts to surface or ground  
10          water resources associated with coal bed methane develop-  
11          ment.

12          (d) COMPLETION OF STUDY.—The National Acad-  
13          emy of Sciences shall submit the findings and rec-  
14          ommendations of the study to the Secretary of the Interior  
15          and the Administrator of the Environmental Protection  
16          Agency within 12 months after the date of enactment of  
17          this Act, and shall upon completion make the results of  
18          the study available to the public.

19          (e) REPORT TO CONGRESS.—The Secretary of the In-  
20          terior and the Administrator of the Environmental Protec-  
21          tion Agency, after consulting with States, shall report to  
22          the Congress within 6 months after receiving the results  
23          of the study on—

24                 (1) the findings and recommendations of the  
25                 study;



1           (2) the agreement or disagreement of the Sec-  
2           retary of the Interior and the Administrator of the  
3           Environmental Protection Agency with each of its  
4           findings and recommendations; and

5           (3) any recommended changes in funding to ad-  
6           dress the effects of coal bed methane production on  
7           surface and ground water resources.

8   **SEC. 1813. BACKUP FUEL CAPABILITY STUDY.**

9           (a) STUDY.—

10           (1) IN GENERAL.—The Secretary shall conduct  
11           a study of the effect of obtaining and maintaining  
12           liquid and other fuel backup capability at—

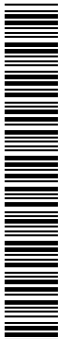
13                   (A) gas-fired power generation facilities;  
14                   and

15                   (B) other gas-fired industrial facilities.

16           (2) CONTENTS.—The study under paragraph  
17           (1) shall address—

18                   (A) the costs and benefits of adding a dif-  
19                   ferent fuel capability to a power gas-fired power  
20                   generating or industrial facility, taking into  
21                   consideration regional differences;

22                   (B) methods of the Federal Government  
23                   and State governments to encourage gas-fired  
24                   power generators and industries to develop the



1 capability to power the facilities using a backup  
2 fuel;

3 (C) the effect on the supply and cost of  
4 natural gas of—

5 (i) a balanced portfolio of fuel choices  
6 in power generation and industrial applica-  
7 tions; and

8 (ii) State regulations that permit  
9 agencies in the State to carry out policies  
10 that encourage the use of other backup  
11 fuels in gas-fired power generation; and

12 (D) changes required in the Clean Air Act  
13 (42 U.S.C. 7401 et seq.) to allow natural gas  
14 generators to add clean backup fuel capabilities.

15 (b) REPORT TO CONGRESS.—Not later than 1 year  
16 after the date of enactment of this Act, the Secretary shall  
17 submit to Congress a report on the results of the study  
18 under subsection (a), including recommendations regard-  
19 ing future activity of the Federal Government relating to  
20 backup fuel capability.

21 **SEC. 1814. INDIAN LAND RIGHTS-OF-WAY.**

22 (a) STUDY.—

23 (1) IN GENERAL.—The Secretary and the Sec-  
24 retary of the Interior (referred to in this section as  
25 the “Secretaries”) shall jointly conduct a study of





1 issues regarding energy rights-of-way on tribal land  
2 (as defined in section 2601 of the Energy Policy Act  
3 of 1992 (as amended by section 503)) (referred to  
4 in this section as “tribal land”).

5 (2) CONSULTATION.—In conducting the study  
6 under paragraph (1), the Secretaries shall consult  
7 with Indian tribes, the energy industry, appropriate  
8 governmental entities, and affected businesses and  
9 consumers.

10 (b) REPORT.—Not later than 1 year after the date  
11 of enactment of this Act, the Secretaries shall submit to  
12 Congress a report on the findings of the study,  
13 including—

14 (1) an analysis of historic rates of compensation  
15 paid for energy rights-of-way on tribal land;

16 (2) recommendations for appropriate standards  
17 and procedures for determining fair and appropriate  
18 compensation to Indian tribes for grants, expan-  
19 sions, and renewals of energy rights-of-way on tribal  
20 land;

21 (3) an assessment of the tribal self-determina-  
22 tion and sovereignty interests implicated by applica-  
23 tions for the grant, expansion, or renewal of energy  
24 rights-of-way on tribal land; and



1 (4) an analysis of relevant national energy  
2 transportation policies relating to grants, expan-  
3 sions, and renewals of energy rights-of-way on tribal  
4 land.

5 **SEC. 1815. MOBILITY OF SCIENTIFIC AND TECHNICAL PER-**  
6 **SONNEL.**

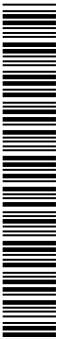
7 Not later than 2 years after the date of enactment  
8 of this section, the Secretary shall transmit to Congress  
9 a report that—

10 (1) identifies any policies or procedures of a  
11 contractor operating a National Laboratory or sin-  
12 gle-purpose research facility that create disincentives  
13 to the temporary or permanent transfer of scientific  
14 and technical personnel among the contractor-oper-  
15 ated National Laboratories or contractor-operated  
16 single-purpose research facilities; and

17 (2) provides recommendations for improving  
18 interlaboratory exchange of scientific and technical  
19 personnel.

20 **SEC. 1816. INTERAGENCY REVIEW OF COMPETITION IN THE**  
21 **WHOLESALE AND RETAIL MARKETS FOR**  
22 **ELECTRIC ENERGY.**

23 (a) **TASK FORCE.**—There is established an inter-  
24 agency task force, to be known as the “Electric Energy



1 Market Competition Task Force” (referred to in this sec-  
2 tion as the “task force”), consisting of 5 members—

3 (1) 1 of whom shall be an employee of the De-  
4 partment of Justice, to be appointed by the Attorney  
5 General of the United States;

6 (2) 1 of whom shall be an employee of the Fed-  
7 eral Energy Regulatory Commission, to be appointed  
8 by the Chairperson of that Commission;

9 (3) 1 of whom shall be an employee of the Fed-  
10 eral Trade Commission, to be appointed by the  
11 Chairperson of that Commission;

12 (4) 1 of whom shall be an employee of the De-  
13 partment, to be appointed by the Secretary; and

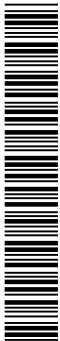
14 (5) 1 of whom shall be an employee of the  
15 Rural Utilities Service, to be appointed by the Sec-  
16 retary of Agriculture.

17 (b) STUDY AND REPORT.—

18 (1) STUDY.—The task force shall conduct a  
19 study and analysis of competition within the whole-  
20 sale and retail market for electric energy in the  
21 United States.

22 (2) REPORT.—

23 (A) FINAL REPORT.—Not later than 1  
24 year after the date of enactment of this Act, the  
25 task force shall submit to Congress a final re-



1 port on the findings of the task force under  
2 paragraph (1).

3 (B) PUBLIC COMMENT.—Not later than  
4 the date that is 60 days before a final report  
5 is submitted to Congress under subparagraph  
6 (A), the task force shall—

7 (i) publish in the Federal Register a  
8 draft of the report; and

9 (ii) provide an opportunity for public  
10 comment on the report.

11 (c) CONSULTATION.—In conducting the study under  
12 subsection (b), the task force shall consult with and solicit  
13 comments from any advisory entity of the task force, the  
14 States, representatives of the electric power industry, and  
15 the public.

16 **SEC. 1817. STUDY OF RAPID ELECTRICAL GRID RESTORA-**  
17 **TION.**

18 (a) STUDY.—

19 (1) IN GENERAL.—The Secretary shall conduct  
20 a study of the benefits of using mobile transformers  
21 and mobile substations to rapidly restore electrical  
22 service to areas subjected to blackouts as a result  
23 of—

24 (A) equipment failure;

25 (B) natural disasters;



1 (C) acts of terrorism; or

2 (D) war.

3 (2) CONTENTS.—The study under paragraph

4 (1) shall contain an analysis of—

5 (A) the feasibility of using mobile trans-  
6 formers and mobile substations to reduce de-  
7 pendence on foreign entities for key elements of  
8 the electrical grid system of the United States;

9 (B) the feasibility of using mobile trans-  
10 formers and mobile substations to rapidly re-  
11 store electrical power to—

12 (i) military bases;

13 (ii) the Federal Government;

14 (iii) communications industries;

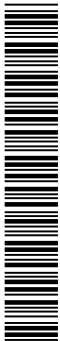
15 (iv) first responders; and

16 (v) other critical infrastructures, as  
17 determined by the Secretary;

18 (C) the quantity of mobile transformers  
19 and mobile substations necessary—

20 (i) to eliminate dependence on foreign  
21 sources for key electrical grid components  
22 in the United States;

23 (ii) to rapidly deploy technology to  
24 fully restore full electrical service to  
25 prioritized Governmental functions; and



1 (iii) to identify manufacturing sources  
2 in existence on the date of enactment of  
3 this Act that have previously manufactured  
4 specialized mobile transformer or mobile  
5 substation products for Federal agencies.

6 (b) REPORT.—

7 (1) IN GENERAL.—Not later than 1 year after  
8 the date of enactment of this Act, the Secretary  
9 shall submit to the President and Congress a report  
10 on the study under subsection (a).

11 (2) INCLUSION.—The report shall include a de-  
12 scription of the results of the analysis under sub-  
13 section (a)(2).

14 **SEC. 1818. STUDY OF DISTRIBUTED GENERATION.**

15 (a) STUDY.—

16 (1) IN GENERAL.—

17 (A) POTENTIAL BENEFITS.—The Sec-  
18 retary, in consultation with the Federal Energy  
19 Regulatory Commission, shall conduct a study  
20 of the potential benefits of cogeneration and  
21 small power production.

22 (B) RECIPIENTS.—The benefits described  
23 in subparagraph (A) include benefits that are  
24 received directly or indirectly by—



1 (i) an electricity distribution or trans-  
2 mission service provider;

3 (ii) other customers served by an elec-  
4 tricity distribution or transmission service  
5 provider; and

6 (iii) the general public in the area  
7 served by the public utility in which the co-  
8 generator or small power producer is lo-  
9 cated.

10 (2) INCLUSIONS.—The study shall include an  
11 analysis of—

12 (A) the potential benefits of—

13 (i) increased system reliability;

14 (ii) improved power quality;

15 (iii) the provision of ancillary services;

16 (iv) reduction of peak power require-  
17 ments through onsite generation;

18 (v) the provision of reactive power or  
19 volt-ampere reactives;

20 (vi) an emergency supply of power;

21 (vii) offsets to investments in genera-  
22 tion, transmission, or distribution facilities  
23 that would otherwise be recovered through  
24 rates;



1 (viii) diminished land use effects and  
2 right-of-way acquisition costs; and

3 (ix) reducing the vulnerability of a  
4 system to terrorism; and

5 (B) any rate-related issue that may impede  
6 or otherwise discourage the expansion of cogen-  
7 eration and small power production facilities,  
8 including a review of whether rates, rules, or  
9 other requirements imposed on the facilities are  
10 comparable to rates imposed on customers of  
11 the same class that do not have cogeneration or  
12 small power production.

13 (3) VALUATION OF BENEFITS.—In carrying out  
14 the study, the Secretary shall determine an appro-  
15 priate method of valuing potential benefits under  
16 varying circumstances for individual cogeneration or  
17 small power production units.

18 (b) REPORT.—Not later than 18 months after the  
19 date of enactment of this Act, the Secretary shall—

20 (1) complete the study;

21 (2) provide an opportunity for public comment  
22 on the results of the study; and

23 (3) submit to the President and Congress a re-  
24 port describing—

25 (A) the results of the study; and





1 (B) information relating to the public com-  
2 ments received under paragraph (2).

3 (c) PUBLICATION.—After submission of the report  
4 under subsection (b) to the President and Congress, the  
5 Secretary shall publish the report.

6 **SEC. 1819. NATURAL GAS SUPPLY SHORTAGE REPORT.**

7 (a) IN GENERAL.—Not later than 180 days after the  
8 date of enactment of this Act, the Secretary shall submit  
9 to Congress a report on natural gas supplies and demand.

10 (b) PURPOSE.—The purpose of the report under sub-  
11 section (a) is to develop recommendations for achieving  
12 a balance between natural gas supply and demand in order  
13 to—

14 (1) provide residential consumers with natural  
15 gas at reasonable and stable prices;

16 (2) accommodate long-term maintenance and  
17 growth of domestic natural gas-dependent industrial,  
18 manufacturing, and commercial enterprises;

19 (3) facilitate the attainment of national ambient  
20 air quality standards under the Clean Air Act (43  
21 U.S.C. 7401 et seq.);

22 (4) achieve continued progress in reducing the  
23 emissions associated with electric power generation;  
24 and



1 (5) support the development of the preliminary  
2 phases of hydrogen-based energy technologies.

3 (c) COMPREHENSIVE ANALYSIS.—The report shall  
4 include a comprehensive analysis of, for the period begin-  
5 ning on January 1, 2004, and ending on December 31,  
6 2015, natural gas supply and demand in the United  
7 States, including—

8 (1) estimates of annual domestic demand for  
9 natural gas, taking into consideration the effect of  
10 Federal policies and actions that are likely to in-  
11 crease or decrease the demand for natural gas;

12 (2) projections of annual natural gas supplies,  
13 from domestic and foreign sources, under Federal  
14 policies in existence on the date of enactment of this  
15 Act;

16 (3) an identification of estimated natural gas  
17 supplies that are not available under those Federal  
18 policies;

19 (4) scenarios for decreasing natural gas demand  
20 and increasing natural gas supplies that compare  
21 the relative economic and environmental impacts of  
22 Federal policies that—

23 (A) encourage or require the use of natural  
24 gas to meet air quality, carbon dioxide emission  
25 reduction, or energy security goals;



1 (B) encourage or require the use of energy  
2 sources other than natural gas, including coal,  
3 nuclear, and renewable sources;

4 (C) support technologies to develop alter-  
5 native sources of natural gas and synthetic gas,  
6 including coal gasification technologies;

7 (D) encourage or require the use of energy  
8 conservation and demand side management  
9 practices; and

10 (E) affect access to domestic natural gas  
11 supplies; and

12 (5) recommendations for Federal actions to  
13 achieve the purposes described in subsection (b), in-  
14 cluding recommendations that—

15 (A) encourage or require the use of energy  
16 sources other than natural gas, including coal,  
17 nuclear, and renewable sources;

18 (B) encourage or require the use of energy  
19 conservation or demand side management prac-  
20 tices;

21 (C) support technologies for the develop-  
22 ment of alternative sources of natural gas and  
23 synthetic gas, including coal gasification tech-  
24 nologies; and



1 (D) would improve access to domestic nat-  
2 ural gas supplies.

3 (d) CONSULTATION.—In preparing the report under  
4 subsection (a), the Secretary shall consult with—

5 (1) experts in natural gas supply and demand;  
6 and

7 (2) representatives of—

8 (A) State and local governments;

9 (B) tribal organizations; and

10 (C) consumer and other organizations.

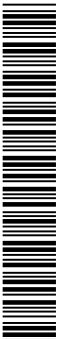
11 (e) HEARINGS.—In preparing the report under sub-  
12 section (a), the Secretary may hold public hearings and  
13 provide other opportunities for public comment, as the  
14 Secretary considers appropriate.

15 **SEC. 1820. HYDROGEN PARTICIPATION STUDY.**

16 Not later than 1 year after the date of enactment  
17 of this Act, the Secretary shall submit to Congress a re-  
18 port evaluating methodologies to ensure the widest partici-  
19 pation practicable in setting goals and milestones under  
20 the hydrogen program of the Department, including inter-  
21 national participants.

22 **SEC. 1821. OVERALL EMPLOYMENT IN A HYDROGEN ECON-**  
23 **OMY.**

24 (a) STUDY.—



1 (1) IN GENERAL.—The Secretary shall carry  
2 out a study of the likely effects of a transition to a  
3 hydrogen economy on overall employment in the  
4 United States.

5 (2) CONTENTS.—In completing the study, the  
6 Secretary shall take into consideration—

7 (A) the replacement effects of new goods  
8 and services;

9 (B) international competition;

10 (C) workforce training requirements;

11 (D) multiple possible fuel cycles, including  
12 usage of raw materials;

13 (E) rates of market penetration of tech-  
14 nologies; and

15 (F) regional variations based on geog-  
16 raphy.

17 (b) REPORT.—Not later than 18 months after the  
18 date of enactment of this Act, the Secretary shall submit  
19 to Congress a report describing the findings, conclusions,  
20 and recommendations of the study under subsection (a).

21 **SEC. 1822. STUDY OF BEST MANAGEMENT PRACTICES FOR**  
22 **ENERGY RESEARCH AND DEVELOPMENT**  
23 **PROGRAMS.**

24 (a) IN GENERAL.—The Secretary shall enter into an  
25 arrangement with the National Academy of Public Admin-



1 istration under which the Academy shall conduct a study  
2 to assess management practices for research, development,  
3 and demonstration programs at the Department.

4 (b) SCOPE OF THE STUDY.—The study shall  
5 consider—

6 (1) management practices that act as barriers  
7 between the Office of Science and offices conducting  
8 mission-oriented research;

9 (2) recommendations for management practices  
10 that would improve coordination and bridge the in-  
11 novation gap between the Office of Science and of-  
12 fices conducting mission-oriented research;

13 (3) the applicability of the management prac-  
14 tices used by the Department of Defense Advanced  
15 Research Projects Agency to research programs at  
16 the Department;

17 (4) the advisability of creating an agency within  
18 the Department modeled after the Department of  
19 Defense Advanced Research Projects Agency;

20 (5) recommendations for management practices  
21 that could best encourage innovative research and  
22 efficiency at the Department; and

23 (6) any other relevant considerations.

24 (c) REPORT.—Not later than 18 months after the  
25 date of enactment of this Act, the Secretary shall submit



1 to Congress a report on the study conducted under this  
2 section.

3 **SEC. 1823. EFFECT OF ELECTRICAL CONTAMINANTS ON RE-**  
4 **LIABILITY OF ENERGY PRODUCTION SYS-**  
5 **TEMS.**

6 Not later than 180 days after the date of enactment  
7 of this Act, the Secretary shall enter into a contract with  
8 the National Academy of Sciences under which the Na-  
9 tional Academy of Sciences shall determine the effect that  
10 electrical contaminants (such as tin whiskers) may have  
11 on the reliability of energy production systems, including  
12 nuclear energy.

13 **SEC. 1824. ALTERNATIVE FUELS REPORTS.**

14 (a) IN GENERAL.—Not later than 1 year after the  
15 date of enactment of this Act, the Secretary shall submit  
16 to Congress reports on the potential for each of biodiesel  
17 and hythane to become major, sustainable, alternative  
18 fuels.

19 (b) BIODIESEL REPORT.—The report relating to bio-  
20 diesel submitted under subsection (a) shall—

21 (1) provide a detailed assessment of—

22 (A) potential biodiesel markets and manu-  
23 facturing capacity; and

24 (B) environmental and energy security  
25 benefits with respect to the use of biodiesel;



1           (2) identify any impediments, especially in in-  
2           frastructure needed for production, distribution, and  
3           storage, to biodiesel becoming a substantial source of  
4           fuel for conventional diesel and heating oil applica-  
5           tions;

6           (3) identify strategies to enhance the commer-  
7           cial deployment of biodiesel; and

8           (4) include an examination and recommenda-  
9           tions, as appropriate, of the ways in which biodiesel  
10          may be modified to be a cleaner-burning fuel.

11          (c) HYTHANE REPORT.—The report relating to  
12          hythane submitted under subsection (a) shall—

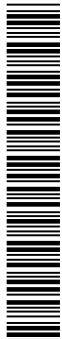
13               (1) provide a detailed assessment of potential  
14               hythane markets and the research and development  
15               activities that are necessary to facilitate the commer-  
16               cialization of hythane as a competitive, environ-  
17               mentally friendly transportation fuel;

18               (2) address—

19                       (A) the infrastructure necessary to  
20                       produce, blend, distribute, and store hythane  
21                       for widespread commercial purposes; and

22                       (B) other potential market barriers to the  
23                       commercialization of hythane;

24               (3) examine the viability of producing hydrogen  
25               using energy-efficient, environmentally friendly





1 methods so that the hydrogen can be blended with  
2 natural gas to produce hythane; and

3 (4) include an assessment of the modifications  
4 that would be required to convert compressed nat-  
5 ural gas vehicle engines to engines that use hythane  
6 as fuel.

7 (d) GRANTS FOR REPORT COMPLETION.—The Sec-  
8 retary may use such sums as are available to the Secretary  
9 to provide, to 1 or more colleges or universities selected  
10 by the Secretary, grants for use in carrying out research  
11 to assist the Secretary in preparing the reports required  
12 to be submitted under subsection (a).

13 **SEC. 1825. FINAL ACTION ON REFUNDS FOR EXCESSIVE**  
14 **CHARGES.**

15 (a) FINDINGS.—Congress finds that—

16 (1) the State of California experienced an en-  
17 ergy crisis;

18 (2) FERC issued an order requiring a refund of  
19 the portion of charges on the sale of electric energy  
20 that was unjust or unreasonable during that crisis;

21 (3) as of the date of enactment of this Act,  
22 none of the refunds ordered to date have been re-  
23 ceived by the State of California; and

24 (4) the Commission has ruled that the State of  
25 California is entitled to approximately \$3 billion in



1 refunds; the State of California maintains that that  
2 \$8.9 billion in refunds is owed.

3 (b) FERC shall—

4 (1) seek to conclude its investigation into the  
5 unjust or unreasonable charges incurred by Cali-  
6 fornia during the 2000–2001 electricity crisis as  
7 soon as possible;

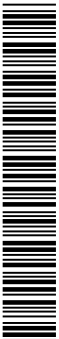
8 (2) seek to ensure that refunds the Commission  
9 determines are owed to the State of California are  
10 paid to the State of California; and

11 (3) submit to Congress a report by December  
12 31, 2005, describing the actions taken by the Com-  
13 mission to date under this section and timetables for  
14 further actions.

15 **SEC. 1826. FUEL CELL AND HYDROGEN TECHNOLOGY**  
16 **STUDY.**

17 (a) FINDINGS.—Congress finds that—

18 (1) according to the National Academy of  
19 Sciences, “Greenhouse gases are accumulating in  
20 Earth’s atmosphere as a result of human activities,  
21 causing surface air temperatures and subsurface  
22 ocean temperatures to rise . . . Human-induced  
23 warming and associated sea level rises are expected  
24 to continue through the 21st century.”;

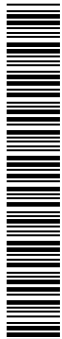


1           (2) in 2001, the Intergovernmental Panel on  
2           Climate Change (IPCC) concluded that the average  
3           temperature of the Earth can be expected to rise be-  
4           tween 2.5 and 10.4 degrees Fahrenheit in this cen-  
5           tury and “there is new and stronger evidence that  
6           most of the warming observed over the last 50 years  
7           is attributable to human activities”;

8           (3) the National Academy of Sciences has stat-  
9           ed that “the IPCC’s conclusion that most of the ob-  
10          served warming of the last 50 years is likely to have  
11          been due to the increase of greenhouse gas con-  
12          centrations accurately reflects the current thinking  
13          of the scientific community on this issue” and that  
14          “there is general agreement that the observed warm-  
15          ing is real and particularly strong within the past  
16          twenty years”;

17          (4) a significant Federal investment toward the  
18          development of fuel cell technologies and the transi-  
19          tion from petroleum to hydrogen in vehicles could  
20          significantly contribute to the reduction of carbon di-  
21          oxide emissions by reducing fuel consumption;

22          (5) a massive infusion of resources and leader-  
23          ship from the Federal Government would be needed  
24          to create the necessary fuel cell technologies that



1 provide alternatives to petroleum and the more effi-  
2 cient use of energy; and

3 (6) the Federal Government would need to com-  
4 mit to developing, in conjunction with private indus-  
5 try and academia, advanced vehicle technologies and  
6 the necessary hydrogen infrastructure to provide al-  
7 ternatives to petroleum.

8 (b) STUDY.—

9 (1) IN GENERAL.—As soon as practicable after  
10 the date of enactment of this Act, the Secretary  
11 shall enter into a contract with the National Acad-  
12 emy of Sciences and the National Research Council  
13 to carry out a study of fuel cell technologies that  
14 provides a budget roadmap for the development of  
15 fuel cell technologies and the transition from petro-  
16 leum to hydrogen in a significant percentage of the  
17 vehicles sold by 2020.

18 (2) REQUIREMENTS.—In carrying out the  
19 study, the National Academy of Sciences and the  
20 National Research Council shall—

21 (A) establish as a goal the maximum per-  
22 centage practicable of vehicles that the National  
23 Academy of Sciences and the National Research  
24 Council determines can be fueled by hydrogen  
25 by 2020;



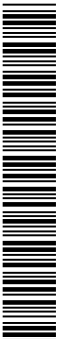
1 (B) determine the amount of Federal and  
2 private funding required to meet the goal estab-  
3 lished under subparagraph (A);

4 (C) determine what actions are required to  
5 meet the goal established under subparagraph  
6 (A);

7 (D) examine the need for expanded and  
8 enhanced Federal research and development  
9 programs, changes in regulations, grant pro-  
10 grams, partnerships between the Federal Gov-  
11 ernment and industry, private sector invest-  
12 ments, infrastructure investments by the Fed-  
13 eral Government and industry, educational and  
14 public information initiatives, and Federal and  
15 State tax incentives to meet the goal established  
16 under subparagraph (A);

17 (E) consider whether other technologies  
18 would be less expensive or could be more quick-  
19 ly implemented than fuel cell technologies to  
20 achieve significant reductions in carbon dioxide  
21 emissions;

22 (F) take into account any reports relating  
23 to fuel cell technologies and hydrogen-fueled ve-  
24 hicles, including—



1 (i) the report prepared by the Na-  
2 tional Academy of Engineering and the  
3 National Research Council in 2004 entitled  
4 “Hydrogen Economy: Opportunities, Costs,  
5 Barriers, and R&D Needs”; and

6 (ii) the report prepared by the U.S.  
7 Fuel Cell Council in 2003 entitled “Fuel  
8 Cells and Hydrogen: The Path Forward”;

9 (G) consider the challenges, difficulties,  
10 and potential barriers to meeting the goal es-  
11 tablished under subparagraph (A); and

12 (H) with respect to the budget roadmap—

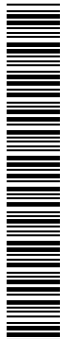
13 (i) specify the amount of funding re-  
14 quired on an annual basis from the Fed-  
15 eral Government and industry to carry out  
16 the budget roadmap; and

17 (ii) specify the advantages and dis-  
18 advantages to moving toward the transi-  
19 tion to hydrogen in vehicles in accordance  
20 with the timeline established by the budget  
21 roadmap.

22 **SEC. 1827. PASSIVE SOLAR TECHNOLOGIES.**

23 (a) DEFINITION OF PASSIVE SOLAR TECHNOLOGY.—

24 In this section, the term “passive solar technology” means  
25 a passive solar technology, including daylighting, that—



1 (1) is used exclusively to avoid electricity use;  
2 and

3 (2) can be metered to determine energy savings.

4 (b) STUDY.—The Secretary shall conduct a study to  
5 determine—

6 (1) the range of levelized costs of avoided elec-  
7 tricity for passive solar technologies;

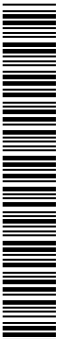
8 (2) the quantity of electricity displaced using  
9 passive solar technologies in the United States as of  
10 the date of enactment of this Act; and

11 (3) the projected energy savings from passive  
12 solar technologies in 5, 10, 15, 20, and 25 years  
13 after the date of enactment of this Act if—

14 (A) incentives comparable to the incentives  
15 provided for electricity generation technologies  
16 were provided for passive solar technologies;  
17 and

18 (B) no new incentives for passive solar  
19 technologies were provided.

20 (c) REPORT.—Not later than 120 days after the date  
21 of enactment of this Act, the Secretary shall submit to  
22 Congress a report that describes the results of the study  
23 under subsection (b).



1 **SEC. 1828. STUDY OF LINK BETWEEN ENERGY SECURITY**  
2 **AND INCREASES IN VEHICLE MILES TRAV-**  
3 **ELED.**

4 (a) **IN GENERAL.**—The Secretary shall enter into an  
5 arrangement with the National Academy of Sciences  
6 under which the Academy shall conduct a study to assess  
7 the implications on energy use and efficiency of land devel-  
8 opment patterns in the United States.

9 (b) **SCOPE.**—The study shall consider—

10 (1) the correlation, if any, between land devel-  
11 opment patterns and increases in vehicle miles trav-  
12 eled;

13 (2) whether petroleum use in the transportation  
14 sector can be reduced through changes in the design  
15 of development patterns;

16 (3) the potential benefits of—

17 (A) information and education programs  
18 for State and local officials (including planning  
19 officials) on the potential for energy savings  
20 through planning, design, development, and in-  
21 frastructure decisions;

22 (B) incorporation of location efficiency  
23 models in transportation infrastructure plan-  
24 ning and investments; and

25 (C) transportation policies and strategies  
26 to help transportation planners manage the de-





1           mand for the number and length of vehicle  
2           trips, including trips that increase the viability  
3           of other means of travel; and

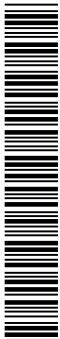
4           (4) such other considerations relating to the  
5           study topic as the National Academy of Sciences  
6           finds appropriate.

7           (c) REPORT.—Not later than 2 years after the date  
8           of enactment of this Act, the National Academy of  
9           Sciences shall submit to the Secretary and Congress a re-  
10          port on the study conducted under this section.

11   **SEC. 1829. SCIENCE STUDY ON CUMULATIVE IMPACTS OF**  
12                           **MULTIPLE OFFSHORE LIQUEFIED NATURAL**  
13                           **GAS FACILITIES.**

14          (a) IN GENERAL.—The Secretary (in consultation  
15          with the National Oceanic Atmospheric Administration,  
16          the Commandant of the Coast Guard, affected recreational  
17          and commercial fishing industries, and affected energy  
18          and transportation stakeholders) shall carry out a study  
19          and compile existing science (including studies and data)  
20          to determine the risks or benefits presented by cumulative  
21          impacts of multiple offshore liquefied natural gas facilities  
22          reasonably assumed to be constructed in an area of the  
23          Gulf of Mexico using the open-rack vaporization system.

24          (b) ACCURACY.—In carrying out subsection (a), the  
25          Secretary shall verify the accuracy of available science and



1 develop a science-based evaluation of significant short-  
2 term and long-term cumulative impacts, both adverse and  
3 beneficial, of multiple offshore liquefied natural gas facili-  
4 ties reasonably assumed to be constructed in an area of  
5 the Gulf of Mexico using or proposing the open-rack va-  
6 porization system on the fisheries and marine populations  
7 in the vicinity of the facility.

8 **SEC. 1830. ENERGY AND WATER SAVING MEASURES IN CON-**  
9 **GRESSIONAL BUILDINGS.**

10 (a) IN GENERAL.—The Architect of the Capitol, as  
11 part of the process of updating the Master Plan Study  
12 for the Capitol complex, shall—

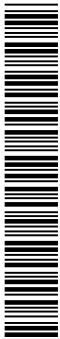
13 (1) carry out a study to evaluate the energy in-  
14 frastructure of the Capitol complex to determine  
15 how to augment the infrastructure to become more  
16 energy efficient—

17 (A) by using unconventional and renewable  
18 energy resources;

19 (B) by—

20 (i) incorporating new technologies to  
21 implement effective green building solu-  
22 tions;

23 (ii) adopting computer-based building  
24 management systems; and



1 (iii) recommending strategies based on  
2 end-user behavioral changes to implement  
3 low-cost environmental gains; and

4 (C) in a manner that would enable the  
5 Capitol complex to have reliable utility service  
6 in the event of power fluctuations, shortages, or  
7 outages;

8 (2) carry out a study to explore the feasibility  
9 of installing energy and water conservation measures  
10 on the rooftop of the Dirksen Senate Office Build-  
11 ing, including the area directly above the food serv-  
12 ice facilities in the center of the building, including  
13 the installation of—

14 (A) a vegetative covering area, using native  
15 species to the maximum extent practicable, to—

16 (i) insulate and increase the energy  
17 efficiency of the building;

18 (ii) reduce precipitation runoff and  
19 conserve water for landscaping or other  
20 uses;

21 (iii) increase, and provide more effi-  
22 cient use of, available outdoor space  
23 through management of the rooftop of the  
24 center of the building as a park or garden  
25 area for occupants of the building; and



1 (iv) improve the aesthetics of the  
2 building; and

3 (B) onsite renewable energy and other  
4 state-of-the-art technologies to—

5 (i) improve the energy efficiency and  
6 energy security of the building or the Cap-  
7 itol complex by providing additional or  
8 backup sources of power in the event of a  
9 power shortage or other emergency;

10 (ii) reduce the use of resources by the  
11 building; or

12 (iii) enhance worker productivity; and

13 (C) not later than 180 days after the date  
14 of enactment of this Act, submit to Congress a  
15 report describing the findings and recommenda-  
16 tions of the study under subparagraph (B).

17 (b) **AUTHORIZATION OF APPROPRIATIONS.**—There is  
18 authorized to be appropriated to the Architect of the Cap-  
19 itol to carry out this section \$2,000,000 for each of fiscal  
20 years 2006 through 2010.

21 **SEC. 1831. STUDY OF AVAILABILITY OF SKILLED WORKERS.**

22 (a) **IN GENERAL.**—The Secretary shall enter into an  
23 arrangement with the National Academy of Sciences  
24 under which the National Academy of Sciences shall con-  
25 duct a study of the short-term and long-term availability



1 of skilled workers to meet the energy and mineral security  
2 requirements of the United States.

3 (b) INCLUSIONS.—The study shall include an analysis  
4 of—

5 (1) the need for and availability of workers for  
6 the oil, gas, and mineral industries;

7 (2) the availability of skilled labor at both entry  
8 level and more senior levels; and

9 (3) recommendations for future actions needed  
10 to meet future labor requirements.

11 (c) REPORT.—Not later than 2 years after the date  
12 of enactment of this Act, the Secretary shall submit to  
13 Congress a report that describes the results of the study.

14 **SEC. 1832. REVIEW OF ENERGY POLICY ACT OF 1992 PRO-**  
15 **GRAMS.**

16 (a) IN GENERAL.—Not later than 180 days after the  
17 date of enactment of this section, the Secretary of Energy  
18 shall complete a study to determine the effect that titles  
19 III, IV, and V of the Energy Policy Act of 1992 (42  
20 U.S.C. 13211 et seq.) have had on—

21 (1) the development of alternative fueled vehicle  
22 technology;

23 (2) the availability of that technology in the  
24 market; and

25 (3) the cost of alternative fueled vehicles.



1 (b) TOPICS.—As part of the study under subsection  
2 (a), the Secretary shall specifically identify—

3 (1) the number of alternative fueled vehicles ac-  
4 quired by fleets or covered persons required to ac-  
5 quire alternative fueled vehicles;

6 (2) the quantity, by type, of alternative fuel ac-  
7 tually used in alternative fueled vehicles acquired by  
8 fleets or covered persons;

9 (3) the quantity of petroleum displaced by the  
10 use of alternative fuels in alternative fueled vehicles  
11 acquired by fleets or covered persons;

12 (4) the direct and indirect costs of compliance  
13 with requirements under titles III, IV, and V of the  
14 Energy Policy Act of 1992 (42 U.S.C. 13211 et  
15 seq.), including—

16 (A) vehicle acquisition requirements im-  
17 posed on fleets or covered persons;

18 (B) administrative and recordkeeping ex-  
19 penses;

20 (C) fuel and fuel infrastructure costs;

21 (D) associated training and employee ex-  
22 penses; and

23 (E) any other factors or expenses the Sec-  
24 retary determines to be necessary to compile re-  
25 liable estimates of the overall costs and benefits



1 of complying with programs under those titles  
2 for fleets, covered persons, and the national  
3 economy;

4 (5) the existence of obstacles preventing compli-  
5 ance with vehicle acquisition requirements and in-  
6 creased use of alternative fuel in alternative fueled  
7 vehicles acquired by fleets or covered persons; and

8 (6) the projected impact of amendments to the  
9 Energy Policy Act of 1992 made by this title.

10 (c) REPORT.—Upon completion of the study under  
11 this section, the Secretary shall submit to Congress a re-  
12 port that describes the results of the study and includes  
13 any recommendations of the Secretary for legislative or  
14 administrative changes concerning the alternative fueled  
15 vehicle requirements under titles III, IV and V of the En-  
16 ergy Policy Act of 1992 (42 U.S.C. 13211 et seq.).

17 **SEC. 1833. STUDY OF FEASIBILITY AND EFFECTS OF RE-**  
18 **DUCING USE OF FUEL FOR AUTOMOBILES.**

19 (a) STUDY.—

20 (1) IN GENERAL.—Not later than 30 days after  
21 the date of the enactment of this Act, the Adminis-  
22 trator of the National Highway Traffic Safety Ad-  
23 ministration shall conduct a study of the feasibility  
24 and effects of reducing, by a significant percentage,



1 by model year 2014, the amount of fuel consumed  
2 by automobiles.

3 (2) INCLUSIONS.—The study under paragraph  
4 (1) shall include an examination of—

5 (A) the Federal policy of establishing aver-  
6 age fuel economy standards for automobiles and  
7 requiring each automobile manufacturer to  
8 comply with average fuel economy standards  
9 that apply to the automobiles the manufacturer  
10 produces (including recommendations of alter-  
11 natives to that policy);

12 (B) methods by which automobile manu-  
13 facturers could contribute toward achieving the  
14 reduction described in paragraph (1);

15 (C) the potential of using fuel cell tech-  
16 nology in motor vehicles to determine the extent  
17 to which fuel cell technology contributes to  
18 achieving the reduction described in paragraph  
19 (1); and

20 (D) the effects of the reduction described  
21 in paragraph (1) on—

22 (i) gasoline supplies;

23 (ii) the automobile industry, including  
24 sales of automobiles manufactured in the  
25 United States;





1 (iii) motor vehicle safety;  
2 (iv) air quality; and  
3 (v) the consumer price for light duty  
4 trucks typically purchased for agricultural  
5 purposes, including by providing estimates  
6 for price differences for the years 2008  
7 through 2012, comparing—

8 (I) light duty truck fuel economy  
9 if no legislative changes are made to  
10 average fuel economy standards; to

11 (II) light duty truck fuel econ-  
12 omy under the reduction described in  
13 paragraph (1).

14 (b) REPORT.—Not later than 1 year after the date  
15 of enactment of this Act, the Administrator shall submit  
16 to Congress a report on the findings, conclusions, and rec-  
17 ommendations of the study under subsection (a).

18 **SEC. 1834. STUDY ON THE BENEFITS OF ECONOMIC DIS-**

19 **PATCH.**

20 (a) STUDY.—The Secretary of Energy, in coordina-  
21 tion and consultation with the States, shall conduct a  
22 study on—

23 (1) the procedures currently used by electric  
24 utilities to perform economic dispatch;



1           (2) identifying possible revisions to those proce-  
2           dures to improve the ability of nonutility generation  
3           resources to offer their output for sale for the pur-  
4           pose of inclusion in economic dispatch; and

5           (3) the potential benefits to residential, com-  
6           mercial, and industrial electricity consumers nation-  
7           ally and in each state if economic dispatch proce-  
8           dures were revised to improve the ability of non-  
9           utility generation resources to offer their output for  
10          inclusion in economic dispatch.

11          (b) DEFINITION.—The term “economic dispatch”  
12          when used in this section means the operation of genera-  
13          tion facilities to produce energy at the lowest cost to reli-  
14          ably serve consumers, recognizing any operational limits  
15          of generation and transmission facilities.

16          (c) REPORT TO CONGRESS AND THE STATES.—Not  
17          later than 90 days after the date of enactment of this Act,  
18          and on a yearly basis following, the Secretary of Energy  
19          shall submit a report to Congress and the States on the  
20          results of the study conducted under subsection (a), in-  
21          cluding recommendations to Congress and the States for  
22          any suggested legislative or regulatory changes.

23          **SEC. 1835. RENEWABLE ENERGY ON FEDERAL LAND.**

24          (a) NATIONAL ACADEMY OF SCIENCES STUDY.—Not  
25          later than 90 days after the date of enactment of this Act,



1 the Secretary of the Interior shall enter into a contract  
2 with the National Academy of Sciences under which the  
3 National Academy of Sciences shall—

4 (1) study the potential of developing wind,  
5 solar, and ocean energy resources (including tidal,  
6 wave, and thermal energy) on Federal land available  
7 for those uses under current law and the outer Con-  
8 tinental Shelf;

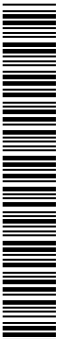
9 (2) assess any Federal law (including regula-  
10 tions) relating to the development of those resources  
11 that is in existence on the date of enactment of this  
12 Act; and

13 (3) recommend statutory and regulatory mecha-  
14 nisms for developing those resources.

15 (b) SUBMISSION TO CONGRESS.—Not later than 2  
16 years after the date of enactment of this Act, the Sec-  
17 retary of the Interior shall submit to Congress the results  
18 of the study under subsection (a).

19 **SEC. 1836. INCREASED HYDROELECTRIC GENERATION AT**  
20 **EXISTING FEDERAL FACILITIES.**

21 (a) IN GENERAL.—The Secretary of the Interior, the  
22 Secretary of Energy, and the Secretary of the Army shall  
23 jointly conduct a study of the potential for increasing elec-  
24 tric power production capability at federally owned or op-  
25 erated water regulation, storage, and conveyance facilities.



1 (b) CONTENT.—The study under this section shall in-  
2 clude identification and description in detail of each facil-  
3 ity that is capable, with or without modification, of pro-  
4 ducing additional hydroelectric power, including esti-  
5 mation of the existing potential for the facility to generate  
6 hydroelectric power.

7 (c) REPORT.—The Secretaries shall submit to the  
8 Committees on Energy and Commerce, Resources, and  
9 Transportation and Infrastructure of the House of Rep-  
10 resentatives and the Committee on Energy and Natural  
11 Resources of the Senate a report on the findings, conclu-  
12 sions, and recommendations of the study under this sec-  
13 tion by not later than 18 months after the date of the  
14 enactment of this Act. The report shall include each of  
15 the following:

16 (1) The identifications, descriptions, and esti-  
17 mations referred to in subsection (b).

18 (2) A description of activities currently con-  
19 ducted or considered, or that could be considered, to  
20 produce additional hydroelectric power from each  
21 identified facility.

22 (3) A summary of prior actions taken by the  
23 Secretaries to produce additional hydroelectric power  
24 from each identified facility.



1           (4) The costs to install, upgrade, or modify  
2           equipment or take other actions to produce addi-  
3           tional hydroelectric power from each identified facil-  
4           ity and the level of Federal power customer involve-  
5           ment in the determination of such costs.

6           (5) The benefits that would be achieved by such  
7           installation, upgrade, modification, or other action,  
8           including quantified estimates of any additional en-  
9           ergy or capacity from each facility identified under  
10          subsection (b).

11          (6) A description of actions that are planned,  
12          underway, or might reasonably be considered to in-  
13          crease hydroelectric power production by replacing  
14          turbine runners, by performing generator upgrades  
15          or rewinds, or construction of pumped storage facili-  
16          ties.

17          (7) The impact of increased hydroelectric power  
18          production on irrigation, water supply, fish, wildlife,  
19          Indian tribes, river health, water quality, navigation,  
20          recreation, fishing, and flood control.

21          (8) Any additional recommendations to increase  
22          hydroelectric power production from, and reduce  
23          costs and improve efficiency at, federally owned or  
24          operated water regulation, storage, and conveyance  
25          facilities.



1 **SEC. 1837. SPLIT-ESTATE FEDERAL OIL AND GAS LEASING**  
2 **AND DEVELOPMENT PRACTICES.**

3 (a) REVIEW.—In consultation with affected private  
4 surface owners, oil and gas industry, and other interested  
5 parties, the Secretary of the Interior shall undertake a re-  
6 view of the current policies and practices with respect to  
7 management of Federal subsurface oil and gas develop-  
8 ment activities and their effects on the privately owned  
9 surface. This review shall include—

10 (1) a comparison of the rights and responsibil-  
11 ities under existing mineral and land law for the  
12 owner of a Federal mineral lease, the private surface  
13 owners and the Department;

14 (2) a comparison of the surface owner consent  
15 provisions in section 714 of the Surface Mining Con-  
16 trol and Reclamation Act of 1977 (30 U.S.C. 1304)  
17 concerning surface mining of Federal coal deposits  
18 and the surface owner consent provisions for oil and  
19 gas development, including coalbed methane produc-  
20 tion; and

21 (3) recommendations for administrative or leg-  
22 islative action necessary to facilitate reasonable ac-  
23 cess for Federal oil and gas activities while address-  
24 ing surface owner concerns and minimizing impacts  
25 to private surface.



1 (b) REPORT.—The Secretary of the Interior shall re-  
2 port the results of such review to Congress not later than  
3 180 days after the date of enactment of this Act.

4 **SEC. 1838. RESOLUTION OF FEDERAL RESOURCE DEVELOP-**  
5 **MENT CONFLICTS IN THE POWDER RIVER**  
6 **BASIN.**

7 (a) REVIEW.—The Secretary of the Interior shall re-  
8 view Federal and State laws in existence on the date of  
9 enactment of this Act in order to resolve any conflict relat-  
10 ing to the Powder River Basin in Wyoming and Montana  
11 between—

12 (1) the development of Federal coal; and

13 (2) the development of Federal and non-Federal  
14 coalbed methane.

15 (b) REPORT.—Not later than 180 days after the date  
16 of enactment of this Act, the Secretary of the Interior  
17 shall submit to Congress a report that—

18 (1) describes methods of resolving a conflict de-  
19 scribed in subsection (a); and

20 (2) identifies a method preferred by the Sec-  
21 retary of the Interior, including proposed legislative  
22 language, if any, required to implement the method.

