

Union Calendar No. 197

111TH CONGRESS
1ST SESSION

H. R. 3598

[Report No. 111-344]

To ensure consideration of water intensity in the Department of Energy's energy research, development, and demonstration programs to help guarantee efficient, reliable, and sustainable delivery of energy and water resources.

IN THE HOUSE OF REPRESENTATIVES

SEPTEMBER 17, 2009

Mr. GORDON of Tennessee introduced the following bill; which was referred to the Committee on Science and Technology

DECEMBER 1, 2009

Additional sponsors: Mr. HALL of Texas, Mr. ROTHMAN of New Jersey, Ms. WOOLSEY, Mr. BAIRD, Mr. WU, Mr. LUJÁN, Mr. LIPINSKI, Mr. MCNERNEY, Ms. GIFFORDS, Mr. HEINRICH, Ms. TITUS, Mr. TONKO, Mrs. DAHLKEMPER, Mr. COSTELLO, Mr. MILLER of North Carolina, and Mr. HOLT

DECEMBER 1, 2009

Reported with an amendment, committed to the Committee of the Whole House on the State of the Union, and ordered to be printed

[Strike out all after the enacting clause and insert the part printed in italics]

[For text of introduced bill, see copy of bill as introduced on September 17, 2009]

A BILL

To ensure consideration of water intensity in the Department of Energy's energy research, development, and demonstration programs to help guarantee efficient, reliable, and sustainable delivery of energy and water resources.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 *This Act may be cited as the “Energy and Water Re-*
5 *search Integration Act”.*

6 **SEC. 2. INTEGRATING ENERGY AND WATER RESEARCH.**

7 *(a) IN GENERAL.—In carrying out the energy re-*
8 *search, development, and demonstration programs and*
9 *projects of the Department of Energy, the Secretary of En-*
10 *ergy shall—*

11 *(1) seek to advance energy and energy efficiency*
12 *technologies and practices that would—*

13 *(A) minimize freshwater withdrawal and*
14 *consumption;*

15 *(B) increase water use efficiency; and*

16 *(C) utilize nontraditional water sources*
17 *with efforts to improve the quality of that water;*

18 *(2) consider the effects climate variability and*
19 *change may have on water supplies and quality for*
20 *energy generation and fuel production; and*

21 *(3) improve understanding of the energy re-*
22 *quired to provide water supplies and the water re-*
23 *quired to provide reliable energy supplies throughout*
24 *the United States.*

1 (b) *DELAY OR DISRUPTION.*—*In carrying out sub-*
2 *section (a), the Secretary shall ensure that no program or*
3 *project of the Department of Energy is unnecessarily de-*
4 *layed or disrupted.*

5 (c) *SPECIFIC CONSIDERATIONS.*—*In carrying out sub-*
6 *section (a), the Secretary shall consider, as appropriate—*

7 (1) *new advanced cooling technologies for energy*
8 *generation and fuel production technologies;*

9 (2) *performance improvement of existing cooling*
10 *technologies and cost reductions associated with using*
11 *those technologies;*

12 (3) *innovative water reuse, recovery, and treat-*
13 *ment in energy generation and fuel production;*

14 (4) *technology development for carbon capture*
15 *and storage systems that utilize efficient water use de-*
16 *sign strategies;*

17 (5) *technologies that are life-cycle cost effective;*

18 (6) *systems analysis and modeling of issues re-*
19 *lating to the energy required to provide water sup-*
20 *plies and the water required to provide reliable energy*
21 *supplies throughout the United States;*

22 (7) *technologies to treat and utilize produced wa-*
23 *ters discharged from oil, natural gas, coalbed meth-*
24 *ane, and mining activities;*

1 (8) *advanced materials for the use of nontradi-*
2 *tional water sources for energy generation and fuel*
3 *production;*

4 (9) *biomass production and utilization and the*
5 *impact on hydrologic systems;*

6 (10) *technologies that reduce impacts on water*
7 *from energy resource development;*

8 (11) *increases in energy efficiency of water dis-*
9 *tribution and collection systems; and*

10 (12) *technologies for energy generation from*
11 *water distribution and collection systems.*

12 (d) *INTERAGENCY COLLABORATION AND NONDUPLICA-*
13 *TION.—In carrying out the energy research, development,*
14 *and demonstration programs of the Department of Energy*
15 *in accordance with this section, the Secretary shall, where*
16 *appropriate, work collaboratively with other Federal agen-*
17 *cies operating related programs and avoid duplication.*

18 (e) *INTRA-AGENCY COORDINATION AND NONDUPLICA-*
19 *TION.—In carrying out the energy research, development,*
20 *and demonstration programs of the Department of Energy*
21 *in accordance with this section, the Secretary shall coordi-*
22 *nate and avoid duplication of activities across programs*
23 *and projects of the Department, including with those of the*
24 *National laboratories.*

1 (f) *RELEVANT INFORMATION AND RECOMMENDA-*
2 *TIONS.—In carrying out the energy research, development,*
3 *and demonstration programs of the Department of Energy*
4 *in accordance with this section, the Secretary shall consider*
5 *and incorporate, as appropriate, relevant information and*
6 *recommendations, including those of the National Water*
7 *Availability and Use Assessment Program under section*
8 *9508(d) of the Omnibus Public Land Management Act of*
9 *2009 (42 U.S.C. 10368(d)).*

10 (g) *REPORTS.—Not later than 1 year after the date*
11 *of enactment of this Act, and at least once every 2 years*
12 *thereafter, the Secretary shall transmit to Congress a report*
13 *on findings and activities under this section.*

14 (h) *AUTHORIZATION OF APPROPRIATIONS.—There are*
15 *authorized to be appropriated to the Secretary of Energy*
16 *for carrying out this section \$60,000,000 for each of the fis-*
17 *cal years 2011 through 2015.*

18 **SEC. 3. ENERGY-WATER ARCHITECTURE COUNCIL.**

19 (a) *IN GENERAL.—The Secretary of Energy, in coordi-*
20 *nation with other relevant Federal agencies, shall establish*
21 *an Energy-Water Architecture Council to promote and en-*
22 *able improved energy and water resource data collection,*
23 *reporting, and technological innovation. The Council shall*
24 *consist of—*

1 (1) *representation from each Federal agency that*
2 *conducts research related to energy and water re-*
3 *source data; and*

4 (2) *non-Federal members, including representa-*
5 *tives of research and academic institutions and in-*
6 *dustry, who have expertise in technologies and prac-*
7 *tices relating to the energy required to provide water*
8 *supplies and the water required to provide reliable*
9 *energy supplies throughout the United States.*

10 ***(b) FUNCTIONS.—The Council shall—***

11 (1) *develop data collection and data communica-*
12 *tion standards and protocols for the energy required*
13 *to provide water supplies and the water required to*
14 *provide reliable energy supplies throughout the*
15 *United States;*

16 (2) *make improvements to Federal water use*
17 *data to increase understanding of trends in energy*
18 *generation and fuel production;*

19 (3) *utilize information from existing monitoring*
20 *networks to provide nationally uniform water and en-*
21 *ergy use and infrastructure data; and*

22 (4) *conduct annual technical workshops, includ-*
23 *ing at least one regional workshop annually, to facili-*
24 *tate information exchange among Federal, State, and*
25 *private sector experts on technologies that encourage*

1 *the conservation and efficient use of water and en-*
2 *ergy.*

3 (c) *REPORTS.*—*Not later than 1 year after the date*
4 *of enactment of this Act, and at least once every 2 years*
5 *thereafter, the Council, through the Secretary of Energy,*
6 *shall transmit to the Congress a report on its findings and*
7 *activities under this section.*

8 (d) *AUTHORIZATION OF APPROPRIATIONS.*—*There are*
9 *authorized to be appropriated to the Secretary of Energy*
10 *for carrying out this section \$5,000,000 for each of the fiscal*
11 *years 2011 through 2015.*

12 **SEC. 4. LIMITATION ON FEDERAL REGULATIONS.**

13 *Nothing in this Act shall be construed to allow the es-*
14 *tablishment of regulations by the Federal Government that*
15 *would infringe or impair the use of water by State, tribal,*
16 *or local governments.*

17 **SEC. 5. MANDATES.**

18 *Nothing in this Act shall be construed to require State,*
19 *tribal, or local governments to take any action that may*
20 *result in an increased financial burden to such governments*
21 *by restricting the use of water by such governments.*

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