

108TH CONGRESS
1ST SESSION

S. 167

To direct the Secretary of Energy to carry out a Next Generation Lighting Initiative.

IN THE SENATE OF THE UNITED STATES

JANUARY 15, 2003

Mr. BINGAMAN (for himself and Mr. DEWINE) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

A BILL

To direct the Secretary of Energy to carry out a Next Generation Lighting Initiative.

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. NEXT GENERATION LIGHTING INITIATIVE.**

4 (a) DEFINITIONS.—In this section:

5 (1) CONSORTIUM.—The term “consortium”
6 means the consortium selected by the Secretary
7 under subsection (d)(1).

8 (2) INITIATIVE.—The term “Initiative” means
9 the Next Generation Lighting Initiative carried out
10 under subsection (b).

3 (b) GENERAL AUTHORITY.—The Secretary shall
4 carry out a program, to be known as the “Next Generation
5 Lighting Initiative”, to support research, development,
6 demonstration, and commercial application activities re-
7 lated to advanced solid-state lighting technologies based
8 on white light emitting diodes.

9 (c) OBJECTIVES.—The objectives of the Initiative
10 shall be—

15 (A) longer lasting;

16 (B) more energy-efficient; and

17 (C) cost-competitive;

18 (2) to develop an inorganic white light emitting
19 diode that has an efficiency of 160 lumens per watt
20 and a 10-year lifetime; and

21 (3) to develop an organic white light emitting
22 diode with an efficiency of 100 lumens per watt with
23 a 5-year lifetime that—

(A) illuminates over a full color spectrum;

1 (B) covers large areas over flexible sur-
2 faces; and

(C) does not contain harmful pollutants (such as mercury) that are typical of fluorescent lamps.

6 (d) FUNDAMENTAL RESEARCH.—

21 (4) GOVERNING COUNCIL.—The Secretary shall
22 serve on the governing council of the consortium.

23 (5) ELIGIBILITY.—To be eligible for a grant
24 under paragraph (6), an applicant shall be broadly

1 representative of United States solid-state lighting
2 research, development, and manufacturing expertise.

3 (6) GRANTS.—

4 (A) IN GENERAL.—The Secretary shall
5 award grants for fundamental research to the
6 consortium, which the consortium may disburse
7 to researchers, including researchers that are
8 not participants in the consortium.

9 (B) SUBMISSION.—To receive a grant, the
10 consortium shall submit to the Secretary a de-
11 scription of the proposed research and a list of
12 the persons that will receive funding.

13 (C) COST-SHARING.—Grants shall be
14 matched by the consortium in accordance with
15 subsection (h).

16 (7) NATIONAL LABORATORIES.—National Lab-
17 oratories may participate in the research under this
18 section and receive funds from the consortium.

19 (8) INTELLECTUAL PROPERTY.—Participants in
20 the consortium and the Federal Government shall
21 have royalty-free nonexclusive rights to use intellec-
22 tual property derived from research funded under
23 this subsection.

24 (e) DEVELOPMENT, DEMONSTRATION, AND COMMER-
25 CIAL APPLICATION.—

9 (f) PLANS AND ASSESSMENTS.—

15 (2) REVIEW.—

16 (A) IN GENERAL.—The Secretary shall
17 enter into an arrangement with the National
18 Academy of Sciences to conduct periodic re-
19 views of the Initiative.

20 (B) DUTIES.—The Academy shall review
21 the research priorities, technical milestones, and
22 plans for technology transfer established under
23 paragraph (1) and evaluate the progress toward
24 achieving them.

1 (C) CONSIDERATION OF RESULTS.—The
2 Secretary shall consider the results of the re-
3 views in evaluating the plans submitted under
4 paragraph (1).

5 (g) AUDIT.—

11 (2) REPORT.—

12 (A) To THE SECRETARY.—The auditor
13 shall annually submit to the Secretary a report
14 describing the results of the audit under para-
15 graph (1).

16 (B) To CONGRESS.—The Secretary shall
17 transmit to Congress a copy of each report sub-
18 mitted under subparagraph (A), including a
19 plan to remedy any deficiencies noted in the re-
20 port.

21 (h) COST SHARING.—

22 (1) RESEARCH AND DEVELOPMENT.—

23 (A) IN GENERAL.—For research and devel-
24 opment programs carried out under this sec-
25 tion, the Secretary shall require a commitment

1 from non-Federal sources of at least 20 percent
2 of the cost of the project.

10 (A) IN GENERAL.—The Secretary shall re-
11 quire at least 50 percent of the costs directly
12 and specifically related to any demonstration or
13 commercial application project under this sec-
14 tion to be provided from non-Federal sources.

15 (B) REDUCTION.—The Secretary may re-
16 duce the non-Federal requirement under this
17 subsection if the Secretary determines that the
18 reduction is necessary and appropriate consid-
19 ering the technological risks involved in the
20 project and is necessary to meet the objectives
21 of this title.

1 (i) AUTHORIZATION OF APPROPRIATIONS.—There
2 are authorized to be appropriated to carry out this sec-
3 tion—

4 (1) \$10,000,000 for fiscal year 2004; and
5 (2) \$50,000,000 for each of fiscal years 2005
6 through 2013.

7 (j) TERMINATION OF INITIATIVE.—The Secretary
8 shall terminate the Initiative not later than September 30,
9 2013.

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