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(Original Signature of Member)

114TH CONGRESS  
1ST SESSION

**H. R.** \_\_\_\_\_

To provide for a technology demonstration program related to the  
modernization of the electric grid.

\_\_\_\_\_  
IN THE HOUSE OF REPRESENTATIVES

Mr. SARBANES introduced the following bill; which was referred to the  
Committee on \_\_\_\_\_

\_\_\_\_\_  
**A BILL**

To provide for a technology demonstration program related  
to the modernization of the electric grid.

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 “21st Century Power  
5 Grid Act”.

6 **SEC. 2. TECHNOLOGY DEMONSTRATION ON THE DISTRIBU-**  
7 **TION SYSTEM.**

8 (a) IN GENERAL.—The Secretary of Energy shall es-  
9 tablish a financial assistance program to carry out eligible

1 projects related to the modernization of the electric grid,  
2 including the application of technologies to improve ob-  
3 servability, advanced controls, and prediction of system  
4 performance on the distribution system and related trans-  
5 mission system inter-dependencies.

6 (b) ELIGIBLE PROJECTS.—To be eligible for financial  
7 assistance under subsection (a), a project shall—

8 (1) be designed to—

9 (A) improve the performance and efficiency  
10 of the future electric grid, while ensuring the  
11 continued provision of safe, secure, reliable, and  
12 affordable power; and

13 (B) provide new options for customer-  
14 owned resources; and

15 (2) demonstrate—

16 (A) secure integration and management of  
17 energy resources, including distributed energy  
18 generation, combined heat and power, micro-  
19 grids, energy storage, electric vehicles, energy  
20 efficiency, demand response, and intelligent  
21 loads; and

22 (B) secure integration and interoperability  
23 of communications and information tech-  
24 nologies;

1           (3) include the participation of a partnership  
2 consisting of 2 or more entities that—

3           (A) may include—

4                   (i) any institution of higher education;

5                   (ii) a National Laboratory;

6                   (iii) a representative of a State or  
7 local government;

8                   (iv) a representative of an Indian  
9 tribe; or

10                  (v) a Federal power marketing admin-  
11 istration; and

12           (B) shall include at least 1 of any of—

13                   (i) an investor-owned electric utility;

14                   (ii) a publicly-owned utility;

15                   (iii) a technology provider;

16                   (iv) a rural electric cooperative;

17                   (v) a regional transmission organiza-  
18 tion; or

19                   (vi) an independent system operator.

20           (c) CYBERSECURITY PLAN.—Each eligible project  
21 carried out pursuant to subsection (a) shall include the  
22 development of a cybersecurity plan written in accordance  
23 with guidelines developed by the Secretary.

24           (d) PRIVACY RISK ANALYSIS.—Each eligible project  
25 carried out pursuant to subsection (a) shall include a pri-

1 vacy impact assessment that evaluates the project against  
2 the 5 core concepts in the Voluntary Code of Conduct of  
3 the Department of Energy, commonly known as the  
4 “DataGuard Energy Data Privacy Program”, or the most  
5 recent revisions to the privacy program of the Depart-  
6 ment.