To provide for independent research of the future resilience and reliability of the Nation’s electric power transmission and distribution system, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

AUGUST 1, 2013

Mr. PAYNE (for himself, Mr. THOMPSON of Mississippi, Mr. KING of New York, Mr. CARTWRIGHT, Mr. KEATING, Mr. LANCE, Mr. SWALWELL of California, Mr. DEFAZIO, Mr. ANDREWS, Mr. RICHMOND, Ms. CLARKE, Mr. SIRES, Mr. CLYBURN, Mr. PASCRELL, Mr. RANGEL, Ms. JACKSON LEE, Mr. BUTTERFIELD, Ms. WILSON of Florida, Mrs. CHRISTENSEN, Ms. GABBARD, Mr. PALLONE, Mr. FRANKS of Arizona, Mr. CARSON of Indiana, Mr. PETERS of California, and Mr. O’ROURKE) introduced the following bill; which was referred to the Committee on Homeland Security

A BILL

To provide for independent research of the future resilience and reliability of the Nation’s electric power transmission and distribution system, and for other purposes.

1 Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

3 SECTION 1. SHORT TITLE.

4 This Act may be cited as the “Saving More American Resources Today Grid Study Act of 2013” or the “SMART Grid Study Act of 2013”.

SEC. 2. NATIONAL RESEARCH COUNCIL STUDY ON THE RESILIENCE AND RELIABILITY OF THE NATION’S POWER GRID.

(a) INDEPENDENT STUDY.—Not later than 60 days after the date of the enactment of this Act, the Secretary of Homeland Security, and the heads of other departments and agencies, as necessary, shall enter into an agreement with the National Research Council to conduct research of the future resilience and reliability of the Nation’s electric power transmission and distribution system. The research under this subsection shall be known as the “Saving More American Resources Today Study” or the “SMART Study”. In conducting such research, the National Research Council shall—

(1) research the options for improving the Nation’s ability to expand and strengthen the capabilities of the Nation’s power grid, including estimation of the cost, time scale for implementation, and identification of the scale and scope of any potential significant health and environmental impacts;

(2) consider the forces affecting the grid, including technical, economic, regulatory, environmental, and geopolitical factors, and how such forces are likely to affect—

(A) the efficiency, control, reliability and robustness of operation;
(B) the ability of the grid to recover from disruptions, including natural disasters and terrorist attacks;

(C) the ability of the grid to incorporate greater reliance on distributed and intermittent power generation and electricity storage;

(D) the ability of the grid to adapt to changing patterns of demand for electricity; and

(E) the economic and regulatory factors affecting the evolution of the grid;

(3) review Federal, State, industry, and academic research and development programs and identify technological options that could improve the future grid;

(4) review the implications of increased reliance on digital information and control of the power grid for improving reliability, resilience, and congestion and for potentially increasing vulnerability to cyber attack;

(5) review regulatory, industry, and institutional factors and programs affecting the future of the grid;

(6) research the costs and benefits, as well as the strengths and weaknesses, of the options identified under paragraph (1) to address the emerging
forces described in paragraph (2) that are shaping the grid;

(7) identify the barriers to realizing the options identified and suggest strategies for overcoming those barriers including suggested actions, priorities, incentives, and possible legislative and executive actions; and

(8) research the ability of the grid to integrate existing and future infrastructure, including utilities, telecommunications lines, highways, and other critical infrastructure.

(b) COOPERATION AND ACCESS TO INFORMATION AND PERSONNEL.—The Secretary shall ensure that the National Research Council receives full and timely cooperation, including full access to information and personnel, from the Department of Homeland Security, the Department of Energy, including the management and operating components of the Departments, and other Federal departments and agencies, as necessary, for the purposes of conducting the study described in subsection (a).

(c) REPORT.—

(1) IN GENERAL.—Not later than 18 months from the date on which the Secretary enters into the agreement with the National Research Council described in subsection (a), the National Research
Council shall submit to the Secretary and the Committee on Homeland Security of the House of Representatives and the Committee on Homeland Security and Governmental Affairs of the Senate a report containing the findings of the research required by that subsection.

(2) FORM OF REPORT.—The report under paragraph (1) shall be submitted in unclassified form, but may include a classified annex.

(d) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Secretary of Homeland Security $2,100,000 to carry out this section.