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(Original Signature of Member)

117TH CONGRESS  
2D SESSION

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

To require the Secretary of Energy to complete and publish a study and develop a plan related to the ability of the electric system to meet the electricity demand of new electric vehicle charging infrastructure, and for other purposes.

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**IN THE HOUSE OF REPRESENTATIVES**

Mr. CASTEN of Illinois introduced the following bill; which was referred to the Committee on \_\_\_\_\_

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

To require the Secretary of Energy to complete and publish a study and develop a plan related to the ability of the electric system to meet the electricity demand of new electric vehicle charging infrastructure, and for other purposes.

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 “Electric Vehicle Grid  
5       Readiness, Improvement, and Development Act” or the  
6       “EV GRID Act”.

1 **SEC. 2. STUDY AND PLAN RELATED TO ABILITY OF THE**  
2 **ELECTRIC SYSTEM TO MEET THE ELEC-**  
3 **TRICITY DEMAND OF NEW ELECTRIC VEHI-**  
4 **CLE CHARGING INFRASTRUCTURE.**

5 (a) STUDY.—

6 (1) IN GENERAL.—Not later than 6 months  
7 after the date of enactment of this section, the Sec-  
8 retary of Energy shall complete and publish on the  
9 website of the Department of Energy a study that  
10 assesses the ability of the electric system to meet the  
11 electricity demand of electric vehicle charging infra-  
12 structure that is installed on or after the date of en-  
13 actment of this section.

14 (2) INCLUSIONS.—The study completed and  
15 published under paragraph (1) shall—

16 (A) include an estimate of—

17 (i) the amount of growth in the use of  
18 electric vehicles that is necessary to meet  
19 the President's greenhouse gas reduction  
20 target; and

21 (ii) how much additional electrical  
22 generation, transmission, and distribution  
23 capacity will need to be added to the elec-  
24 tric system to meet the electricity demand  
25 of electric vehicle charging infrastructure  
26 that is installed on or after the date of en-

1           actment of this section, including how such  
2           electricity demand varies by geography,  
3           population density, vehicle-grid interaction  
4           scenario, and the time of usage of such  
5           electric vehicle charging infrastructure;  
6           and

7           (B) identify geographic areas in which  
8           greater investment in the electric system is nec-  
9           essary to meet the electricity demand of electric  
10          vehicle charging infrastructure installed on or  
11          after the date of enactment of this section in  
12          such geographic areas.

13          (b) PLAN AND RECOMMENDATIONS.—Not later than  
14          3 months after the date on which the study is published  
15          under subsection (a), the Secretary of Energy shall, in co-  
16          ordination with the Building a Better Grid Initiative of  
17          the Office of Electricity and the Vehicle Technologies Of-  
18          fice of the Office of Energy Efficiency and Renewable En-  
19          ergy—

20                (1) develop a plan, based on such study, for  
21                how the Department of Energy may assist the elec-  
22                tric system with meeting the increase in the demand  
23                for electricity estimated in such study; and

24                (2) provide to Congress recommendations for  
25                legislation that would support the Department of

1 Energy with assisting the electric system as de-  
2 scribed in paragraph (1).

3 (c) AUTHORIZATION OF APPROPRIATIONS.—There is  
4 authorized to be appropriated to the Secretary of Energy  
5 to carry out this section \$4,000,000 for fiscal year 2023.

6 (d) DEFINITIONS.—In this section:

7 (1) ELECTRIC VEHICLE CHARGING INFRA-  
8 STRUCTURE.—The term “electric vehicle charging  
9 infrastructure” means the charging infrastructure  
10 necessary to support light duty, medium duty, and  
11 heavy duty on-road electric vehicles, including such  
12 charging infrastructure that is located at a work-  
13 place, recreational destination, vehicle corridor,  
14 home, or depot.

15 (2) PRESIDENT’S GREENHOUSE GAS REDUC-  
16 TION TARGET.—The term “President’s greenhouse  
17 gas reduction target” means the President’s target  
18 of reducing greenhouse gas pollution by 50 to 52  
19 percent from 2005 levels by 2030.