

AMENDMENT NO. \_\_\_\_\_ Calendar No. \_\_\_\_\_

Purpose: To establish and promote a national electric system efficiency and peak demand reduction goal.

**IN THE SENATE OF THE UNITED STATES—111th Cong., 1st Sess.**

(no.) \_\_\_\_\_

(title) \_\_\_\_\_  
\_\_\_\_\_

Referred to the Committee on \_\_\_\_\_ and  
ordered to be printed

Ordered to lie on the table and to be printed

AMENDMENTS intended to be proposed by Ms. CANTWELL

Viz:

- 1 In section 105(a)(9), after “distributed generation,”
- 2 insert “smart grid functions,”.

3 At the appropriate place, insert the following:

4 **SEC. \_\_\_\_ . NATIONAL ELECTRIC SYSTEM EFFICIENCY AND**  
 5 **PEAK DEMAND REDUCTION GOAL.**

6 (a) DEFINITIONS.—In this section:

- 7 (1) APPLICABLE BASELINE.—The term “appli-
- 8 cable baseline” means the highest annual peak de-
- 9 mand during 1 or more years determined by the

1 Commission, in consultation with the Secretary and  
2 the North American Electric Reliability Corporation.

3 (2) COMMISSION.—The term “Commission”  
4 means Federal Energy Regulatory Commission.

5 (3) DEMAND REDUCTION.—The term “demand  
6 reduction” means the reduction in annual peak de-  
7 mand as compared to a previous baseline year or pe-  
8 riod, expressed in megawatts.

9 (4) DYNAMIC PEAK MANAGEMENT CONTROL.—  
10 The term “dynamic peak management control”  
11 means the control of megawatts of electricity  
12 through a demand response program or other means  
13 that is directly capable of actively and dynamically  
14 reducing peak demand.

15 (5) LOAD-SERVING ENTITY.—

16 (A) IN GENERAL.—The term “load-serving  
17 entity” means an entity that provides electricity  
18 directly to retail consumers with the responsi-  
19 bility to ensure power quality and reliability.

20 (B) INCLUSIONS.—The term “load-serving  
21 entity” includes an entity described in subpara-  
22 graph (A) that is investor-owned, publicly-  
23 owned, owned by a rural electric cooperative, or  
24 owned by another entity.

1           (6) PEAK DEMAND.—The term “peak demand”  
2 means electricity demand—

3           (A) during the highest hour on the system  
4 of a load-serving entity during a calendar year,  
5 expressed in megawatts;

6           (B) measured using an alternative calcula-  
7 tion method determined by the Commission, in  
8 consultation with the Secretary and the North  
9 American Electric Reliability Corporation; and

10          (C) that takes into account monthly and  
11 seasonal variations in peak demand for elec-  
12 tricity.

13          (7) PEAK DEMAND PERIOD.—The term “peak  
14 demand period” means the time period on the sys-  
15 tem of a load-serving entity relative to peak demand  
16 that may warrant special measures or electricity re-  
17 sources to maintain system reliability or avoid excess  
18 costs while meeting peak demand.

19          (8) REGIONAL TRANSMISSION ORGANIZATION.—  
20 The term “Regional Transmission Organization”  
21 means an entity that is approved as a Regional  
22 Transmission Organization by the Commission.

23          (9) SMART GRID.—The term “smart grid”  
24 means smart grid (within the meaning of title XIII

1 of the Energy Independence and Security Act of  
2 2007 (42 U.S.C. 17381 et seq.)).

3 (10) SYSTEM LOAD FACTOR.—The term “sys-  
4 tem load factor” means the ratio that the kilowatt  
5 hours consumed on a system bear to the highest  
6 level of demand in kilowatts on the system during a  
7 given year.

8 (b) GOAL.—It is the policy of the United States  
9 that—

10 (1) the national electric system efficiency goal  
11 of the United States is to optimize and make more  
12 efficient the planning and operation of national and  
13 local electricity systems in a manner that the system  
14 load factor of the systems will be improved by 1.5  
15 percent per year during each of calendar years 2010  
16 through 2030; and

17 (2) the goal described in paragraph (1) can be  
18 met or exceeded by lessening the difference between  
19 the periods of lowest and highest electricity demand,  
20 with particular focus on reducing the frequency and  
21 severity of peak demand periods, using smart grid  
22 and demand response technologies, practices, and  
23 activities, including—

1 (A) the reduction of overall electricity de-  
2 mand through the adoption of energy-efficient  
3 technologies or conservation practices;

4 (B) the use of demand response tech-  
5 nologies, practices, and activities that allow dy-  
6 namic control, load-shifting, and reduction of  
7 time-based electricity consumption by load-serv-  
8 ing entities and electricity customers, including  
9 the wide-spread installation or use of—

10 (i) distributed generation;

11 (ii) smart meters and equipment with  
12 smart grid capabilities;

13 (iii) energy storage; and

14 (iv) time-based pricing that reflects  
15 marginal electricity generation costs; and

16 (C) the use of smart grid technologies,  
17 practices, and activities (including activities de-  
18 scribed in title XIII of the Energy Independ-  
19 ence and Security Act of 2007 (42 U.S.C.  
20 17381 et seq.)) that provide time-based infor-  
21 mation on, and dynamic control of, the elec-  
22 tricity grid allowing for the most cost-effective,  
23 efficient, and reliable generation, transmission,  
24 and distribution of electricity.

25 (c) ACTION PLAN.—

1           (1) IN GENERAL.—Not later than 180 days  
2 after the date of enactment of this Act, the Sec-  
3 retary, in cooperation with the Commission, Re-  
4 gional Transmission Organizations, the National As-  
5 sociation of Regulatory Utility Commissioners, and  
6 heads of other appropriate Federal agencies, shall  
7 develop an action plan to achieve or exceed the na-  
8 tional goal established under subsection (a).

9           (2) PLAN CONTENTS.—The action plan shall—

10           (A) identify future regulatory, funding,  
11 and policy priorities that would assist the  
12 United States in meeting the national goal de-  
13 scribed in paragraph (1);

14           (B) include data collection methodologies  
15 and compilations used to establish baseline and  
16 goal attainment data;

17           (C) include guidelines for the establish-  
18 ment of dynamic peak management control  
19 goals, including—

20           (i) the establishment of applicable  
21 baselines in a consistent nationwide man-  
22 ner; and

23           (ii) the use of a methodology that pro-  
24 vides for adjustments to baseline and goals  
25 for a load-serving entity to reflect changes

1 in the number of customers served, weath-  
2 er conditions, and any other appropriate  
3 factors;

4 (D) include a system and rules for meas-  
5 urement and verification of demand reductions;  
6 and

7 (E) coordinate with any existing com-  
8 plementary programs or initiatives managed by  
9 load-serving entities, Regional Transmission Or-  
10 ganizations, and States.

11 (3) PUBLIC INPUT AND COMMENT.—The Sec-  
12 retary shall develop the plan in a manner that pro-  
13 vides appropriate opportunities for public input and  
14 comment.

15 (4) ACTION PLAN UPDATES.—The Secretary  
16 shall—

17 (A) update the action plan every 3 years;  
18 and

19 (B) include the updated action plan in the  
20 national energy policy plan required by section  
21 801 of the Department of Energy Organization  
22 Act (42 U.S.C. 7321).

23 (5) REPORT TO CONGRESS.—In updating the  
24 national electric system efficiency goal established  
25 under subsection (a), the Secretary shall submit to

1 the Committee on Energy and Natural Resources of  
2 the Senate and the Committee on Energy and Com-  
3 merce of the House of Representatives a report de-  
4 scribing—

5 (A) progress made toward implementing  
6 the necessary policies to meet the national goal;

7 (B) the resulting cost-savings to ratepayers  
8 and the United States economy;

9 (C) the improvements to the reliability and  
10 efficiency of the United States electricity grid;  
11 and

12 (D) any additional legal authorities nec-  
13 essary to achieve the national goal.

14 (6) PROGRESS REPORTING AND TRANSPARENCY  
15 FOR RATEPAYERS.—Not later than 2 years after the  
16 date of enactment of this Act, the Secretary shall es-  
17 tablish a public domain website on which the Sec-  
18 retary shall provide information and data dem-  
19 onstrating progress by States, other jurisdictional  
20 entities, and load-serving entities in meeting the na-  
21 tional electric system efficiency goal established  
22 under subsection (b).

23 (7) NO IMPACT ON EXISTING STATE GOALS AND  
24 STANDARDS.—Nothing in this section diminishes  
25 any authority of a State or political subdivision of a

1 State to adopt or enforce any law (including regula-  
2 tions) that increases electricity grid efficiency, smart  
3 grid and distributed generation deployment, dynamic  
4 peak management control, demand response and dis-  
5 tributed storage, or the regulation of load-serving  
6 entities.