

**AMENDMENT TO H.R. 3628, AS REPORTED  
OFFERED BY MS. LEGER FERNANDEZ OF NEW  
MEXICO**

Strike section 2 and insert the following:

**1 SEC. 2. DEVELOPMENT OF GUIDELINES AND BEST PRAC-**  
**2 TICES FOR ELECTRIC UTILITY INTEGRATED**  
**3 RESOURCE PLANNING.**

**4** (a) IN GENERAL.—The Secretary, in consultation  
**5** with State public utility commissions, State energy offices,  
**6** owners or operators of electric utilities (including investor-  
**7** owned utilities, municipal utilities, and electric coopera-  
**8** tives), balancing area authorities, Transmission Organiza-  
**9** tions, and other relevant stakeholders, shall develop guide-  
**10** lines and best practices for integrated resource planning  
**11** of the electricity system.

**12** (b) REQUIREMENTS.—

**13** (1) KEY ISSUES.—The guidelines and best  
**14** practices developed under subsection (a) shall ad-  
**15** dress key issues related to integrated resource plan-  
**16** ning. In developing the guidelines and best practices,  
**17** the Secretary shall consider, at a minimum, the fol-  
**18** lowing issues, while retaining discretion to incor-  
**19** porate additional considerations and to refine the

1 scope, level of detail, and implementation approaches  
2 for each issue as appropriate:

3 (A) Developing capacity expansion mod-  
4 eling and resource adequacy analysis in an  
5 iterative manner to improve integrated resource  
6 planning by ensuring the expanded electricity  
7 system achieves resource adequacy while mini-  
8 mizing costs.

9 (B) The consideration of a wide range of  
10 alternatives for capacity expansion models to  
11 meet resource adequacy targets, including the  
12 traditional expansion of electricity generation  
13 and transmission capacity and the use of novel  
14 grid-enhancing technologies, small and large-  
15 scale storage, distributed energy resources, be-  
16 hind-the-meter interventions, and demand-side  
17 interventions.

18 (C) Explicit consideration of electric trans-  
19 mission in capacity expansion modeling and its  
20 contribution to resource adequacy and reli-  
21 ability of electricity systems.

22 (D) The use of an interregional planning  
23 approach in capacity expansion modeling to  
24 evaluate the resource adequacy benefits of ca-  
25 pacity resource sharing across regions, includ-

1           ing through collaboration between States, bal-  
2           ancing area authorities, electric utilities, Trans-  
3           mission Organizations, and other relevant  
4           stakeholders.

5           (E) The integration of technical, financial,  
6           and regulatory information from other fuel sup-  
7           ply systems, such as the natural gas network.

8           (F) The use of scenario analysis developed  
9           using capacity expansion modeling and trans-  
10          mission expansion modeling to represent a full  
11          range of future characteristics of the electricity  
12          system, including the availability of different  
13          electricity generating and storage resources,  
14          and transmission infrastructure.

15          (G) The use of probabilistic models in re-  
16          source adequacy analysis to account for varia-  
17          bility and uncertainty in the supply and de-  
18          mand of electricity, including the impact of ex-  
19          treme weather event scenarios, forecasting er-  
20          rors, fuel prices, and other uncertainties on  
21          such supply and demand.

22          (H) The use of historical weather data and  
23          forward-looking meteorological projections, in-  
24          cluding with respect to extreme weather event  
25          scenarios, to account for the variability in elec-

1           tricity demand, electricity generation from indi-  
2           vidual or groups of electricity generators, and  
3           electricity system outages to assess resource  
4           adequacy.

5           (I) The use of multiple resource adequacy  
6           metrics for assessing resource adequacy to ac-  
7           count for the magnitudes, frequencies, and du-  
8           rations of potential events that stress the elec-  
9           tricity system.

10          (J) The use of scorecards that summarize  
11          the costs and a wide range of benefits of sce-  
12          narios developed through the integrated re-  
13          source planning process, including—

14               (i) costs of infrastructure investments;  
15               (ii) environmental sustainability;  
16               (iii) resource adequacy and reliability;  
17               (iv) economic impacts; and

18               (v) other costs and benefits that are  
19          relevant to the decision-making objectives  
20          of States, electric utilities, balancing area  
21          authorities, Transmission Organizations,  
22          and other relevant stakeholders.

23          (K) The use of rigorous mechanisms for  
24          capacity accreditation to measure the capacity

1 value of possible investments that support re-  
2 source adequacy, including—

3 (i) capacity values for both conven-  
4 tional and emerging generation resources,  
5 including distributed energy resources and  
6 behind-the-meter interventions;

7 (ii) capacity values for demand-side  
8 interventions; and

9 (iii) capacity values for transmission  
10 infrastructure upgrades and grid-enhanc-  
11 ing technologies that enable the deliver-  
12 ability of generating capacity from remote  
13 or otherwise constrained generation re-  
14 sources.

15 (L) The use of probabilistic metrics to  
16 measure capacity values that account for prob-  
17 ability distributions of the magnitudes, fre-  
18 quencies, and durations of potential events that  
19 affect the availability of—

20 (i) conventional and emerging genera-  
21 tion resources, behind-the-meter interven-  
22 tions, and demand-side interventions; and

23 (ii) transmission infrastructure up-  
24 grades and grid-enhancing technologies  
25 that enable the deliverability of electricity

1 from remote or otherwise constrained gen-  
2 eration resources.

3 (2) STATE TREATMENT OF INTEGRATED RE-  
4 SOURCE PLANS.—In developing the guidelines and  
5 best practices under subsection (a), the Secretary  
6 shall consider providing guidance on how State pub-  
7 lic utility commissions and State energy offices may  
8 review and respond to integrated resource plans, in-  
9 cluding guidance on—

10 (A) opportunities for public engagement  
11 and comment, including well-designed stake-  
12 holder involvement processes with several op-  
13 portunities for feedback and transparent access  
14 to data inputs, models, licenses, and other re-  
15 quirements for relevant stakeholders to rep-  
16 licate modeling outputs from integrated re-  
17 source planning; and

18 (B) the connection between integrated re-  
19 source planning outcomes and regulatory ac-  
20 tions, such as procurement decisions, certifi-  
21 cates of public convenience and necessity, and  
22 general rate cases.

23 (c) PUBLICATION OF GUIDELINES AND BEST PRAC-  
24 TICES.—Not later than 2 years after the date of enact-  
25 ment of this Act, the Secretary shall publish on a publicly

1 accessible website of the Department of Energy the guide-  
2 lines and best practices developed under subsection (a).

3 (d) PERIODIC EVALUATIONS AND REVISIONS.—The  
4 Secretary shall, not less frequently than once every 5  
5 years—

6 (1) evaluate the guidelines and best practices  
7 published under this section; and

8 (2) revise such guidelines and best practices  
9 and publish such revised guidelines and best prac-  
10 tices in accordance with this section.

11 (e) DEFINITIONS.—In this section:

12 (1) BALANCING AREA AUTHORITY.—The term  
13 “balancing area authority” means the responsible  
14 entity that—

15 (A) integrates resource plans in advance of  
16 real-time operations;

17 (B) maintains the balance between elec-  
18 tricity demand, electricity supply, and scheduled  
19 interchange within the geographic area of the  
20 responsible entity; and

21 (C) supports interconnection frequency in  
22 real-time.

23 (2) BEHIND-THE-METER INTERVENTION.—The  
24 term “behind-the-meter intervention”—

1 (A) means an action or technology that re-  
2 duces or shifts electricity demand or provides  
3 local electricity generation or storage capacity  
4 at the site of a customer; and

5 (B) includes—

- 6 (i) an energy efficiency upgrade, a  
7 residential solar panel, an energy storage  
8 system, and the actions taken under a de-  
9 mand response program; and  
10 (ii) interventions that help to reduce  
11 strain on the electricity system and im-  
12 prove the reliability of the electricity sys-  
13 tem during peak demand periods or emer-  
14 gencies.

15 (3) CAPACITY ACCREDITATION.—The term “ca-  
16 pacity accreditation” means the process of deter-  
17 mining a capacity value.

18 (4) CAPACITY EXPANSION MODELING.—The  
19 term “capacity expansion modeling” means mathe-  
20 matical modeling to identify the least cost invest-  
21 ments in generation, storage, behind-the-meter inter-  
22 ventions, distributed resource, and transmission in-  
23 frastructure required to meet future electricity de-  
24 mand, subject to fuel prices, technology cost and



1 performance, policy and regulation, and other con-  
2 straints and conditions.

3 (5) CAPACITY VALUE.—The term “capacity  
4 value”—

5 (A) means a measure of the contribution  
6 to resource adequacy by—

7 (i) a conventional or emerging gener-  
8 ating resource, behind-the-meter interven-  
9 tion, or demand-side intervention; or

10 (ii) a transmission infrastructure up-  
11 grade or grid-enhancing technology that  
12 enables the deliverability of electricity from  
13 remote or otherwise constrained generation  
14 resources; and

15 (B) includes probabilistic metrics such as  
16 effective load-carrying capacity, equivalent firm  
17 capacity, and equivalent conventional power.

18 (6) DISTRIBUTED ENERGY RESOURCE.—The  
19 term “distributed energy resource” means a small-  
20 scale electricity generation or storage system that is  
21 located close to the point of use, such as a rooftop  
22 solar panel, home energy storage system, or commu-  
23 nity wind power system.

24 (7) ELECTRIC COOPERATIVE.—The term “elec-  
25 tric cooperative” means a not-for-profit entity that—

1 (A) provides electricity to members of the  
2 entity; and

3 (B) is owned and operated by such mem-  
4 bers.

5 (8) GRID-ENHANCING TECHNOLOGY.—The term  
6 “grid-enhancing technology”—

7 (A) means a technology designed to im-  
8 prove the reliability, efficiency, or flexibility of  
9 the electricity system; and

10 (B) includes a smart grid technology, an  
11 energy storage system, and an advanced grid  
12 management system.

13 (9) INTEGRATED RESOURCE PLANNING.—The  
14 term “integrated resource planning” has the mean-  
15 ing given such term in section 3 of the Public Utility  
16 Regulatory Policies Act of 1978 (16 U.S.C. 2602).

17 (10) MUNICIPAL UTILITY.—The term “munic-  
18 ipal utility” means a municipal corporation that op-  
19 erates facilities used to generate, purchase, transmit,  
20 or distribute electricity to consumers.

21 (11) RESOURCE ADEQUACY.—The term “re-  
22 source adequacy” means the ability of the electricity  
23 system to maintain sufficient, available generating,  
24 storage, and transmitting capacity and supporting  
25 infrastructure to meet forecasted electricity demand

1 and system reliability requirements under a range of  
2 expected and adverse weather-sensitive conditions,  
3 including peak load events, generation availability,  
4 and unplanned outages.

5 (12) RESOURCE ADEQUACY METRIC.—The term  
6 “resource adequacy metric”—

7 (A) means a quantitative measure of the  
8 resource adequacy of the electricity system; and

9 (B) includes metrics derived from prob-  
10 abilistic analysis, such as loss-of-load expecta-  
11 tion, loss-of-load hours, loss-of-load days, loss-  
12 of-load years, loss-of-load probability, loss-of-  
13 load events, expected unserved energy, and nor-  
14 malized expected unserved energy.

15 (13) SECRETARY.—The term “Secretary”  
16 means the Secretary of Energy, acting through the  
17 head of the Office of Electricity of the Department  
18 of Energy.

19 (14) TRANSMISSION ORGANIZATION.—The term  
20 “Transmission Organization” has the meaning given  
21 such term in section 3 of the Federal Power Act (16  
22 U.S.C. 796).

