

SENATE BILL NO. 328—SENATOR LANGE

MARCH 22, 2021

Referred to Committee on Growth and Infrastructure

SUMMARY—Revises provisions relating to energy storage systems. (BDR 58-658)

FISCAL NOTE: Effect on Local Government: No.
Effect on the State: Yes.

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EXPLANATION – Matter in *bolded italics* is new; matter between brackets ~~omitted material~~ is material to be omitted.

AN ACT relating to energy; requiring certain electric utilities to include in the resource plan submitted to the Public Utilities Commission of Nevada a plan for the procurement of energy storage systems as necessary to meet targets for the procurement of such systems; revising provisions requiring the Commission to establish targets for the procurement of energy storage systems; authorizing the Commission to waive energy storage system procurement targets or to not establish such targets under certain circumstances; establishing qualifications for persons who install energy storage systems; and providing other matters properly relating thereto.

Legislative Counsel’s Digest:

1 Existing law requires the Public Utilities Commission of Nevada to: (1)
2 determine, on or before October 1, 2018, whether it is in the public interest to
3 establish by regulation biennial targets for the procurement of energy storage
4 systems by certain electric utilities; and (2) if the Commission determines that it is
5 in the public interest to establish such targets, adopt regulations establishing
6 biennial targets for the procurement of energy storage systems by certain electric
7 utilities. (NRS 704.795, 704.796) Existing regulations, with certain exceptions,
8 establish progressively larger targets for the procurement of energy storage systems
9 by certain electric utilities, culminating in a requirement that certain electric
10 utilities procure energy storage systems capable of storing not less than 1,000
11 megawatts of electric power by December 31, 2030. (Section 10 of LCB File No.
12 R106-19) **Sections 3 and 9** of this bill increase the biennial targets for the
13 procurement of energy storage systems by certain electric utilities by requiring the
14 Commission to establish higher targets for the procurement of such systems,
15 culminating in a requirement that certain electric utilities procure energy storage



16 systems capable of storing not less than 3,000 megawatts of electric power by
17 December 31, 2030.

18 **Section 3** authorizes the Commission to grant a waiver or deferral of the target
19 for the procurement of energy storage systems during a calendar year in which the
20 electric utility cannot procure a sufficient number of energy storage systems that
21 provide benefits to the customers of the utility that exceed the costs of the energy
22 storage system and that meet certain additional criteria. **Section 3** requires the
23 Commission, in deciding whether to grant a waiver or deferral to an electric utility,
24 to consider all known and measurable benefits and costs of the procurement of
25 energy storage systems and enumerates certain specific benefits and costs which
26 must be considered. **Section 3** also provides that the Commission is not required to
27 establish targets for the procurement of energy storage systems if such systems are
28 rendered unnecessary by technological innovations or other factors. **Section 4** of
29 this bill makes conforming changes to remove references to the adoption by the
30 Commission of biennial targets for the procurement of energy storage systems by
31 regulation because those targets are established by **section 3**. **Section 1** of this
32 bill requires an electric utility to file with the Commission, as part of the triennial
33 integrated resource plan of the utility, a plan for the procurement of energy storage
34 systems as necessary to meet the targets for the procurement of energy storage
35 systems established by the Commission. **Section 8** of this bill requires an electric
36 utility, on or before April 1, 2022, to file an amendment to its existing integrated
37 resource plan that complies with the requirements of **section 1** relating to a plan for
38 the procurement of energy storage systems.

39 **Section 5** of this bill prohibits a person from installing an energy storage
40 system unless the person holds a valid license as an electrical contractor and certain
41 additional professional qualifications relating to the installation of energy storage
42 systems. **Section 6** of this bill provides that a violation of the provisions of **section**
43 **5** is grounds for disciplinary action by the State Contractors' Board.

THE PEOPLE OF THE STATE OF NEVADA, REPRESENTED IN
SENATE AND ASSEMBLY, DO ENACT AS FOLLOWS:

1 **Section 1.** NRS 704.741 is hereby amended to read as follows:

2 704.741 1. A utility which supplies electricity in this State
3 shall, on or before June 1 of every third year, in the manner
4 specified by the Commission, submit a plan to increase its supply of
5 electricity or decrease the demands made on its system by its
6 customers to the Commission. Two or more utilities that are
7 affiliated through common ownership and that have an
8 interconnected system for the transmission of electricity shall
9 submit a joint plan.

10 2. The Commission shall, by regulation:

11 (a) Prescribe the contents of such a plan, including, but not
12 limited to, the methods or formulas which are used by the utility or
13 utilities to:

14 (1) Forecast the future demands, except that a forecast of the
15 future retail electric demands of the utility or utilities must not
16 include the amount of energy and capacity proposed pursuant to
17 subsection ~~6~~ 7 as annual limits on the total amount of energy and



1 capacity that eligible customers may be authorized to purchase from
2 providers of new electric resources through transactions approved
3 by the Commission pursuant to an application submitted pursuant to
4 NRS 704B.310 on or after May 16, 2019; and

5 (2) Determine the best combination of sources of supply to
6 meet the demands or the best method to reduce them; and

7 (b) Designate renewable energy zones and revise the designated
8 renewable energy zones as the Commission deems necessary.

9 3. The Commission shall require the utility or utilities to
10 include in the plan:

11 (a) An energy efficiency program for residential customers
12 which reduces the consumption of electricity or any fossil fuel and
13 which includes, without limitation, the use of new solar thermal
14 energy sources.

15 (b) A proposal for the expenditure of not less than 5 percent of
16 the total expenditures related to energy efficiency and conservation
17 programs on energy efficiency and conservation programs directed
18 to low-income customers of the electric utility.

19 (c) A comparison of a diverse set of scenarios of the best
20 combination of sources of supply to meet the demands or the best
21 methods to reduce the demands, which must include at least one
22 scenario of low carbon intensity that includes the deployment of
23 distributed generation.

24 (d) An analysis of the effects of the requirements of NRS
25 704.766 to 704.776, inclusive, on the reliability of the distribution
26 system of the utility or utilities and the costs to the utility or utilities
27 to provide electric service to all customers. The analysis must
28 include an evaluation of the costs and benefits of addressing issues
29 of reliability through investment in the distribution system.

30 (e) A list of the utility's or utilities' assets described in
31 NRS 704.7338.

32 (f) A surplus asset retirement plan as required by NRS 704.734.

33 4. The Commission shall require the utility or utilities to
34 include in the plan a plan for construction or expansion of
35 transmission facilities to serve renewable energy zones and to
36 facilitate the utility or utilities in meeting the portfolio standard
37 established by NRS 704.7821.

38 5. The Commission shall require the utility or utilities to
39 include in the plan a distributed resources plan. The distributed
40 resources plan must:

41 (a) Evaluate the locational benefits and costs of distributed
42 resources. This evaluation must be based on reductions or increases
43 in local generation capacity needs, avoided or increased investments
44 in distribution infrastructure, safety benefits, reliability benefits and
45 any other savings the distributed resources provide to the electricity



1 grid for this State or costs to customers of the electric utility or
2 utilities.

3 (b) Propose or identify standard tariffs, contracts or other
4 mechanisms for the deployment of cost-effective distributed
5 resources that satisfy the objectives for distribution planning.

6 (c) Propose cost-effective methods of effectively coordinating
7 existing programs approved by the Commission, incentives and
8 tariffs to maximize the locational benefits and minimize the
9 incremental costs of distributed resources.

10 (d) Identify any additional spending necessary to integrate cost-
11 effective distributed resources into distribution planning consistent
12 with the goal of yielding a net benefit to the customers of the
13 electric utility or utilities.

14 (e) Identify barriers to the deployment of distributed resources,
15 including, without limitation, safety standards related to technology
16 or operation of the distribution system in a manner that ensures
17 reliable service.

18 6. *The Commission shall require the utility or utilities to*
19 *include in the plan a plan for the procurement of energy storage*
20 *systems as necessary to meet the targets for the procurement of*
21 *energy storage systems established by NRS 704.796.*

22 7. The Commission shall require the utility or utilities to
23 include in the plan a proposal for annual limits on the total amount
24 of energy and capacity that eligible customers may be authorized to
25 purchase from providers of new electric resources through
26 transactions approved by the Commission pursuant to an application
27 submitted pursuant to NRS 704B.310 on or after May 16, 2019. In
28 developing the proposal and the forecasts in the plan, the utility or
29 utilities must use a sensitivity analysis that, at a minimum, addresses
30 load growth, import capacity, system constraints and the effect of
31 eligible customers purchasing less energy and capacity than
32 authorized by the proposed annual limit. The proposal in the plan
33 must include, without limitation:

34 (a) A forecast of the load growth of the utility or utilities;

35 (b) The number of eligible customers that are currently being
36 served by or anticipated to be served by the utility or utilities;

37 (c) Information concerning the infrastructure of the utility or
38 utilities that is available to accommodate market-based new electric
39 resources;

40 (d) Proposals to ensure the stability of rates and the availability
41 and reliability of electric service; and

42 (e) For each year of the plan, impact fees applicable to each
43 megawatt or each megawatt hour to account for costs reflected in
44 the base tariff general rate and base tariff energy rate paid by end-
45 use customers of the electric utility.



1 ~~7.1~~ 8. The annual limits proposed pursuant to subsection ~~6.1~~ 7
2 shall not apply to energy and capacity sales to an eligible customer
3 if the eligible customer:

4 (a) Was not an end-use customer of the electric utility at any
5 time before June 12, 2019; and

6 (b) Would have a peak load of 10 megawatts or more in the
7 service territory of an electric utility within 2 years of initially
8 taking electric service.

9 ~~8.1~~ 9. As used in this section:

10 (a) "Carbon intensity" means the amount of carbon by weight
11 emitted per unit of energy consumed.

12 (b) "Distributed generation system" has the meaning ascribed to
13 it in NRS 701.380.

14 (c) "Distributed resources" means distributed generation
15 systems, energy efficiency, energy storage, electric vehicles and
16 demand-response technologies.

17 (d) "Eligible customer" has the meaning ascribed to it in
18 NRS 704B.080.

19 (e) "Energy" has the meaning ascribed to it in NRS 704B.090.

20 (f) "New electric resource" has the meaning ascribed to it in
21 NRS 704B.110.

22 (g) "Provider of new electric resources" has the meaning
23 ascribed to it in NRS 704B.130.

24 (h) "Renewable energy zones" means specific geographic zones
25 where renewable energy resources are sufficient to develop
26 generation capacity and where transmission constrains the delivery
27 of electricity from those resources to customers.

28 (i) "Sensitivity analysis" means a set of methods or procedures
29 which results in a determination or estimation of the sensitivity of a
30 result to a change in given data or a given assumption.

31 **Sec. 2.** NRS 704.746 is hereby amended to read as follows:

32 704.746 1. After a utility has filed its plan pursuant to NRS
33 704.741, the Commission shall convene a public hearing on the
34 adequacy of the plan.

35 2. The Commission shall determine the parties to the public
36 hearing on the adequacy of the plan. A person or governmental
37 entity may petition the Commission for leave to intervene as a party.
38 The Commission must grant a petition to intervene as a party in the
39 hearing if the person or entity has relevant material evidence to
40 provide concerning the adequacy of the plan. The Commission may
41 limit participation of an intervener in the hearing to avoid
42 duplication and may prohibit continued participation in the hearing
43 by an intervener if the Commission determines that continued
44 participation will unduly broaden the issues, will not provide



1 additional relevant material evidence or is not necessary to further
2 the public interest.

3 3. In addition to any party to the hearing, any interested person
4 may make comments to the Commission regarding the contents and
5 adequacy of the plan.

6 4. After the hearing, the Commission shall determine whether:

7 (a) The forecast requirements of the utility or utilities are based
8 on substantially accurate data and an adequate method of
9 forecasting.

10 (b) The plan identifies and takes into account any present and
11 projected reductions in the demand for energy that may result from
12 measures to improve energy efficiency in the industrial,
13 commercial, residential and energy producing sectors of the area
14 being served.

15 (c) The plan adequately demonstrates the economic,
16 environmental and other benefits to this State and to the customers
17 of the utility or utilities associated with the following possible
18 measures and sources of supply:

19 (1) Improvements in energy efficiency;

20 (2) Pooling of power;

21 (3) Purchases of power from neighboring states or countries;

22 (4) Facilities that operate on solar or geothermal energy or
23 wind;

24 (5) Facilities that operate on the principle of cogeneration or
25 hydrogeneration;

26 (6) Other generation facilities; and

27 (7) Other transmission facilities.

28 5. The Commission shall give preference to the measures and
29 sources of supply set forth in paragraph (c) of subsection 4 that:

30 (a) Provide the greatest economic and environmental benefits to
31 the State;

32 (b) Are consistent with the provisions of this section;

33 (c) Provide levels of service that are adequate and reliable;

34 (d) Provide the greatest opportunity for the creation of new jobs
35 in this State; and

36 (e) Provide for diverse electricity supply portfolios and which
37 reduce customer exposure to the price volatility of fossil fuels and
38 the potential costs of carbon.

39 ↪ In considering the measures and sources of supply set forth in
40 paragraph (c) of subsection 4 and determining the preference given
41 to such measures and sources of supply, the Commission shall
42 consider the cost of those measures and sources of supply to the
43 customers of the electric utility or utilities.

44 6. The Commission shall:



1 (a) Adopt regulations which determine the level of preference to
2 be given to those measures and sources of supply; and

3 (b) Consider the value to the public of using water efficiently
4 when it is determining those preferences.

5 7. The Commission shall:

6 (a) Consider the level of financial commitment from developers
7 of renewable energy projects in each renewable energy zone, as
8 designated pursuant to subsection 2 of NRS 704.741; and

9 (b) Adopt regulations establishing a process for considering
10 such commitments including, without limitation, contracts for the
11 sale of energy, leases of land and mineral rights, cash deposits and
12 letters of credit.

13 8. The Commission shall, after a hearing, review and accept or
14 modify an emissions reduction and capacity replacement plan which
15 includes each element required by NRS 704.7316. In considering
16 whether to accept or modify an emissions reduction and capacity
17 replacement plan, the Commission shall consider:

18 (a) The cost to the customers of the electric utility or utilities to
19 implement the plan;

20 (b) Whether the plan provides the greatest economic benefit to
21 this State;

22 (c) Whether the plan provides the greatest opportunities for the
23 creation of new jobs in this State; and

24 (d) Whether the plan represents the best value to the customers
25 of the electric utility or utilities.

26 9. In considering whether to accept or modify a proposal for
27 annual limits on the total amount of energy and capacity that eligible
28 customers may be authorized to purchase from providers of new
29 electric resources through transactions approved by the Commission
30 pursuant to an application submitted pursuant to NRS 704B.310
31 after May 16, 2019, which is included in the plan pursuant to
32 subsection ~~6~~ 7 of NRS 704.741, the Commission shall consider
33 whether the proposed annual limits:

34 (a) Further the public interest, including, without limitation,
35 whether the proposed annual limits promote safe, economic,
36 efficient and reliable electric service to all customers of electric
37 service in this State;

38 (b) Align an economically viable utility model with state public
39 policy goals; and

40 (c) Encourage the development and use of renewable energy
41 resources located in this State and, in particular, renewable energy
42 resources that are coupled with energy storage.

43 **Sec. 3.** NRS 704.796 is hereby amended to read as follows:

44 704.796 ~~If, pursuant to NRS 704.795, the Commission~~
45 ~~determines that it is in the public interest to establish by regulation~~



1 ~~targets for the procurement of energy storage systems by an electric~~
2 ~~utility, the]~~

3 *1. Except as otherwise provided in subsections 3 and 4, the*
4 *Commission shall establish targets for the procurement of energy*
5 *storage systems that require each electric utility to procure energy*
6 *storage systems capable of storing electric power in an amount*
7 *that:*

8 (a) *By December 31, 2022, is equal to not less than 500*
9 *megawatts.*

10 (b) *By December 31, 2024, is equal to not less than 1,000*
11 *megawatts.*

12 (c) *By December 31, 2026, is equal to not less than 1,500*
13 *megawatts.*

14 (d) *By December 31, 2028, is equal to not less than 2,000*
15 *megawatts.*

16 (e) *By December 31, 2030, is equal to not less than 3,000*
17 *megawatts.*

18 *2. The Commission shall adopt regulations:*

19 ~~[1.— Establishing biennial targets for the procurement of energy~~
20 ~~storage systems by the electric utility;—~~

21 ~~—2.] (a) Setting forth the points of interconnection on the electric~~
22 ~~grid for the implementation of energy storage systems;~~

23 ~~[3.] (b) Establishing that an energy storage system may be~~
24 ~~owned by the electric utility or any other person;~~

25 ~~[4.— Establishing requirements for the filing by the electric~~
26 ~~utility of annual or biennial plans to meet biennial targets for the~~
27 ~~procurement and implementation of energy storage systems;~~

28 ~~—5.— Prescribing a procedure by which the Commission must, at~~
29 ~~least once every 3 years, reevaluate the biennial targets for the~~
30 ~~procurement of energy storage systems by the electric utility;—~~

31 ~~—6.] (c) Establishing a procedure by which an electric utility may~~
32 ~~obtain a waiver or deferral of the [biennial] targets for the~~
33 ~~procurement of energy storage systems [if the electric utility is not~~
34 ~~able to identify energy storage systems that provide benefits to~~
35 ~~customers of the utility that exceed the costs of energy storage~~
36 ~~systems;] pursuant to subsection 3; and~~

37 ~~[7.] (d) Requiring the electric utility to include such information~~
38 ~~as the Commission may require in each plan submitted by the~~
39 ~~electric utility pursuant to NRS 704.741.~~

40 *3. The Commission may grant a waiver or deferral of a target*
41 *for the procurement of energy storage systems for a calendar year*
42 *if the Commission determines that an electric utility is unable to*
43 *meet the target for that calendar year because, after making*
44 *reasonable efforts, the electric utility is unable to procure a*
45 *sufficient number of energy storage systems which provide*



1 *benefits to customers of the utility that exceed the costs of energy*
2 *storage systems and which satisfy the requirement set forth in*
3 *subsection 2 of NRS 704.797. In calculating the benefits and costs*
4 *of the procurement of particular energy storage systems, the*
5 *Commission shall consider all known and measurable benefits*
6 *and costs, including, without limitation:*

7 (a) *Any reduction in the need for the additional generation of*
8 *electricity during periods of peak demand;*

9 (b) *Any reduction in line losses;*

10 (c) *The benefits and costs related to ancillary services;*

11 (d) *Avoided costs for additional generation, transmission and*
12 *generation capacity;*

13 (e) *The benefits arising from a reduction of greenhouse gas*
14 *emissions and the emission of other air pollutants;*

15 (f) *The benefits and costs related to voltage support;*

16 (g) *The benefits of diversifying the types of resources used for*
17 *the generation of electricity;*

18 (h) *The administrative costs incurred by the electric utility;*

19 (i) *The cost to the electric utility of the integration of energy*
20 *storage systems into the transmission and distribution grid; and*

21 (j) *The cost of energy storage systems.*

22 4. *The Commission is not required to adopt targets for the*
23 *procurement of energy storage systems for a calendar year*
24 *pursuant to subsection 1 if the Commission determines that*
25 *technological innovations or other factors have rendered*
26 *increasing this capacity unnecessary to obtain the benefits set*
27 *forth in subsection 3.*

28 **Sec. 4.** NRS 704.797 is hereby amended to read as follows:

29 704.797 1. ~~If the Commission adopts regulations pursuant to~~
30 ~~NRS 704.796 to establish biennial targets for the procurement of~~
31 ~~energy storage systems by an electric utility, to~~ *To* meet the targets
32 ~~[set forth in those regulations,] for the procurement of energy~~
33 ~~storage systems established pursuant to NRS 704.796,~~ the electric
34 utility may procure energy storage systems that are either
35 centralized or distributed and either owned by the utility or by any
36 other person, as prescribed by regulation of the Commission.

37 2. Electric energy storage systems procured by an electric
38 utility to meet any ~~biennial~~ targets for the procurement of energy
39 storage systems established ~~by regulation~~ pursuant to
40 NRS 704.796 must:

41 (a) Reduce peak demand for electricity;

42 (b) Avoid or defer investment by the electric utility in assets for
43 the generation, transmission and distribution of electricity;

44 (c) Improve the reliability of the operation of the transmission or
45 distribution grid;



1 (d) Reduce the emission of greenhouse gases or other air
2 pollutants; or

3 (e) Integrate renewable energy into the electric grid.

4 **Sec. 5.** Chapter 624 of NRS is hereby amended by adding
5 thereto a new section to read as follows:

6 **1. A person shall not install an energy storage system in this**
7 **State unless he or she holds:**

8 **(a) A valid license in the specialty of electrical contracting with**
9 **any subclassification required to perform such work issued**
10 **pursuant to this chapter and the regulations of the Board; and**

11 **(b) A certificate demonstrating the successful completion of**
12 **the Energy Storage and Microgrid Training and Certification**
13 **program (ESAMTAC).**

14 **2. As used in this section, “energy storage system” has the**
15 **meaning ascribed to it in NRS 704.793.**

16 **Sec. 6.** NRS 624.3016 is hereby amended to read as follows:

17 624.3016 The following acts or omissions, among others,
18 constitute cause for disciplinary action under NRS 624.300:

19 1. Any fraudulent or deceitful act committed in the capacity of
20 a contractor, including, without limitation, misrepresentation or the
21 omission of a material fact.

22 2. A conviction of a violation of NRS 624.730, or a conviction
23 in this State or any other jurisdiction of a felony relating to the
24 practice of a contractor or a crime involving moral turpitude.

25 3. Knowingly making a false statement in or relating to the
26 recording of a notice of lien pursuant to the provisions of
27 NRS 108.226.

28 4. Failure to give a notice required by NRS 108.227, 108.245,
29 108.246 or 624.520.

30 5. Failure to comply with NRS 624.920, 624.930, 624.935 or
31 624.940 or any regulations of the Board governing contracts for
32 work concerning residential pools and spas.

33 6. Failure to comply with NRS 624.600.

34 7. Misrepresentation or the omission of a material fact, or the
35 commission of any other fraudulent or deceitful act, to obtain a
36 license.

37 8. Failure to pay an assessment required pursuant to
38 NRS 624.470.

39 9. Failure to file a certified payroll report that is required for a
40 contract for a public work.

41 10. Knowingly submitting false information in an application
42 for qualification or a certified payroll report that is required for a
43 contract for a public work.



1 11. Failure to notify the Board of a conviction or entry of a
2 plea of guilty, guilty but mentally ill or nolo contendere pursuant to
3 NRS 624.266.

4 12. Failure to provide a builder's warranty as required by NRS
5 624.602 or to respond reasonably to a claim made under a builder's
6 warranty.

7 **13. *Failure to comply with section 5 of this act.***

8 **Sec. 7.** NRS 624.800 is hereby amended to read as follows:

9 624.800 For any violation of the provisions of NRS 624.005 to
10 624.750, inclusive, ***and section 5 of this act*** that is punishable as a
11 misdemeanor, an indictment must be found, or an information or
12 complaint filed, within 2 years after the commission of the offense.

13 **Sec. 8.** A public utility required to file a plan pursuant to NRS
14 704.741 shall, on or before April 1, 2022, submit an amendment to
15 its existing plan that complies with the provisions relating to a plan
16 for the procurement of energy storage systems in subsection 6 of
17 NRS 704.741, as amended by section 1 of this act.

18 **Sec. 9.** NRS 704.795 is hereby repealed.

19 **Sec. 10.** 1. This section becomes effective upon passage and
20 approval.

21 2. Sections 1 to 9, inclusive, of this act become effective:

22 (a) Upon passage and approval for the purpose of adopting any
23 regulations and performing any other preparatory administrative
24 tasks that are necessary to carry out the provisions of this act; and

25 (b) On October 1, 2021, for all other purposes.

TEXT OF REPEALED SECTION

704.795 Commission required to determine whether targets for the procurement of energy storage systems by electric utility is in public interest; required factors to consider; calculation of benefits and costs.

1. On or before October 1, 2018, the Commission shall determine whether it is in the public interest to establish by regulation biennial targets for the procurement of energy storage systems by an electric utility.

2. In making the determination required by subsection 1, the Commission shall consider:

(a) Whether the procurement of energy storage systems by an electric utility will achieve the following purposes:



(1) The integration of renewable energy resources which generate electricity on an intermittent basis into the transmission and distribution grid of the electric utility.

(2) The improvement of the reliability of the systems for the transmission and distribution of electricity.

(3) The increased use of renewable energy resources to generate electricity.

(4) The reduction of the need for the additional generation of electricity during periods of peak demand.

(5) The avoidance or deferral of investment by the electric utility in generation, transmission and distribution of electricity.

(6) The replacement of ancillary services provided by facilities using fossil fuels with ancillary services provided by the use of energy storage systems.

(7) The reduction of greenhouse gas emissions.

(b) The interconnection of energy storage systems at each point of the electric grid, including, without limitation, in the transmission and distribution of electricity and at the site of the customer.

3. For the purposes of subsection 1, the Commission shall determine that the establishment of targets for the procurement of energy storage systems by an electric utility is in the public interest if the benefits to customers of the electric utility exceed the costs of the procurement of energy storage systems. In calculating the benefits and costs of the procurement of energy storage systems, the Commission shall consider all known and measurable benefits and costs, including, without limitation:

(a) A reduction in the need for the additional generation of electricity during periods of peak demand;

(b) A reduction in line losses;

(c) The benefits and costs related to ancillary services;

(d) Avoided costs for additional generation, transmission and generation capacity;

(e) The benefits arising from a reduction of greenhouse gas emissions and the emission of other air pollutants;

(f) The benefits and costs related to voltage support;

(g) The benefits of diversifying the types of resources used for the generation of electricity;

(h) The administrative costs incurred by the electric utility;

(i) The cost to the electric utility of the integration of energy storage systems into the transmission and distribution grid; and

(j) The cost of energy storage systems.

