

SENATE BILL NO. 204—SENATORS ATKINSON, SPEARMAN;
CANCELA, GOICOECHEA, MANENDO AND SEGERBLOM

FEBRUARY 22, 2017

Referred to Committee on Commerce, Labor and Energy

SUMMARY—Requires the Public Utilities Commission of Nevada to investigate and establish biennial targets for certain electric utilities to procure energy storage systems under certain circumstances. (BDR 58-642)

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 the Public Utilities Commission of Nevada to investigate and establish biennial targets for certain electric utilities to procure energy storage systems if certain criteria are satisfied; requiring energy storage systems procured by an electric utility to satisfy such targets to meet certain criteria; and providing other matters properly relating thereto.

Legislative Counsel's Digest:

1 **Section 7** of this bill requires the Public Utilities Commission of Nevada to
2 investigate and determine, on or before October 1, 2018, whether it is in the public
3 interest to establish by regulation biennial targets for the procurement of energy
4 storage systems by an electric utility. Under **section 7**, in making this
5 determination, the Commission must consider whether energy storage systems will
6 achieve certain purposes, including, without limitation: (1) the integration of
7 renewable energy resources into the transmission and distribution grid; (2) the
8 improvement in the reliability of the electric grid; (3) a reduction in the emission of
9 greenhouse gases; and (4) certain other purposes. **Section 7** further provides that, in
10 measuring the benefits and costs of energy storage systems, the Commission is
11 required to consider all known and measurable benefits and costs, including,
12 without limitation, certain benefits and costs listed in **section 7**.

13 If the Commission determines that the benefits of the procurement of energy
14 storage systems exceed the costs, **section 8** of this bill requires the Commission to
15 establish by regulation biennial targets for the procurement of energy storage
16 systems by an electric utility. In addition to such a target, these regulations must
17 include, without limitation: (1) provisions setting forth the locations for the
18 implementation of energy storage systems; (2) requirements for the utility to submit



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19 annual or biennial plans to meet targets for the procurement of energy storage
20 systems; (3) a process for reevaluating the biennial targets at least once every 3
21 years; (4) a procedure by which the electric utility may obtain a waiver or deferral
22 of biennial targets if the electric utility is not able to identify energy storage
23 systems that provide benefits to its customers that exceed the costs of such systems;
24 (5) a requirement for the electric utility to include information concerning energy
25 storage systems in the resource plans filed by the electric utility with the
26 Commission.

27 **Section 9** of this bill establishes the criteria for an energy storage system
28 procured by an electric utility to meet any biennial targets for the procurement of
29 energy storage systems established by the Commission. Under **section 9**, such a
30 system: (1) may be centralized or distributed; (2) may be owned by the electric
31 utility or any other person; and (3) must meet certain other criteria.

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

1 **Section 1.** The Legislature hereby finds and declares that:

2 1. Energy storage systems provide opportunities to:

3 (a) Reduce costs to ratepayers by avoiding or deferring the need
4 for new generation of energy and for upgrades to systems for the
5 transmission and distribution of energy;

6 (b) Reduce the use of fossil fuels for meeting demand during
7 peak load periods and for providing ancillary services;

8 (c) Assist electric utilities with integrating sources of renewable
9 energy into the grids for the transmission and distribution of
10 electricity and with enhancing grid stability;

11 (d) Support diversification of energy resources and enhance grid
12 security; and

13 (e) Reduce the emission of greenhouse gases and other air
14 pollutants.

15 2. There exist opportunities in the current energy storage
16 market which can be enhanced through the sharing of system
17 capabilities, recognition of technological advances, improvement of
18 price structures and use of a collaborative approach to generation,
19 transmission and distribution planning.

20 3. For the reasons set forth in subsection 1, it is in the public
21 interest to remove the barriers to the use of energy storage systems
22 in this State by investigating the costs and benefits of energy storage
23 systems and, if such an investigation indicates that the benefits of
24 energy storage systems exceed the costs of such systems,
25 implementing biennial targets for the procurement of energy storage
26 systems by an electric utility in this State.



1 **Sec. 2.** Chapter 704 of NRS is hereby amended by adding
2 thereto the provisions set forth as sections 3 to 9, inclusive, of this
3 act.

4 **Sec. 3.** *As used in sections 3 to 9, inclusive, of this act, unless*
5 *the context otherwise requires, the words and terms defined in*
6 *sections 4, 5 and 6 of this act have the meanings ascribed to them*
7 *in those sections.*

8 **Sec. 4.** *“Electric utility” has the meaning ascribed to it in*
9 *NRS 704.187.*

10 **Sec. 5.** *“Energy storage system” means commercially*
11 *available technology that is capable of retaining energy, storing*
12 *the energy for a period of time and delivering the energy after*
13 *storage, including, without limitation, by chemical, thermal or*
14 *mechanical means.*

15 **Sec. 6.** *“Procure” or “procurement” means to acquire by*
16 *ownership or by a contractual right to use the energy from, or the*
17 *capacity of, an energy storage system.*

18 **Sec. 7. 1.** *On or before October 1, 2018, the Commission*
19 *shall determine whether it is in the public interest to establish by*
20 *regulation biennial targets for the procurement of energy storage*
21 *systems by an electric utility.*

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

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

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

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

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

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

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

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

40 **(7)** *The reduction of greenhouse gas emissions.*

41 **(b)** *The interconnection of energy storage systems at each*
42 *point of the electric grid, including, without limitation, in the*
43 *transmission and distribution of electricity and at the site of the*
44 *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.

Sec. 8. If, pursuant to section 7 of this act, the Commission determines that it is in the public interest to establish by regulation targets for the procurement of energy storage systems by an electric utility, the Commission shall adopt regulations:

1. Establishing biennial targets for the procurement of energy storage systems by the electric utility;

2. Setting forth the points of interconnection on the electric grid for the implementation of energy storage systems;

3. Establishing that an energy storage system may be owned by the electric utility or any other person;

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

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

6. Establishing a procedure by which an electric utility may obtain a waiver or deferral of the biennial targets for the procurement of energy storage systems if the electric utility is not able to identify energy storage systems that provide benefits to customers of the utility that exceed the costs of energy storage systems; and



1 7. *Requiring the electric utility to include such information as*
2 *the Commission may require in each plan submitted by the electric*
3 *utility pursuant to NRS 704.741.*

4 **Sec. 9. 1.** *If the Commission adopts regulations pursuant to*
5 *section 8 of this act to establish biennial targets for the*
6 *procurement of energy storage systems by an electric utility, to*
7 *meet the targets set forth in those regulations, the electric utility*
8 *may procure energy storage systems that are either centralized or*
9 *distributed and either owned by the utility or by any other person,*
10 *as prescribed by regulation of the Commission.*

11 2. *Electric energy storage systems procured by an electric*
12 *utility to meet any biennial targets for the procurement of energy*
13 *storage systems established by regulation pursuant to section 8 of*
14 *this act must:*

15 (a) *Reduce peak demand for electricity;*

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

18 (c) *Improve the reliability of the operation of the transmission*
19 *or distribution grid;*

20 (d) *Reduce the emission of greenhouse gases or other air*
21 *pollutants; or*

22 (e) *Integrate renewable energy into the electric grid.*

23 **Sec. 10.** This act becomes effective on July 1, 2017.



