

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 a requirement 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 a requirement 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 requirements 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 a requirement 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 annual requirements for the procurement of energy storage
16 systems by an electric utility. In addition to such a requirement, these regulations
17 must include, without limitation: (1) provisions setting forth the locations for the
18 implementation of energy storage systems; (2) requirements for the utility to submit



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

26 **Section 9** of this bill establishes the requirements for an energy storage system
27 procured by an electric utility to comply with any annual requirements for the
28 procurement of energy storage systems established by the Commission. Under
29 **section 9**, such a system: (1) may be centralized or distributed; (2) may be owned
30 by the electric 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:

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 significant barriers to obtaining the benefits of
16 energy storage systems, including, without limitation, inadequate
17 evaluation of the use of energy storage on the transmission and
18 distribution grid through long-term resource planning and a lack of
19 recognition of advances in the technology and market for energy
20 storage systems.

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



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

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

11 (b) A reduction in line losses;

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

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

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

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

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

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

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

23 (j) The cost of energy storage systems.

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

28 1. Establishing annual requirements for the procurement of
29 energy storage systems by the electric utility which increase over
30 time;

31 2. Setting forth the locations on the electric grid for the
32 implementation of energy storage systems;

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

35 4. Establishing requirements for the filing by the electric
36 utility of annual or biannual plans for the procurement and
37 implementation of energy storage systems;

38 5. Prescribing a procedure by which the Commission must, at
39 least once every 3 years, reevaluate the annual requirements for
40 the procurement of energy storage systems by the electric utility;

41 6. Establishing a procedure by which an electric utility may
42 obtain a waiver or deferral of the requirement to procure energy
43 storage systems if the electric utility is not able to identify energy
44 storage systems that provide benefits to customers of the utility
45 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.** *If the Commission adopts regulations pursuant to*
5 *section 8 of this act to establish annual requirements for the*
6 *procurement of energy storage systems by an electric utility, to*
7 *meet the annual requirements set forth in those regulations, the*
8 *electric utility:*

9 1. *May procure an energy storage system that is either*
10 *centralized or distributed and either owned by the utility or by any*
11 *other person.*

12 2. *Must procure an electric energy storage system that:*

13 (a) *Reduces peak demand for electricity;*

14 (b) *Avoids or defers investment by the electric utility in assets*
15 *for the generation, transmission and distribution of electricity;*

16 (c) *Improves the reliability of the operation of the transmission*
17 *or distribution grid;*

18 (d) *Reduces the emission of greenhouse gases or other air*
19 *pollutants; or*

20 (e) *Integrates renewable energy into the electric grid.*

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

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