

First Regular Session  
Seventy-first General Assembly  
STATE OF COLORADO

INTRODUCED

LLS NO. 17-0614.02 Duane Gall x4335

HOUSE BILL 17-1299

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HOUSE SPONSORSHIP

Hansen and Coleman,

SENATE SPONSORSHIP

(None),

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House Committees  
Transportation & Energy

Senate Committees

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A BILL FOR AN ACT

101 CONCERNING A TRANSPORTATION LEGISLATION REVIEW COMMITTEE  
102 HEARING ON THE INTEGRATION OF ENERGY STORAGE INTO THE  
103 ELECTRIC RESOURCE PLANNING PROCESS FOR PUBLIC UTILITIES.

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Bill Summary

*(Note: This summary applies to this bill as introduced and does not reflect any amendments that may be subsequently adopted. If this bill passes third reading in the house of introduction, a bill summary that applies to the reengrossed version of this bill will be available at <http://leg.colorado.gov>.)*

The bill directs the transportation legislation review committee (TLRC) to conduct a hearing during the 2017 interim on the potential economic and social benefits and costs of requiring the public utilities commission to determine the appropriate targets, if any, for the amount of viable and cost-effective energy storage systems (e.g., batteries, heat

Shading denotes HOUSE amendment. Double underlining denotes SENATE amendment.  
*Capital letters indicate new material to be added to existing statute.*  
*Dashes through the words indicate deletions from existing statute.*

sinks, pumped storage hydroelectric systems) that an electric utility subject to Colorado's renewable energy standard should incorporate into its electric resource acquisition plans.

The hearing must take place on or before December 1, 2017.

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1 *Be it enacted by the General Assembly of the State of Colorado:*

2 **SECTION 1.** In Colorado Revised Statutes, **add** 43-2-145.8 as  
3 follows:

4 **43-2-145.8. Transportation legislation review committee -**  
5 **inclusion of energy storage systems in utility resource planning -**  
6 **legislative declaration - definitions - hearing - repeal.** (1) (a) THE  
7 GENERAL ASSEMBLY FINDS AND DETERMINES THAT:

8 (I) EXPANDING THE USE OF ENERGY STORAGE SYSTEMS CAN ASSIST  
9 ELECTRIC UTILITIES IN IMPROVING THE RELIABILITY AND SECURITY OF  
10 SERVICE;

11 (II) ADDITIONAL ENERGY STORAGE SYSTEMS CAN OPTIMIZE THE  
12 USE OF VARIABLE, INTERMITTENT, AND OFF-PEAK ELECTRICAL  
13 GENERATION FROM SOURCES SUCH AS HYDROELECTRIC, WIND, AND SOLAR  
14 ENERGY;

15 (III) EXPANDED USE OF ENERGY STORAGE SYSTEMS CAN REDUCE  
16 COSTS TO RATEPAYERS BY AVOIDING OR DEFERRING THE NEED FOR NEW  
17 PEAKING POWER PLANTS AND AVOIDING OR DEFERRING UPGRADES TO THE  
18 DISTRIBUTION AND TRANSMISSION SYSTEM AND EXPANSION OF THE  
19 ELECTRICAL GRID;

20 (IV) EXPANDED USE OF ENERGY STORAGE SYSTEMS WILL REDUCE  
21 THE USE OF ELECTRICITY GENERATED FROM COSTLY FUELS TO MEET LOAD  
22 REQUIREMENTS ON DAYS WITH HIGH ELECTRICITY DEMAND AND CAN  
23 AVOID OR REDUCE THE NEED FOR ADDITIONAL ELECTRIC GENERATION

1 FACILITIES TO MEET THAT DEMAND, THUS SAVING MONEY FOR  
2 RATEPAYERS AND REDUCING EMISSIONS;

3 (V) USE OF ENERGY STORAGE SYSTEMS TO PROVIDE ANCILLARY  
4 SERVICES WILL REDUCE COSTS FOR RATEPAYERS; AND

5 (VI) THERE ARE SIGNIFICANT BARRIERS TO OBTAINING THE  
6 BENEFITS OF ENERGY STORAGE SYSTEMS, INCLUDING:

7 (A) INADEQUATE EVALUATION OF THE USE OF ENERGY STORAGE  
8 TO INTEGRATE ENERGY RESOURCES INTO THE TRANSMISSION AND  
9 DISTRIBUTION GRID THROUGH LONG-TERM ELECTRICITY RESOURCE  
10 PLANNING;

11 (B) LACK OF RECOGNITION OF TECHNOLOGICAL AND  
12 MARKETPLACE ADVANCEMENTS; AND

13 (C) INADEQUATE STATUTORY AND REGULATORY SUPPORT.

14 (b) THEREFORE, THE GENERAL ASSEMBLY DECLARES THAT AN  
15 INTERIM HEARING IS APPROPRIATE TO FURTHER INVESTIGATE THE  
16 ECONOMIC AND SOCIAL BENEFITS AND COSTS OF, AND TO ENCOURAGE THE  
17 PLANNING FOR AND INCORPORATION OF, ENERGY STORAGE SYSTEMS AS  
18 PART OF COLORADO'S ELECTRIC ENERGY GRID.

19 (2) AS USED IN THIS SECTION, UNLESS THE CONTEXT OTHERWISE  
20 REQUIRES:

21 (a) "COMMISSION" MEANS THE COLORADO PUBLIC UTILITIES  
22 COMMISSION.

23 (b) (I) "ENERGY STORAGE SYSTEM" MEANS COMMERCIALY  
24 AVAILABLE TECHNOLOGY THAT IS CAPABLE OF ABSORBING ENERGY,  
25 STORING IT FOR A PERIOD OF TIME, AND THEREAFTER DISPATCHING THE  
26 ENERGY AS DESCRIBED IN THIS SUBSECTION (2)(b).

27 (II) AN ENERGY STORAGE SYSTEM:

1 (A) MAY BE EITHER CENTRALIZED OR DISTRIBUTED AND MAY BE  
2 OWNED BY A QUALIFYING RETAIL UTILITY, A CUSTOMER OF A QUALIFYING  
3 RETAIL UTILITY, A THIRD PARTY, OR JOINTLY BY TWO OR MORE OF THESE  
4 ENTITIES;

5 (B) MUST IMPROVE THE RELIABLE OPERATION OF THE ELECTRICAL  
6 TRANSMISSION OR DISTRIBUTION GRID IN A COST-EFFECTIVE MANNER;  
7 REDUCE DEMAND FOR ELECTRICAL GENERATION; OR DEFER OR SUBSTITUTE  
8 FOR AN INVESTMENT IN GENERATION, TRANSMISSION, OR DISTRIBUTION  
9 ASSETS; AND

10 (C) MUST USE MECHANICAL, CHEMICAL, OR THERMAL PROCESSES  
11 TO STORE ENERGY THAT WAS GENERATED AT ONE TIME FOR USE AT A  
12 LATER TIME; STORE THERMAL ENERGY FOR DIRECT USE FOR HEATING OR  
13 COOLING AT A LATER TIME IN A MANNER THAT AVOIDS THE NEED TO USE  
14 ELECTRICITY AT THAT LATER TIME; USE MECHANICAL, CHEMICAL, OR  
15 THERMAL PROCESSES TO STORE ENERGY GENERATED FROM RENEWABLE  
16 RESOURCES FOR USE AT A LATER TIME; OR USE MECHANICAL, CHEMICAL,  
17 OR THERMAL PROCESSES TO STORE ENERGY GENERATED FROM  
18 MECHANICAL PROCESSES THAT WOULD OTHERWISE BE WASTED FOR  
19 DELIVERY AT A LATER TIME.

20 (c) "New", WITH REFERENCE TO AN ENERGY STORAGE SYSTEM,  
21 MEANS THAT THE SYSTEM IS INSTALLED ON OR AFTER JANUARY 1, 2017.

22 (d) "PEAK DEMAND PERIOD" MEANS A PERIOD OF HIGH DAILY,  
23 WEEKLY, OR SEASONAL DEMAND FOR ELECTRICITY. FOR PURPOSES OF THIS  
24 SECTION, THE PEAK DEMAND PERIOD FOR AN INVESTOR-OWNED UTILITY  
25 SHALL BE DETERMINED OR APPROVED BY THE PUBLIC UTILITIES  
26 COMMISSION AND FOR A MUNICIPALLY OWNED UTILITY OR NONEXEMPT  
27 COOPERATIVE ELECTRIC ASSOCIATION SHALL BE DETERMINED OR

1 APPROVED BY ITS GOVERNING BODY.

2 (e) "PROCURE", WITH REFERENCE TO AN ENERGY STORAGE  
3 SYSTEM, MEANS TO CONSTRUCT OR PURCHASE THE ENERGY STORAGE  
4 SYSTEM OR TO ACQUIRE AN ENFORCEABLE RIGHT TO USE THE ENERGY  
5 FROM, OR THE CAPACITY OF, AN ENERGY STORAGE SYSTEM OWNED BY  
6 ANOTHER PERSON.

7 (f) "QUALIFYING RETAIL UTILITY" HAS THE MEANING SET FORTH IN  
8 SECTION 40-2-124 (1).

9 (3) (a) ON OR BEFORE DECEMBER 1, 2017, THE TRANSPORTATION  
10 LEGISLATION REVIEW COMMITTEE SHALL HOLD A HEARING ON THE  
11 POTENTIAL ECONOMIC AND SOCIAL BENEFITS AND COSTS OF REQUIRING  
12 THE PUBLIC UTILITIES COMMISSION TO DETERMINE THE APPROPRIATE  
13 TARGETS, IF ANY, FOR THE AMOUNT OF VIABLE AND COST-EFFECTIVE  
14 ENERGY STORAGE SYSTEMS THAT AN ELECTRIC UTILITY SUBJECT TO  
15 COLORADO'S RENEWABLE ENERGY STANDARD SHOULD INCORPORATE INTO  
16 ITS ELECTRIC RESOURCE ACQUISITION PLANS.

17 (b) (I) THE TRANSPORTATION LEGISLATION REVIEW COMMITTEE  
18 SHALL INVITE MEMBERS OF THE COMMISSION OR THE COMMISSION'S  
19 DESIGNEE, REPRESENTATIVES OF COLORADO ELECTRIC SERVICE  
20 PROVIDERS, AND INTERESTED MEMBERS OF THE PUBLIC TO THE HEARING  
21 TO ENGAGE IN A PANEL DISCUSSION OF THE ISSUES SET FORTH IN  
22 SUBSECTION (3)(a) OF THIS SECTION.

23 (II) IN ADDITION TO ALLOWING PUBLIC TESTIMONY AT THE  
24 HEARING, THE TRANSPORTATION LEGISLATION REVIEW COMMITTEE SHALL  
25 ACCEPT WRITTEN QUESTIONS SUBMITTED BY MEMBERS OF THE PUBLIC TO  
26 BE ASKED OF THE PANEL MEMBERS BY THE CHAIR OF THE COMMITTEE OR  
27 THE CHAIR'S DESIGNEE AT THE HEARING. THE CHAIR MAY DETERMINE:

1 (A) THE NUMBER OF SUBMITTED WRITTEN QUESTIONS ASKED OF  
2 THE PANEL; AND

3 (B) THE ORDER IN WHICH THE APPROVED SUBMITTED QUESTIONS  
4 WILL BE ASKED OF THE PANEL.

5 (4) THIS SECTION IS REPEALED, EFFECTIVE JULY 1, 2018.

6 **SECTION 2. Act subject to petition - effective date.** This act  
7 takes effect at 12:01 a.m. on the day following the expiration of the  
8 ninety-day period after final adjournment of the general assembly (August  
9 9, 2017, if adjournment sine die is on May 10, 2017); except that, if a  
10 referendum petition is filed pursuant to section 1 (3) of article V of the  
11 state constitution against this act or an item, section, or part of this act  
12 within such period, then the act, item, section, or part will not take effect  
13 unless approved by the people at the general election to be held in  
14 November 2018 and, in such case, will take effect on the date of the  
15 official declaration of the vote thereon by the governor.