

SENATE COMMITTEE OF REFERENCE AMENDMENT
Committee on Transportation & Energy.

SB25-127 be amended as follows:

1 Amend printed bill, strike everything below the enacting clause and
2 substitute:

3 **"SECTION 1. Short title.** The short title of this act is the
4 "Colorado Grid Optimization Act".

5 **SECTION 2.** In Colorado Revised Statutes, 40-2-125.5, **add** (5.5)
6 and (5.7) as follows:

7 **40-2-125.5. Carbon dioxide emission reductions - goal to**
8 **eliminate by 2050 - legislative declaration - interim targets -**
9 **submission and approval of plans - definitions - cost recovery -**
10 **reports - rules.** (5.5) (a) (I) EXCEPT AS PROVIDED IN SUBSECTION
11 (5.5)(a)(II) OF THIS SECTION, ON AND AFTER SEPTEMBER 1, 2025, A
12 QUALIFYING RETAIL UTILITY'S ELECTRIC RESOURCE PLAN MUST INCLUDE
13 AN EVALUATION OF ADVANCED TRANSMISSION TECHNOLOGIES. THE
14 EVALUATION MUST INCLUDE:

15 (A) A TECHNICAL FEASIBILITY ASSESSMENT;

16 (B) A COST-EFFECTIVENESS ANALYSIS;

17 (C) A BASE MODELING SCENARIO AND A MODELING SCENARIO
18 THAT INCORPORATES ADVANCED TRANSMISSION TECHNOLOGIES THAT MAY
19 INCREASE SYSTEM CAPACITY, INCREASE CAPACITY TO CONNECT TO NEW
20 RENEWABLE ENERGY AND ZERO-CARBON RESOURCES, AND LOWER COSTS;
21 AND

22 (D) AN INVENTORY OF THE UTILITY'S EXISTING AND PLANNED
23 ADVANCED TRANSMISSION TECHNOLOGIES.

24 (II) IF A QUALIFYING RETAIL UTILITY DOES NOT INCORPORATE AN
25 EVALUATION OF ADVANCED TRANSMISSION TECHNOLOGIES IN ITS
26 ELECTRIC RESOURCE PLAN, THE QUALIFYING RETAIL UTILITY SHALL
27 SUBMIT A DETAILED EXPLANATION OF WHY AN EVALUATION WAS NOT
28 INCORPORATED, WHICH EXPLANATION MUST INCLUDE RELEVANT
29 ANALYSES DEMONSTRATING WHY ADVANCED TRANSMISSION
30 TECHNOLOGIES WERE NOT FOUND TO OFFER A MORE COST-EFFECTIVE
31 STRATEGY, WHETHER IN COMBINATION WITH OR INSTEAD OF OTHER
32 CAPITAL INVESTMENTS, TO ACHIEVE ONE OR MORE OF THE FOLLOWING:

33 (A) AN INCREASE IN TRANSMISSION SYSTEM CAPACITY,
34 EFFICIENCY, RELIABILITY, OR RESILIENCY;

35 (B) A REDUCTION OF TRANSMISSION SYSTEM CONGESTION;

36 (C) A REDUCTION OF CURTAILMENT OF RENEWABLE AND
37 ZERO-CARBON RESOURCES;

38 (D) A REDUCTION OF THE RISK OF IGNITING WILDFIRES; AND

39 (E) AN INCREASE IN CAPACITY TO CONNECT NEW RENEWABLE
40 ENERGY AND ZERO-CARBON RESOURCES.

6 (c) AS USED IN THIS SUBSECTION (5.5) AND SUBSECTION (5.7) OF
7 THIS SECTION:

8 (I) "ADVANCED CONDUCTOR" MEANS A CONDUCTOR THAT HAS A
9 DIRECT CURRENT ELECTRICAL RESISTANCE THAT IS AT LEAST TEN PERCENT
10 LOWER THAN EXISTING CONDUCTORS OF A SIMILAR DIAMETER ON THE
11 ELECTRIC TRANSMISSION SYSTEM AND THAT INCREASES CAPACITY BY AT
12 LEAST SEVENTY-FIVE PERCENT ON THE SYSTEM.

17 (A) ADVANCED CONDUCTORS;

18 (B) GRID-ENHANCING TECHNOLOGIES; AND

19 (C) OTHER TECHNOLOGY AS DETERMINED BY THE COMMISSION.

20 (III) "GRID-ENHANCING TECHNOLOGY" MEANS A HARDWARE OR A
21 SOFTWARE TECHNOLOGY THAT REDUCES CONGESTION OR ENHANCES THE
22 FLEXIBILITY OF ELECTRIC TRANSMISSION AND DISTRIBUTION SYSTEMS BY
23 INCREASING THE CAPACITY OF A TRANSMISSION OR DISTRIBUTION LINE OR
24 REROUTING ELECTRICITY FROM OVERLOADED LINES TO UNCONGESTED
25 LINES, WHILE MAINTAINING INDUSTRY SAFETY STANDARDS.

26 "GRID-ENHANCING TECHNOLOGY" INCLUDES:

27 (A) DYNAMIC LINE RATINGS;

28 (B) ADVANCED POWER FLOW CONTROLLERS;

29 (C) TOPOLOGY OPTIMIZATION;

30 (D) ENERGY STORAGE AS A TRANSMISSION ASSET; AND

31 (E) OTHER TECHNOLOGIES THAT INCREASE GRID RELIABILITY,
32 FLEXIBILITY, AND CAPACITY.

33 (5.7) Performance-based incentives for advanced transmission

34 **technologies.** (a) THE COMMISSION MAY INVESTIGATE NEW INCENTIVES
35 FOR THE UTILIZATION OF ADVANCED TRANSMISSION TECHNOLOGIES THAT

36 DEMONSTRATE AN ABILITY TO:
37 (I) PROVIDE ELECTRIC TRANSMISSION SYSTEM CONGESTION RELIEF;
38 (II) INTERCONNECT NEW LOAD OR GENERATION THAT THE
39 QUALIFYING RETAIL UTILITY IS OTHERWISE UNABLE TO INTEGRATE ONTO
40 THE GRID IN A TIMELY AND PRACTICABLE MANNER THROUGH EXISTING
41 TRANSMISSION OR DISTRIBUTION INVESTMENTS;

42 (III) REDUCE WILDFIRE RISKS AND ENHANCE RESILIENCY TO
43 WILDFIRE IMPACTS AND OTHER EXTREME CONDITIONS, HAZARDS, OR RISKS;

1 OR

2 (IV) AVOID, REDUCE, OR DEFER THE ACTIVATION OF PUBLIC
3 SAFETY POWER SHUT OFFS OR DE-ENERGIZATION EVENTS.

4 (b) IN DESIGNING INCENTIVES FOR THE UTILIZATION OF ADVANCED
5 TRANSMISSION TECHNOLOGIES THAT DEMONSTRATE THE BENEFITS
6 OUTLINED IN SUBSECTION (5.7)(a) OF THIS SECTION, THE COMMISSION
7 SHALL CONSIDER:

8 (I) SHARED SAVINGS APPROACHES;

9 (II) PERFORMANCE INCENTIVE MECHANISMS; AND

10 (III) APPROPRIATE CONSUMER PROTECTIONS TO ENSURE ANY
11 ADDITIONAL REVENUE OR COST RECOVERY AUTHORIZED AS A RESULT OF
12 THE INCENTIVE IS PRUDENT.

13 **SECTION 3.** In Colorado Revised Statutes, 40-2-134, **amend** (2);
14 and **add** (3) and (4) as follows:

15 **40-2-134. Wholesale electric cooperatives - electric resource**
16 **planning - definitions - rules.** (2) (a) As used in this section, "wholesale
17 electric cooperative" means any generation and transmission cooperative
18 electric association that provides wholesale electric service directly to
19 cooperative electric associations. EXCEPT AS PROVIDED IN SUBSECTION
20 (2)(b) OF THIS SECTION, ON AND AFTER SEPTEMBER 1, 2025, AN
21 INTEGRATED OR ELECTRIC RESOURCE PLAN THAT A WHOLESALE ELECTRIC
22 COOPERATIVE SUBMITS TO THE COMMISSION MUST INCLUDE AN
23 EVALUATION OF ADVANCED TRANSMISSION TECHNOLOGIES, INCLUDING:

24 (I) A TECHNICAL FEASIBILITY ASSESSMENT;

25 (II) A COST-EFFECTIVENESS ANALYSIS;

26 (III) A BASE MODELING SCENARIO AND A MODELING SCENARIO
27 THAT INCORPORATES ADVANCED TRANSMISSION TECHNOLOGIES THAT MAY
28 INCREASE SYSTEM CAPACITY, INCREASE CAPACITY TO CONNECT TO NEW
29 RENEWABLE ENERGY AND ZERO-CARBON RESOURCES, AND LOWER COSTS;
30 AND

31 (IV) AN INVENTORY OF THE WHOLESALE ELECTRIC COOPERATIVE'S
32 EXISTING AND PLANNED ADVANCED TRANSMISSION TECHNOLOGIES.

33 (b) IF A WHOLESALE ELECTRIC COOPERATIVE DOES NOT
34 INCORPORATE AN EVALUATION OF ADVANCED TRANSMISSION
35 TECHNOLOGIES IN ITS INTEGRATED OR ELECTRIC RESOURCE PLAN, THE
36 WHOLESALE ELECTRIC COOPERATIVE SHALL SUBMIT A DETAILED
37 EXPLANATION OF WHY AN EVALUATION WAS NOT INCORPORATED, WHICH
38 EXPLANATION MUST INCLUDE RELEVANT ANALYSES DEMONSTRATING WHY
39 ADVANCED TRANSMISSION TECHNOLOGIES WERE NOT FOUND TO OFFER A
40 MORE COST-EFFECTIVE STRATEGY, WHETHER IN COMBINATION WITH OR
41 INSTEAD OF OTHER CAPITAL INVESTMENTS, TO ACHIEVE ONE OR MORE OF
42 THE GOALS LISTED IN SECTION 40-2-125.5 (5.5)(a)(II).

43 (3) AS NEEDED, THE COMMISSION SHALL CONSULT WITH THE

1 COLORADO ELECTRIC TRANSMISSION AUTHORITY, SUBJECT TO AN
2 INTERGOVERNMENTAL AGREEMENT, TO EVALUATE THE PLANS SUBMITTED
3 PURSUANT TO THIS SECTION.

4 (4) AS USED IN THIS SECTION:

5 (a) "ADVANCED TRANSMISSION TECHNOLOGIES" HAS THE MEANING
6 SET FORTH IN SECTION 40-2-125.5 (5.5)(c)(II).

7 (b) "WHOLESALE ELECTRIC COOPERATIVE" MEANS A GENERATION
8 AND TRANSMISSION COOPERATIVE ELECTRIC ASSOCIATION THAT PROVIDES
9 WHOLESALE ELECTRIC SERVICE DIRECTLY TO COOPERATIVE ELECTRIC
10 ASSOCIATIONS.

11 **SECTION 4.** In Colorado Revised Statutes, 40-2-126, **amend** (6)
12 as follows:

13 **40-2-126. Transmission facilities - biennial review - energy**
14 **resource zones - definitions - plans - approval - cost recovery -**
15 **powerline trail consideration.** (6) The commission shall amend its rules
16 requiring the filing of ten-year transmission plans by utilities to also
17 require utilities to:

18 (a) Consider and address plans for the construction of new
19 powerline trails in coordination with applicable local governments in each
20 two-year update to a ten-year transmission plan; **and**

21 (b) Demonstrate compliance with section 33-45-103 (2);

22 (c) CONSIDER ADVANCED TRANSMISSION TECHNOLOGIES, AS
23 DEFINED IN SECTION 40-2-125.5 (5.5)(c)(II), IN EACH TEN-YEAR
24 TRANSMISSION PLAN;

25 (d) ALIGN EACH TEN-YEAR TRANSMISSION PLAN WITH THE
26 UTILITY'S ELECTRIC RESOURCE PLAN AND CLEAN ENERGY PLAN; AND

27 (e) IDENTIFY STRATEGIES TO REDUCE THE CAPITAL AND FINANCING
28 COSTS FOR PROJECTS THAT THE UTILITY IDENTIFIES IN A TEN-YEAR
29 TRANSMISSION PLAN, INCLUDING BY USING THE PUBLIC FINANCING
30 AUTHORITY OF THE COLORADO ELECTRIC TRANSMISSION AUTHORITY.

31 **SECTION 5.** In Colorado Revised Statutes, 40-1-102, **amend**
32 (1.5); and **add** (1.7) as follows:

33 **40-1-102. Definitions.** As used in articles 1 to 7 of this title 40,
34 unless the context otherwise requires:

35 (1.5) "~~Commission~~" means the public utilities commission of the
36 state of Colorado "COLORADO ELECTRIC TRANSMISSION AUTHORITY"
37 MEANS THE COLORADO ELECTRIC TRANSMISSION AUTHORITY CREATED IN
38 SECTION 40-42-103 (1).

39 (1.7) "COMMISSION" MEANS THE PUBLIC UTILITIES COMMISSION OF
40 THE STATE OF COLORADO.

41 **SECTION 6. Act subject to petition - effective date.** This act
42 takes effect at 12:01 a.m. on the day following the expiration of the
43 ninety-day period after final adjournment of the general assembly; except

1 that, if a referendum petition is filed pursuant to section 1 (3) of article V
2 of the state constitution against this act or an item, section, or part of this
3 act within such period, then the act, item, section, or part will not take
4 effect unless approved by the people at the general election to be held in
5 November 2026 and, in such case, will take effect on the date of the
6 official declaration of the vote thereon by the governor.".

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