

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.

1 (b) AS NEEDED, THE COMMISSION SHALL CONSULT WITH THE
2 COLORADO ELECTRIC TRANSMISSION AUTHORITY, SUBJECT TO AN
3 INTERGOVERNMENTAL AGREEMENT, TO EVALUATE THE PLANS SUBMITTED
4 PURSUANT TO THIS SUBSECTION (5.5) AND TO DESIGN INCENTIVES
5 PURSUANT TO SUBSECTION (5.7) OF THIS SECTION.

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.

13 (II) "ADVANCED TRANSMISSION TECHNOLOGIES" MEANS
14 HARDWARE OR SOFTWARE TECHNOLOGIES THAT INCREASE THE CAPACITY,
15 EFFICIENCY, RELIABILITY, OR RESILIENCY OF AN EXISTING OR A NEW
16 TRANSMISSION FACILITY, INCLUDING:

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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