

Second Regular Session
Seventy-third General Assembly
STATE OF COLORADO

INTRODUCED

LLS NO. 22-0299.01 Jennifer Berman x3286

HOUSE BILL 22-1249

HOUSE SPONSORSHIP

Bernett and Hooton,

SENATE SPONSORSHIP

Rankin,

House Committees
Energy & Environment

Senate Committees

A BILL FOR AN ACT

101 CONCERNING THE CREATION OF A ROADMAP FOR IMPROVING
102 ELECTRIC GRIDS IN THE STATE.

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 requires the Colorado energy office (office), in collaboration with the department of local affairs (department) and the Colorado resiliency office (resiliency office), to develop a grid resilience and reliability roadmap (roadmap) for improving the resilience and reliability of electric grids in the state (grid), which roadmap must include guidance on how microgrids may be used to harden the grid, improve grid

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

resilience and reliability, and help serve communities' electricity needs independent of the grid. In developing the roadmap, the office, department, and resiliency office are required to engage interested persons throughout the state in stakeholder meetings and consider stakeholder input. The roadmap may identify:

- The potential benefits of developing microgrids, including whether and how developing microgrids improves grid resilience and reliability;
- The critical facilities and infrastructure and the high-risk communities that should be prioritized for microgrid projects (projects);
- Existing and potential threats to grid resilience and reliability and how microgrids may help to overcome the threats; and
- Recommendations regarding potential legislative or administrative changes needed to help facilitate projects, including needed statutory or rule changes, metrics for evaluating the costs and benefits of microgrids, financial and technical support for microgrid deployment, and education and outreach programs.

The office and department are required to post the roadmap on their websites. The office is also required to submit a copy of the roadmap to the public utilities commission (commission), and, on or before March 1, 2025, in collaboration with the department, present the roadmap to the legislative committees of reference with jurisdiction over energy matters. On a periodic basis at least every 5 years, the office, department, and resiliency office are required to review the roadmap and, if necessary, update it. If the roadmap is updated, it must be posted on the office's and department's websites and submitted to the commission and the legislative committees of reference with jurisdiction over energy matters.

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

2 **SECTION 1.** In Colorado Revised Statutes, **add** 24-38.5-113 as
3 follows:

4 **24-38.5-113. Grid resilience and reliability roadmap -**
5 **microgrid development - stakeholder input - definitions - reporting.**

6 (1) (a) ON OR BEFORE JANUARY 1, 2025, THE OFFICE, IN COLLABORATION
7 WITH THE DEPARTMENT AND THE RESILIENCY OFFICE, SHALL PRODUCE A
8 GRID RESILIENCE AND RELIABILITY ROADMAP, AND THE ROADMAP SHALL

1 BE POSTED ON THE OFFICE'S AND DEPARTMENT'S WEBSITES. ON OR BEFORE
2 MARCH 1, 2025, REPRESENTATIVES OF THE OFFICE AND THE DEPARTMENT
3 SHALL PRESENT THE ROADMAP TO THE HOUSE OF REPRESENTATIVES
4 ENERGY AND ENVIRONMENT COMMITTEE AND THE SENATE
5 TRANSPORTATION AND ENERGY COMMITTEE, OR THEIR SUCCESSOR
6 COMMITTEES. THE OFFICE SHALL SUBMIT A COPY OF THE ROADMAP TO THE
7 PUBLIC UTILITIES COMMISSION.

8 (b) (I) IN ACCORDANCE WITH SUBSECTION (1)(b)(II) OF THIS
9 SECTION, THE OFFICE, DEPARTMENT, AND RESILIENCY OFFICE SHALL
10 ENGAGE IN A SERIES OF STAKEHOLDER MEETINGS WITH INTERESTED
11 PERSONS THROUGHOUT THE STATE, INCLUDING BUT NOT LIMITED TO THE
12 INTERESTED PERSONS LISTED IN SUBSECTION (1)(b)(II) OF THIS SECTION,
13 AND GIVE CONSIDERATION TO STAKEHOLDER INPUT RECEIVED WHEN
14 DEVELOPING THE ROADMAP.

15 (II) IN CONDUCTING STAKEHOLDER MEETINGS PURSUANT TO
16 SUBSECTION (1)(b)(I) OF THIS SECTION, THE OFFICE, DEPARTMENT, AND
17 RESILIENCY OFFICE SHALL SEEK INPUT FROM THE FOLLOWING GROUPS:

- 18 (A) MICROGRID DEVELOPERS;
- 19 (B) THE PUBLIC UTILITIES COMMISSION;
- 20 (C) THE OFFICE OF THE UTILITY CONSUMER ADVOCATE CREATED
21 IN SECTION 40-6.5-102 (1);
- 22 (D) UTILITIES;
- 23 (E) REPRESENTATIVES OF DISPROPORTIONATELY IMPACTED
24 COMMUNITIES; AND
- 25 (F) REPRESENTATIVES OF LABOR ORGANIZATIONS.

26 (2) (a) (I) IN DEVELOPING THE ROADMAP, THE OFFICE,
27 DEPARTMENT, AND RESILIENCY OFFICE SHALL INCLUDE GUIDANCE

1 REGARDING HOW AND IN WHAT MANNER MICROGRIDS MAY BE USED TO
2 HELP:

3 (A) HARDEN THE GRID AND IMPROVE GRID RESILIENCE AND
4 RELIABILITY; AND

5 (B) SERVE THE ELECTRICITY NEEDS OF AREAS, COMMUNITIES,
6 NEIGHBORHOODS, OR BUILDINGS, INDEPENDENT OF THE GRID.

7 (II) TO THE EXTENT PRACTICABLE, THE ROADMAP MUST INCLUDE
8 EXAMPLES OF THE DIFFERENT WAYS THAT MICROGRIDS CAN BE DEPLOYED
9 TO ACHIEVE THE GOALS SET FORTH IN SUBSECTION (2)(a)(I) OF THIS
10 SECTION AND THE KEY FACTORS TO CONSIDER WHEN DEPLOYING
11 MICROGRIDS.

12 (b) IN DEVELOPING THE ROADMAP, THE OFFICE, DEPARTMENT, AND
13 RESILIENCY OFFICE MAY:

14 (I) IDENTIFY THE STATE'S GOALS WITH REGARD TO MICROGRIDS;

15 (II) EXAMINE WHETHER AND IN WHAT MANNER MICROGRIDS
16 IMPROVE:

17 (A) GRID RESILIENCE AND RELIABILITY;

18 (B) GREENHOUSE GAS EMISSION REDUCTIONS;

19 (C) THE STATE'S TRANSITION TO CLEAN ENERGY; AND

20 (D) THE USE OF BENEFICIAL ELECTRIFICATION, AS DEFINED IN
21 SECTION 40-1-102 (1.2), AND LOAD MANAGEMENT;

22 (III) IDENTIFY TYPES OF CRITICAL FACILITIES AND
23 INFRASTRUCTURE IN THE STATE FOR WHICH PROJECTS TO IMPROVE GRID
24 RESILIENCE AND RELIABILITY MUST BE PRIORITIZED. "CRITICAL FACILITIES
25 AND INFRASTRUCTURE" INCLUDES THE FOLLOWING TYPES OF FACILITIES:

26 (A) EMERGENCY SERVICES;

27 (B) PUBLIC WORKS;

- 1 (C) ENERGY;
- 2 (D) TELECOMMUNICATIONS AND BROADBAND;
- 3 (E) HOSPITALS AND OTHER HEALTH-CARE SERVICES;
- 4 (F) GOVERNMENT;
- 5 (G) SCHOOLS; AND
- 6 (H) INFORMATION TECHNOLOGY FACILITIES FOR PUBLIC
- 7 INSTITUTIONS.

8 (IV) IDENTIFY COMMUNITIES THAT ARE AT THE HIGHEST RISK OF
9 POWER OUTAGES IN THE STATE DUE TO NATURAL DISASTERS OR ARE
10 OTHERWISE MOST VULNERABLE TO GRID INTERRUPTIONS, INCLUDING AN
11 IDENTIFICATION OF THE DISPROPORTIONATELY IMPACTED COMMUNITIES
12 THAT ARE AT SUCH HIGHER RISK OF POWER OUTAGES;

13 (V) IN CONSIDERATION OF THE TECHNOLOGY AVAILABLE AT THE
14 TIME OF THE DEVELOPMENT OF THE ROADMAP, ASSESS WHETHER AND HOW
15 MICROGRIDS MAY BE ABLE TO:

16 (A) PROTECT CRITICAL FACILITIES AND INFRASTRUCTURE AND
17 HIGH-RISK COMMUNITIES FROM THE NEGATIVE EFFECTS OF NATURAL
18 DISASTERS, FUEL TRANSPORT AND DELIVERY DISRUPTIONS, OR CYBER
19 ATTACKS;

20 (B) REDUCE THE NEGATIVE EFFECTS OF POWER OUTAGES AND GRID
21 INTERRUPTIONS ARISING FROM NORMAL DISRUPTIONS OF THE GRID, SUCH
22 AS LIGHTNING STRIKES, HIGH WINDS, WILDLIFE INTERACTIONS, AND
23 FALLEN TREE LIMBS;

24 (C) DYNAMICALLY UTILIZE DEMAND-SIDE RESOURCES;

25 (D) IMPROVE CONSUMER CHOICE;

26 (E) HELP CONSUMERS REDUCE ENERGY COSTS, ESPECIALLY THOSE
27 CONSUMERS LOCATED IN RURAL AREAS OF THE STATE; AND

1 (F) HELP ENSURE THE STATE MEETS ITS GREENHOUSE GAS
2 EMISSION REDUCTIONS GOALS, AS SET FORTH IN SECTION 25-7-102 (2)(g);

3 (VI) IDENTIFY LEGAL, REGULATORY, ECONOMIC, AND OTHER
4 BARRIERS TO DEVELOPING AND DEPLOYING MICROGRIDS IN THE STATE,
5 INCLUDING RIGHTS-OF-WAY ISSUES AND RATE STRUCTURES, AND PROVIDE
6 RECOMMENDATIONS ON HOW TO OVERCOME SUCH BARRIERS;

7 (VII) RECOMMEND A PROCESS FOR:

8 (A) NOMINATING QUALIFYING TYPES OF CRITICAL FACILITIES AND
9 INFRASTRUCTURE, AS DESCRIBED IN SUBSECTION (2)(b)(III) OF THIS
10 SECTION, AND AT-RISK COMMUNITIES, AS DESCRIBED IN SUBSECTION
11 (2)(b)(IV) OF THIS SECTION; AND

12 (B) PRIORITIZING THE QUALIFYING TYPES OF CRITICAL FACILITIES
13 AND INFRASTRUCTURE AND AT-RISK COMMUNITIES FOR PROJECTS TO
14 IMPROVE GRID RESILIENCE AND RELIABILITY;

15 (VIII) IDENTIFY THE NEED FOR FINANCIAL AND TECHNICAL
16 SUPPORT, EDUCATION, AND OUTREACH FOR MICROGRID DEVELOPMENT
17 AND DEPLOYMENT; AND

18 (IX) DEVELOP RECOMMENDATIONS, INCLUDING LEGISLATIVE
19 RECOMMENDATIONS FOR THE GENERAL ASSEMBLY AND ADMINISTRATIVE
20 RECOMMENDATIONS FOR STATE AGENCIES, INCLUDING THE PUBLIC
21 UTILITIES COMMISSION, AND UTILITIES, ON ISSUES RELATED TO MICROGRID
22 DEVELOPMENT AND DEPLOYMENT, INCLUDING RECOMMENDATIONS
23 REGARDING:

24 (A) A PROPOSED STATUTORY DEFINITION OF THE TERM
25 "MICROGRID";

26 (B) KEY FACTORS TO CONSIDER IN THE DEVELOPMENT AND
27 DEPLOYMENT OF MICROGRIDS;

1 (C) STATUTORY OR RULE CHANGES REQUIRED TO ENABLE
2 MICROGRID DEVELOPMENT AND DEPLOYMENT;

3 (D) METRICS FOR EVALUATING THE COSTS AND BENEFITS OF
4 MICROGRIDS;

5 (E) HOW TO OVERCOME ANY BARRIERS IDENTIFIED PURSUANT TO
6 SUBSECTION (2)(b)(VI) OF THIS SECTION;

7 (F) FINANCIAL AND TECHNICAL SUPPORT FOR MICROGRID
8 DEVELOPMENT AND DEPLOYMENT; AND

9 (G) EDUCATION AND OUTREACH PROGRAMS.

10 (c) FOR ANY ITEM LISTED IN SUBSECTION (2)(b) OF THIS SECTION
11 THAT THE OFFICE, DEPARTMENT, AND RESILIENCY OFFICE DECIDE NOT TO
12 INCLUDE IN THE ROADMAP, THE OFFICE, DEPARTMENT, AND RESILIENCY
13 OFFICE SHALL PROVIDE AN EXPLANATION SETTING FORTH THEIR REASONS
14 FOR NOT INCLUDING THE ITEM IN THE ROADMAP.

15 (3) ON OR BEFORE JANUARY 1, 2030, AND AT LEAST EVERY FIVE
16 YEARS THEREAFTER, THE OFFICE, IN COLLABORATION WITH THE
17 DEPARTMENT AND THE RESILIENCY OFFICE, SHALL REVIEW AND, IF
18 NECESSARY, UPDATE THE ROADMAP. IN REVIEWING THE ROADMAP, THE
19 OFFICE, DEPARTMENT, AND RESILIENCY OFFICE SHALL ENGAGE IN A
20 STAKEHOLDER PROCESS WITH INTERESTED PERSONS THROUGHOUT THE
21 STATE IN ACCORDANCE WITH THE STAKEHOLDER PROCESS SET FORTH IN
22 SUBSECTION (1)(b) OF THIS SECTION. IF THE ROADMAP IS UPDATED, THE
23 OFFICE AND DEPARTMENT SHALL POST THE UPDATED ROADMAP ON THEIR
24 WEBSITES AND THE OFFICE SHALL SUBMIT A COPY OF THE UPDATED
25 ROADMAP TO THE PUBLIC UTILITIES COMMISSION AND THE MEMBERS OF
26 THE HOUSE OF REPRESENTATIVES ENERGY AND ENVIRONMENT COMMITTEE
27 AND THE SENATE TRANSPORTATION AND ENERGY COMMITTEE, OR THEIR

1 SUCCESSOR COMMITTEES.

2 (4) AS USED IN THIS SECTION, UNLESS THE CONTEXT OTHERWISE
3 REQUIRES:

4 (a) "DEPARTMENT" MEANS THE DEPARTMENT OF LOCAL AFFAIRS
5 CREATED IN SECTION 24-1-125.

6 (b) "DISPROPORTIONATELY IMPACTED COMMUNITY" HAS THE
7 MEANING SET FORTH IN SECTION 24-4-109 (2)(b)(II).

8 (c) "GREENHOUSE GAS" HAS THE MEANING SET FORTH IN SECTION
9 2-2-322.3 (1)(a).

10 (d) "GRID" MEANS AN INTERCONNECTED NETWORK OF FACILITIES
11 FOR A UTILITY'S DELIVERY OF ELECTRICITY TO CONSUMERS.

12 (e) "OFFICE" MEANS THE COLORADO ENERGY OFFICE CREATED IN
13 SECTION 24-38.5-101 (1).

14 (f) "PUBLIC UTILITIES COMMISSION" MEANS THE PUBLIC UTILITIES
15 COMMISSION CREATED IN SECTION 40-2-101 (1).

16 (g) "RESILIENCY OFFICE" MEANS THE COLORADO RESILIENCY
17 OFFICE CREATED IN SECTION 24-32-121 (1).

18 (h) "ROADMAP" MEANS THE GRID RESILIENCE AND RELIABILITY
19 ROADMAP DEVELOPED PURSUANT TO THIS SECTION.

20 (i) "UTILITY" MEANS AN ELECTRIC UTILITY IN THE STATE.

21 **SECTION 2. Act subject to petition - effective date.** This act
22 takes effect at 12:01 a.m. on the day following the expiration of the
23 ninety-day period after final adjournment of the general assembly; except
24 that, if a referendum petition is filed pursuant to section 1 (3) of article V
25 of the state constitution against this act or an item, section, or part of this
26 act within such period, then the act, item, section, or part will not take
27 effect unless approved by the people at the general election to be held in

1 November 2022 and, in such case, will take effect on the date of the
2 official declaration of the vote thereon by the governor.