

**Second Regular Session  
Seventy-third General Assembly  
STATE OF COLORADO**

**PREAMENDED**

*This Unofficial Version Includes Committee  
Amendments Not Yet Adopted on Second Reading*

LLS NO. 22-0299.01 Jennifer Berman x3286

**HOUSE BILL 22-1249**

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**HOUSE SPONSORSHIP**

**Bernett and Hooton,**

**SENATE SPONSORSHIP**

**Rankin,**

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**House Committees**

Energy & Environment  
Appropriations

**Senate Committees**

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**A BILL FOR AN ACT**

101      **CONCERNING THE CREATION OF A MICROGRID ROADMAP FOR**  
102              **IMPROVING ELECTRIC GRIDS IN THE STATE, AND, IN**  
103              **CONNECTION THEREWITH, MAKING AN APPROPRIATION.**

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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 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

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.

guidance on how microgrids may be used to harden the grid, improve grid 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.

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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** 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) (I) ON OR BEFORE JANUARY 1, 2025, THE OFFICE, IN  
7 COLLABORATION WITH THE DEPARTMENT AND THE RESILIENCY OFFICE,

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

9 (II) ON OR BEFORE JULY 1, 2024, THE OFFICE SHALL:

10 (A) PUBLISH A DRAFT ROADMAP;

11 (B) POST THE DRAFT ROADMAP ON ITS WEBSITE AND PROVIDE A  
12 MECHANISM FOR RECEIVING PUBLIC COMMENT ON THE DRAFT ROADMAP;  
13 AND

14 (C) ALLOW PUBLIC COMMENT ON THE DRAFT ROADMAP FOR AT  
15 LEAST THIRTY DAYS.

16 (III) THE OFFICE, IN COLLABORATION WITH THE DEPARTMENT AND  
17 THE RESILIENCY OFFICE, SHALL REVIEW ANY COMMENTS RECEIVED ABOUT  
18 THE DRAFT ROADMAP.

19 (b) (I) IN ACCORDANCE WITH SUBSECTION (1)(b)(II) OF THIS  
20 SECTION, THE OFFICE, DEPARTMENT, AND RESILIENCY OFFICE SHALL  
21 ENGAGE IN A SERIES OF STAKEHOLDER MEETINGS WITH INTERESTED  
22 PERSONS THROUGHOUT THE STATE, INCLUDING BUT NOT LIMITED TO THE  
23 INTERESTED PERSONS LISTED IN SUBSECTION (1)(b)(II) OF THIS SECTION,  
24 AND GIVE CONSIDERATION TO STAKEHOLDER INPUT RECEIVED WHEN  
25 DEVELOPING THE ROADMAP.

26 (II) IN CONDUCTING STAKEHOLDER MEETINGS PURSUANT TO  
27 SUBSECTION (1)(b)(I) OF THIS SECTION, THE OFFICE, DEPARTMENT, AND

1 RESILIENCY OFFICE SHALL SEEK INPUT FROM THE FOLLOWING GROUPS:

2 (A) MICROGRID DEVELOPERS;

3 (B) THE PUBLIC UTILITIES COMMISSION AND THE COMMISSION'S  
4 STAFF;

5 (C) THE OFFICE OF THE UTILITY CONSUMER ADVOCATE CREATED  
6 IN SECTION 40-6.5-102 (1);

7 (D) UTILITIES;

8 (E) REPRESENTATIVES OF DISPROPORTIONATELY IMPACTED  
9 COMMUNITIES;

10 (F) REPRESENTATIVES OF COMMUNITIES AT THE HIGHEST RISK OF  
11 POWER OUTAGES AS DESCRIBED IN SUBSECTION (2)(b)(IV) OF THIS  
12 SECTION;

13 (G) REPRESENTATIVES OF MUNICIPAL, COUNTY, OR CITY AND  
14 COUNTY GOVERNMENTS;

15 (H) REPRESENTATIVES OF COMMERCIAL AND INDUSTRIAL UTILITY  
16 CUSTOMERS;

17 (I) REPRESENTATIVES OF LABOR ORGANIZATIONS; AND

18 (J) REPRESENTATIVES FROM THE DEPARTMENT OF PUBLIC SAFETY  
19 CREATED IN SECTION 24-33.5-103 (1), REPRESENTATIVES FROM THE  
20 DIVISION OF HOMELAND SECURITY AND EMERGENCY MANAGEMENT  
21 CREATED IN SECTION 24-33.5-1603 (1), AND OTHER REPRESENTATIVES OF  
22 CRITICAL INFRASTRUCTURE IN THE STATE.

23 (III) IN ADDITION TO SEEKING INPUT FROM THE GROUPS LISTED IN  
24 SUBSECTION (1)(b)(II) OF THIS SECTION, THE OFFICE, DEPARTMENT, AND  
25 RESILIENCY OFFICE, WHEN DEVELOPING THE ROADMAP, SHALL TAKE INTO  
26 CONSIDERATION UTILITY WILDFIRE MITIGATION PLANS.

27 (2) (a) (I) IN DEVELOPING THE ROADMAP, THE OFFICE,

1 DEPARTMENT, AND RESILIENCY OFFICE SHALL INCLUDE GUIDANCE  
2 REGARDING WHETHER, HOW, AND IN WHAT MANNER MICROGRIDS MAY BE  
3 USED TO:

4 (A) HELP HARDEN THE GRID AND IMPROVE GRID RESILIENCE AND  
5 RELIABILITY FOR INDIVIDUAL CUSTOMERS;

6 (B) HELP HARDEN THE GRID AND IMPROVE GRID RESILIENCE AND  
7 RELIABILITY FOR COMMUNITIES AND MULTIPLE CUSTOMERS;

8 (C) DELIVER AND MANAGE ELECTRICITY AND THE NECESSARY  
9 INFRASTRUCTURE IN CIRCUMSTANCES WHERE EXTENDING DISTRIBUTION  
10 INFRASTRUCTURE MAY NOT BE PRACTICABLE; AND

11 (D) OPERATE AUTONOMOUSLY AND DISCONNECTED FROM THE  
12 GRID, WHEN NECESSARY, TO SERVE THE ELECTRICITY NEEDS OF  
13 COMMUNITIES, NEIGHBORHOODS, OR BUILDINGS.

14 (II) TO THE EXTENT PRACTICABLE, THE ROADMAP MUST INCLUDE  
15 EXAMPLES OF THE DIFFERENT WAYS THAT MICROGRIDS CAN BE DEPLOYED  
16 TO ACHIEVE THE GOALS SET FORTH IN SUBSECTION (2)(a)(I) OF THIS  
17 SECTION AND THE KEY FACTORS TO CONSIDER WHEN DEPLOYING  
18 MICROGRIDS.

19 (b) IN DEVELOPING THE ROADMAP, THE OFFICE, DEPARTMENT, AND  
20 RESILIENCY OFFICE MAY:

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

22 (II) EXAMINE WHETHER AND IN WHAT MANNER MICROGRIDS  
23 IMPROVE:

24 (A) GRID RESILIENCE AND RELIABILITY;

25 (B) GREENHOUSE GAS EMISSION REDUCTIONS;

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

27 (D) THE USE OF BENEFICIAL ELECTRIFICATION, AS DEFINED IN

1 SECTION 40-1-102 (1.2), AND LOAD MANAGEMENT;

2 (III) IDENTIFY TYPES OF CRITICAL FACILITIES AND  
3 INFRASTRUCTURE IN THE STATE FOR WHICH PROJECTS TO IMPROVE GRID  
4 RESILIENCE AND RELIABILITY MAY BE PRIORITIZED. "CRITICAL FACILITIES  
5 AND INFRASTRUCTURE" INCLUDES THE FOLLOWING TYPES OF FACILITIES:

6 (A) EMERGENCY SERVICES;

7 (B) PUBLIC WORKS;

8 (C) ENERGY;

9 (D) TELECOMMUNICATIONS AND BROADBAND;

10 (E) HOSPITALS AND OTHER HEALTH-CARE SERVICES;

11 (F) GOVERNMENT;

12 (G) SCHOOLS;

13 (H) INFORMATION TECHNOLOGY FACILITIES FOR PUBLIC  
14 INSTITUTIONS; AND

15 (I) ANY OTHER FACILITIES IDENTIFIED BY THE OFFICE AND  
16 RESILIENCY OFFICE.

17 (IV) IDENTIFY COMMUNITIES THAT ARE AT THE HIGHEST RISK OF  
18 POWER OUTAGES IN THE STATE DUE TO NATURAL DISASTERS OR ARE  
19 OTHERWISE MOST VULNERABLE TO GRID INTERRUPTIONS, INCLUDING AN  
20 IDENTIFICATION OF THE DISPROPORTIONATELY IMPACTED COMMUNITIES  
21 THAT ARE AT HIGHER RISK OF POWER OUTAGES;

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

25 (A) PROTECT CRITICAL FACILITIES AND INFRASTRUCTURE AND  
26 HIGH-RISK COMMUNITIES FROM THE NEGATIVE EFFECTS OF NATURAL  
27 DISASTERS, FUEL TRANSPORT AND DELIVERY DISRUPTIONS, OR CYBER

1       ATTACKS;

2               (B) REDUCE THE NEGATIVE EFFECTS OF POWER OUTAGES AND GRID

3       INTERRUPTIONS ARISING FROM NORMAL DISRUPTIONS OF THE GRID, SUCH

4       AS LIGHTNING STRIKES, HIGH WINDS, WILDLIFE INTERACTIONS, AND

5       FALLEN TREE LIMBS;

6               (C) DYNAMICALLY UTILIZE DEMAND-SIDE RESOURCES;

7               (D) IMPROVE CUSTOMER CHOICE, INCLUDING COST IMPACTS AND

8       BENEFITS TO THE CUSTOMER SERVED BY THE MICROGRID AND TO OTHER

9       CUSTOMERS SERVED BY THE UTILITY;

10              (E) BE INCLUDED IN DISTRIBUTED ENERGY RESOURCE PLANNING;

11              (F) HELP CONSUMERS REDUCE ENERGY COSTS, ESPECIALLY THOSE

12       CONSUMERS LOCATED IN RURAL AREAS OF THE STATE; AND

13              (G) HELP ENSURE THE STATE MEETS ITS GREENHOUSE GAS

14       EMISSION REDUCTIONS GOALS, AS SET FORTH IN SECTION 25-7-102 (2)(g);

15              (VI) IDENTIFY LEGAL, REGULATORY, ECONOMIC, AND OTHER

16       BARRIERS TO DEVELOPING AND DEPLOYING MICROGRIDS IN THE STATE,

17       INCLUDING RIGHTS-OF-WAY ISSUES AND RATE STRUCTURES, AND PROVIDE

18       RECOMMENDATIONS ON HOW TO OVERCOME SUCH BARRIERS;

19              (VII) EXPLORE OPPORTUNITIES TO FOSTER PUBLIC-PRIVATE

20       PARTNERSHIPS, INCLUDING UTILITY PILOT PROGRAMS AND

21       COST-RECOVERY MECHANISMS TO SUPPORT UTILITY RESILIENCE

22       INITIATIVES;

23              (VIII) RECOMMEND A PROCESS FOR:

24              (A) NOMINATING QUALIFYING TYPES OF CRITICAL FACILITIES AND

25       INFRASTRUCTURE, AS DESCRIBED IN SUBSECTION (2)(b)(III) OF THIS

26       SECTION, AND AT-RISK COMMUNITIES, AS DESCRIBED IN SUBSECTION

27       (2)(b)(IV) OF THIS SECTION; AND

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

4 (IX) IDENTIFY THE NEED FOR FINANCIAL AND TECHNICAL SUPPORT,  
5 EDUCATION, AND OUTREACH FOR MICROGRID DEVELOPMENT AND  
6 DEPLOYMENT; AND

7 (X) DEVELOP RECOMMENDATIONS, INCLUDING LEGISLATIVE  
8 RECOMMENDATIONS FOR THE GENERAL ASSEMBLY AND ADMINISTRATIVE  
9 RECOMMENDATIONS FOR STATE AGENCIES, INCLUDING THE PUBLIC  
10 UTILITIES COMMISSION, AND UTILITIES, ON ISSUES RELATED TO MICROGRID  
11 SAFETY, DEVELOPMENT, MAINTENANCE, AND DEPLOYMENT INCLUDING  
12 RECOMMENDATIONS REGARDING:

13 (A) A PROPOSED STATUTORY DEFINITION OF THE TERM  
14 "MICROGRID";

15 (B) KEY FACTORS TO CONSIDER IN THE SAFETY, DEVELOPMENT,  
16 MAINTENANCE, AND DEPLOYMENT OF MICROGRIDS;

17 (C) STATUTORY OR RULE CHANGES REQUIRED TO ENABLE SAFE  
18 AND RELIABLE MICROGRID DEVELOPMENT, MAINTENANCE, AND  
19 DEPLOYMENT;

20 (D) METRICS FOR EVALUATING THE COSTS AND BENEFITS OF  
21 MICROGRIDS;

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

24 (F) FINANCIAL AND TECHNICAL SUPPORT FOR MICROGRID SAFETY,  
25 DEVELOPMENT, MAINTENANCE, AND DEPLOYMENT; AND

26 (G) EDUCATION AND OUTREACH PROGRAMS, INCLUDING  
27 APPRENTICESHIP PROGRAMS, AS DEFINED IN SECTION 8-83-308 (3)(a).



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

6 (3) ON OR BEFORE JANUARY 1, 2030, AND AT LEAST EVERY FIVE  
7 YEARS THEREAFTER, THE OFFICE, IN COLLABORATION WITH THE  
8 DEPARTMENT AND THE RESILIENCY OFFICE, SHALL REVIEW AND, IF  
9 NECESSARY, UPDATE THE ROADMAP. IN REVIEWING THE ROADMAP, THE  
10 OFFICE, DEPARTMENT, AND RESILIENCY OFFICE SHALL ENGAGE IN A  
11 STAKEHOLDER PROCESS WITH INTERESTED PERSONS THROUGHOUT THE  
12 STATE IN ACCORDANCE WITH THE STAKEHOLDER PROCESS SET FORTH IN  
13 SUBSECTION (1)(b) OF THIS SECTION. IF THE ROADMAP IS UPDATED, THE  
14 OFFICE AND DEPARTMENT SHALL POST THE UPDATED ROADMAP ON THEIR  
15 WEBSITES AND THE OFFICE SHALL SUBMIT A COPY OF THE UPDATED  
16 ROADMAP TO THE PUBLIC UTILITIES COMMISSION AND THE MEMBERS OF  
17 THE HOUSE OF REPRESENTATIVES ENERGY AND ENVIRONMENT COMMITTEE  
18 AND THE SENATE TRANSPORTATION AND ENERGY COMMITTEE, OR THEIR  
19 SUCCESSOR COMMITTEES.

20 (4) AS USED IN THIS SECTION, UNLESS THE CONTEXT OTHERWISE  
21 REQUIRES:

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

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

26 (c) "GREENHOUSE GAS" HAS THE MEANING SET FORTH IN SECTION  
27 2-2-322.3 (1)(a).

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

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

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

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

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

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

12 **SECTION 2. Appropriation.** For the 2022-23 state fiscal year,  
13 \$22,470 is appropriated to the office of the governor for use by the  
14 Colorado energy office. This appropriation is from the general fund and  
15 is based on an assumption that the office will require an additional 0.2  
16 FTE. To implement this act, the office may use this appropriation for  
17 program administration.

18 **SECTION 3. Act subject to petition - effective date.** This act  
19 takes effect at 12:01 a.m. on the day following the expiration of the  
20 ninety-day period after final adjournment of the general assembly; except  
21 that, if a referendum petition is filed pursuant to section 1 (3) of article V  
22 of the state constitution against this act or an item, section, or part of this  
23 act within such period, then the act, item, section, or part will not take  
24 effect unless approved by the people at the general election to be held in  
25 November 2022 and, in such case, will take effect on the date of the  
26 official declaration of the vote thereon by the governor.