Second Regular Session
Seventy-third General Assembly
STATE OF COLORADO

REVISED
This Version Includes All Amendments Adopted on Second Reading in the Second House

LLS NO. 22-0299.01 Jennifer Berman x3286 **HOUSE BILL 22-1249**

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A BILL FOR AN ACT

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

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

SENATE
2nd Reading Unamended
April 19, 2022

HOUSE
3rd Reading Unamended
April 4, 2022

HOUSE
Amended 2nd Reading
April 1, 2022

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.

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

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

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

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

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

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

(A) PUBLISH A DRAFT ROADMAP;

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

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

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

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

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

RESILIENCY OFFICE SHALL SEEK INPUT FROM THE FOLLOWING GROUPS:

(A) MICROGRID DEVELOPERS;

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

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

(D) UTILITIES;

(E) REPRESENTATIVES OF DISPROPORTIONATELY IMPACTED COMMUNITIES;

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

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

(H) REPRESENTATIVES OF COMMERCIAL AND INDUSTRIAL UTILITY CUSTOMERS;

(I) REPRESENTATIVES OF LABOR ORGANIZATIONS; AND

(J) REPRESENTATIVES FROM THE DEPARTMENT OF PUBLIC SAFETY CREATED IN SECTION 24-33.5-103 (1), REPRESENTATIVES FROM THE DIVISION OF HOMELAND SECURITY AND EMERGENCY MANAGEMENT CREATED IN SECTION 24-33.5-1603 (1), REPRESENTATIVES FROM THE DIVISION OF FIRE PREVENTION AND CONTROL CREATED IN SECTION 24-33.5-1201 (1)(a), AND OTHER REPRESENTATIVES OF CRITICAL INFRASTRUCTURE IN THE STATE.

(III) IN ADDITION TO SEEKING INPUT FROM THE GROUPS LISTED IN SUBSECTION (1)(b)(II) OF THIS SECTION, THE OFFICE, DEPARTMENT, AND RESILIENCY OFFICE, WHEN DEVELOPING THE ROADMAP, SHALL TAKE INTO

CONSIDERATION UTILITY WILDFIRE MITIGATION PLANS.

(2) (a) (I) IN DEVELOPING THE ROADMAP, THE OFFICE, DEPARTMENT, AND RESILIENCY OFFICE SHALL INCLUDE GUIDANCE REGARDING WHETHER, HOW, AND IN WHAT MANNER MICROGRIDS MAY BE USED TO:

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

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

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

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

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

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

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

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

(A) GRID RESILIENCE AND RELIABILITY;

(B) GREENHOUSE GAS EMISSION REDUCTIONS;

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

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

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

(A) EMERGENCY SERVICES;

(B) PUBLIC WORKS;

(C) ENERGY;

(D) TELECOMMUNICATIONS AND BROADBAND;

(E) HOSPITALS AND OTHER HEALTH-CARE SERVICES;

(F) GOVERNMENT;

(G) SCHOOLS;

(H) INFORMATION TECHNOLOGY FACILITIES FOR PUBLIC INSTITUTIONS; AND

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

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

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

(A) PROTECT CRITICAL FACILITIES AND INFRASTRUCTURE AND

HIGH-RISK COMMUNITIES FROM THE NEGATIVE EFFECTS OF NATURAL DISASTERS, FUEL TRANSPORT AND DELIVERY DISRUPTIONS, OR CYBER ATTACKS, OR ELECTROMAGNETIC INTERFERENCE CAUSED BY ELECTROMAGNETIC PULSES;

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

(C) DYNAMICALLY UTILIZE DEMAND-SIDE RESOURCES;

(D) IMPROVE CUSTOMER OPTIONS, INCLUDING COST IMPACTS AND BENEFITS TO THE CUSTOMER SERVED BY THE MICROGRID AND TO OTHER CUSTOMERS SERVED BY THE UTILITY;

(E) BE INCLUDED IN DISTRIBUTED ENERGY RESOURCE PLANNING;

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

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

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

(VII) EXPLORE OPPORTUNITIES TO FOSTER PUBLIC-PRIVATE PARTNERSHIPS, INCLUDING UTILITY PILOT PROGRAMS AND COST-RECOVERY MECHANISMS TO SUPPORT UTILITY RESILIENCE INITIATIVES;

(VIII) RECOMMEND A PROCESS FOR:

(A) NOMINATING QUALIFYING TYPES OF CRITICAL FACILITIES AND

INFRASTRUCTURE, AS DESCRIBED IN SUBSECTION (2)(b)(III) OF THIS SECTION, AND AT-RISK COMMUNITIES, AS DESCRIBED IN SUBSECTION (2)(b)(IV) OF THIS SECTION; AND

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

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

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

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

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

(C) KEY FACTORS TO CONSIDER WITH RESPECT TO WORKER LICENSING AND CERTIFICATION IN RELATION TO WORK INVOLVED IN DEVELOPING, MAINTAINING, AND DEPLOYING MICROGRIDS;

(D) STATUTORY OR RULE CHANGES REQUIRED TO ENABLE SAFE AND RELIABLE MICROGRID DEVELOPMENT, MAINTENANCE, AND DEPLOYMENT;

(E) METRICS FOR EVALUATING THE COSTS AND BENEFITS OF MICROGRIDS;

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

(G) FINANCIAL AND TECHNICAL SUPPORT FOR MICROGRID SAFETY, DEVELOPMENT, MAINTENANCE, AND DEPLOYMENT; AND

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

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

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

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

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

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

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

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

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

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

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

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

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

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

SECTION 3. Act subject to petition - effective date. This act takes effect at 12:01 a.m. on the day following the expiration of the ninety-day period after final adjournment of the general assembly; except that, if a referendum petition is filed pursuant to section 1 (3) of article V

of the state constitution against this act or an item, section, or part of this act within such period, then the act, item, section, or part will not take effect unless approved by the people at the general election to be held in November 2022 and, in such case, will take effect on the date of the official declaration of the vote thereon by the governor.