A BILL FOR AN ACT

CONCERNING MODIFICATIONS TO THE ELECTRIC UTILITY RESOURCE ACQUISITION PROCESS, AND, IN CONNECTION THERewith, PROMOTING A MORE RESILIENT, RELIABLE, AND COST-EFFECTIVE ELECTRICAL GRID THROUGH ENHANCED PLANNING AND DATA TRANSPARENCY.

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 directs specified electric utilities to prepare, and the Colorado public utilities commission to review, proposals to integrate
distributed energy resources into their plans to acquire new infrastructure. "Distributed energy resources" is defined to include renewable distributed generation facilities, such as rooftop solar, energy storage facilities, electric vehicles, and other features of an improved and diversified electrical grid architecture. The commission may approve the plans as submitted or modify them in ways that improve system reliability, reduce costs, or increase the benefits to ratepayers.

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

SECTION 1. Legislative declaration. (1) The general assembly finds and determines that:

(a) Colorado's economy, as well as the health and safety of its residents, depends on the reliable and efficient supply of electricity;

(b) The threat of interruptions in electric supply due to weather, malicious interference, or malfunctions in generation and transmission facilities makes distributed energy resources an important part of a robust, resilient electrical grid;

(c) A transparent distribution grid planning process, which includes development of a map that publicly displays optimal locations for the safe installation of additional distributed energy resources, will lower costs for Colorado ratepayers;

(d) Electric utilities in many states, including California, Hawaii, Minnesota, Maryland, Massachusetts, and New York, are proactively planning their distribution grids for greater penetrations of distributed energy resources; and

(e) In Minnesota, Xcel Energy has recognized that the capacity to incorporate distributed energy resources is a key element in the future of distribution system planning and has provided preliminary hosting capacity results for more than one thousand sources of distributed energy.

(2) Therefore, the general assembly declares that it is in the public
interest to develop a cost-effective distribution grid planning process with
online hosting capacity maps that will aid in the siting and installation of
cost-effective distributed energy resources.

SECTION 2. In Colorado Revised Statutes, add 40-2-126.5 as
follows:

40-2-126.5. Distribution facilities - improvements to
distribution grid - planning - approval - definitions. (1) AS USED IN
THIS SECTION, UNLESS THE CONTEXT OTHERWISE REQUIRES:

(a) "DISTRIBUTED ENERGY RESOURCES" MEANS DISTRIBUTED
GENERATION, AS DEFINED IN SECTION 40-2-124 (1)(a)(III), ENERGY
STORAGE, ELECTRIC VEHICLES, AND ENERGY EFFICIENCY AND DEMAND
RESPONSE PROGRAMS THAT CAN BE LEVERAGED TO ESTABLISH A NEW,
DIVERSIFIED GRID ARCHITECTURE THAT MITIGATES VULNERABILITY TO
TERRORIST ATTACKS, HACKING, EXTREME WEATHER, INSUFFICIENT FUEL
SUPPLY, AND OTHER DISRUPTIONS.

(b) "DISTRIBUTION RESOURCES PLAN" MEANS A FIVE-YEAR PLAN
FOR:

(I) DISTRIBUTION GRID UPGRADES; AND

(II) PROCUREMENT OF DISTRIBUTED ENERGY RESOURCES.

(c) "DISTRIBUTION SUBSTATION GRID AREA" MEANS THE
GEOGRAPHIC AREA SERVED BY A DISTRIBUTION SUBSTATION.

(d) "QUALIFYING RETAIL UTILITY" HAS THE MEANING SET FORTH
IN SECTION 40-2-124 (1); EXCEPT THAT THE TERM DOES NOT INCLUDE A
MUNICIPALLY OWNED UTILITY.

(2) ON OR BEFORE JUNE 1, 2018, EACH QUALIFYING RETAIL UTILITY
IN COLORADO SHALL SUBMIT TO THE COMMISSION A PROPOSAL FOR A
DISTRIBUTION RESOURCES PLAN.
(3) On or before December 1, 2018, the Commission shall review each qualifying retail utility’s proposal for a distribution resources plan and approve, or modify and approve, a distribution resources plan for the qualifying retail utility. The Commission may modify any plan as appropriate to minimize overall system costs and maximize ratepayer benefits from investments in distributed energy resources.

(4) After approval of a qualifying retail utility’s distribution resources plan, the qualifying retail utility’s expenditures for distribution infrastructure necessary to effectuate the plan shall be proposed and considered as part of the next general rate case for the qualifying retail utility. The Commission may approve these expenditures if it concludes that ratepayers would realize net benefits and the associated costs are just and reasonable. The Commission shall also adopt criteria, benchmarks, and accountability mechanisms to evaluate the success of any investment authorized pursuant to a distribution resources plan.

(5) Each distribution resources plan proposal must, at a minimum:

(a) Support market innovation through data transparency;

(b) Improve interconnection procedures for distributed energy resources, to which end the qualifying retail utility shall:

(I) Publish interconnection queue and cost data;

(II) Determine the ability of the existing distribution infrastructure
SYSTEM TO ACCOMMODATE ADDITIONAL DISTRIBUTED ENERGY RESOURCES; AND

(III) PUBLISH ON THE QUALIFYING RETAIL UTILITY’S WEBSITE, AND REGULARLY UPDATE, PUBLICLY ACCESSIBLE DISTRIBUTION GRID MAPS SHOWING AVAILABLE HOSTING CAPACITY TO AT LEAST THE DISTRIBUTION GRID LINE-SEGMENT LEVEL OF DETAIL;

(c) PROPOSE, FOR APPROVAL BY THE COMMISSION, A METHODOLOGY TO VALUE THE COSTS AND BENEFITS OF DISTRIBUTED ENERGY RESOURCES. THE METHODOLOGY MUST RECOGNIZE LOCATION-SPECIFIC FACTORS AND MUST IDENTIFY AND QUANTIFY:

(I) REDUCTIONS OR INCREASES IN LOCAL GENERATION CAPACITY NEEDS, AVOIDED OR INCREASED INVESTMENTS IN TRANSMISSION AND DISTRIBUTION INFRASTRUCTURE, SAFETY BENEFITS, RELIABILITY AND RESILIENCE BENEFITS, AND ANY OTHER SAVINGS THE DISTRIBUTED ENERGY RESOURCES PROVIDE TO THE ELECTRIC GRID OR COSTS THAT THE DISTRIBUTED ENERGY RESOURCES IMPOSE UPON THE RATEPAYERS OF THE QUALIFYING RETAIL UTILITY;

(II) THE AGGREGATE VALUE ACHIEVED THROUGH PLANNED OR COORDINATED OPERATION OF PORTFOLIOS OF DISTRIBUTED ENERGY RESOURCES; AND

(III) SOCIETAL VALUES FOR ECONOMICALLY QUANTIFIABLE IMPACTS, INCLUDING STATE AND LOCAL REVENUES, EMPLOYMENT, EMISSIONS, HEALTH, AND ENVIRONMENTAL IMPACTS.

(d) (I) PROPOSE AT LEAST THREE DISTRIBUTION SUBSTATION GRID AREA PILOT PROJECTS, WHICH THE QUALIFYING RETAIL UTILITY SHALL DEPLOY BY JUNE 1, 2020, THAT:

(A) SUPPORT A MORE DIVERSIFIED GRID ARCHITECTURE THROUGH
THE DEPLOYMENT OF DISTRIBUTED ENERGY RESOURCES; AND

(B) ACHIEVE RATEPAYER SAVINGS WHEN COMPARED WITH OTHER APPROACHES TO MEETING THE INFRASTRUCTURE REQUIREMENTS OF THE ELECTRICAL GRID.

(c) INCLUDE A DISTRIBUTED ENERGY RESOURCES PROCUREMENT PLAN THAT PROPOSES OR IDENTIFIES STANDARD TARIFFS, CONTRACTS, OR OTHER SOURCING MECHANISMS. THE DISTRIBUTED ENERGY RESOURCES PROCUREMENT PLAN MUST SUPPORT A MARKET FOR DISTRIBUTED ENERGY RESOURCES BY MONETIZING THE BENEFITS OF DISTRIBUTED ENERGY RESOURCES IDENTIFIED UNDER SUBSECTION (5)(c) OF THIS SECTION.

(f) PROPOSE COST-EFFECTIVE METHODS OF EFFECTIVELY COORDINATING EXISTING COMMISSION-APPROVED PROGRAMS, INCENTIVES, AND TARIFFS TO MAXIMIZE THE LOCATIONAL BENEFITS AND MINIMIZE THE INCREMENTAL COSTS OF DISTRIBUTED ENERGY RESOURCES. NOTHING IN THIS SECTION AFFECTS EXISTING OBLIGATIONS UNDER A NET ENERGY METERING PROGRAM.

(g) IDENTIFY ANY ADDITIONAL QUALIFYING RETAIL UTILITY SPENDING, INCLUDING FOR SMART METERING, NECESSARY TO INTEGRATE COST-EFFECTIVE DISTRIBUTED ENERGY RESOURCES INTO DISTRIBUTION PLANNING CONSISTENT WITH THE GOAL OF YIELDING NET BENEFITS TO RATEPAYERS;

(h) IDENTIFY AND REMOVE BARRIERS TO THE DEPLOYMENT OF DISTRIBUTED ENERGY RESOURCES THROUGH MEANS THAT INCLUDE THE ADOPTION OF REVISED SAFETY STANDARDS RELATED TO TECHNOLOGY OR OPERATION OF THE DISTRIBUTION SYSTEM IN A MANNER THAT ENSURES RELIABLE SERVICE; AND

(i) FORECAST THE GROWTH OF DISTRIBUTED ENERGY RESOURCES
THROUGH 2025, INCLUDING REASONABLY DETAILED PREDICTIONS OF THE
EXPECTED SITING LOCATIONS WITHIN THE DISTRIBUTION SUBSTATION GRID
AREA AND IMPACTS ON TRANSMISSION AND DISTRIBUTION SYSTEM
PLANNING.

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 (August
9, 2017, if adjournment sine die is on May 10, 2017); 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 2018 and, in such case, will take effect on the date of the
official declaration of the vote thereon by the governor.