

First Regular Session
Seventy-fourth General Assembly
STATE OF COLORADO

INTRODUCED

LLS NO. 23-0594.01 Jennifer Berman x3286

HOUSE BILL 23-1080

HOUSE SPONSORSHIP

Winter T., Bockenfeld, Bradley, Evans, Holtorf, Weinberg, Wilson

SENATE SPONSORSHIP

Pelton B.,

House Committees
Energy & Environment

Senate Committees

A BILL FOR AN ACT

101 CONCERNING ALTERNATIVE ENERGY SOURCES, AND, IN CONNECTION
102 THEREWITH, REQUIRING A FEASIBILITY STUDY FOR THE USE OF
103 SMALL MODULAR NUCLEAR REACTORS AS A SOURCE OF
104 CARBON-FREE ENERGY AND SPECIFYING THE MAXIMUM
105 NAMEPLATE CAPACITY OF A GENERATION UNIT FOR PUMPED
106 HYDROELECTRICITY THAT QUALIFIES AS RECYCLED ENERGY
107 UNDER THE RENEWABLE ENERGY STANDARD.

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>.)

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

Section 1 of the bill requires the director of the Colorado energy office or the director's designee (director) to conduct or cause to be conducted a study on the feasibility of using small modular nuclear reactors as a carbon-free energy source in the state (feasibility study). On or before July 1, 2025, the director is required to submit the director's findings and conclusions of the feasibility study to the legislative committees with jurisdiction over energy matters.

Current law defines recycled energy for purposes of the renewable energy standard as energy produced by a generation unit with a nameplate capacity of not more than 15 megawatts. For pumped hydroelectricity generation only, **section 2** specifies that the energy be produced by a generation unit with a nameplate capacity of not more than 400 megawatts.

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

2 **SECTION 1.** In Colorado Revised Statutes, **add** 24-38.5-119 as
3 follows:

4 **24-38.5-119. Feasibility of small modular nuclear reactors as**
5 **a source of carbon-free energy - study - report - short title -**
6 **definitions - appropriation - repeal.** (1) THE SHORT TITLE OF THIS
7 SECTION IS THE "AFFORDABLE AND RELIABLE ALTERNATIVE ENERGY
8 ACT".

9 (2) AS USED IN THIS SECTION, UNLESS THE CONTEXT OTHERWISE
10 REQUIRES:

11 (a) "CARBON-FREE ENERGY SOURCE" MEANS A SOURCE OF ENERGY
12 THAT DOES NOT PRODUCE ANY CARBON EMISSIONS IN ITS GENERATION.

13 (b) "DIRECTOR" MEANS THE DIRECTOR OF THE OFFICE OR THE
14 DIRECTOR'S DESIGNEE.

15 (c) "NET PRESENT VALUE OF REVENUE REQUIREMENTS" HAS THE
16 MEANING SET FORTH IN SECTION 40-1-102 (9).

17 (d) "OFFICE" MEANS THE COLORADO ENERGY OFFICE CREATED IN
18 SECTION 24-38.5-101.

1 (e) "SMALL MODULAR NUCLEAR REACTOR" OR "REACTOR" MEANS
2 A NUCLEAR REACTOR THAT:

3 (I) HAS A RATED CAPACITY OF NOT MORE THAN THREE HUNDRED
4 MEGAWATTS OF ELECTRICITY;

5 (II) CAN BE CONSTRUCTED AND OPERATED IN COMBINATION WITH
6 OTHER SIMILAR REACTORS AT A SINGLE SITE IF MULTIPLE REACTORS ARE
7 NECESSARY; AND

8 (III) HAS BEEN LICENSED BY THE UNITED STATES NUCLEAR
9 REGULATORY COMMISSION AND IS IN COMPLIANCE WITH ALL
10 REQUIREMENTS AND CONDITIONS ASSOCIATED WITH THE LICENSE.

11 (3) THE DIRECTOR SHALL CONDUCT OR CAUSE TO BE CONDUCTED
12 A STUDY REGARDING THE FEASIBILITY OF USING SMALL MODULAR
13 NUCLEAR REACTORS AS A CARBON-FREE ENERGY SOURCE FOR THE STATE.

14 THE STUDY MUST INCLUDE:

15 (a) AN EVALUATION OF:

16 (I) EXISTING STATE LAW TO DETERMINE AND IDENTIFY WHICH, IF
17 ANY, STATUTES AND AGENCY RULES WOULD NEED TO BE AMENDED TO
18 ENABLE THE CONSTRUCTION AND OPERATION OF SMALL MODULAR
19 NUCLEAR REACTORS IN THE STATE;

20 (II) THE ECONOMIC FEASIBILITY OF REPLACING CARBON-BASED
21 ENERGY SOURCES WITH REACTORS, WHILE ACCOUNTING FOR THE NET
22 PRESENT VALUE OF REVENUE REQUIREMENTS THAT WOULD RESULT FROM
23 THE RETIREMENT OF COAL-FIRED PLANTS;

24 (III) THE SAFETY OF AND THE WASTE STREAM RESULTING FROM
25 THE CONSTRUCTION AND OPERATION OF REACTORS; AND

26 (IV) THE PROPERTY TAX BENEFITS TO COUNTIES, SCHOOL
27 DISTRICTS, AND SPECIAL TAXING DISTRICTS IN CONNECTION WITH THE USE

1 OF REACTORS;

2 (b) AN ESTIMATE OF THE NUMBER OF JOBS THAT COULD BE
3 CREATED AND THE OVERALL IMPACT TO LOCAL ECONOMIES IN
4 CONNECTION WITH THE USE OF SMALL MODULAR NUCLEAR REACTORS;

5 (c) A COMPARISON OF THE RELIABILITY AND COST OF SMALL
6 MODULAR NUCLEAR REACTORS AND OF NATURAL GAS, WIND, AND SOLAR
7 ENERGY PRODUCTION;

8 (d) THE IDENTIFICATION OF LOCAL GOVERNMENT PERMITTING
9 REQUIREMENTS OR APPROVALS THAT WOULD BE REQUIRED FOR THE
10 OPERATION OF SMALL MODULAR NUCLEAR REACTORS IN THE STATE; AND

11 (e) ANY OTHER INFORMATION THAT THE DIRECTOR DEEMS
12 NECESSARY.

13 (4) ON OR BEFORE JULY 1, 2025, THE DIRECTOR SHALL SUBMIT
14 FINDINGS AND CONCLUSIONS OF THE FEASIBILITY STUDY REQUIRED IN
15 SUBSECTION (3) OF THIS SECTION TO THE HOUSE OF REPRESENTATIVES
16 ENERGY AND ENVIRONMENT COMMITTEE AND THE SENATE
17 TRANSPORTATION AND ENERGY COMMITTEE, OR THEIR SUCCESSOR
18 COMMITTEES. THE FINDINGS AND CONCLUSIONS SUBMITTED MUST
19 INCLUDE ANY RECOMMENDATIONS REGARDING:

20 (a) THE POTENTIAL FOR USING SMALL MODULAR NUCLEAR
21 REACTORS TO PROVIDE ENERGY IN THE STATE; AND

22 (b) ADMINISTRATIVE OR LEGISLATIVE ACTION NEEDED TO
23 PROMOTE THE USE OF SMALL MODULAR NUCLEAR REACTORS IN THE STATE.

24 (5) FOR THE 2023-24 STATE FISCAL YEAR, THE GENERAL
25 ASSEMBLY SHALL APPROPRIATE TWO HUNDRED FIFTY THOUSAND DOLLARS
26 FROM THE GENERAL FUND TO THE OFFICE FOR USE BY THE OFFICE IN
27 IMPLEMENTING THIS SECTION.

1 (6) THIS SECTION IS REPEALED, EFFECTIVE SEPTEMBER 1, 2026.

2 **SECTION 2.** In Colorado Revised Statutes, 40-2-124, **amend** (1)
3 introductory portion and (1)(a)(VI)(A) as follows:

4 **40-2-124. Renewable energy standards - qualifying retail and**
5 **wholesale utilities - definitions - net metering - legislative declaration**

6 **- rules.** (1) Each provider of retail electric service in the state of
7 Colorado, other than municipally owned utilities that serve forty thousand
8 customers or fewer, is a qualifying retail utility. Each qualifying retail
9 utility, with the exception of cooperative electric associations that have
10 voted to exempt themselves from commission jurisdiction pursuant to
11 section 40-9.5-104 and municipally owned utilities, is subject to the rules
12 ~~established~~ THAT THE COMMISSION ESTABLISHES under this article 2. ~~by~~
13 ~~the commission.~~ No additional regulatory authority is provided to the
14 commission other than that specifically contained in this section. In
15 accordance with article 4 of title 24, the commission shall revise or clarify
16 existing rules to establish the following:

17 (a) Definitions of eligible energy resources that can be used to
18 meet the standards. "Eligible energy resources" means recycled energy,
19 renewable energy resources, and renewable energy storage. In addition,
20 resources using coal mine methane and synthetic gas produced by
21 pyrolysis of waste materials are eligible energy resources if the
22 commission determines that the electricity generated by those resources
23 is greenhouse gas neutral. The commission shall determine, following an
24 evidentiary hearing, the extent to which such electric generation
25 technologies utilized in an optional pricing program may be used to
26 comply with this standard. A fuel cell using hydrogen derived from an
27 eligible energy resource is also an eligible electric generation technology.

1 Fossil and nuclear fuels and their derivatives are not eligible energy
2 resources. As used in this section:

3 (VI) (A) "Recycled energy" means energy produced by a
4 generation unit with a nameplate capacity of not more than fifteen
5 megawatts, OR, FOR PUMPED HYDROELECTRICITY GENERATION, PRODUCED
6 BY A GENERATION UNIT WITH A NAMEPLATE CAPACITY OF NOT MORE THAN
7 FOUR HUNDRED MEGAWATTS, that either converts the otherwise lost
8 energy from the heat from exhaust stacks or pipes to electricity and does
9 not combust additional fossil fuel or is pumped hydroelectricity
10 generation that does not combust fossil fuel to pump water; is not located
11 on a natural waterway; includes measures to prevent fish mortality in the
12 facility; does not impact any decreed in-stream flow; and does not cause
13 any violation of state water quality standards when operated.

14 **SECTION 3. Act subject to petition - effective date.** This act
15 takes effect at 12:01 a.m. on the day following the expiration of the
16 ninety-day period after final adjournment of the general assembly; except
17 that, if a referendum petition is filed pursuant to section 1 (3) of article V
18 of the state constitution against this act or an item, section, or part of this
19 act within such period, then the act, item, section, or part will not take
20 effect unless approved by the people at the general election to be held in
21 November 2024 and, in such case, will take effect on the date of the
22 official declaration of the vote thereon by the governor.