## HOUSE COMMITTEE OF REFERENCE AMENDMENT Committee on State, Civic, Military, & Veterans Affairs. SB24-214 be amended as follows:

1	Amend reengrossed bill, page 10, after line 10 insert:
2	"SECTION 3. In Colorado Revised Statutes, add article 7.7 to
3	title 6 as follows:
4	ARTICLE 7.7
5	Standards for Construction Projects
6	that Receive State Financial Assistance
7	<b>6-7.7-101. Legislative declaration.</b> (1) THE GENERAL ASSEMBLY
8	FINDS THAT:
9	(a) APPLIANCES CERTIFIED BY THE ENERGY STAR PROGRAM MEET
10	STRICT ENERGY EFFICIENCY AND PERFORMANCE GUIDELINES SET BY THE
11	FEDERAL ENVIRONMENTAL PROTECTION AGENCY AND THE UNITED STATES
12	DEPARTMENT OF ENERGY AND CAN SAVE AN ESTIMATED TWENTY TO
13	THIRTY PERCENT MORE ENERGY THAN APPLIANCES THAT ARE NOT
14	CERTIFIED BY THE ENERGY STAR PROGRAM;
15	(b) New building construction projects that use taxpayer
16	DOLLARS TO PURCHASE EQUIPMENT SHOULD ENSURE THAT THE EQUIPMENT
17	HAS LOWER LIFETIME COSTS TO OPERATE AND MAINTAIN;
18	(c) Many projects that receive state financial assistance
19	AIM TO ASSIST VULNERABLE LOWER-INCOME HOUSEHOLDS, AND
20	INSTALLING APPLIANCES CERTIFIED BY THE ENERGY STAR PROGRAM
21	COULD LOWER THE COSTS OF THE ENERGY BILLS OF THESE HOUSEHOLDS
22	OVER TIME; AND
23	(d) SAVING ENERGY IS CRUCIAL IN:
24	(I) AVOIDING THE MOST SERIOUS EFFECTS OF CLIMATE CHANGI
25	AND PRESERVING COLORADO'S WAY OF LIFE, THE HEALTH OI
26	COMMUNITIES, AND THE NATURAL ENVIRONMENT;
27	(II) ACHIEVING THE STATEWIDE GREENHOUSE GAS EMISSION
28	REDUCTION GOALS; AND
29	(III) REDUCING COSTS FOR COLORADANS.
30	(2) The general assembly therefore determines and
31	DECLARES THAT IT IS IN THE PUBLIC INTEREST OF THE HEALTH AND
32	ENVIRONMENT OF THE STATE TO REQUIRE THAT NEW BUILDING
33	CONSTRUCTION PROJECTS THAT RECEIVE STATE FINANCIAL ASSISTANCE
34	USE COVERED ENERGY-CONSUMING PRODUCTS THAT ARE CERTIFIED BY
35	THE ENERGY STAR PROGRAM.
36	<b>6-7.7-102. Definitions.</b> As used in this article 7.7, unless thi
37	CONTEXT OTHERWISE REQUIRES:
38	(1) "COVERED ENERGY-CONSUMING PRODUCT" MEANS AN

APPLIANCE, DEVICE, OR PIECE OF EQUIPMENT THAT IS:

(a) POWERED BY ELECTRICITY OR FUEL;

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- (b) DESIGNED TO PERFORM ONE OR MORE SPECIFIC TASKS INSIDE A RESIDENTIAL OR COMMERCIAL BUILDING, SUCH AS COOKING, WASHING, DRYING, HEATING, COOLING, PROVIDING DOMESTIC HOT WATER, PRINTING, OR DIGITAL ENTERTAINMENT; AND
  - (c) COVERED WITHIN THE SCOPE OF THE ENERGY STAR PROGRAM.
- (2) "Energy Star program" means the federal program authorized by 42 U.S.C. sec. 6294a, as amended.
- (3) "SOCIAL COST OF CARBON" MEANS THE SOCIAL COST OF CARBON DIOXIDE EMISSIONS DEVELOPED BY THE PUBLIC UTILITIES COMMISSION PURSUANT TO SECTION 40-3.2-106.
- (4) "STATE FINANCIAL ASSISTANCE" MEANS ALLOCATIONS FROM THE GENERAL FUND OR OTHER LEGISLATIVE ALLOCATIONS, STATE TAXPAYER FUNDS, REBATES, GRANTS, OR LOANS PROVIDED OR ADMINISTERED BY THE STATE.
- 6-7.7-103. Energy-efficiency standards for certain building construction projects that receive state financial assistance record retention requirements waivers exemptions standardized resources enforcement civil penalties. (1) On and after January 1, 2025, except as set forth in subsection (3) or (4) of this section, recipients of state financial assistance for New Building construction projects that include the specification, provision, or purchase of covered energy-consuming products shall use covered energy-consuming products certified by the Energy Star program.
- (2) On and after January 1, 2025, a state agency that provides or administers state financial assistance for a new building construction project shall:
- (a) INCLUDE THE REQUIREMENTS OF SUBSECTION (1) OF THIS SECTION IN THE STATE AGENCY'S CRITERIA OR GUIDANCE FOR APPLYING FOR OR RECEIVING STATE FINANCIAL ASSISTANCE FOR NEW BUILDING CONSTRUCTION PROJECTS;
- (b) REQUEST AN ATTESTATION SIGNED BY A RECIPIENT OF STATE FINANCIAL ASSISTANCE FOR NEW BUILDING CONSTRUCTION PROJECTS THAT DECLARES THAT:
- (I) THE REQUIREMENTS OF SUBSECTION (1) OF THIS SECTION HAVE BEEN OR WILL BE FOLLOWED; OR
- (II) THE RECIPIENT OF THE STATE FINANCIAL ASSISTANCE IS REQUESTING A WAIVER PURSUANT TO SUBSECTION (3) OF THIS SECTION; AND
- (c) RESPOND TO WAIVER REQUESTS RECEIVED PURSUANT TO SUBSECTION (3) OF THIS SECTION.
- 42 (3) A STATE AGENCY THAT PROVIDES OR ADMINISTERS STATE
  43 FINANCIAL ASSISTANCE FOR NEW BUILDING CONSTRUCTION PROJECTS MAY
  44 ISSUE A STANDARDIZED WAIVER FROM THE REQUIREMENTS OF SUBSECTION
  45 (1) OF THIS SECTION FOR A NEW BUILDING CONSTRUCTION PROJECT IF THE

RECIPIENT DEMONSTRATES, THROUGH EVIDENCE AND ATTESTATION FROM A LICENSED PROFESSIONAL ENGINEER OR DESIGN PROFESSIONAL, THAT:

- (a) NO COVERED ENERGY-CONSUMING PRODUCT CERTIFIED BY THE ENERGY STAR PROGRAM AND THAT MEETS THE FUNCTIONAL REQUIREMENTS OF THE PROJECT IS REASONABLY AVAILABLE TO THE APPLICANT; OR
- (b) Taking energy cost savings and the social cost of Carbon into account, no covered energy-consuming product certified by the Energy Star program is cost-effective over the Life of the product.
- (4) THE FOLLOWING NEW BUILDING CONSTRUCTION PROJECTS ARE EXEMPT FROM THE REQUIREMENTS OF THIS SECTION:
- (a) Projects that have passed the design phase before January 1, 2025, and would require significant redesign to include a covered energy-consuming product certified by the Energy Star program; and
- (b) Projects that have received a permit from a local government for the use of a covered energy-consuming product before January 1, 2025.
- 20 (5) If the attorney general, by a preponderance of the 21 EVIDENCE, BELIEVES THAT A PERSON HAS VIOLATED OR CAUSED ANOTHER 22 PERSON TO VIOLATE SUBSECTION (1) OF THIS SECTION, THE ATTORNEY 23 GENERAL MAY BRING A CIVIL ACTION ON BEHALF OF THE STATE TO SEEK 24 THE ASSESSMENT OF A CIVIL PENALTY OF UP TO THE TOTAL AMOUNT OF 25 STATE FINANCIAL ASSISTANCE RECEIVED BY THE VIOLATOR ON OR AFTER 26 JANUARY 1, 2025, WHICH AMOUNT MUST BE TRANSMITTED TO THE STATE 27 TREASURER, WHO SHALL CREDIT THE AMOUNT TO THE ENERGY FUND 28 CREATED IN SECTION 24-38.5-102.4 (1)(a)(I).".
- 29 Renumber succeeding sections accordingly.
- 30 Page 18, after line 25 insert:
- 31 "SECTION 12. In Colorado Revised Statutes, add part 16 to 32 article 7 of title 25 as follows:
- 33 PART 16
- 34 AFFORDABLE APPLIANCES FOR A HEALTHY COMMUNITY 35 **25-7-1601. Legislative declaration.** (1) THE GENERAL ASSEMBLY 36 FINDS AND DETERMINES THAT:
- 37 (a) RISING TEMPERATURES ARE INCREASING THE DEMAND FOR AIR 38 CONDITIONERS:
- (b) Common types of air conditioners can also provide winter heating if they are configured as heat pumps, which are a more environmentally friendly option than other types of heating, ventilation, and air conditioning systems;

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- (c) The "Inflation Reduction Act of 2022", the state, and utilities are opening up opportunities to make this technology less expensive than cooling-only systems; and
- (d) COLORADO SHOULD BE PREPARED TO TAKE ADVANTAGE OF NEW OPPORTUNITIES TO THE MAXIMUM EXTENT TO CREATE A MORE AFFORDABLE AND ENVIRONMENTALLY FRIENDLY HOUSING MARKET AND HEATING, VENTILATION, AND AIR CONDITIONING INDUSTRY.
- (2) THE GENERAL ASSEMBLY, THEREFORE, DETERMINES AND DECLARES THAT IT IS IN THE PUBLIC INTEREST FOR THE HEALTH AND ENVIRONMENT OF THE STATE TO REQUIRE THAT THE COLORADO ENERGY OFFICE CONDUCT A STUDY OF THE TECHNICAL VIABILITY, ECONOMIC CONDITIONS, AND WORKFORCE READINESS OF STANDARDS FOR CONFIGURING NEW RESIDENTIAL AIR CONDITIONERS AS HEAT PUMPS.
- **25-7-1602. Definitions.** As used in this part 16, unless the context otherwise requires:
- (1) "AIR CONDITIONER" MEANS AN ELECTRICALLY POWERED MECHANICAL DEVICE THAT USES THE REFRIGERATION CYCLE TO COOL AN INTERIOR HABITABLE SPACE.
- (2) "APPLICABLE AIR CONDITIONER" MEANS AN AIR CONDITIONER THAT IS:
  - (a) NEW;

- (b) POWERED BY A SINGLE-PHASE CURRENT;
- (c) DESIGNED AND INTENDED FOR RESIDENTIAL USE;
- (d) DESIGNED AND INTENDED FOR PERMANENT INSTALLATION; AND
- (e) Not designed or intended to be window mounted.
- (3) "HEAT PUMP" MEANS AN ELECTRICALLY POWERED MECHANICAL DEVICE THAT USES THE REFRIGERATION CYCLE TO TRANSFER THERMAL ENERGY FROM ONE LOCATION TO ANOTHER.
- (4) "HVAC" MEANS A HEATING, VENTILATION, AND AIR CONDITIONING SYSTEM.
- (5) "Office" means the Colorado energy office created in section 24-38.5-101 (1).
- (6) "RESIDENTIAL" MEANS ONE- AND TWO-FAMILY DWELLINGS AND TOWNHOUSES, AS DEFINED IN THE MOST RECENT EDITION OF THE INTERNATIONAL RESIDENTIAL CODE.
- **25-7-1603.** Colorado energy office study accelerated adoption of heat pump technology. (1) On or before August 1, 2024, THE OFFICE SHALL COMMENCE A STUDY WITH TARGETED STAKEHOLDER INPUT TO EXPLORE HOW TO ACCELERATE ADOPTION OF HEAT PUMP TECHNOLOGY IN COLORADO THROUGH A TECHNICAL STANDARD FOR APPLICABLE AIR CONDITIONERS.
  - (2) IN CONDUCTING THE STUDY, THE OFFICE SHALL:
- (a) FOCUS ON A STATEWIDE POINT-OF-SALE STANDARD ON NEW AND REPLACEMENT AIR CONDITIONERS;
  - (b) Consider equipment performance in different climate

ZONES AND CONDITIONS;

- (c) Consult with stakeholders from manufacturers, distributors, contractors, heat pump experts, green builders, environmental justice groups, and utilities serving retail customers:
- (d) USE DATA AND FINDINGS FROM RECENT PUBLIC UTILITY PROCEEDINGS TO ACCELERATE DATA COLLECTION FOR THE STUDY;
- (e) DETERMINE THE REQUIREMENTS FOR SUCCESSFUL IMPLEMENTATION OF A STATEWIDE POINT-OF-SALE STANDARD; AND
- (f) Make recommendations on how the state can address any associated needs or gaps before a statewide point-of-sale standard takes effect.
- (3) IN CONDUCTING THE STUDY, THE OFFICE SHALL ASSESS AND DETERMINE:
- (a) UP-FRONT COST GAPS AND ONGOING COSTS AND COST SAVINGS FOR RESIDENTIAL HOMES FROM IMPLEMENTATION OF A STATEWIDE POINT-OF-SALE STANDARD;
- (b) Whether and where federal, state, local, and utility incentives can cover any identified cost gaps, and make recommendations for what, if any, new incentives may be needed for income-qualified households;
- (c) ANY TECHNICAL LIMITATIONS, AND POTENTIAL REMEDIES FOR THOSE LIMITATIONS, FOR A STATEWIDE POINT-OF-SALE STANDARD;
- (d) System configuration options for cold-temperature performance;
- (e) NECESSARY CUSTOMER INFORMATION REGARDING COLD-TEMPERATURE PERFORMANCE;
- (f) What, if any, exceptions or exemptions may be necessary for a statewide point-of-sale standard and how such exceptions or exemptions could be administered;
- (g) POTENTIAL IMPROVEMENTS TO THE STATE INCOME TAX CREDIT CREATED IN SECTION 39-22-554;
  - (h) SUPPLY CHAIN STATUS;
  - (i) CONTRACTOR TRAINING NEEDS; AND
  - (j) QUALITY ASSURANCE MEASURES.
- (4) THE OFFICE SHALL DELIVER THE STUDY RESULTS TO THE CHAIRS OF THE TRANSPORTATION AND ENERGY COMMITTEE OF THE SENATE AND THE ENERGY AND ENVIRONMENT COMMITTEE OF THE HOUSE OF REPRESENTATIVES, OR ANY SUCCESSOR COMMITTEES, ACCORDING TO THE FOLLOWING SCHEDULE:
- (a) On or before January 1, 2025, the office shall deliver A progress report;
- (b) On or before March 1, 2025, the office shall deliver interim results and legislative recommendations; and
  - (c) On or before June 1, 2025, the office shall deliver the

- 1 FINAL STUDY AND FINAL LEGISLATIVE RECOMMENDATIONS.
- 2 **25-7-1604. Repeal of part.** This part 16 is repealed, effective
- 3 JULY 1, 2030.".

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- 4 Renumber succeeding sections accordingly.
- 5 Page 23, after line 24 insert:
- "SECTION 16. In Colorado Revised Statutes, 39-22-554, amend
  (2)(a)(I)(C), (2)(g)(I)(C), (2)(g)(I)(D), (2)(p)(I)(C), (2)(p)(I)(D),
  (2)(q)(I)(C), (2)(p)(I)(D), (2)(q)(I)(D), (3)(c)(I) introductory portion,
  (3)(d)(II), (3)(e), (5)(a)(II), (5)(a)(V), and (5)(d)(II)(A); repeal
  (2)(a)(I)(B), (2)(a)(III), (2)(g)(III), (2)(g)(IV), (2)(p)(III), (2)(q)(III), and
  (5)(a)(III); and add (2)(a)(I)(D), (2)(a)(I)(E), (2)(c.5), (2)(d.5),
  (2)(g)(I)(E), (2)(i.5), (2)(q)(I)(E), and (5)(a)(III.5) as follows:
  - 39-22-554. Heat pump technology and thermal energy network tax credit tax preference performance statement definitions repeal. (2) Definitions. As used in this section, unless the context otherwise requires:
    - (a) (I) "Air-source heat pump system" means a system that:
    - (B) Has a variable speed compressor; and
  - (C) Is listed in the Air-conditioning, Heating, and Refrigeration Institute directory of certified product performance as a matched system;
  - (D) CONFORMS TO ALL APPLICABLE MUNICIPAL, STATE, AND FEDERAL CODES, STANDARDS, REGULATIONS, AND CERTIFICATIONS; AND
  - (E) IS INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
  - (III) "Air-source heat pump system" includes mechanical and electrical equipment central to the operation of an air-source heat pump, including an upgraded electrical panel if necessary.
  - (c.5) "COLD-CLIMATE HEAT PUMP" MEANS A TYPE OF AIR-SOURCE HEAT PUMP SYSTEM THAT:
  - (I) MEETS THE QUALIFICATION CRITERIA OF THE FEDERAL ENVIRONMENTAL PROTECTION AGENCY'S ENERGY STAR PROGRAM'S COLD-CLIMATE HEAT PUMP DESIGNATION OR MEETS THE HIGHEST TIER OF THE CONSORTIUM FOR ENERGY EFFICIENCY'S NORTHERN AIR-SOURCE HEAT PUMP SPECIFICATIONS, NOT INCLUDING AN ADVANCED TIER;
  - (II) IS INSTALLED WITH CONTROLS THAT SET A CROSSOVER TEMPERATURE SPECIFIED BY GUIDELINES ESTABLISHED BY THE OFFICE PURSUANT TO SUBSECTION (7) OF THIS SECTION;
  - (III) CONFORMS TO ALL APPLICABLE MUNICIPAL, STATE, AND FEDERAL CODES, STANDARDS, REGULATIONS, AND CERTIFICATIONS;
- 40 (IV) IS INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S 41 SPECIFICATIONS; AND
- 42 (V) IS LISTED IN THE AIR-CONDITIONING, HEATING, AND

REFRIGERATION INSTITUTE DIRECTORY OF CERTIFIED PRODUCT PERFORMANCE AS A MATCHED SYSTEM.

- (d.5) "Crossover temperature" means the point that a heat-pump-based HVAC system switches either partially or fully from the heat pump to a supplementary heating source.
  - (g) (I) "Ground-source heat pump system" means a system that:
- (C) Has blowers that are variable speed, high-efficiency motors that meet or exceed efficiency levels listed in the National Electrical Manufacturers Association MG 1-1993 publication; and
- (D) Complies with all state and local drinking water guidelines and regulations and public water system requirements; AND
- (E) IS INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
- (III) "Ground-source heat pump system" includes mechanical and electrical equipment central to the operation of a ground-source heat pump, including an upgraded electrical panel if necessary.
- (IV) "Ground-source heat pump system" may include a heat exchanger for water heating.
- (i.5) "HEAT PUMP" MEANS AN ELECTRICALLY POWERED MECHANICAL DEVICE THAT USES THE REFRIGERATION CYCLE TO TRANSFER THERMAL ENERGY FROM ONE LOCATION TO ANOTHER.
- (p) (I) "Variable refrigerant flow heat pump system" means a system that:
- (C) Has blowers that are <del>variable speed,</del> high-efficiency motors that meet or exceed efficiency levels listed in the National Electrical Manufacturers Association <del>MGI-1993</del> MG 1-1993 publication; <del>and</del>
- (D) Complies with all state and local drinking water guidelines and regulations and public water system and wastewater system requirements; AND
- (E) Is installed in accordance with the manufacturer's specifications.
- (III) "Variable refrigerant flow system" includes mechanical and electrical equipment central to the operation of a variable refrigerant flow system.
  - (q) (I) "Water-source heat pump system" means a system that:
- (C) Has blowers that are variable speed, high-efficiency motors that meet or exceed efficiency levels listed in the National Electrical Manufacturers Association MG 1-1993 publication; and
- (D) Complies with all state and local drinking water guidelines and regulations and public water system and wastewater system requirements; AND
- (E) IS INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
- (III) "Water-source heat pump system" includes mechanical and electrical equipment central to the operation of a water-source heat pump.

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- (3) (c) Subject to the modifications set forth in subsection (3)(d) of this section and the annual review required pursuant to subsection (3)(e) of this section and except as otherwise provided in subsection (3)(f) of this section, the amount of the credit allowed pursuant to this section is calculated as follows:
- (I) For the installation of an air-source heat pump system THAT IS NOT A COLD-CLIMATE HEAT PUMP, or FOR a variable refrigerant flow heat PUMP system:
- (d) Notwithstanding the amounts set forth in subsection (3)(c) of this section, the amount of the credit allowed by this section may be modified as follows:
- (II) For a nonresidential building, the amount of the credit is the amount of the credit permitted pursuant to subsection (3)(c) of this section multiplied by the number of increments of four tons of heating capacity; up to a maximum of one hundred tons; and
- (e) The office shall annually review and evaluate the effectiveness of the tax credits and may, FOR THE SUBSEQUENT TAX YEAR:
- (I) Modify the amounts set forth in subsection (3)(c) of this section; AND
- (II) ESTABLISH, MODIFY, OR REMOVE LIMITS ON THE CREDITS CALCULATED PURSUANT TO SUBSECTION (3)(d) OF THIS SECTION.
- (5) (a) The office shall create, and update at least annually, a list containing the names and contact information of eligible taxpayers. To become an eligible taxpayer, and be included on the list described in this subsection (5), a taxpayer shall demonstrate to the office that the taxpayer and any of its employees who will be installing heat pump technology or thermal energy networks:
- (II) Are knowledgeable of AND AGREE TO FOLLOW the relevant system requirements set forth in subsections (2)(a), (2)(c.5), (2)(g), (2)(h), (2)(i), (2)(m), (2)(n), (2)(p), and (2)(q) of this section;
- (III) Will install heat pump technology and thermal energy networks in accordance with the national electric code and manufacturer's specifications;
- (III.5) HAVE RECEIVED TRAINING PURSUANT TO THE GUIDELINES ISSUED BY THE OFFICE PURSUANT TO SUBSECTION (7) OF THIS SECTION;
- (V) Will meet any additional standards established by the office in its guidelines. including, if applicable, the 2021 international energy conservation code.
- (d) (II) (A) The office shall annually PERIODICALLY examine a sample of the eligible taxpayers on the list described in this subsection (5) to substantiate that the eligible taxpayers are meeting the office's standards and properly claiming the credit allowed by this section. Every eligible taxpayer shall produce the books and records described in subsection (5)(d)(I) of this section for examination at any time by the office."

- 1 Renumber succeeding sections accordingly.
- 2 Page 25, after line 20 insert:

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3 "SECTION 20. In Colorado Revised Statutes, add 40-3.2-110 as follows:

## 5 40-3.2-110. Requirements related to heat pumps - definitions.

- (1) AS USED IN THIS SECTION, UNLESS THE CONTEXT OTHERWISE REQUIRES, "HEAT PUMP" MEANS AN ELECTRICALLY POWERED DEVICE THAT USES THE REFRIGERATION CYCLE TO TRANSFER THERMAL ENERGY FROM ONE LOCATION TO ANOTHER.
- (2) ON OR BEFORE AUGUST 1, 2027, AN INVESTOR-OWNED UTILITY THAT PROVIDES ELECTRIC OR THERMAL ENERGY SHALL, WITHIN A GENERAL RATE CASE REQUEST, SUBMIT TO THE COMMISSION A PROPOSAL FOR A VOLUNTARY RATE OR RATES FOR ENERGY SUPPLIED TO RESIDENTIAL CUSTOMERS WHO UTILIZE A HEAT PUMP AS THEIR PRIMARY HEATING SOURCE, WHICH VOLUNTARY RATE OR RATES:
- (a) May be new rates, new or existing riders, or incorporated into an existing time-of-use rate;
- 18 (b) If cost-justified, are designed to lower the average 19 Monthly energy bill of residential customers who utilize a heat 20 Pump as their primary heating source; and
  - (c) AVOID CROSS-SUBSIDIES FROM OTHER CUSTOMERS.".
- 22 Renumber succeeding sections accordingly.

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