1	SENATE BILL NO. 105
2	INTRODUCED BY BECK
3	
4	A BILL FOR AN ACT ENTITLED: "AN ACT REQUIRING A LOW-VOLTAGE ELECTRICIAN'S LICENSE FOR
5	PERSONS WIRING FOR, INSTALLING, AND REPAIRING LIFE AND PROPERTY PROTECTION EQUIPMENT;
6	ELIMINATING THE REQUIREMENT THAT A LICENSED ELECTRICIAN MAY INSTALL A NEW SECURITY
7	ALARM SYSTEM ONLY UNDER THE DIRECTION OF A JOURNEYMAN SECURITY ALARM INSTALLER,
8	SUBJECT TO INSPECTION AND APPROVAL BY A LICENSED SECURITY ALARM INSTALLER; AMENDING
9	SECTIONS 37-68-102, 37-68-103, 37-68-301, 37-68-302, 37-68-305, 37-68-307, 37-68-308, 37-68-310,
10	37-68-311, AND 37-68-314, MCA; AND REPEALING SECTION 37-60-409, MCA."
11	
12	BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MONTANA:
13	
14	Section 1. Section 37-68-102, MCA, is amended to read:
15	"37-68-102. Definitions. Unless the context requires otherwise, in this chapter, the following
16	definitions apply:
17	(1) "Board" means the state electrical board provided for in 2-15-1874.
18	(2) "Department" means the department of commerce provided for in Title 2, chapter 15, part 18.
19	(3) "Electrical contractor" means a person, firm, partnership, corporation, association, or
20	combination of these who that undertakes or offers to undertake for another the planning, laying out,
21	supervising, and installing or the making of additions, alterations, and repairs in the installation of wiring
22	apparatus and equipment for electric light, heat, and power. A registered electrical engineer who plans or
23	designs electrical installations is not an electrical contractor.
24	(4) "Journeyman electrician" means a person having the necessary qualifications, training,
25	experience, and technical knowledge to wire for, install, and repair electrical apparatus and equipment for
26	light, heat, power, and other purposes under the rules governing this work.
27	(5) "Low-voltage electrician" means a person having the necessary qualifications, training,
28	experience, and technical knowledge to wire for, install, and repair electrical apparatus and equipment
29	operating at 70 volts or less for energy management controls, facility automation controls, fire protection
30	systems, security alarm systems, nurse call communication, and other purposes governing this work. A

journeyman electrician is qualified to perform all work of a low-voltage electrician.

(6) "Master electrician" means a person having the necessary qualifications, training, experience, and technical knowledge to properly plan, lay out, and supervise the installation and repair of wiring apparatus and equipment for electric light, heat, power, and other purposes under the rules governing this work.

(6)(7) "Residential electrician" means a person having the necessary qualifications, training, experience, and technical knowledge to wire for, install, and repair electrical apparatus and equipment for light, heat, power, and other purposes in residential construction consisting of less than five living units in a single structure under the rules governing this work."

# Section 2. Section 37-68-103, MCA, is amended to read:

"37-68-103. Exemptions. (1) Nothing in this This chapter shall be deemed to does not apply to the installation, alteration, or repair of electrical signal or communications equipment owned or operated by a public utility or a city. For purposes of this exemption, "communications equipment" includes telephone wire inside a customer's premises. Nothing in this This chapter prohibits does not prohibit a public utility from doing inside wiring to install, alter, repair, or maintain electrical equipment, installations, or facilities in buildings owned by the public utility if the work is accomplished by an employee who is a licensed electrician. If the building owned by the public utility is open to the public and the inside wiring constitutes major renovation or construction, the installation, alteration, repair, or maintenance of electrical equipment, installations, or facilities is subject to permits and inspections required by law.

- (2) The licensing or inspection provisions of this chapter do not apply to regularly employed maintenance electricians doing maintenance work on the business premises of their employer, nor and do they not apply to line work on the business premises of the employer when ordinary and customary in-plant or onsite installations, modifications, additions, or repairs are performed.
- (3) Nothing in this <u>This</u> chapter shall <u>may not</u> be construed to require an individual to hold a license while or for doing electrical work on his <u>the individual's</u> own property or residence provided that said if the property or residence is maintained for his <u>the individual's</u> own use.
- (4) An individual, firm, partnership, or corporation may engage in business as an electrical contractor without an electrician's license if all electrical work performed by such the individual, firm, partnership, or corporation is under the direction, control, and supervision of a licensed master electrician



or under the direction, control, and supervision of a journeyman electrician for residential construction consisting of less than five living units in a single structure.

- (5) Any A person who plugs in an electrical appliance where an approved electrical outlet is already installed shall may not be considered as an installer.
- (6) No <u>The</u> provisions of this chapter shall <u>may not</u> in any manner interfere with, hamper, preclude, or prohibit any <u>a</u> vendor of any electrical appliance from selling, delivering, and connecting any electrical appliance if the connection does not necessitate the installation of electrical wiring of the structure where in which the appliance is to be connected.
- (7) This chapter does not apply to the installation, alteration, or repair of television and radio central antenna systems, sound systems, computer networks, or intercommunications, access control, or fiber systems that are not related to life or property protection systems."

Section 3. Section 37-68-301, MCA, is amended to read:

"37-68-301. License required to engage in electrical work. (1) A person may not engage in or work at the business, trade, or calling of electrical contractor, residential electrician, <u>low-voltage electrician</u>, journeyman electrician, or master electrician in this state until the person has received from the department a license or permit to work as an electrical contractor, residential electrician, <u>low-voltage electrician</u>, journeyman electrician, or master electrician.

or union, who refers persons for employment by others may not refer a person for employment by others to perform the work of an electrical contractor, residential electrician, low-voltage electrician, journeyman electrician, or master electrician in this state unless the person has received from the department a license or permit to work as an electrical contractor, residential electrician, low-voltage electrician, journeyman electrician, or master electrician."

Section 4. Section 37-68-302, MCA, is amended to read:

"37-68-302. Unauthorized use of title. No A person, firm, partnership, corporation, or association shall may not assume or use the title or designation of licensed master electrician, licensed journeyman electrician, licensed low-voltage electrician, or residential electrician unless qualified and licensed under this chapter."



Section 5. Section 37-68-305, MCA, is amended to read:

"37-68-305. Journeyman, low-voltage, and residential electricians -- application -- qualifications -- contents of examination. (1) An applicant for a journeyman electrician's license shall furnish written evidence that he the applicant has had at least 4 years' apprenticeship in the electrical trade or 4 years' practical experience in the wiring for, installing, and repairing of electrical apparatus and equipment for light, heat, and power. Applications for license and notice to the applicant shall must be made and given as in the ease of same manner as for master electricians' licenses. The written examination for a journeyman's license shall must consist of at least 30 questions designed to fairly test the applicant's knowledge and the technical application thereof of the applicant's knowledge in the following subjects:

- (a) the Ohm's law;
  - (b) the national electrical code; and
- 12 (c) the layout and practical installation of electrical circuits.
  - (2) An applicant for a low-voltage electrician's license shall furnish written evidence that the applicant has at least 4 years' and 8,000 hours' apprenticeship in the electrical trade or 4 years' practical experience in the wiring for, installing, and repairing of life and property protection equipment or apparatus operating at 70 volts or less for energy management controls, facility automation controls, fire protection systems, security alarm systems, nurse call communication, or other similar life or property protection equipment or devices. Applications for license and notice to the applicant must be made and given in the same manner as for master electricians' licenses. The written examination for a low-voltage electrician's license must consist of at least 30 questions designed to fairly test the applicant's knowledge and the technical application of the applicant's knowledge in the following subjects:
- 22 (a) Ohm's law;
  - (b) the national electrical code; and
- 24 (c) the layout and practical installation of electrical circuits."
  - (2)(3) An applicant for a residential electrician's license shall furnish written evidence that he the applicant has had at least 2 years' apprenticeship in the electrical trade or 2 years' practical experience in the wiring for, installing, and repairing of electrical apparatus and equipment for light, heat, and power in residential construction consisting of less than five living units in a single structure. Application Applications for license and notice to the applicant ie must be made and given as in the ease of same manner as for master electricians' licenses. The written examination for a residential electrician's license eonsists must



1	consist of at least 30 questions designed to fairly test the applicant's knowledge and the technical
2	application thereof of the applicant's knowledge in the following subjects:
3	(a) the Ohm's law;
4	(b) the national electrical code; and
5	(c) the layout and practical installation of electrical circuits in residential construction consisting
6	of less than five living units in a single structure."
7	

Section 6. Section 37-68-307, MCA, is amended to read:

"37-68-307. Examination procedure -- issuance of master, journeyman, low-voltage, or residential electrician's license -- expiration. (1) To ensure impartiality, the examination for either the master's or journeyman's license must be by numbers drawn by lot. A paper may not be marked with the name of an applicant, but must be anonymously graded by the department. The examination passing grade is 75%.

- (2) If it is determined that the applicant has passed the examination, the department, on payment by the applicant of the fee, shall issue to the applicant a license that authorizes the licensee to engage in the business, trade, or calling of a residential electrician, <u>low-voltage electrician</u>, journeyman electrician, or master electrician.
- (3) Each original license expires on a July 15 that is not more than 3 years subsequent to the date of issuance, at the discretion of the board."

Section 7. Section 37-68-308, MCA, is amended to read:

"37-68-308. Licensure without examination of persons licensed locally. The board may authorize the department to issue a license as a master electrician, journeyman electrician, <u>low-voltage electrician</u>, or residential electrician to an applicant without written examination on satisfactory proof that the applicant has the qualifications to apply for a license under this chapter and is the holder of a valid license issued by a city or other political subdivision of this state which that provides for the examination and licensing of electricians."

Section 8. Section 37-68-310, MCA, is amended to read:

"37-68-310. License renewal every three years -- renewal of lapsed licenses. Licenses of residential electricians, low-voltage electricians, journeyman electricians, or master electricians, unless they



have been suspended or revoked by the board, must be renewed for a period of 3 years by the department on application for renewal made to the department on or before the renewal date set by department rule and on the payment of a renewal fee. If application for renewal is not made on or before the renewal date, an additional fee prescribed by board rule must be paid. It is unlawful for a person who refuses or fails to pay the renewal fee to practice electrical work in this state. A person with a lapsed license may be issued a renewal license without examination if the applicant pays the original renewal fee and any delinquency fee within 1 year of the license expiration date. A lapsed license that is not renewed within 1 year following its expiration date may not be renewed unless the applicant passes the examination and pays the fee required for an original license."

Section 9. Section 37-68-311, MCA, is amended to read:

"37-68-311. Examination fee -- license fee -- specific exemption for apprentices. (1) Master electricians, and journeyman electricians, low-voltage electricians, or residential electricians installing or intending to install for hire electric wiring or equipment to convey electric current or apparatus to be operated by this current shall make application apply for a license to the department. The application must be on a form furnished by the department and must be accompanied by an examination fee set by the board. The forms form must state the applicant's full name and address, the extent of work experience, and other information required by the board. If the applicant has complied with the rules adopted by the board and, being qualified, has successfully completed the examination, the applicant shall pay to the department a license fee set by the board for a master electrician's license, or for a journeyman a journeyman electrician's license, a low-voltage electrician's license, or a residential electrician's license, and upon receipt of the fee, the department shall issue the proper license to the applicant.

(2) A person serving a 4-year electrician apprenticeship under the supervision of a licensed electrician is exempt from the licensing provision of this section during training. Credit for the time spent in an electrical school must be given to the a master electrician, journeyman electrician, low-voltage electrician, residential electrician, or apprentice, up to a total of 2 years, on the 4-year requirement."

Section 10. Section 37-68-314, MCA, is amended to read:

"37-68-314. Qualifications for licensing examination -- when no discretion in board. A person applying for a license as a journeyman electrician, a low-voltage electrician, or a residential electrician must



1	be allowed by the state electrical board to take the required examination and be granted a license upo	
2	passing the examination if the applicant:	
3	(1) he has completed an appropriate training program conducted by a bona fide union;	
4	(2) he has completed the appropriate required apprenticeship; or	
5	(3) he has worked in the electrical field for 10 years and is considered by his the applicant's	
6	employer, as shown by a written statement of the employer, to be capable and qualified to take the	
7	examination for the license for which he the applicant is applying."	
8		
9	NEW SECTION. Section 11. Repealer. Section 37-60-409, MCA, is repealed.	
10	-END-	

## STATE OF MONTANA - FISCAL NOTE

### Fiscal Note for SB0105, as introduced

## DESCRIPTION OF PROPOSED LEGISLATION:

An act requiring a low-voltage electrician's license for persons wiring for, installing, and repairing life and property protection equipment; eliminating the requirement that a licensed electrician may install a new security alarm system only under the direction of a journeyman security alarm installer, subject to inspection and approval by a licensed security alarm installer.

## ASSUMPTIONS:

### Building Codes Bureau:

- 1. Approximately 1,500 additional electrical permits would be issued annually by the Department of Commerce (DOC), Building Codes Bureau, for low-voltage installations (energy management and facility automation controls, fire and security alarm systems, and nurse call communications.). The average cost of the permit is \$72.
- The Building Codes Bureau, in direct relation to the anticipated increase in electrical permitting activity, would be required to perform an additional 3,000 electrical inspections annually.
- 3. An additional 2.00 FTE electrical inspectors, grade 14, would be required to perform the additional electrical inspections. The estimated personal services cost is \$63,670 in fiscal year 1998 and fiscal year 1999.
- 4. Approximately \$17,890 in additional operating expenses would be incurred in fiscal year 1998 and fiscal year 1999. Two additional vehicles would be needed in fiscal year 1998 for the additional inspectors at an estimated cost of \$26,000.
- The increased permitting revenues would offset the increased personal services, operating, and equipment expenditures.

#### POL Bureau:

DAVE LEWIS, BUDGET DIRECTOR

Office of Budget and Program Planning

- 1. A licensing category for low-voltage electricians would be created and there would be an estimated 3,000 licensees with no grandfather clause. Persons impacted by the proposed legislation include fire protection, security alarm installers, mechanical equipment pipe-fitters, master/journeyman plumbers, and heating/air conditioning installers.
- 2. An additional 1.00 FTE licensing technician, grade 9, would be required to process applications and perform other administrative duties associated with the new licensing category. The estimated personal services cost is \$21,964 in fiscal year 1998 and fiscal year 1999.
- 3. An additional 1.00 FTE compliance specialist, grade 12, would be required to perform the regulatory duties of license checks and investigation of complaints associated with the new licensing category. The estimated personal services cost is \$27,338 in fiscal year 1998 and fiscal year 1999.
- 4. Additional annual operating expenses are estimated at \$29,700 in fiscal year 1998 and fiscal year 1999. Estimated operating expenses include communications, printing, legal fees and court costs, data network charges, travel, rent, and administrative charges. The estimated fiscal year 1998 equipment costs of \$4,700 include a computer, desk, and chair for the licensing technician.
- 5. There would be no costs incurred by the POL Bureau for examination expenses because applicants will pay a testing agency directly for these costs.
- 6. Licensing fees for low-voltage electricians would be set commensurate with the costs of administering the program. In fiscal year 1998, the application and license fees are projected to be \$75 for 3,000 new applicants in fiscal year 1998 and 150 new applicants in fiscal year 1999. Income generated from the fees would be needed to fund the program until the next three-year licensing period in the year 2000.

(Continued)

TOM BECK, PRIMARY SPONSOR

Fiscal Note for SB0105, as introduced

Fiscal Note Request, <u>SB0105</u>, <u>as introduced</u> Page 2 (montinued)

### FISCAL IMPACT:

Department of Commerce
Building Codes & POL Bureaus:

	FY98	FY99
Expenditures:	<u>Difference</u>	<u>Difference</u>
FTE	4.00	4.00
Personal Services	112,972	112,972
Operating Expenses	47,590	47,590
Equipment	30,700	0
Total	191,262	160,562
Funding:		
Special Revenue (02)	191,262	160,562
Revenues:		
Building Codes Permits	107,560	107,560
POL Licensing Fees	<u>225,000</u>	<u> 11,250</u>
Total	332,560	118,810
Net_Impact:		
Building Codes SSR (02)	0	26,000
POL State Electrical BD. SSR (	02) 141,298	<u>(67,752)</u>
Total	141,298	(41,752)

### EFFECT ON COUNTY OR OTHER LOCAL REVENUES OR EXPENDITURES:

Building Codes Bureau: Thirteen local government programs (Billings, Bozeman, Butte-Silver Bow County, Columbia Falls, East Helena, Glasgow, Great Falls, Helena, Missoula, Pinesdale, St. Ignatius, Stevensville, and Walkerville) issue electrical permits and conduct electrical inspections and all would likely be affected by the proposed legislation. The fiscal impact upon the aforementioned local governments is unknown.

# LONG-RANGE EFFECTS OF PROPOSED LEGISLATION:

Building Codes Bureau: The bureau will have an increased number of electrical permits to issue and inspect on an annual basis and additional FTEs will be required to perform the work. Electrical inspectors cannot inspect more than 700 new electrical permits annually. Permits and inspections beyond the estimated numbers will require an additional FTE and vehicles for each additional 700 permits issued annually.

#### TECHNICAL NOTES:

This bill creates a discrepancy within the state licensure system in that it will require two separate licenses for some persons performing certain types of low-voltage electrical work.

- 1. Fire protection system installers and servicers are already regulated under 50-39-101 through 50-39-107, MCA. These statutes already require an application for licensure, issuance of a license by the DOC, and regulation of the licensee's work, including inspections. SB0105 would not recognize any of these existing requirements, and would instead cause this group of licensed persons to apply, pay a fee for, and obtain a second, separate "low-voltage electrician" license to meet entirely new requirements.
- 2. Security alarm system installers and servicers are already regulated under 37-60-101 through 37-60-411, MCA. These statutes also require a license and disciplinary action against the licensee. SB0105 would not recognize these existing licenses, but would cause this group of licensed persons to meet new requirements and obtain a second, separate "low-voltage electrician" license.