

**DEPARTMENT OF CONSUMER AND BUSINESS SERVICES,  
BUILDING CODES DIVISION**

**DIVISION 30**

**GENERAL LICENSING REQUIREMENTS**

**918-030-0000**

**Purpose and Scope**

OAR chapter 918, division 30 establishes the general licensing requirements and procedures for individuals and businesses licensed by the appropriate board or by Building Codes Division. These rules apply to individuals and businesses required to be licensed under provisions of ORS chapters 447.110 to 447.156, 460.005 to 460.175, 479.510 to 479.945, 480.510 to 480.670 and 693.

**918-030-0010**

**Definitions**

As used in OAR chapter 918, division 30 and division 35, terms are defined as follows unless context requires otherwise:

- (1) "Applicant" means a person that applies for a license in the manner established by these rules.
- (2) "Appropriate Board" means the advisory board that has authority over a particular license or licensee.
- (3) "Appropriate rules" refers to the administrative rules containing specific licensing criteria that are located in OAR chapter 918 division 225, division 282, division 400, division 695 and division 780.
- (4) "Code cycle" means the period from adoption of the current Oregon Specialty Code to the adoption of a new Oregon Specialty Code. Adoption refers to the base model code and does not mean amendment of the Oregon Specialty Code.
- (5) "Director" means the Director of the Department of Consumer and Business Services.
- (6) "Lawful work experience" means work experience in a jurisdiction that was gained in compliance with that jurisdiction's regulations. Lawful experience may include:
  - (a) Work experience gained while licensed for the scope and type of work performed; and
  - (b) Work experience gained while in the employ of a licensed employer when the employee is not required to have a license.
- (7) "Person" means individuals, corporations, associations, firms, partnerships, limited liability companies, joint stock companies, and public agencies. "Person" also means the owner or holder of a direct or indirect interest in a corporation, association, firm, partnership, limited liability company or joint stock company if:
  - (a) The interest allows the owner or holder to participate in the management of the business; and
  - (b) The owner or holder of the interest has either had a division issued license revoked or been the recipient of a notice of proposed civil penalty from the director or the appropriate board.
- (8) For purposes of ORS 447.040, 479.620, 480.630 and any other license regulated by ORS chapter 455, "engaging in the business" means to advertise or solicit, contract or agree to perform, or to perform, work for which a license or permit is required under Oregon law, including but not limited to a single instance.
- (9) "Reciprocal Jurisdiction" means a state with a current reciprocal licensing agreement with the state of Oregon.

(10) "Registered" when referring to an apprenticeship program or a training committee means that the program or committee has been registered under the standards adopted by the Oregon Bureau of Labor and Industries or approved by the appropriate advisory board.

(11) "Valid" license means a license issued by either the appropriate board or division that has not expired and has not been suspended or revoked.

## **918-030-0015**

### **Contractor Licenses**

(1) This rule applies to contractors' licenses issued by the division for the following: boiler contractors, electrical contractors, elevator contractors, and plumbing contractors.

(2) These contractors must possess or maintain a Construction Contractors Board license under ORS Chapter 701 or OAR Chapter 812. Possession of a Construction Contractors Board license does not replace any license required by the division or the appropriate board.

(3) Any applicant for a division-issued contractor's license must provide verification of appropriate Construction Contractors Board licensing.

(4) The division or appropriate board may suspend, revoke, or refuse to renew any contractor license if the licensee fails to maintain a required Construction Contractors Board license. Failure to maintain a required Construction Contractors Board license includes, but is not limited to, suspension, termination, or revocation by the Construction Contractors Board, or failure to renew with the Construction Contractors Board.

### **Application and Examination**

## **918-030-0020**

### **Application Process**

(1) An applicant must apply for a license on a division form or by completing an online application available through the division's Web site.

(2) In order to be approved the application must include:

(a) Applicable examination and application fees; and

(b) Verification of training, work experience or other documentation submitted in the manner established by OAR 918-030-0030.

(3) Nothing in chapter 918, division 030 prevents an applicant for a license from faxing or scanning and e-mailing documents.

(4) An applicant may not sit for an examination or receive a license unless the division approves the application.

(5) An applicant required by statute or appropriate rule to pass a written examination must score at least 75 percent correct.

## **918-030-0030**

### **Qualifying Criteria**

All applicants must submit proof of qualifying criteria as required by the appropriate rules and in the manner established by this rule.

(1) Submit training and experience verification as follows:

(a) A certificate of completion from a registered apprenticeship program, or a referral letter from either the registered training committee or a board approved training program stating the applicant is qualified to take the examination. The division will accept completion from an apprenticeship program that is not registered only if it meets the Oregon standard for apprenticeship training.

(b) A copy of a valid license from a reciprocal jurisdiction or a letter from the reciprocal jurisdiction stating that the applicant is currently licensed. Only reciprocal jurisdiction licenses obtained through examination meet this requirement; or

(c) Other verification of equivalent training and experience submitted in the manner established in OAR 918-030-0040 and 918-030-0050.

(2) Electrical license applicants who are required to submit proof of related training classes may alternatively submit verification of twice the amount of equivalent work experience required for the license.

(3) Applicants required to take an examination must submit proof of a high school diploma, GED or international equivalent. A college degree will substitute for the requirements of this section.

(4) For purposes of qualifying for a license, the division will consider no more than 2,000 hours of experience per year.

(5) Only lawful work experience is accepted. The appropriate board or division determines whether an applicant's work experience is lawful. If an applicant disagrees with the determination, the applicant must provide evidence clearly demonstrating that, at the time the disputed work was performed, the work experience was lawful under the laws of the jurisdiction in which work was performed.

#### **918-030-0040**

##### **Other Verification**

(1) Applicants submitting other verification of equivalent training and experience under OAR 918-030-0030(1)(c), must provide verification from the following persons:

(a) Verification from a current or previous employer actively involved with the applicant's work; or

(b) If the current or previous employer is no longer in business, is deceased or otherwise cannot be located, verification from the individual that supervised the work; or

(c) Only if both the employer and the supervisor cannot be located, verification from a co-worker that was directly involved in the work performed. Co-worker verification must be accompanied by supporting documentation, such as employment records, showing that the verifier worked with the applicant and has knowledge of the work performed.

(2) The appropriate board may approve alternate verification of training and experience on a case-by-case basis.

#### **918-030-0045**

##### **Oregon Reciprocal License Requirements**

(1) The purpose of these rules is to assist the citizens of Oregon and reciprocating states with substantially similar electrical and plumbing licensing criteria to obtain a license without examination.

(2) For the purposes of this rule the following definitions apply:

(a) "Reciprocal Applicant" means a person applying for a reciprocal license.

(b) "Reciprocal License" means a license issued by Oregon to a person who qualifies under these rules.

(c) "Reciprocal State" means a state with a reciprocal licensing agreement with Oregon.

(d) "Work Experience" refers to work experience obtained through a registered apprenticeship program. Work experience may also refer to work experience verified in the manner established by OAR 918-030-0040 or 918-030-0050.

(3) To qualify for a license under these rules, a reciprocal applicant must prove that they:

(a) Possess an equivalent or higher license from the reciprocal state that is current and active with no violations or conditions attached within the past three (3) years;

(b) Qualified for the equivalent or higher license from the reciprocal state through required work experience and by passing an examination in the reciprocal state with a score of 75 percent or better;

(c) Have worked a minimum of six (6) months (1,000 hours) under the license in the reciprocal state;

(d) Have not taken and failed the Oregon examination within the past two (2) years for the license type they are applying to reciprocate.

### **918-030-0050**

#### **Verification of Military Training and Experience**

(1) Experience and training gained through the military is evaluated on a case-by-case basis. The experience and training must be equivalent to the license criteria established by the appropriate rules.

(2) Military training and experience must be submitted as follows:

(a) Official documentation from supervising officials showing the type and approximate hours of work experience; or

(b) Other reliable documentation verifying training and experience if supervisory officials cannot be located.

### **918-030-0060**

#### **Reapplying After Failed Examination**

(1) An applicant who fails an examination may reapply for the license at any time as provided in OAR 918-030-0020. There is no waiting period to reapply after a failed exam.

(2) An applicant who reapplies is not required to re-qualify for examination or provide work history information unless the requirements for the license have changed since the applicant originally applied for the license.

(3) Exam retakes are scheduled no less than 30 days from the date of the failed exam.

### **Continuing Education**

#### **918-030-0100**

##### **Continuing Education Generally**

(1) OAR 918-030-0100 to 918-030-0150 establishes minimum continuing education requirements for licensees.

(2) The hourly continuing education requirements can be met by approved class, online or correspondence courses.

(3) When a continuing education course is taught in more than one session, credit is only granted upon completion of the entire course.

(4) Table 2-A lists the effective dates for the Oregon rule and law course requirements for specific licenses.

[ED. NOTE: Tables referenced are not included in rule text. [Click here for PDF copy of table\(s\).](#)]

## 918-030-0120

### Licenses Requiring 24 Hours of Continuing Education

(1) During each three-year license cycle, the following license holders are required to complete 24 hours of approved continuing education. The hours must include code-change courses in the amounts below, and after the date listed in Table 2-A must include a 4-hour Oregon rule and law course meeting the standards established in OAR 918-035-0055. The Oregon rule and law course is in addition to the code-change hour requirement:

- (a) General Supervising Electrician: must include 12 hours of code change;
- (b) Limited Supervising Electrician: must include 12 hours of code change;
- (c) General Journeyman Electrician: must include 8 hours of code change;
- (d) Journeyman Plumber: must include 4 hours of code change.

(2) During each three-year license cycle, the following license holders are required to complete 24 hours of approved continuing education:

- (a) Class 3 Boiler Building Service Mechanic;
- (b) Class 4 Boiler Boilermaker;
- (c) Class 5 Boiler Pressure-Piping Mechanic;
- (d) Class 5A Boiler Process Piping Mechanic; and
- (e) Class 5B Boiler Refrigeration Piping Mechanic.

[ED. NOTE: Tables referenced are not included in rule text. [Click here for PDF copy of table\(s\).](#)]

## 918-030-0125

### Licenses Requiring 16 Hours of Continuing Education

During each three-year license cycle, the following license holders are required to complete 16 hours of approved continuing education. The hours must include code-change courses in the amounts below, and after the date listed in Table 2-A must include a 4-hour Oregon rule and law course meeting the standards established in OAR 918-035-0055. The Oregon rule and law course is in addition to the code-change hours requirement:

- (1) Limited Residential Electrician: must include 8 hours of code change.
- (2) Limited Journeyman Manufacturing Plant Electrician: must include 8 hours of code change.

[ED. NOTE: Tables referenced are not included in rule text. [Click here for PDF copy of table\(s\).](#)]

## 918-030-0130

### Licenses Requiring 8 Hours of Continuing Education

(1) During each three-year license cycle, the following license holders are required to complete 8 hours of approved continuing education. The hours must include code-change courses in the amounts below, and after the date listed in Table 2-A code-change courses must include Oregon rule and law material meeting the standards established in OAR 918-035-0055:

- (a) Limited Maintenance Electrician; must include 2 hours of code change;

(b) Class A Limited Energy Technician; must include 8 hours of code change;

(c) Class B Limited Energy Technician; must include 2 hours of code change.

(2) During each three-year license cycle, the following license holders are required to complete 8 hours of approved continuing education:

(a) Solar Heating and cooling System Plumbing Installer; and

(b) Class 2 Boiler Pressure Vessel Installer.

[ED. NOTE: Tables referenced are not included in rule text. [Click here for PDF copy of table\(s\).](#)]

#### **918-030-0135**

##### **Licenses Requiring 4 Hours of Continuing Education**

During each three-year license cycle, the following license holders are required to complete 4 hours of approved continuing education. The hours must include code-change in the amounts below, and after the date listed in Table 2-A code-change courses must include Oregon rule and law material meeting the standards established in OAR 918-035-0055:

(1) Limited Renewable Energy Technician; must include 2 hours of code change; and

(2) Limited Journeyman Sign Electrician; must include 2 hours of code change.

[ED. NOTE: Tables referenced are not included in rule text. [Click here for PDF copy of table\(s\).](#)]

#### **918-030-0140**

##### **Backflow Tester Approved Training**

(1) An Oregon journeyman plumber or an Oregon apprentice plumber must complete an approved training program in order to test backflow prevention device assemblies.

(2) The director recognizes the following state-approved training programs for an Oregon journeyman plumber or an Oregon apprentice plumber who tests backflow prevention device assemblies:

(a) Backflow Tester Training approved by the Department of Human Services; or

(b) Division-approved continuing education course with content related to testing backflow prevention device assemblies.

(3) Backflow tester training approved by the Department of Human Services meets continuing education requirements for Oregon journeyman plumbing license renewal.

#### **918-030-0150**

##### **New Licensee Continuing Education Requirements**

(1) New licensees must complete the following continuing education requirements prior to renewal:

(a) No continuing education is required if license is obtained within 6 months of license expiration date; or

(b) The lesser of 8 hours of continuing education or the minimum requirement for the license is required if the license is obtained within 12 months of the license expiration date; or

(c) The lesser of 16 hours of continuing education or the minimum requirement for the license is required if the license is obtained within 24 months of the license expiration date.

(2) New licensees are not required to complete a code-change course.

### **License Expiration and Renewal**

#### **918-030-0200**

##### **License Renewal Process**

(1) License renewals must be completed on or prior to the license expiration date by:

(a) Submitting a renewal application or completing the online renewal form;

(b) Completing all continuing education requirements; and

(c) Paying the license renewal fee .

(2) The division mails one renewal notification to the last known address of the licensee at least 30 days prior to license expiration. It is the responsibility of the licensee to notify the division of a change in the licensee's address.

#### **918-030-0210**

##### **License Expiration Dates**

(1) All licenses expire on a three-year cycle established in **Table 1-A**, unless renewed.

(2) The license expiration date is printed on all licenses.

[ED. NOTE: Tables referenced are available from the agency.]

#### **918-030-0220**

##### **Transitional Rule for License Expiration Dates**

Nothing in these rules shall prevent the following licenses from renewing as follows:

(1) All combination licenses expire on July 1, 2006 unless renewed. Combination licenses next expire on July 1, 2008 and every three years thereafter.

(2) All contractor licenses except the electrical elevator contractor licenses expire on July 1, 2006 unless renewed. Contractor licenses described in this section next expire on July 1, 2008 and every three years thereafter. Electrical elevator contractor licenses expire annually on October 1 unless renewed. Electrical elevator contractor licenses shall continue to expire annually until October 1, 2009 and then shall expire every three years thereafter.

(3) All boiler licenses, including the boiler business license expire annually on July 1, unless renewed. Boiler licenses shall continue to expire annually until July 1, 2008 and then shall expire every three years thereafter.

(4) The elevator contractor mechanical license expires on July 1, 2006 unless renewed. Licenses described in this section next expire on July 1, 2007 and every three years thereafter.

(5) A holder of a journeyman plumber license that expires on April 1, 2007 shall be issued a license that expires on April 1, 2011, if the license holder renews the license prior to the April 1, 2007 expiration date. A license holder described in this section must complete 24 hours of approved continuing education prior to April 1, 2011 in order to renew the license.

(6) Reciprocating conveyor mechanic licenses and restricted reciprocating conveyor mechanic licenses issued on or after January 1, 2008 first expire on July 1, 2011 and every three years thereafter.

#### **918-030-0230**

##### **Failure to Renew**

(1) A licensee who fails to renew a license must not perform work requiring the expired license.

(2) A licensee who fails to renew a license may obtain a valid license within one year of the date the license expired if the licensee:

(a) Reapplies for the license;

(b) Pays the license renewal fee; and

(c) Completes all outstanding continuing education requirements that accrued prior to license expiration.

(3) A licensee who fails to renew under OAR 918-030-0200 and fails to obtain a valid license in Section (2), must apply for the license under OAR 918-030-0020, including passing the appropriate examination.

(4) Applicants reapplying under sections (2) or (3) of this rule are not required to re-qualify for examination or provide work history information unless the requirements for the license have changed since the applicant originally applied to the division.

#### **918-030-0240**

##### **Extension for Hardship or Illness**

(1) The appropriate board or the division may extend the period for complying with continuing education requirements or for complying with renewal requirements in cases of hardship or illness.

(2) Requests for extension must:

(a) Be in writing;

(b) Describe the hardship or illness;

(c) Describe why the applicant is unable to comply; and

(d) State when the person will complete the continuing education requirements.

(3) A hardship or illness extension will not be granted for:

(a) Failure or inability to pay renewal fees; or

(b) Renewal applications that are lost or otherwise are not delivered to the applicant.

#### **918-030-0250**

##### **Extension for Call to Military Service**

(1) The appropriate board or the division may extend the period for complying with continuing education requirements or renewal requirements if the licensee was ordered to military duty for a period of 60 days or more.

(2) Request for extension must:



(a) Be in writing; and

(b) Include a copy of military orders.

(3) Following release from duty, the licensee shall comply with renewal requirements or complete continuing education in a manner acceptable to the board or the division.

#### **918-030-0320**

##### **Purpose of the Rules**

ORS 25.785 requires the Building Codes Division and its appropriate advisory boards to record an applicant's social security number in order to issue or renew a license, certification or registration subject to suspension under ORS 25.750 to 25.783. These rules establish requirements and procedures for applicants with or without social security numbers issued by the United States Social Security Administration to provide a social security number or a statement indicating that the applicant does not have a social security number.

#### **918-030-0325**

##### **Requirements and Procedures**

(1) The Building Codes Division will not issue or renew a license, certification or registration subject to suspension under ORS 25.750 to 25.783 unless an applicant provides his or her social security number on the application or renewal form. Applicants do not need to provide their social security number on applications for renewal if the applicant previously provided their social security number to the division and it is in the record.

(2) The Building Codes Division may accept a written statement to fulfill the requirements of section (1) from an applicant who has not been issued a social security number by the United States Social Security Administration. Applicants do not need to provide this statement with the application for renewal if the applicant previously provided this statement to the division and it is in the record. Any written statement submitted must:

(a) Be signed by the applicant; and

(b) Attest to the fact that a social security number has not been issued to the applicant by the United States Social Security Administration.

#### **Miscellaneous Licensing Rules**

#### **918-030-0900**

##### **Revocation, Cancellation or Suspension of License**

In accordance with ORS Chapter 183, the director may revoke, cancel or suspend a contractor license, business license or registration to conduct business when the contractor or business holds more than one license under ORS 479.510 to 479.945, 480.510 to 480.670, chapter 447 and chapter 460, if the contractor or business:

(1) Does not meet the minimum qualifications prescribed in ORS 460.085, 479.630, 480.630 or 447.040, any rule adopted thereunder;

(2) Falsifies an application;

(3) Establishes a pattern of conduct that may include:

(a) Working or employing persons without proper license or certification;

(b) Making, directing or supervising installations that are unsafe or do not meet minimum safety standards; or

(c) Failing to meet the minimum requirements in the State Building Code; or

(4) Any other activity prejudicial to the electrical, plumbing, elevator or boiler or pressure vessel safety programs under ORS 479.510 to 479.945, 480.510 to 480.670, chapter 447 and chapter 460, or any rules adopted thereunder.

#### **918-030-0910**

#### **Combination Licenses**

The division, with the approval of the appropriate advisory board, shall establish license categories for contractors or businesses who hold two or more contractor or business licenses established under ORS 479.510 to 479.945, 480.510 to 480.670, chapter 447 and chapter 460 that are valid for two years.

#### **918-030-0920**

#### **Visible Identification Badge**

(1) For the purpose of this rule, a visible identification badge is an individual license, registration or certification issued by the division or an appropriate advisory board. This rule does not apply to contractors, businesses or inspectors.

(2) Individuals performing elevator, electrical, boiler, pressure vessel, or plumbing work, which requires a license, shall wear and visibly display their license. A licensee does not need to wear and visibly display their license if doing so would create a danger or unsafe condition for the licensee or for the public, provided the licensee can demonstrate proof of licensure to an inspector, investigator or other employee empowered to enforce the state building code.

### **DIVISION 251**

#### **ELECTRICAL AND ELEVATOR ADMINISTRATION AND DEFINITIONS**

##### **Board-Created Definitions**

#### **918-251-0090**

#### **Definitions**

For purposes of OAR chapter 918, divisions 251 through 311, unless otherwise specified, the following apply:

(1) "Appliance" as applied to the limited maintenance specialty contractor license established by ORS 479.630, means any built-in or permanently-connected electrical utilization equipment, not including lighting fixtures, other than industrial, that is installed or connected as a unit to perform one or more functions such as clothes washing, air conditioning, food mixing, deep frying, etc.

(2) "Approved" when referring to electrical product certification means approved in Oregon or for Oregon by the Electrical and Elevator Board.

(3) "Balance of system" as it relates to renewable electrical energy systems are those products, equipment, and systems for the conversion, control and storage of electrical energy.

(4) "Board" means Electrical and Elevator Board.

(5) "Building" means a structure that stands alone or that is isolated from adjoining structures by area separation walls as identified in Chapter 7 of the Oregon Structural Specialty Code adopted in OAR chapter 918, division 460, with all openings therein protected by approved fire doors as required.

(6) "Certification Mark" is identification on an electrical product indicating that the product has been certified under ORS 479.760.

(7) "Certified Electrical Product" is an electrical product certified under ORS 479.760 to which a label or other identifying mark.

(8) "Continuously Employ" means a person, including a person leased from a worker leasing company licensed under ORS 656.850, during time periods when electrical work for which they are responsible is performed, devotes their entire time of employment to tasks of supervising, designing, laying out, planning, controlling, and making electrical installations for the electrical contractor for which the supervisor is registered as signing supervisor.

(9) "Custom Made" means electrical products that are designed for a specific purpose and location.

(10) "Document" means prepare records itemizing what was checked, why it was checked, when it was done, how it was checked, what was determined, and who did the work.

(11) "Electrical Specialty Code" means the National Electrical Code with Oregon amendments.

(12) "Electrical Specialty Code Inspector," formerly referred to as "A-Level Electrical Inspector," is a person certified to inspect under the Oregon Electrical Specialty Code.

(13) "Energy generation," as it relates to renewable electrical energy generation equipment, are those products, equipment, and systems in renewable electrical energy systems that produce or convert electrical energy.

(14) "Engineer" is an individual who has completed a minimum four-year degree program in electrical engineering or electrical technology with power specialty, from an accredited college or university and has received a Bachelor of Science degree.

(15) "Field Evaluation" means the evaluation of electrical products by an approved field evaluation firm.

(16) "Indorsement" is a designation within the restricted energy electrical area showing qualifications and training regarding a product area. It determines the scope of restricted energy electrical activity authorized under a restricted energy electrical license.

(17) "Industrial Electronic Equipment" means a device, appliance, motor, or machine regulated, operated, or controlled through fiber optics or by a combination of electron tubes, capacitors, resistors, impedance transformer, and relays; the control circuit, and/or the power circuits having electrons flowing through a vacuum, metallic vapor, gas tubes, or transistors as used in an industrial plant.

(18) "Industrial Plant", for purposes of licensing and electrical master permit inspection program, means an establishment engaged in industrial production, or service, or a school, hospital, sewer plant, water plant, commercial office building, building occupied by the state or a local government entity, or an institution. For purposes of the elevator program, "industrial plant" does not include a school, hospital, commercial office building, building occupied by the state or a local government entity, or an institution where the elevators are accessible to and used by persons other than the employees of that building.

(19) "Installation" includes external and field wiring, service contracts or warranties by the seller or manufacturer concerning the longevity of the equipment or parts after the original installation. It does not include "start-up" activities where new equipment is placed in service, and that type of work related to delivering and setting in place a piece of machinery.

(20) "Inverter", as it relates to renewable electrical energy generation equipment, is a product, equipment or system that converts direct current into alternating current.

(21) "Jurisdictional Inspector" is a state or municipal inspector having inspection responsibility within their jurisdiction over electrical products or their installation, or both.

(22) "Labeled" means a label, symbol or other identifying mark of a Nationally Recognized Testing Laboratory (NRTL), field evaluation firm or the division that is attached to an electrical product indicating the product is manufactured according to approved standards and tested or evaluated for specific end uses or both.

(23) "Lighting Fixture" is a complete lighting unit consisting of a lamp or lamps together with the parts designed to distribute the light, to position and protect the lamps, and to connect the lamp to the power supply.

(24) "Limited Energy System" means those systems that include Class 1, Class 2 or Class 3 systems as defined by Section 725.2 of NFPA 70 (National Electrical Code) and audio systems, communication systems and power-limited fire alarm systems, covered in the Oregon Electrical Specialty Code.

(25) "Listed Product" means a product was examined and accepted by a Nationally Recognized Testing Laboratory (NRTL) to meet a particular product standard and is maintained on a list of the listing laboratory.

(26) "Maintain" means to preserve electrical equipment in a good sound condition.

(27) "Maintenance" Compare with repair, replacement, and maintain for definition.

(28) "Minimum Electrical Installation Safety Code" means the adopted Oregon Electrical Specialty Code.

(29) "Nationally Recognized Testing Laboratory (NRTL)" means a laboratory recognized by the Federal Occupational Safety and Health Administration (OSHA) under 29 CFR 1910.7.

(30) "NEMA" means the National Electrical Manufacturers Association.

(31) "Off grid system" is a stand-alone system, connected to a structure, whose electrical systems are not connected to a utility-supplied electrical production and distribution network.

(32) "On grid system" is an electrical power system connected to a structure whose electrical systems are also connected to a utility-supplied electrical production and distribution network.

(33) "Plug-in Replacement" is a part, component or assembly designed to be inserted directly into a mating receptacle or socket such as printed circuit boards, control relays, control harnesses or other equipment connected by a cord or cable and plug assembly. A plug-in replacement does not have any field wiring that is connected to the plug-in part or assembly.

(34) "Power Circuitry" means that portion of the system, other than control, that provides electrical power to utilization equipment.

(35) "Registered Professional Electrical Engineer" is an individual licensed by the State of Oregon Board of Engineering Examiners as a professional electrical engineer under OAR chapter 820, division 10.

(36) "Renewable Electrical Energy System" as it relates to electrical energy generation, is the total components and subsystems that, in combination, convert wind energy, solar energy, micro-hydroelectricity, photovoltaic energy or fuel cell energy into electrical energy suitable for connection to a utilization load.

(37) "Repair" means to restore worn or damaged parts to a good, sound condition by means other than replacement.

(38) "Replacement" means substitution of complete units of damaged or worn equipment with similar new or used equipment of a size and rating that does not exceed the design capacity of the existing product.

(39) "Signing Supervising Electrician" or "Signing Supervisor" is a licensed supervising electrician who has been authorized by the electrical contractor to sign permits.

(40) "Similar Equipment," as applied to the limited maintenance specialty contractor license established by ORS 479.630(12), means components of light fixtures other than ballasts.

(41) "Special Deputy" means a person certified by the board or Chief Electrical Inspector to perform special deputy inspections allowed under ORS 479.760.

(42) "Stand-alone system" is a renewable electrical energy system that supplies power independently of an electrical production and distribution network.

(43) "Up to the load side of the inverter", as it relates to electrical energy generation equipment, is the renewable electrical energy system equipment up to the alternating current connection terminals of the inverter.

[Publications: Publications referenced are available from the agency.]

## DIVISION 261

### ELECTRICAL EXEMPTIONS

#### Exemptions Created by the Board

918-261-0000

#### Partial Exemption for Medical Diagnostic Imaging and Therapy Equipment

(1) An exemption from electrical licensing of ORS 479.620 is created under ORS 479.540 for certain persons installing or working on designated medical equipment under this rule.

(a) Only the following medical equipment can be involved: General X-ray systems, vascular systems, computer tomography scanners (CT), magnetic resonance imaging systems (MRI), nuclear medicine systems, positron emission tomography scanners (PET), radiation therapy systems, image-guided therapy systems, dental radiographic, panoramic systems, film processors and newly developed imaging or therapy equipment approved by order of the board;

(b) Only the following electrical installations are allowed: Assembly, interconnection, equipment modification and retrofit, calibrations, testing, maintenance and trouble shooting;

(c) Only electrical licensing is exempted. A permit pursuant to ORS 479.550 and inspection are required, and the installation shall comply with the **Electrical Specialty Code**; and

(d) The persons performing the work must meet the requirements of section (3) of this rule.

(2) An exemption from the permit requirements of ORS 479.550 and licensing requirements of ORS 479.620 is created under ORS 479.540, for repair, maintenance, parts replacement, calibration, testing and trouble shooting involving assemblies and components of the equipment described in subsection (1)(a) of this rule on the load side of the power source.

(a) Only the following are exempted: Super conducting magnet, gantry, patient tables, computer cabinets, system cabinets, operator consoles, display consoles, x-ray generators, x-ray tubes, collimators, hanger assemblies, filming devices, transducers, detector assemblies, modulator, wave guides, accelerating tube, radiation head, water cooling systems, portable systems, and all sublevel assemblies and components;

(b) The person doing the work must meet the qualifications of section (3) of this rule;

(c) All electrical work shall comply with the **Electrical Specialty Code**; and

(d) Different exempt components shall not be combined to exempt a complete system under section (2) of this rule.

(3) Only qualified personnel are authorized to make the electrical installations in sections (1) and (2) of this rule. The installation is exempt if the person making the installation is:

(a) An employee or agent of a manufacturer, with training in installation, warranty work and maintenance involving the specific product of the manufacturer;

(b) A contractor or employee of a contractor, if the contractor is a business entity other than a sole proprietor, who has training by the manufacturer or a nationally recognized training facility to perform the specific work on the specific type product of the manufacturer; or

(c) An employee or agent of a health care facility which owns or leases the medical equipment with training by the manufacturer or a nationally recognized training facility to perform the specific work on the specific type product of the manufacturer.

(4) Procedure for proving exemptions.

(a) The exemption is self-executing. A person claiming the exemption has the burden of proof to show, upon request by an electrical inspector or compliance person, that the person meets the relevant requirements of section (3) of this rule; and

(b) A certificate from the manufacturer or equivalent training facility showing the name of the person, scope of training, including the work in question, and identifying the particular equipment or types of equipment, date of issuance, period for certification and any limitations on the certification, shall meet the requirements of this section.

(5) Revocation of Exemption. In addition to civil penalties for violations, the board may revoke partially or completely the right to use this exemption up to one year for a first violation of subsection (2)(d) of this rule, and up to five years for a second violation or subsequent violations.

(6) Prohibited Installations. The following installations are not exempt under sections (1) or (2) of this rule and shall only be made by qualified licensed electrical personnel:

(a) All work on electrical distribution systems within the constructed facility housing the equipment. This includes installation of electrical supply to the primary supply connection of the medical equipment; and

(b) Installation of electrical raceways and conduits interconnecting major components of the medical systems.

[Publications: Publications referenced are available from the agency.]

#### **918-261-0015**

#### **Exemption from Engineering Requirements for Design of Fire Protection Systems**

(1) As used in this rule:

(a) "Fire protection system" has the meaning given that term in OAR 918-305-0110.

(b) "Customer" means a person who purchases the design and the service of having the electrical portion of a fire protection system installed.

(2) A general supervising electrician, general journeyman electrician, or class "A" limited energy technician licensee who is employed by a licensed electrical contractor and acting both within the scope of the licensee's license and as a signing supervisor:

(a) May design, plan, and lay out the electrical portion of a fire protection system for the licensed electrical contractor's customers and for an electrical contractor who purchases the design and the parts or equipment for the electrical portion of a fire protection system and installs all or part of the system.

(b) Is not subject to any requirements for an additional license, permit, certificate, or registration when designing, planning, or laying out the electrical portions of a fire protection system as authorized by this rule.

(3) The electrical design documents for a fire protection system that are prepared by a general supervising electrician, general journeyman electrician, or class "A" limited energy technician licensee under subsection (2) of this rule are exempt from ORS 671.025 and do not require the stamp of an Oregon registered architect or professional engineer.

(4) For the purposes of ORS 479.860(2), and the exemption created in subsection (2) of this rule, the electrical portion of any fire protection system is considered a noncomplex electrical installation.

#### **918-261-0020**

#### **Exemption for HVAC/R Electrical Components**

(1) Definitions. For the purposes of this rule, a "component" is an electrical part installed inside, or as part of, an appliance where the part is approved by and meets the design specifications of the manufacturer of the appliance. An appliance is not a "component."

(2) An exemption from permits and listing requirements is created under ORS 479.540 for the following components repaired, maintained or replaced by a licensed general electrical contractor with a supervising electrician, properly licensed personnel or a limited maintenance specialty contractor HVAC/R:

- (a) Electrical motor;
- (b) Compressor;
- (c) Capacitor;
- (d) Relay;
- (e) Wiring;
- (f) Ignition transformer;
- (g) Low voltage transformer;
- (h) Fan or motor control;
- (i) Sequencer;
- (j) Pressure switch;
- (k) Limit switch;
- (l) Air switch;
- (m) Air cleaner;
- (n) Humidifier;
- (o) Reversing valve;
- (p) Timer;
- (q) Defrost heater;
- (r) Stack switch;
- (s) Gas valves;
- (t) An external thermostat operating at less than 100 va;
- (u) Electric water heating element; and
- (v) Other control devices within the appliance in residential, commercial or industrial service.

(3) An exemption from permits and listing requirements is created under ORS 479.540 for the following components repaired, maintained or replaced by a limited maintenance specialty contractor:

- (a) Electrical motor;

- (b) Compressor;
- (c) Capacitor;
- (d) Relay;
- (e) Wiring;
- (f) Ignition transformer;
- (g) Low voltage transformer;
- (h) Fan or motor control;
- (i) Sequencer;
- (j) Pressure switch;
- (k) Limit switch;
- (l) Air switch;
- (m) Air cleaner;
- (n) Humidifier;
- (o) Reversing valve;
- (p) Timer;
- (q) Defrost heater;
- (r) Stack switch;
- (s) Gas valves;
- (t) Electric water heating element; and
- (u) Other control devices within the appliance only of the size and type typically located in a one- or two-family residence.

#### **918-261-0025**

#### **Exemption for Limited Energy Underground Signaling Circuits**

(1) A license and permit is not required to install limited energy underground signaling circuits or loops defined in this rule. Unlicensed individuals are allowed to install underground signaling circuits or loops, and cover these circuits or loops without a permit or inspection.

(2) For purposes of this rule "underground signaling circuits or loops" means Class 2 circuits defined in Article 725 of the Electrical Specialty Code intended for use as traffic signal devices, gate controllers, weigh stations, counters or other similar devices.

(3) A license and permit is required to splice, connect, or extend the signaling circuits, loops, or loop conductor, or to connect to any of the following:

- (a) Controller;



- (b) Control devices;
- (c) Underground wiring; or
- (d) Conduit outside the roadway surface.

#### **918-261-0030**

#### **Exemption and Interpretation Regarding Overhead and Underground Electrical Power Lines and Equipment**

(1) Licensing exemption for municipality owned or operated powerlines for transmission or distribution of electricity to the point of service. An exemption is created from the requirements of the **Electrical Specialty Code**, for permits, compliance inspections, licenses or product certification for overhead and underground electrical power lines for transmission or distribution of electricity to the point of service and related equipment owned or operated by a municipality.

(2) Interpretation regarding privately owned power lines. Overhead or underground electrical power lines and equipment owned or operated by a private party that is not a utility or municipality, and utilities who contract to manage private systems are regulated by the **Electrical Specialty Code**. This means the division and municipalities shall require permit and inspection, **Electrical Specialty Code** compliance, and electrical contractor licensing. The licensing exemption for qualified personnel working for the electrical contractor principally engaged in the business of installing and maintaining these systems is in ORS 479.540. Product certification is required for products used in a system that generates and distributes electricity unless the following conditions are satisfied:

- (a) The system is designed and stamped by an Oregon-licensed professional electrical engineer;
- (b) The system meets NESC standards;
- (c) All plan reviews, design specifications, permits and inspections are reviewed and approved by the authority having jurisdiction;
- (d) The owner and the operator meet the Federal Energy Regulatory Commission definition of a "wholesale generator";
- (e) The system is connected to a utility grid and that connection is for the sole purpose of generating and selling electrical power;
- (f) The individual turbines are 25 kW or larger and the system is 10 megawatts or larger; and
- (g) All generation and distribution systems undergo startup and commissioning by qualified personnel prior to being placed in operation.

[Publications: Publications referenced are available from the agency.]

#### **918-261-0031**

#### **Exemptions for Industrial Electrical Equipment**

Industrial electrical equipment designed for and used directly in the production of a product; which due to the equipment design or use requires specialized and specific training in the process, function, design, modification, repair, or maintenance of the equipment is exempt from permits specifically for repair, modification or maintenance. Individuals performing work under this rule are also exempt from licensing.

#### **918-261-0034**

#### **Product Certification Partial Exemption**

(1) A partial exemption from electrical product certification is created under ORS 479.540 for distribution equipment operating at over 600 volts only when:

(a) the product is used in an emergency repair or installation as defined in section (4); and

(b) the installer provides the local jurisdiction with written evidence that the equipment meets the appropriate standards within 72 hours of installation.

(2) The exemption is restricted to repairs or installations that include the following:

(a) cable and associated fittings that meet the standards of the serving utility; or

(b) pad-mounted switch gear that meets ANSI IEEE C37.73-1998 or C37.74-2003, or the equivalent and appropriate standard in effect at the time the product was manufactured.

(3) A jurisdiction may require product certification or take other appropriate steps if any of the circumstances in section (1) and (2) do not exist.

(4) For the purposes of this rule, emergency repair or installation means an acute, unplanned and immediate need for electrical repair or replacement involving an existing electrical installation or electrical product.

### **918-261-0036**

#### **Exemption for Transformers**

An exemption from certification is created under ORS 479.540 for transformers over 600 volts that are built to or conform with:

(1) IEEE C57.12.00 standards; or

(2) Standards used by a public utility as defined in ORS 757.005.

### **918-261-0037**

#### **Exemption for Traffic Management Systems**

An exemption from certification is created under ORS 479.540 for traffic management systems approved by Oregon Department of Transportation (ODOT) and maintained on their qualified products list. This exemption does not apply to message boards nor does it remove the requirements of licensing, permitting and inspection for the installation of these products.

### **918-261-0038**

#### **Exemption for Manufactured Construction Services**

An exemption from licensing is created under ORS 479.540 for the placement of manufactured construction services of 100 amperes, 240 volts single-phase or less. This exemption applies only to manufactured services used during construction. Repairs or alterations to the manufactured construction service require permit, inspection and appropriately licensed person(s). The word "manufactured" as used in this rule applies to a construction service built by and supplied from an electrical contractor or manufacturer.

### **918-261-0039**

#### **Exemption for Products Located on the Load Side of a Listed Class 2 Transformer**

(1) An exemption from product certification is granted under ORS 479.540 for installation of Class 2 products, other than wiring, located on the load side of a listed Class 2 transformer. The exemption applies only to products that are not:

(a) In a damp or wet location;

- (b) Located in a plenum, duct or other air-handling space;
- (c) Located in any area from chapter 5 of the adopted **Oregon Electrical Specialty Code**; or
- (d) Part of a protective signaling system.

(2) An exemption from permitting is created for installation of Class 2 wiring located on the load side of a listed garage door controller. The exemption applies only to one- and two-family dwellings when the wiring is not part of the original wiring of the dwelling.

[Publications: Publications referenced are available from the agency.]

### **Interpretations Concerning Exemptions**

#### **918-261-0040**

#### **Interpretation of "Owner" in ORS 479.540(1)**

For the purposes of ORS 479.540(1):

(1) The owner of property to which this exemption applies shall be a natural person and not a business entity such as a corporation or partnership.

(2) The members of the owner's immediate family are defined in section (3). Persons whose only relationship is as an officer, stockholder, partner or employee of a business entity to which the owner is affiliated are not included.

(3) "Immediate family" of an owner includes the owner's:

- (a) Parent;
- (b) Step-parent or parent's domestic partner;
- (c) Sibling and sibling's spouse or domestic partner;
- (d) Child and child's spouse or domestic partner;
- (e) Spouse or domestic partner;
- (f) Spouse's or domestic partner's child and the child's spouse or domestic partner;
- (g) Grandchild; and
- (h) Grandparent.

(4) "Immediate family" of an owner does not include the owner's step-sibling, aunt, uncle, cousin, step-grandchild, or step-grandparent.

(5) "Domestic partner" means a person in a relationship with another person, each of whom:

- (a) Is at least 18 years of age and capable of entering into a civil contract or, if 17, has the written consent of a parent or guardian to enter into the domestic partnership;
- (b) Is not a first cousin or any nearer kin to the other person, whether of the whole or half blood, and whether by blood or adoption, except for a first cousin by adoption only;
- (c) Desires a relationship of marriage under Oregon law and would enter into marriage with the other person, and only with the other person, if Oregon law permitted such a marriage;

(d) Acknowledges and accepts financial obligations to the other person and to third parties similar to the financial obligations that arise by reason of a marriage recognized under Oregon law and has joint financial accounts, and joint financial responsibilities;

(e) Is not married and has no similar commitment and responsibility to any other person; and

(f) Has continuously lived with the other person for six (6) months in an exclusive relationship that each intends to maintain for the rest of their lives.

## **DIVISION 271**

### **ELECTRICAL INSPECTIONS**

#### **Inspection Procedures**

##### **918-271-0000**

#### **Role of an Electrical Inspector**

An electrical inspector shall inspect electrical installations and provide public information on the meaning or application of an electrical code provision, but shall not lay out work or act as a consultant for electrical contractors, property owners or users.

##### **918-271-0010**

#### **Calls for Inspection**

(1) All persons who take out an electrical permit, homeowners as well as electrical contractors, shall request an inspection within three working days of:

(a) The completion of any electrical installation intended to be covered or concealed or that is intended to be placed into service before the final electrical inspection; and

(b) The completion of all electrical installations for the job site covered by a particular permit.

(2) Transactions under a master inspection permit are covered by separate requirements.

##### **918-271-0020**

#### **Requests for Inspection and Notice of Results**

(1) Except as provided in section (2) of this rule, an inspecting jurisdiction, shall inspect within 48 hours of a written request for inspection unless the time for inspection is extended to a set date by mutual agreement. The 48 hours excludes Saturdays, Sundays and holidays.

(2) The inspecting jurisdiction shall inspect an installation at a remote location within a reasonable time of the request.

(a) For the purpose of this section a "remote location" is:

(A) An inspection location that is more than 60 miles one way using the most direct route, measured from the closest of the inspector's station, inspection office or the inspecting jurisdiction's primary offices; or

(B) An inspection location that requires more than one hour of normal driving, one way, using the most direct route from the closest point mentioned in paragraph (A) of this subsection.

(b) For the purposes of this section "within a reasonable time" means a response time that takes into account the time, distance and number of inspection requests, but shall not exceed seven consecutive calendar days including the date the

request was received unless the time for inspection is extended to a set date by mutual agreement. If the seventh calendar day falls on a weekend or holiday this is extended to include the next business day.

(3) Reasonable procedures designed to provide actual notice of inspection results shall be used by all inspecting jurisdictions to notify the person requesting inspections, of the results of electrical inspection. "Reasonable procedures designed to provide actual notice" shall include posting at the job site and:

(a) Nothing more, when the installation is by an owner;

(b) Nothing more, when the installation is approved;

(c) Notification of any deficiencies on a specific permit by:

(A) FAX transmittal to the electrical contractor;

(B) Personal delivery to the electrical contractor or signing supervisor;

(C) Mailing, including electronic mailing; or

(D) Telephone followed by written notification;

(d) By written confirmation of inspection approval if a permit holder requests confirmation.

(4) If the inspection mentioned in sections (1) and (2) of this rule involved a cover inspection, the work cannot be covered unless:

(a) Inspection clearance is given; or

(b) The request for inspection is in writing communicated to the inspecting jurisdiction, with notice that a cover inspection is involved, no extensions are agreed to, and the maximum time for making the required inspection under sections (1) and (2) of this rule are exceeded. For the purposes of this subsection:

(A) Written request includes a letter, telegram or FAX transmittal; and

(B) The burden of proof is on the person requesting the electrical inspection to prove that a written request was communicated.

### **918-271-0030**

#### **Correction of Defects**

(1) Defects in electrical installations noted by the electrical inspector shall be corrected and an inspection request made within 20 calendar days of the date of actual notice of deficiency. For the purpose of this rule, actual notice is given when the inspecting jurisdiction does everything required in OAR 918-271-0020.

(2) If corrections cannot reasonably be made within the specified time in section (1) of this rule, or an interpretation or written appeal has been requested, the permit holder shall contact the inspecting jurisdiction and request an extension of time to a specified date or until deficiency is resolved.

(3) Requests for inspection and requests for extension may be communicated in any way. However, if challenged, the burden of proof is on the requester to document the request was in fact communicated. Responses may also be communicated in any way, but if challenged, the burden of proof is on the inspecting jurisdiction.

#### **Inspection Protocols**

### **918-271-0040**

## **Mandatory Inspection Practices**

(1) Electrical inspectors shall inspect and verify the appropriateness of the size, placement, protection and termination of the following electrical installations. Inspectors shall note discrepancies and require correction of code violations pursuant to OAR 918-098-1900. Physical contact is not required to inspect the electrical installations listed below.

- (a) Service entrance conductors;
- (b) Service equipment;
- (c) Grounding electrode and grounding electrode conductor;
- (d) Bonding;
- (e) Overcurrent protection;
- (f) Branch circuits;
- (g) Feeders; and
- (h) Underground installations.

(2) Electrical inspectors shall test ground-fault circuit interrupter devices (GFCI) and arc-fault circuit interrupter devices (AFCI) for functionality. Ground fault protection services (GFP) shall be performance tested in accordance with the Oregon Electrical Specialty Code.

(3) A final inspection shall be requested and provided to verify all mandatory items in sections (1) and (2) of this rule are in compliance.

(4) A final inspection shall be performed by the inspecting jurisdiction as soon as practicable, but not later than five working days following the date on which it is requested. Subject to the approval of the building official, the permit holder may schedule a final inspection prior to completion of the electrical installation in order to allow the permit holder to be present at the time of inspection and facilitate access to energized installations.

## **918-271-0050**

### **Inspection of Secondary Considerations**

(1) Electrical installations not specified by OAR 918-271-0040 are secondary items.

(2) At least 30 percent of all secondary items at a job site shall be inspected using a sampling process that reviews all separate categories of secondary items. If code violations are found within the samples inspected, an additional ten percent of the secondary items shall be inspected.

(3) If additional violations are found, the inspector shall:

- (a) Require the permit holder to check all other similar categories of installations on the job site;
- (b) Advise of the correction of all defects; and
- (c) If warranted, inspect all other similar categories of installations on the job site.

## **918-271-0100**

### **Electrical Disconnection**

(1) In the case of a disconnection made or ordered under ORS 479.820(2) or (3) and after setting forth in writing the facts supporting the action, the division may disconnect or cause the disconnection or disconnection of service, without hearing, to:

- (a) An electrical installation or product that fails to comply with minimum safety standards; or,
- (b) An electrical installation or product, the condition of which constitutes an immediate hazard to life or property.

(2) In the case of a disconnection under subsection (1) of this rule, if the installation or property owner requests a hearing within 90 days after the date of disconnection, then a hearing shall be granted and the division may issue an order pursuant to such hearing as required by ORS Chapter 183 confirming, altering or dismissing its earlier order.

(3) Such a hearing need not be held where the disconnection or order of disconnect is accompanied by or is pursuant to a citation for violation which is subject to judicial determination in any court of this state, and the order by its terms will terminate in case of final judgment in favor of the property owner.

#### **918-271-0105**

##### **Electrical Disconnection**

(1) In the case of a disconnection made or ordered under ORS 479.820(2) or (3) and after setting forth in writing the facts supporting the action, the division may disconnect or cause the disconnection of service, without hearing, to:

- (a) An electrical installation or product that fails to comply with minimum safety standards; or
- (b) An electrical installation or product, the condition of which constitutes an immediate hazard to life or property.

(2) In the case of a disconnection under section (1) of this rule, if the owner of the installation, or of the property where the installation is located, requests a hearing within 90 days after the date of disconnection, then a hearing shall be granted and the division may issue an order pursuant to such hearing as required by ORS chapter 183 confirming, altering, or dismissing its earlier order.

(3) Such a hearing need not be held where the disconnection or order of disconnect is accompanied by, or is pursuant to, a citation for violation which is subject to judicial determination in any court of this state, and the order by its terms will terminate in case of final judgment in favor of the installation or property owner.

### **DIVISION 281**

#### **CERTIFICATION OF ELECTRICAL INSPECTORS**

#### **918-281-0000**

##### **Scope**

The rules in OAR 918-281-0000 to 918-281-0020 establish requirements for certification of electrical inspectors. OAR 918-281-0070 provides a certification endorsement for manufactured home electrical inspectors.

#### **918-281-0010**

##### **Continuing Education**

Electrical inspectors must obtain continuing education as outlined in OAR 918-098-1450.

#### **918-281-0020**

##### **Electrical Specialty Code Inspector Certification**

(1) Scope: An Electrical Specialty Code inspector:

- (a) Inspects electrical installations regulated by the **Oregon Electrical Specialty Code**;
- (b) Inspects electrical installations regulated by the **Oregon Residential Specialty Code**; and
- (c) May do electrical plan reviews as provided in OAR 918-311-0040.

(2) Qualifications: To qualify for the certification, the individual must have the following training or experience or both:

- (a) Four years experience as a licensed general journeyman electrician and a valid Oregon general supervising electrician license;
- (b) A four-year Bachelor of Science degree in electrical engineering, plus three years approved experience in design, inspection, or supervision of installations covered by the National Electrical Code or **Oregon Electrical Specialty Code**;  
or
- (c) Equivalent experience or qualifications approved by the board.

(3) Application for Certification: A person seeking certification under this rule must apply for an Oregon Code Certification as provided in OAR 918-098-1025.

(4) All applicants must pass a board-approved examination with a minimum grade of 75 percent covering:

- (a) The **Oregon Electrical Specialty Code** and electrical provisions of the **Oregon Residential Specialty Code**; and
- (b) Electrical theory, design, installation, and materials.

(5) A person who is certified under this rule must also possess a valid Oregon Inspector Certification issued under OAR 918-098-1025 prior to performing electrical inspections or plan reviews.

(6) Persons qualifying under subsection (2)(b) or (c) of this rule must pass the Oregon general supervising electrician license examination with a minimum grade of 75 percent. An Oregon general supervising electrician license may not be issued to applicants under these subsections.

(7) For purposes of this rule, one year of experience equals 2,000 hours.

[Publications: Publications referenced are available from the agency.]

## **918-281-0070**

### **Certification Extension**

Manufactured Home Installation Inspectors. A certified manufactured home installation inspector who is certified in one or more specialty codes may have the inspector's certification indorsement authorizing inspection of electrical connections between the approved manufactured dwelling and approved service point without payment of additional certification fees if the applicant:

- (1) Submits an application for certification indorsement as a manufactured home electrical installation inspector; and
- (2) Passes an approved examination covering knowledge of the **Electrical Specialty Code** and practice applicable to manufactured home installations.

[Publications: Publications referenced are available from the agency.]



## DIVISION 282

### ELECTRICAL AND ELEVATOR LICENSING

#### Electrical Contractors

##### 918-282-0000

##### Electrical Contractors in General

(1) An electrical contractor license is a specialized license allowing a company to engage in the business of making electrical installations. This license is in addition to the licensing and bonding required by the Construction Contractors Board.

(2)(a) Generally, the contractor is required to have a full-time general supervising electrician to supervise the electrical work and sign permits; and

(b) Generally, the electrical installations are required to be made by individuals holding an appropriate electrical license.

(3) Exceptions to Sections (1) and (2). Certain statutory exemptions are in ORS 479.540. Different electrical contractor categories and requirements are in ORS 479.630 and this division of rules.

##### 918-282-0010

##### Electrical Contractor License

An electrical contractor:

(1) Shall continuously employ at least one full-time general supervising electrician except as otherwise exempted;

(2) Is not authorized to make, direct, supervise or control the making of an electrical installation, unless properly licensed; and

(3) Shall display its electrical license at each of the contractor's places of business. If the contractor has multiple places of business, a facsimile of the license may be posted. The object of this requirement is to display the scope of electrical authority held by the contractor

##### 918-282-0015

##### Electrical Contractor's Responsibilities

Electrical contractors engaged in the business of making electrical installations that require a signing supervising electrician shall assure that all electrical work is made by, or under the direct supervision or control of, a continuously employed full-time signing supervising electrician acting within the scope of their license.

(1) Signing supervising electricians shall perform supervisory duties for only one contractor for which they are registered. Registered signing supervising electricians shall provide direct supervision or control through one of the following:

(a) Be on the job site;

(b) Have on the job site a continuously employed full-time supervising electrician; or

(c) Be available in person, or have a supervising electrician available to meet with the jurisdictional inspector at the job site within two business days following the request.

(2) Electrical contractors who have more than one designated continuously employed full-time signing supervising electrician shall assign only one signing supervising electrician responsibility for the work being performed under each valid permit.

(3) When an electrical contractor has only one designated signing supervising electrician, the electrical contractor may not use a different signing supervising electrician until the designated signing supervising electrician has discontinued the signing supervising electrician responsibilities and written notice has been provided to the division. The electrical contractor shall not continue electrical work until another signing supervising electrician is employed and written notification is provided to the division.

(4) Electrical contractors shall notify the division in writing who their signing supervising electrician(s) is. Notification shall be provided within five days of entering into or termination of that relationship.

(5) Worker leasing companies, as defined in ORS 656.850, shall notify the division within five business days of any contractual relationship or change in a contractual relationship with an electrical contractor. Notification shall include the name of the electrical contractor and a list of employed licensed electricians, including signing supervising electricians, leased to the electrical contractor. Electrical contractors and signing supervising electricians who utilize worker leasing companies are responsible for assuring compliance with the provisions of ORS Chapter 479 and the rules adopted thereunder.

#### **918-282-0017**

##### **Elevator Contractor Electrical License**

An elevator contractor licensed under this section:

(1) Shall continuously employ at least one full-time general supervising electrician or limited elevator journeyman to act as a signing supervisor to obtain and sign elevator plan approval permits;

(2) Is limited to electrical work associated with the installation, alteration, repair and maintenance of elevators. This work is limited to the wiring from the load side of the main disconnecting means for the elevator; and

(3) Is authorized to make, supervise, direct or control the making of an electrical installation only if properly licensed.

#### **918-282-0020**

##### **Limited Sign Contractor License**

A limited sign contractor:

(1) Shall employ at least one full-time limited journeyman sign electrician;

(2) Is limited to the electrical work authorized by a limited journeyman sign electrician license; and

(3) Is authorized to make, direct, supervise or control the making of a sign installation only if the contractor is a sole proprietor who is also licensed as a limited journeyman, a general supervising or a general journeyman electrician.

#### **918-282-0030**

##### **Limited Energy Contractor License**

A limited energy contractor:

(1) Continuously employs at least one full-time Class "A" limited energy technician, Class "B" limited energy technician or general journeyman to act as a signing supervising electrician to obtain and sign permits;

(2) Is limited to electrical work on limited energy systems and the scope of work authorized under the employed signing supervisor's license; and

(3) Is authorized to make, direct, supervise or control the making of an electrical installation, only if properly licensed.

### **918-282-0033**

#### **Limited Renewable Energy Contractor**

In addition to the requirements of OAR 918-282-0000, a limited renewable energy contractor:

(1) Engages in the business of or makes the limited types of electrical installations limited to 25 kva and 600 volts nominal or less, specified in ORS 479.630(16);

(2) Continuously employs at least one general supervising electrician, general journeyman electrician or limited renewable energy technician to act as signing supervising electrician to:

(a) Obtain and sign permits; and

(b) Supervise the electrical installations authorized by ORS 479.630(16).

### **918-282-0040**

#### **Limited Maintenance Specialty Contractor-HVAC/R License**

(1) A limited maintenance specialty contractor-HVAC/R (Heating, Ventilating, Air-conditioning and Refrigeration):

(a) May maintain, service, repair or replace commercial and industrial electrical products that use fuel or other forms of energy to produce heat, power, refrigeration or air conditioning;

(b) May maintain, service, repair or replace the equipment on the load side of the disconnect switch located at or on the electrical product; and

(c) Shall only make electrical modifications or install electrical products where the modification, the size or the type of the product installed is approved by the manufacturer for the equipment involved; and

(d) Shall install, maintain or repair 100 volt-ampere or less thermostat or associated control wiring beyond the electrical product in other than a one- or two-family dwelling only when the contractor employs one or more of the following to perform the work:

(A) General journeyman electrician;

(B) General supervising electrician;

(C) Class "A" limited energy technician; or

(D) Class "B" limited energy technician.

(2) License and Equivalent Requirements. This contractor:

(a) Shall provide proof of at least two years (4,000 hours) experience in installation, including set-up and testing, plus approved specialized training from a manufacturer, distributor, school, or apprenticeship program, or lawful on-the-job training in one or more of the following activities: Electrical repair, service, maintenance, installation or replacement of existing, built-in or permanently connected commercial or industrial heating, ventilation, air conditioning, dehumidifying, filtering or refrigeration equipment;

(b) Shall agree to create an electrical training record within 60 days of hiring for each employee who will do the electrical work and:

(A) Maintain the record for as long as the employee remains with the contractor;

- (B) Represent that only employees with electrical training will be used for electrical transactions under this license;
  - (C) Agree that the training records will be provided or made available to the division upon request; and
  - (D) Submit a list of all trained persons employed, or to be employed, to do electrical work authorized by this rule at time of the application and renewal. The list shall include all Class "B" limited energy technicians employed by the contractor and be updated within 30 days of changes.
- (3) Employment of 100 volt-ampere journeymen or technicians. A limited maintenance specialty contractor-HVAC/R may employ, or be a:
- (a) Class "A" limited energy technician; or
  - (b) Class "B" limited energy technician allowing 100 volt-ampere or under thermostat, or associated control wiring involving any type of equipment on which the limited maintenance specialty contractor-HVAC/R is authorized to work.

#### **918-282-0050**

##### **Limited Maintenance Specialty Contractor License**

- (1) A limited maintenance specialty contractor:
- (a) May connect replacement appliances to existing junction boxes;
  - (b) May repair by replacement, as defined in OAR 918-251-0090, ballasts, lamp holders and equipment that are a part of lighting fixtures; and
  - (c) Shall not make electrical installations involving services, feeders or branch circuits.
- (2) A firm that holds a valid limited maintenance specialty contractor license shall provide and maintain a list of employees in accordance with ORS 479.630 and shall designate to the division an individual within the firm who shall be responsible for compliance with applicable codes and rules for obtaining permits and calling for inspections.
- (3) The applicant shall provide verification of one year of experience in appliance repair or replacement work as defined in statute.
- (4) This contractor can convert to a limited maintenance specialty contractor-HVAC/R by meeting the requirements of OAR 918-282-0040 and paying an additional fee.
- (5) Limited maintenance specialty contractor employees need not be licensed.

#### **918-282-0060**

##### **Restricted Energy Contractor License**

- (1) A restricted energy contractor is limited to HVAC activities only, unless the board approves additional indorsements, at which time the contractor shall file separate proof of qualification.
- (2) Applicants for this license shall:
- (a) Designate the applicable indorsement sought;
  - (b) Attach a copy of the identification card to be used for the licensing period; and
  - (c) Provide a list of employees covered by the license and proof of experience:

(A) For the contractor, if the contractor is an individual; a partner if the contractor is a partnership; or a designated person employed by the corporation who actively supervises the restricted energy electrical activities in the case of a corporate contractor;

(B) That the qualifying person has on-the-job training, training from a manufacturer, distributor or school, or completed an apprenticeship program under the relevant **Electrical Specialty Code** or **One and Two Family Dwelling Specialty Code**; and

(C) That the person had at least two years of experience in the trade.

(3) In addition to the statutory requirements for identity of the contractor, the contractor shall issue an identification card to employees covered by the license upon employment, and annually thereafter showing:

(a) Name of employee;

(b) Date of issue;

(c) Contractor's name and the Construction Contractors Board identification number; and

(d) The expiration date coinciding with the contractor's license expiration.

(4) When the contractor's experience is based on a corporate supervisor or partner and that person leaves the entity, the contractor shall immediately amend the license and qualify another person or surrender the license for cancellation.

(5) The contractor shall maintain a current list of employees with the division.

[Publications: Publications referenced are available from the agency.]

**918-282-0070**

### **Limited Pump Installation Specialty Contractor License**

(1) A limited pump installation specialty contractor:

(a) Makes the limited types of electrical installations specified in ORS 479.630;

(b) May direct, supervise or control these limited types of electrical installations;

(c) May make repairs or perform work on them without further license;

(d) Shall provide an updated list of employees annually;

(e) Shall designate to the division an individual within the firm responsible for compliance with applicable codes and rules; and

(f) Shall obtain permits and call for inspections.

(2) Installations under this license shall be limited to branch circuit wiring provided from the load side of a disconnect means external to panel boards.

(3) Employees of a limited pump installation specialty contractor need not be licensed.

(4) License and Equivalent Requirements. This license requires proof of one year of experience in residential pump installation, repair and maintenance or equivalent experience as approved by the board. If applicant is a business entity other than a sole proprietorship, the qualification shall be provided by a person designated by the entity. There is no examination for this license.

## Electrical Licensing Requirements

### 918-282-0100

#### Electrical Licensing in General

(1) An electrical license is issued to an individual and allows the holder to make certain regulated electrical installations. Individual electrical licensing laws are in ORS 479.630. The following rules implement the individual electrical licensing laws. Application and examination requirements as well as continuing education and renewal requirements are located in OAR division 30.

(2) When the rules refer to a "valid" electrical license, this means a license issued by the Electrical and Elevator Board that has not expired, or been suspended or canceled.

### 918-282-0110

#### General Licensing Exemptions

In addition to the exceptions provided in ORS 479.540, electrical licenses are not required to:

- (1) Replace light bulbs, fluorescent tubes or approved fuses, or to connect approved portable electrical equipment to permanently installed and properly wired receptacles;
- (2) Do experimental electrical work or testing of electrical products in electrical shops, educational institutions, industrial plants or recognized testing laboratories;
- (3) Operate, maintain, repair and replace broadcast equipment of commercial radio and television stations; or
- (4) Install limited energy systems not exceeding 100 voltampere ("VA") in Class 2 and 3 systems limited to:
  - (a) Single station smoke or ionization detectors installed in buildings three stories or less in height;
  - (b) Closed circuit television systems installed in buildings three stories or less in height;
  - (c) Master Antenna Television ("MATV") systems installed in buildings three stories or less in height; or
  - (d) Intercom and audio systems installed in one- and two-family dwellings.

### 918-282-0120

#### Licensing Requirements for Electrical Work

(1) No person or entity shall allow any individual to perform electrical work for which the individual is not properly registered or licensed.

(2) Owners, managers or agents of facilities having electrical employees shall report in writing to the division and the authority having jurisdiction, the names and license numbers of limited supervising manufacturing plant or limited maintenance electricians employed.

### 918-282-0130

#### Fees

The division charges an application and license renewal fee as specified in ORS 479.840.

### General Supervising Electrician License

(1) A general supervising electrician when working for or as an electrical contractor requiring a signing supervisor:

(a) Directs, supervises, makes, or controls the making of electrical installations;

(b) May design, plan, and lay out work for the customers of the contractor with whom the supervising electrician is continuously employed; and

(c) Is the only individual authorized to direct, supervise, or control the installation or alteration of an electrical service.

(2) The general signing supervising electrician must:

(a) Sign all permits;

(b) Ensure all electrical installations meet minimum safety standards;

(c) Be continuously employed as a general supervising electrician on the electrical contractor's regular payroll and be available during working hours to carry out the duties of a supervising electrician under this section;

(d) Ensure proper electrical safety procedures are used;

(e) Ensure all electrical labels and permits required to perform electrical work are used and signed;

(f) Ensure electricians have proper licenses for the work performed, and may not permit either by assent or by failure to prevent, an individual to perform work for which they are not properly licensed;

(g) Comply with corrective notices issued by the inspecting authority;

(h) Notify the division in writing within five days if the signing supervising electrician terminates the relationship with the electrical contractor; and

(i) Not act as a supervising electrician for more than one employer.

(3) Supervising electricians who fail to comply with the provisions of this rule through act or omission may be subject to penalties. Penalties include, but are not limited to, fines, license conditioning, suspension, and revocation.

(4) If the general supervising electrician leaves the employment of the general electrical contractor or employer, electrical work which requires a general supervising electrician shall not be conducted until a replacement general supervising electrician is employed and written notice designating the supervising electrician is given to the division.

(5) License and Equivalent Requirements:

(a) The licensing requirements for a general supervising electrician are set out in ORS 479.630.

(b) To comply with the experience requirements, a non-journeyman applicant relying on equivalent experience shall provide proof that applicant had:

(A) Qualifying experience to become a journeyman electrician, that is at least 8,000 hours of work experience with sufficient minimum hours in each area set out in OAR 918-282-0170; and

(B) Additional qualifying experience as a journeyman, that is at least 8,000 hours of work experience that is equivalent to journeyman work.

(c) A licensed journeyman only needs to document 8,000 hours of experience as a journeyman.

## **918-282-0150**

### **Employment Requirements for Supervising Electricians Employed by Industrial or Manufacturing Plant**

(1) Owners, managers or agents of an industrial or manufacturing plant, hospital, sewer plant, water plant, commercial office building, building occupied by the state or a local government entity or an institution employing individuals who install electrical wiring or equipment shall employ on regular payroll a registered professional electrical engineer, a general supervising electrician or a limited supervising electrician:

(a) To supervise, direct or control this work; and

(b) Who may also install, maintain, repair, or replace electrical wiring and electrical products as licensed.

(2) The general supervising electrician, limited supervising electrician or registered professional electrical engineer may be relieved from responsibility for future work under any permit signed by the supervising electrician or registered professional electrical engineer, if electrician or engineer has left or been discharged from the employ of a licensed electrical contractor or industrial plant, provided that notice in writing of termination is filed with the division within five days by the general supervising electrician, limited supervising electrician or registered professional electrical engineer.

(3) The license or authority of the employer to continue with the electrical work shall, without further order or action by the division, be suspended until another general supervising electrician, limited supervising electrician or registered professional electrical engineer is employed and written notice given to the division by the general supervising electrician, limited supervising electrician or registered professional electrical engineer.

## **918-282-0160**

### **Limited Supervising Electrician License**

(1) A limited supervising electrician may:

(a) Direct, supervise, make or control the making of electrical installations limited to installation, maintenance, replacement and repair of electrical wiring and electrical products on or in an existing, operable manufacturing or industrial plant, hospital, sewer plant, water plant, commercial office building, building owned or operated by the state or a local government facility designated by the board or an institution owned or operated by the licensee's employer; and

(b) Design, plan and lay out work for the employer; and

(c) Shall sign all permits;

(d) Shall ensure electrical installations meet minimum safety standards; and

(e) Is not authorized to install or perform work on service equipment.

(2) License and Equivalent Requirements. The four-year experience requirement can be met by four years of experience as a limited journeyman manufacturing plant electrician.

## **918-282-0170**

### **General Journeyman License**

(1) A general journeyman:

(a) Is authorized to make any electrical installation; and

(b) Shall work under the supervision, direction and control of a general supervising electrician unless doing the type of work that may be supervised, directed or controlled by a person holding a specific limited supervising electrician license, or the type of work requiring no supervision.



(2) A general journeyman working in a manufacturing or industrial plant without a supervising electrician or engineer is limited to maintenance work.

(3) License and Equivalent Requirements.

(a) Applicants for acceptance under equivalent requirements shall show proof of the following work categories and minimum hours of on-the-job training or experience:

(A) Stock room and material handling, 100 hours:

(i) Shop;

(ii) Service.

(B) Residential Wiring, 1,000 hours:

(i) Service and panel;

(ii) Conduit, flex, romex boxes, electric heating systems;

(iii) Wire pulling and taps;

(iv) Wiring devices and fixtures;

(v) Remodel and finish work.

(C) Commercial Installations, 1,000 hours:

(i) Services, switchboards and panels;

(ii) Conduit, flex, metal moldings, floor duct and boxes;

(iii) Wire pulling and taps;

(iv) Wire devices;

(v) Lighting fixtures - high voltages, explosion proof, perimeter lighting.

(D) Industrial Installations, 1,000 hours:

(i) Services, switchboards and panels;

(ii) Conduit, tray and boxes;

(iii) Wire pulling and taps;

(iv) Motor and equipment installations;

(v) Lighting fixtures - High voltage, explosion proof, security lighting.

(E) Intercommunication, Signal and Control Systems, 500 hours;

(F) Underground Construction, 100 hours:

(i) Tunnel rack work;

(ii) Ditch digging and material handling;

(iii) Conduit preparation.

(G) Trouble Shooting and Maintenance, 250 hours;

(H) Finishing and Fixture Hanging, 50 hours;

(I) Total Minimum Subject Hours, 4,000.

(b) Total Hours Required. Total electrical work experience shall be at least 8,000 hours. No more than 300 percent credit shall be allowed for subjects (A) through (H) for any one subject;

(c) Related Training Classes. Applicants shall submit transcripts with passing grades of "C" or better in graded classes and a "pass" in non-graded classes in the following related electrical training classes:

(A) Electrical mathematics;

(B) Safety and accident prevention;

(C) Care and use of hand and power tools;

(D) Blueprint reading and electrical symbols;

(E) Introduction to National Electrical Code;

(F) Electrical fundamentals and basic theory, including AC and DC;

(G) Electrical measuring devices;

(H) Wiring methods;

(I) Low voltage and limited energy circuits;

(J) Residential, industrial and commercial calculations;

(K) Motors, generators and transformers;

(L) Practical circuit sketching;

(M) Lighting circuits;

(N) Fundamentals of electronics;

(O) High voltage distribution and equipment.

[Publications: Publications referenced are available from the agency.]

**918-282-0180**

### **Limited Residential Electrician License**

Limited Residential Electrician License

(1) A limited residential electrician:

(a) Makes electrical installations on one- or two-family or multi-family dwelling units, not exceeding three floors above grade; and

(b) Shall work under the supervision, direction and control of a general supervising electrician.

(2) License and Equivalent Requirements.

(a) Applicants for acceptance under equivalent requirements shall show proof of the following work categories and minimum hours of on-the-job training or experience:

(A) Stock room and Material handling, 100 hours:

(i) Shop;

(ii) Service.

(B) New Residential Wiring, 2,000 hours:

(i) Service and panel;

(ii) Conduit, flex, romex boxes, electric heating systems;

(iii) Wire pulling and taps.

(C) Intercommunication, Signal and Control System, 50 hours;

(D) Underground Installation, 100 hours:

(i) Ditch digging;

(ii) Material handling;

(iii) Conduit preparation.

(E) Trouble shooting, 200 hours;

(F) Remodeling, 500 hours;

(G) Finishing and Fixture Hanging, 200 hours.

(c) Total Hours Required. Total electrical work experience shall be at least 4,000 hours. No more than 300 percent credit shall be allowed for subjects (A) through (G) for any one subject;

(d) Related Training Classes. Applicants shall submit transcripts with passing grades of "C" or better in graded classes and a "pass" in non-graded classes in the following related electrical training classes:

(A) Electrical mathematics;

(B) Safety and accident prevention;

(C) Care and use of hand and power tools;

(D) Blueprint reading and electrical symbols;

(E) Introduction to **National Electrical Code**;

(F) Electrical fundamentals and basic theory, including AC and DC;

(G) Electric measuring devices;

(H) Wiring methods;

(I) Low voltage and limited energy circuits;

(J) Residential calculations;

(K) Basics of motors, generators and transformers;

(L) Practical circuit sketching;

(M) Lighting circuits;

(N) Fundamentals of electronics;

(O) High voltage distribution and equipment.

[Publications: Publications referenced are available from the agency.]

**918-282-0185**

### **Limited Elevator Journeyman License**

(1) A limited elevator journeyman:

(a) Shall be employed by an appropriately licensed electrical contractor under ORS chapter 479;

(b) Is limited to electrical and mechanical work on elevators. This work is limited to the wiring from the load side of the main disconnecting means for the elevator; and

(c) Shall not exceed the scope of work authorized by the employer's license.

(2) License Requirements. Applicants shall:

(a) Have a minimum of 8,000 aggregate hours of lawfully obtained on-the-job training in the elevator industry installing, repairing, altering and maintaining elevator mechanical and electrical equipment; and

(b) Complete a Board approved limited elevator journeyman apprenticeship program.

(3) Applicants are required to provide documentation of work categories and minimum hours in:

(a) Basic construction and maintenance safety and tools -- 250 hours;

(b) Blue print reading -- 250 hours;

(c) Material handling -- hoisting and rigging -- 500 hours;

(d) Guide rail systems installation and maintenance -- 400 hours;

(e) Drive machines and systems; overhead equipment including beams and sheaves -- 800 hours;

(f) Hydraulic systems and control valves -- 800 hours;

- (g) Car frames, platforms and enclosures -- 500 hours;
  - (h) Doors, entrances and operators -- 500 hours;
  - (i) Construction wiring and practices -- 800 hours; and
  - (j) Adjusting elevator systems -- 200 hours;
  - (k) Maintenance, circuit tracing, trouble-shooting, test equipment, periodic testing requirements -- 1,000 hours;
  - (l) Alteration of existing equipment 1,000 hours;
  - (m) Structure and operation of escalators and moving walks -- 500 hours; and
  - (n) Related industry equipment 500 hours.
- (4) Additionally applicants shall submit transcripts with passing grade of 70-percent or better in graded classes and a "pass" in non-graded classes in the following related training classes;
- (a) Basic construction and maintenance safety;
  - (b) Blueprint reading;
  - (c) Code-related requirements;
  - (d) Equipment testing procedures;
  - (e) Guide rail systems installation and maintenance;
  - (f) Pit equipment and maintenance;
  - (g) Car frames, platforms and enclosures;
  - (h) Hoisting and rigging;
  - (i) Overhead equipment including beams and sheaves;
  - (j) Hoist ropes and roping procedures;
  - (k) Structure and operation of escalators and moving walks;
  - (l) Drive machines and components;
  - (m) Hydraulic systems and control valves;
  - (n) Traction machines and components;
  - (o) Basic electrical theory;
  - (p) Circuit tracing;
  - (q) Basic electronics and solid state theory;
  - (r) Construction wiring and practices; and
  - (s) Electrical code and safety training.

## Limited Journeyman Manufacturing Plant Electrician License

(1) A limited journeyman manufacturing plant electrician:

(a) Installs, maintains, replaces and repairs electrical wiring and electrical products on or in an existing and operable manufacturing or industrial plant owned or used by the licensee's employer; and

(b) Is limited to repair and maintenance work if no supervising electrician or engineer is employed.

(2) License and Equivalent Requirements.

(a) Applicants for acceptance under equivalent requirements shall show proof of the following work categories and minimum hours of on-the-job training or experience:

(A) Installation of electrical circuits, 1,000 hours;

(B) Motors and generators, 500 hours:

(i) Dismantling and checking physical conditions;

(ii) Assembly and testing;

(iii) Repair and maintenance;

(iv) Internal and external connections to change direction of rotation and speed and for change of supply of voltage;

(v) Motor setting, drives, pulley, gears, coupling devices;

(vi) Related mechanical equipment: Traction units, cranes, winches and hoists.

(C) Manual and automatic controls, including magnetic and solid state, 1,000 hours;

(D) Trouble Shooting, 500 hours:

(i) Circuit analysis;

(ii) Use of test equipment;

(iii) Emergency repairs for temporary maintenance of service.

(E) Power distribution, 1,000 hours:

(i) Inside and outside, high and low voltage distribution systems, maintenance and replacement;

(ii) Transformer connecting, testing and repairing;

(iii) Switch gear and load centers, maintenance and repair;

(iv) Wiring, maintenance, repair and adjustment of control panels, instruments and relays.

(b) Total Hours Required. Total experience shall be at least 8,000 hours. No more than 300 percent credit shall be allowed for subjects (A) through (E) for any one subject.

(c) An applicant may substitute up to 1,000 hours of experience of any two or more of the following, provided the hours in any one subject are at least the minimum specified. Substituted experience shall be only for work experience beyond the 4,000-hour minimum category hours:

(A) Welders, welding, 100 hours:

- (i) Soldering, brazing, welding (acetylene);
- (ii) Welding (electric);
- (iii) Maintenance and repair of welding equipment.

(B) Electric furnaces, 200 hours:

- (i) Forming electrodes;
- (ii) Mounting and connecting electrodes;
- (iii) Operation of equipment;
- (iv) Controls.

(C) Rectifiers, 100 hours:

- (i) Installing, replacing and testing rectifier units;
- (ii) Repairing related equipment.

(D) Meters, 100 hours:

- (i) Testing meters;
- (ii) Rebuilding meters;
- (iii) Minor repairs;
- (iv) Installation;
- (v) Calibration.

(E) Batteries, 100 hours:

- (i) Handling, testing, storing, maintenance;
- (ii) Minor repairs, terminals, case electrolyte;
- (iii) Rebuilding.

(F) Signal systems, 100 hours:

- (i) Installations;
- (ii) Testing;
- (iii) Service (minor);

(iv) Overhaul.

(G) Lighting, 300 hours:

(i) Maintenance of indoor and outdoor lighting, general and special;

(ii) Set-up, operation, maintenance, dismantling, and storing of temporary and emergency lighting and portable power plants.

(d) Related Training Classes. Applicants shall submit transcripts with passing grades of "C" or better in graded classes and a "pass" in non-graded classes in the following related electrical training classes:

(A) Electrical mathematics;

(B) Safety and accident prevention;

(C) Care and use of hand and power tools;

(D) Blueprint reading and electrical symbols;

(E) Introduction to **National Electrical Code**;

(F) Electrical fundamentals and basic theory, including AC and DC;

(G) Electric measuring devices;

(H) Wiring methods;

(I) Low voltage and limited energy circuits;

(J) Industrial and commercial calculations;

(K) Motors, generators and transformers;

(L) Practical circuit sketching;

(M) Lighting circuits;

(N) Fundamentals of electronics;

(O) Welding and cutting;

(P) High voltage distribution and equipment.

[Publications: Publications referenced are available from the agency.]

**918-282-0200**

### **Indorsement for Manufacturing Plant Electricians**

(1) Scope and Authority. The purpose of this rule is to allow manufacturing plant electricians to be employed by a general electrical contractor only when necessary to allow the plant owner or operator to change their method of maintaining their plant and equipment. This rule is adopted under ORS 479.630.

(2) For the purposes of this rule a:



(a) "General electrical contractor" is an electrical contractor employing a general supervising electrician;

(b) "Manufacturing plant" is the owner or operator of a manufacturing or industrial plant;

(c) "Manufacturing plant electrician" is a limited supervising electrician, limited journeyman manufacturing plant electrician or limited maintenance electrician whose license is authorized by ORS 479.630 and an apprentice, training for an applicable manufacturing plant electrician license.

(3)(a) A licensed manufacturing plant electrician, having specialized training to repair and maintain electrical systems and equipment owned or operated by the manufacturing plant, may be issued an indorsement to the electrician's license. This indorsement authorizes employment by an identified general electrical contractor and performance of electrical work consistent with the manufacturing plant electrician's license only at the premises of the identified manufacturing plant if the requirements of subsection (c) of this section are met;

(b) An apprentice manufacturing plant electrician at a manufacturing plant may be issued an indorsement authorizing employment by a general electrical contractor for continuance of the apprenticeship training at the premises of the identified manufacturing plant if the requirements of subsection (c) of this section are met;

(c) The indorsement in subsections (a) and (b) of this section may be granted if:

(A) The manufacturing plant:

(i) Chooses to contract all plant maintenance to one or more contractors;

(ii) Provides electrical maintenance through a general electrical contractor; and

(iii) Agrees to inform the division if it decides to again provide its own electrical maintenance and offer reemployment to the manufacturing plant electricians.

(B) The electrical contractor:

(i) Hires all of the manufacturing plant electricians who receive indorsements under this rule who want to continue working at the same facility;

(ii) Uses those electricians for substantially the same work being done by them for the same manufacturing plant facilities, provided this is within the scope of the license;

(iii) Keeps on file with the division, with annual updates, the names and status of all manufacturing plant electricians employed by the contractor and assigned to the account of the plant;

(iv) Continues electrical apprenticeship undertakings of the manufacturing plant for all electrical apprentices indorsed under this rule; and

(v) Retains or assigns, as needed, a separate supervising electrician, general or limited as required, to the account of the specific manufacturing plant for each plant or cluster of plants within a 20-mile area.

(4) This rule does not authorize a general electrical contractor to hire a manufacturing plant electrician who is not issued an indorsement under this rule.

(5) No indorsement shall be issued under this rule until after consultation with the board concerning the facts and circumstances of the proposed transaction by the manufacturing plant and receipt of an affirmative recommendation.

(6)(a) The indorsement terminates automatically, if:

(A) The underlying license is revoked, expires or is not timely renewed;

(B) The employment between the electrician and the contractor is terminated; or

(C) The agreement between the manufacturing plant and contractor is terminated.

(b) The indorsement does not terminate if the manufacturing plant hires electrical contractors in addition to the contractor covered under the indorsement.

(7) If a new electrical contractor is hired by the manufacturing plant to replace the electrical contractor covered by the indorsement, the manufacturing plant electricians are required to seek a new indorsement.

(8)(a) Notwithstanding any requirements to the contrary, any manufacturing plant apprentice who receives an indorsement and is transferred to a general electrical contractor under this rule is entitled to become a manufacturing plant electrician upon successful completion of apprenticeship training and passing relevant examinations;

(b) When the apprentice working under an indorsement becomes a manufacturing plant electrician, the prior indorsement continues; and

(c) The indorsement is continued for any other manufacturing plant electrician whose license is upgraded within the manufacturing plant electrician category.

**918-282-0205**

### **Limited Renewable Energy Technician**

(1) In addition to the requirements of ORS 479.630(16), a limited renewable energy technician shall be employed by a limited renewable energy contractor or electrical contractor.

(2) Persons seeking to be licensed under this rule shall provide proof of completion of a board-approved apprenticeship program that includes:

(a) A minimum of 4,000 hours of on-the-job training in the following work areas:

(A) 1,500 hours total with a minimum of 1,000 hours in photovoltaics and a minimum of 500 hours in other renewable electrical energy system installations, including, but not limited to:

(i) Wire pulling and splices;

(ii) Conduit, flex, tray and duct;

(iii) Control panels and controls;

(iv) Wiring devices; and

(v) Removal and finish work of renewable electrical energy systems including wind, solar, micro-hydroelectricity, photovoltaic, fuel cells and engine generators for off-grid systems;

(B) 1,500 hours minimum in balance of system including, but not limited to, installation, removal and finish of inverters, batteries, regulation, metering, conditioning equipment and systems; and

(C) 1,000 hours in other related on-the-job training including, but not limited to:

(i) **National Electrical Code** requirements for design of system;

(ii) Troubleshooting;

(iii) Maintenance; and

(iv) Plan/blueprint reading; and

(b) A minimum of 288 hours of classroom or related training covering:

(A) Electrical mathematics;

(B) Safety and accident prevention;

(C) Care and use of hand and power tools;

(D) Blueprint reading and electrical symbols;

(E) Introduction to the **National Electrical Code**;

(F) Electrical fundamentals and basic theory, including alternating and direct current;

(G) Electrical measuring devices;

(H) Wiring methods;

(I) Related electrical statutes and rules;

(J) Fundamentals of electronics;

(K) Renewable electrical energy systems including, but not limited to, systems and devices as set forth in ORS 479.630(16)(b)(A);

(L) Class 2 and 3 circuits; and

(M) Basic mechanics -- applied physics and theory.

[Publications: Publications referenced are available from the agency.]

**918-282-0220**

### **Limited Journeyman Sign Electrician License**

(1) A limited journeyman sign electrician:

(a) Installs and services electrical signs and outline lighting;

(b) Shall be employed by a limited sign contractor;

(c) May extend a sign branch circuit not more than 15 feet if the dedicated branch circuit exists at that location; and

(d) Is not permitted to:

(A) Install a branch circuit from an electrical panel;

(B) Install control equipment not located on the same wall or post, inside or outside the building;

(C) Install branch circuits; or

(D) Perform work on service equipment.

(2) A licensed apprentice, after completing the sixth period of apprenticeship training, may service signs without supervision. "Servicing" is the replacement of incandescent, high intensity discharge and fluorescent lamps and cleaning and painting the sign interior.

(3) This license is not required to install the footing or pole, or to operate the equipment required to access or set in place an electric sign, or to clean and paint the sign exterior.

(4) License and Equivalent Requirements. Applicants for acceptance under equivalent requirements shall show proof of the following work categories and minimum hours of on-the-job training or experience:

- (a) Stock room and material handling, 100 hours;
- (b) Pattern and blueprints, 150 hours;
- (c) Layout design, 500 hours;
- (d) Assembly of display, 1,000 hours;
- (e) Display painting and component parts, 250 hours;
- (f) Display installation, service and maintenance, 1,250 hours; and
- (g) Transportation and hoisting equipment maintenance and repair, 750 hours.

(h) Related Training Classes. Applicants shall submit transcripts with passing grades of "C" or better in graded classes and "pass" in non-graded classes in the following related electrical training classes pertaining to sign installation:

- (A) Electrical fundamentals and basic theory;
- (B) Wiring methods, under 600 volts nominal;
- (C) Wiring methods, over 600 volts nominal;
- (D) Conduit systems, raceways and boxes; and
- (E) Introduction to the National Electrical Code.

**918-282-0230**

### **Limited Journeyman Stage Electrician License**

(1) A limited journeyman stage electrician:

- (a) Shall be employed by an electrical contractor;
- (b) Shall only install temporary feeders, branch circuits and equipment used for the production of shows, exhibits, displays, festivals, conventions, stage, theater, film or video productions;
- (c) Shall be authorized to perform maintenance on temporary equipment designed to be accessed by qualified personnel such as, but not limited to, electronic dimmers, pendant drops, cords, connectors, theatrical and film and video lighting fixtures operating at not more than 150 volts to ground; and
- (d) Is not authorized to install or extend permanent wiring of the structures involved, or install, maintain or repair service conductors or service equipment.

(2) License and Equivalent Requirements. Applicants for acceptance under equivalent requirements shall show proof of the following work categories and minimum hours of on-the-job training or experience:

- (a) Stage/film and video/event lighting, 750 hours;
- (b) Stage/film and video/event dimmer distribution and applications, 250 hours;

(c) Three-phase temporary power distribution and power sources including service disconnects and generators, 500 hours;

(d) Stage/film and video lamp operator, 500 hours;

(e) Set construction, installation, maintenance and repair, 1,000 hours, a minimum of which shall be:

(A) Stockroom, 50 hours;

(B) Troubleshooting, 50 hours;

(C) Pre-rigging/rigging, 50 hours;

(D) Transportation and hoisting, 50 hours;

(E) Layout and design, 50 hours;

(F) Pattern and blueprint, 50 hours.

(f) Stage/film and video/even property, 1,000 hours, a minimum of which shall be:

(A) Repair of related equipment, 125 hours;

(B) Troubleshooting, 125 hours;

(C) Maintenance of related equipment, 125 hours.

(g) A minimum of 150 electrical-related training hours during the course of an apprenticeship or approved training program.

**918-282-0240**

### **Limited Maintenance Electrician License**

(1) A limited maintenance electrician:

(a) Maintains, repairs and replaces electrical installations on the premises of an industrial plant where the individual is employed;

(b) Maintains, repairs and replaces electrical installations on systems that are less than 600 volts phase to phase on the premises of a commercial office building, a building occupied by the state or by a local government entity or a facility designated by the board, where the individual is employed; and

(c) Is not authorized to make any new electrical installations or to perform any work on services.

(2) License and Equivalent Requirements. Applicants who did not complete an approved apprenticeship program shall verify 4,000 hours of on-the-job training or experience for the following work categories and minimum hours:

(a) Motors, generators and heating equipment, 500 hours;

(A) Assembly and testing;

(B) Repair and maintenance;

(C) Internal and external connections to change direction of rotation, speed and supply voltage;

(D) Motor setting, drives, pulleys, gears and coupling devices;

- (E) In-place motor cleaning (maximum 100 hours credit);
- (b) Controls, manual and automatic, including magnetic and solid state, 1,000 hours;
- (c) Trouble shooting, 1,000 hours;
- (d) Power distribution, inside and outside, high and low voltage distribution systems, maintenance and replacement, 500 hours;
- (e) Lighting, 500 hours;
- (f) Electrical oriented drawings, 100 hours;
- (g) Total Hours Required. The minimum work hours under each subject shall not be less than the hours specified. No more than 300 percent credit shall be allowed under subjects (a) through (f) for any one subject;
- (h) The applicant's on-the-job training or work experience shall be supervised by a:
  - (A) General supervising electrician;
  - (B) Limited supervising manufacturing plant electrician;
  - (C) General journeyman electrician;
  - (D) Limited journeyman manufacturing plant electrician; or
  - (E) Limited maintenance electrician;
- (i) Required Educational Training. Applicants shall submit transcripts verifying successful completion, with passing grades of "C" or better in graded classes and a "pass" in non-graded classes, in the following subject areas:
  - (A) Electricity and electronics;
  - (B) Fundamental mechanical principles;
  - (C) Mathematics of the trade;
  - (D) Instrumentation and controls;
  - (E) Federal, state and local electrical laws, codes and rules;
  - (F) Blueprint reading, electrical drawing, pictorial, block, one-line and schematic drawings;
  - (G) Industrial electrical safety; and
  - (H) Certified cardiopulmonary resuscitation (CPR) course.

**918-282-0250**

### **Limited Maintenance Manufactured Structures Electrician**

A limited maintenance manufactured structures electrician:

- (a) Is authorized to repair or maintain electrical wiring and equipment used in manufactured structures (manufactured dwellings and recreational vehicles) as defined in ORS 446.003; and

(b) Is not authorized to make new electrical installations or alterations of electrical wiring or equipment.

(2) "Repair" as used in this rule includes replacement.

(3) License and Equivalent Requirements. Applicant shall provide verified experience of:

(a) Two years of experience consisting of at least 4,000 hours in repair and maintenance of electrical problems of the type and nature found in manufactured structures while in the employment of a manufactured structures manufacturer, or performing similar work regardless of employment status, under federal preemption by the Manufactured Home Construction and Safety Standards Act of 1974, **42 USC Section 5401** and following sections, and the Manufactured Home and Construction and Safety Standards in **24 CFR Section 3280.801** dated October 25, 1995, and following sections, and **3282.401 to 3282.416** dated January 15, 1992;

(b) Two years employment as a limited maintenance manufactured structures trainee with a licensee or employer of a licensee;

(c) A combination of subsections (a) and (b) of this section equaling two years; or

(d) Equivalent experience equaling two years.

(4) A person may be employed as a limited maintenance manufactured structures electrical trainee provided all of the following conditions are met:

(a) The person only performs electrical work in the physical presence of the licensee;

(b) The number of trainees does not exceed the number of full-time licensees;

(c) The employer and trainee enter into a training program where the employer commits to provide education, training and experience for the person to qualify; and

(d) The person submits a copy of the training program and name of trainee to the division.

(5) The examination shall cover applicant's knowledge of basic electrical principles of repair and maintenance of electrical wiring and equipment used in a manufactured structure.

(6) This license is not required to perform electrical work on manufactured structures federally preempted by the Manufactured Home Construction and Safety Standards Act of 1974, **42 USC Section 5401** and following sections and the Manufactured Home and Construction and Safety Standards in **24 CFR Section 3280.801** dated October 25, 1995, and following sections, and **3282.401 to 3282.416** dated January 15, 1992.

[Publications: Publications referenced are available from the agency.]

**918-282-0260**

### **Limited Building Maintenance Electrician License**

(1) A limited building maintenance electrician:

(a) Is authorized to maintain, repair and replace the following electrical installations required on the premises of commercial office buildings, buildings occupied by the state or a local government entity or facilities designated by the board in electrical systems not exceeding 300 volts to ground:

(A) Electrical appliances;

(B) Light switches;

(C) Light fixtures;

(D) Fans;

(E) Receptacles; and

(F) Fluorescent ballasts.

(b) May be employed by the owner of a commercial office building or the owner's agent, neither of whom need to be licensed.

(2) Qualification Based on Employment and Experience Gained Prior to July 1, 1995. Prior to August 1, 1998, an applicant can qualify by submitting independent documentation of at least one year of commercial office building maintenance experience, provided the experience was gained prior to July 1, 1995, and by passing a written examination. No applications shall be received under this section after August 1, 1998.

(3) License and Equivalent Requirements. The equivalent standards adopted by the board under ORS 479.630 include:

(a) Work Categories and Minimum Hours. Applicants who did not complete an approved training program must verify 2,000 hours of on-the-job training or experience in maintenance, repair and replacement for the following work categories and minimum hours:

(A) Electrical appliances, 100 hours;

(B) Light switches, 250 hours;

(C) Light fixtures, 200 hours;

(D) Fans, 100 hours;

(E) Receptacles, 250 hours; and

(F) Fluorescent ballasts, 300 hours.

(b) Total Hours Required. The minimum work hours under each subject shall not be less than the hours specified. No more than 300 percent credit shall be allowed for subjects (A) through (F) for any one subject.

(4) Required Educational Qualification by Training.

(a) Applicants shall attend 16 hours of approved electrical safety training before commencing any on-the-job activities or additional electrical training.

(b) Required Electrical Training. Applicants shall submit transcripts verifying successful completion, with passing grades, in the following subject areas:

(A) Basic electricity;

(B) Sources of electricity;

(C) Building electrical service;

(D) Measuring electrical energy consumption and electrical circuits;

(E) Protective devices (fuses and circuit breakers) and electrical symbols;

(F) Electrical conductors, insulation and raceways;

(G) Electrical boxes, receptacles, switches and solenoids;



(H) Motors and starters, maintenance and safety;

(I) Electrical testing meters;

(J) Basics of lighting;

(K) Light sources, fixtures and maintenance;

(L) Maintenance and safety;

(M) Scope of work allowed; and

(N) Applicable sections of the **Oregon Electrical Specialty Code**.

(c) Prior to performing any unsupervised electrical work as a trainee, applicant shall have a minimum of 80 hours of approved on-the-job training under the supervision of a competent licensed electrician whose scope of license allows all of the electrical activities of a limited building maintenance electrician, provided the training covers each of the electrical installations in subsection (3)(a) of this section.

(d) For the purposes of this section the following licensees can be the training electrician: General supervising electrician, limited supervising electrician, general journeyman, limited manufacturing plant journeyman, limited maintenance electrician and limited building maintenance electrician which includes a person licensed under section (2) of this rule.

(5) Definitions.

(a) "Commercial Office Building" is a building of which 75 percent or more of the office area is used for professional or service transactions, including storage of records. For the purpose of determining "office area," stairways, hallways, rest rooms and vehicle parking are excluded;

(b) "Government Building" means a building, or portion thereof, which is owned, leased or rented and used by the state or any county, municipality or other political subdivision of the state; and

(c) "Owner's Agent" means the owner's employee, or other person or entity under contract, who oversees the daily maintenance of the owner's property.

[Publications: Publications referenced are available from the agency.]

**918-282-0270**

## **Apprentices**

(1) An apprentice:

(a) Shall meet the following minimum requirements:

(A) General journeyman, Class A limited energy technician and Class B limited energy technician:

(i) Be 17 years of age to apply, 18 years of age to be registered;

(ii) Have a high school diploma, GED, or international equivalency; and

(iii) Have one-year high school algebra, integrated math 2 or its equivalent, with a grade of "C" or better, or equivalent community college mathematics placement test results.

(B) Limited journeyman manufacturing plant, limited maintenance, limited journeyman sign, limited journeyman stage and limited renewable energy technician:

(i) Be 17 years of age to apply, 18 years of age to be registered;

(ii) Have a high school diploma, GED or international equivalency; and

(iii) Have one-year high school mathematics with a passing grade, or equivalent community college mathematics placement test results;

(C) Limited residential:

(i) Be 17 years of age to apply, 18 years of age to be registered;

(ii) Have a high school diploma, GED, or international equivalency; and

(iii) Have one-year high school algebra, integrated math 2 or its equivalent, with a grade of "C" or better, or one-year high school math and completion of an algebra course as part of an approved apprenticeship program, with a grade of "C" or better, or equivalent community college mathematics placement test results.

(b) Shall be licensed;

(c) May assist an appropriately licensed electrician on the same job site and the same shift in performing electrical work authorized in the trade, or branch of the trade, in which the licensee is registered; and

(d) Shall not perform electrical work under a person holding a letter of authority card issued to State of Oregon employees.

(2) Apprentice licenses issued under sections (3)(a), (4), or (5) of this rule are issued and renewed by the Oregon Bureau of Labor and Industries according to standards established in this rule and the guidelines established by the Bureau of Labor and Industries and the Building Codes Division.

(3) Electrical apprentice licenses:

(a) Shall be issued to individuals registered in formal electrical apprenticeship programs recognized by the board and the Oregon Bureau of Labor and Industries under ORS Chapter 660; and

(b) May be issued to trainees enrolled in individually approved, employer-sponsored training programs leading to the limited journeyman license in OAR 918-282-0190. Individuals enrolled in these programs may be issued an electrical apprentice license only if the employer's program is approved by the board.

(4) Reciprocal electrical apprentice licenses shall be issued to individuals currently registered in an approved apprenticeship program outside Oregon in a state that is party to the state apprenticeship reciprocal agreement.

(5) Notwithstanding subsection (1)(c) of this rule, a final period apprentice licensed under sections (3)(a) or (4) of this rule that meets the requirements of this section and the Bureau of Labor and Industries may be issued an indirect supervision electrical apprentice license, allowing the apprentice to work under indirect supervision at the discretion of the responsible supervisor. A license under this section may be issued to:

(a) A final period apprentice in an 8,000 hour apprenticeship program with at least 6,500 hours of on-the-job training, allowing the apprentice to work under indirect supervision on projects not exceeding eight hours duration and limited to 300 volts phase to phase or phase to ground; or

(b) A final period apprentice in a 6,000 hour apprenticeship program with at least 5,000 hours of on-the-job training, allowing the apprentice to work under indirect supervision on projects not exceeding eight hours duration that are otherwise within the scope of the apprentice's license.

**918-282-0290**

**Elevator Apprenticeship Program**

The National Elevator Industry Educational Program (NEIEP) approved by the Elevator Safety Board, now the Electrical and Elevator Board, is approved as an elevator apprenticeship program referred to in ORS 479.630 as a prerequisite for a limited journeyman elevator license.

### **Limited Energy Licensing**

**918-282-0345**

#### **Class "A" Limited Energy Technician License**

Scope of work. A Class "A" limited energy technician:

- (1) Is allowed to install, alter and repair all limited energy systems; and
- (2) Shall also be licensed as an electrical contractor or shall work for a licensed electrical contractor, limited energy electrical contractor, or for one employer in an industrial plant.

**918-282-0355**

#### **Licensing Requirements for Class "A" Limited Energy Technician**

(1) License and Equivalent Requirements. Applicant shall have a minimum of 6,000 hours of lawfully obtained experience. Experience must be verified as established in OAR division 30. This experience shall be obtained as follows

- (a) By successful completion of a board-approved Class "A" limited energy apprenticeship program; or
- (b) Through limited energy electrical experience equivalent to a Class "A" board-approved limited energy apprenticeship program.

(2) Persons utilizing lawful experience may meet equivalent experience requirements by providing verification as required by OAR 918-030-0030 through 918-030-0050.

(3) Applicants for approval under equivalent requirements must show proof of the following work categories and minimum hours of on the job training or experience:

(a) Stock room and materials, 150 hours:

(A) Shop;

(B) Service;

(b) Limited energy wiring, 2,400 hours:

(A) Installation;

(B) Wire pulling;

(C) Splices;

(D) Conduit;

(E) Flex;

(F) Tray and duct;

(G) Control panels and controls;

- (H) Wiring devices;
- (I) Removal and finish work;
- (c) Trouble shooting and maintenance, 375 hours;
- (d) Outdoor installation, overhead and underground, 75 hours; and
- (e) Trade-specific installations, 3,000 hours of which at least 750 hours must be from paragraph (A) below:
  - (A) Protective signaling, including but not limited to:
    - (i) Fire alarm;
    - (ii) Nurse call;
    - (iii) Security;
  - (B) Medical;
  - (C) Data and telecommunications;
  - (D) CCTV, paging and sound;
  - (E) Instrumentation and HVAC;
- (4) Total Hours Required. Total electrical work experience shall be at least 6,000 hours. No more than 300 percent credit shall be allowed in work categories (a) through (d) in Section (3) of this rule.
- (5) Related Training Classes. Additionally, applicants shall have a minimum of 432 hours of related classroom training as outlined in the following:
  - (a) Electrical mathematics;
  - (b) Safety and accident prevention;
  - (c) Care and use of hand and power tools;
  - (d) Blueprint reading and electrical symbols;
  - (e) Introduction to the National Electrical Code;
  - (f) Electrical fundamentals and basic theory, including AC and DC;
  - (g) Electrical measuring devices;
  - (h) Wiring methods;
  - (i) Related electrical statutes and rules;
  - (j) Fundamentals of electronics;
  - (k) Transformers;

## **918-282-0360**

### **Class "B" Limited Energy Technician**

Scope of work:

(1) A Class "B" limited energy technician is allowed to perform limited energy electrical activity that does not include protective signaling as defined in ORS 479.905.

(2) A Class "B" limited energy technician shall also be licensed as an electrical contractor, work for a licensed electrical contractor, or for one employer in an industrial plant. The scope of limited energy electrical work cannot exceed either that which the signing supervisor is authorized to perform, or that work which the individual is licensed to perform.

## **918-282-0365**

### **Licensing Requirements for Class "B" Limited Energy Technician**

(1) License and Equivalent Requirements. Applicant shall have a minimum of 4,000 hours of lawfully obtained experience. Experience must be verified as established in OAR division 30. This experience shall be obtained as follows:

(a) As an apprentice in a board-approved limited energy electrical activity apprenticeship program; or

(b) Through limited energy activity equivalent to an apprenticeship program, and the completion of a board-approved 32 hour training program.

(2) Persons utilizing lawful experience may meet equivalent experience requirements by providing verification as required by OAR 918-030-0030 through 918-030-0050.

(3) Applicants for approval under equivalent requirements must show proof of the following work categories and minimum hours of on the job training or experience:

(a) Stock room and materials, including shop and service: 100 hours;

(b) Limited energy installations, including cables and supports, wire pulling and splices, conduit, flex, tray and duct, control panels and controls, wiring devices, removal and finish work: 1,650 hours;

(c) Trouble shooting and maintenance: 250 hours; and

(d) Occupation specific applications including 2,000 hours in any of the following:

(A) Communications systems, including data telecommunications, intercom, paging;

(B) Specialized control systems, including HVAC, medical, boiler, clock, instrumentation, or other limited energy systems; and

(C) Limited energy electrical activity defined in ORS 479.905(4).

(4) Total Hours Required. Total electrical work experience shall be at least 4,000 hours. No more than 300 percent credit shall be allowed in work categories (a) through (d) in Section (3) of this rule.

(5) Applicants shall also have a minimum of 288 hours of class or related training covering:

(a) Electrical mathematics;

(b) Safety and accident prevention;

(c) Care and use of hand and power tools;

- (d) Blueprint reading and electrical symbols;
- (e) Introduction to the National Electrical Code;
- (f) Electrical fundamentals and basic theory, including alternating and direct current;
- (g) Electrical measuring devices;
- (h) Wiring methods;
- (i) Related electrical statutes and rules;
- (j) Fundamentals of electronics;
- (k) Transformers;
- (l) Lighting circuits; and
- (m) Basic mechanics -- Applied physics and theory.

**918-282-0400**

### **Solar Licensing**

The purpose of this rule is to clarify the scope of work for solar installations. It does not affect the scope of licenses established in ORS 479.630.

(1) For the purposes of this rule the following definitions apply:

- (a) "Building Integrated" means photovoltaic (PV) cells, devices, modules, or modular materials that are integrated into the outer surface or structure of a building and serve as the outer protective surface of that building or structure, such as the roof, skylights, windows or facades.
- (b) "Module" means a complete, environmentally protected unit consisting of solar cells, optics, and other components, exclusive of tracker, designed to generate dc power when exposed to sunlight.
- (c) "Racking" means the material, supports, attachment, frame, skeleton used to attach a solar system or module to a building, structure, or ground mounting.
- (d) "Rack mounted PV module" means a PV module that is attached to racking.

(2) Persons placing or installing structural elements, including footings, roofs, carports, racking, and building integrated PV modules are not required to possess an electrical license.

(3) The following licensing requirements apply to PV system installations:

(a) For PV systems not exceeding 25KW a Limited Renewable Energy Technician, General Journeyman Electrician, General Supervising Electrician or Limited Residential Electrician license is required to perform the following:

(A) Installation or attachment of PV modules to racking.

(B) Making electrical connections between modules, including installation of all conductors that connect to and/or interconnect all PV modules regardless of the type of electrical connection including plug-type interconnections.

(C) Making electrical connections to combiner boxes and inverter(s), including installation of all conductors between arrays and combiner boxes, up to the load side of the inverter.

(D) All elements of system grounding utilizing wire-type conductors on the DC side of the inverter.

(b) For PV systems exceeding 25KW a General Journeyman Electrician, General Supervising Electrician or Limited Residential Electrician license is required to perform the following:

(A) Installation or attachment of PV modules to racking.

(B) Making electrical connections between modules, including installation of all conductors that connect to and/or interconnect all PV modules regardless of the type of electrical connection including plug-type interconnections.

(C) Making electrical connections to combiner boxes and inverter(s), including installation of all conductors between arrays and combiner boxes, up to the load side of the inverter.

(D) All elements of system grounding utilizing wire-type conductors.

(E) Electrical connections to building electrical system including all AC connections on the line side of the inverter(s).

### **918-282-0465**

#### **Purpose and Scope**

(1) It is the purpose of these rules to allow qualified applicants to obtain a provisional general journeyman electrician license. The Electrical and Elevator Board has determined that individuals who meet the qualifications established in these rules have experience substantially equivalent to the state's general journeyman apprentice program.

(2) A provisional general journeyman electrician:

(a) Is authorized to make any electrical installation that an Oregon general journeyman electrician is authorized to make; and

(b) May only work under the supervision, direction and control of an Oregon licensed general supervising electrician unless doing the type of work that may be supervised, directed or controlled by a person holding a specified limited supervising electrician license.

### **918-282-0470**

#### **Application Process and Qualifications**

The division may issue a provisional general journeyman electrician license to an applicant who meets the requirements of this rule.

(1) Applicants for a provisional general journeyman electrician license must:

(a) Apply on a form provided by the division; and

(b) Submit proof of completing a 4-hour Oregon rule and law course meeting the standards established in OAR 918-035-0055 prior to application.

(2) For the purposes of this rule, an approved apprenticeship program is a program that is substantially similar to the licensing requirements for hours and classroom training in Oregon. Examples include:

(a) The inside wireman apprenticeship delivered by the International Brotherhood of Electrical Workers and the National Electrical Contractors Association Electrical Training Alliance; or

(b) The journeyman electrical apprenticeship delivered by the Independent Electrical Contractors.

(3) The application must include:

(a) Appropriate application fees; and

(b) Verification of training, work experience and other required documentation.

(4) Verification referenced in subsection (3)(b) includes:

(a) Submitting training examination and experience verification as follows:

(A) Applicants from the State of Alaska must provide:

(i) A copy of a valid journeyman electrician certification issued by the State of Alaska Department of Labor and Workforce Development. This certificate must be current and in good standing with no history of violations;

(ii) Proof of passing the State of Alaska Department of Labor and Workforce Development journeyman electrician examination; and

(iii) A copy of certificate of completion from an approved apprenticeship program.

(B) Applicants from the State of Alabama must provide:

(i) A copy of a valid journeyman electrician certification issued by the State of Alabama Electrical Contractors Board. This certificate must be current and in good standing with no history of violations;

(ii) Proof of passing the State of Alabama journeyman electrician examination; and

(iii) A copy of certificate of completion from an approved apprenticeship program.

(C) Applicants from the Province of Alberta must provide:

(i) A copy of a valid electrician certification issued by the Province of Alberta. This certificate must be current and in good standing with no history of violations;

(ii) Proof of passing the interprovincial construction electrician examination; and

(iii) A copy of certificate of completion from an approved apprenticeship program.

(D) Applicants from the Province of British Columbia must provide:

(i) A copy of a valid building electrician certification issued by the Province of British Columbia. This certificate must be current and in good standing with no history of violations;

(ii) Proof of passing the interprovincial construction electrician examination; and

(iii) A copy of certificate of completion from an approved apprenticeship program.

(E) Applicants from the State of Colorado must provide:

(i) A copy of a valid journeyman electrician certification issued by the State of Colorado Department of Regulatory Agencies. This certificate must be current and in good standing with no history of violations;

(ii) Proof of passing the State of Colorado Department of Regulatory Agencies journeyman electrician examination; and

(iii) A copy of certificate of completion from an approved apprenticeship program.

(F) Applicants from the State of Connecticut must provide:



(i) A copy of a valid journeyman electrician certification issued by the State of Connecticut Department of Consumer Protection. This certificate must be current and in good standing with no history of violations;

(ii) Proof of passing the State of Connecticut Department of Consumer Protection journeyman electrician examination; and

(iii) A copy of certificate of completion from an approved apprenticeship program.

(G) Applicants from the State of Idaho must provide:

(i) A copy of a valid journeyman electrician certification issued by the State of Idaho Division of Building Safety. This certificate must be current and in good standing with no history of violations;

(ii) Proof of passing the State of Idaho Division of Building Safety journeyman electrician examination; and

(iii) A copy of certificate of completion from an approved apprenticeship program.

(H) Applicants from the State of Kentucky must provide:

(i) A copy of a valid journeyman electrician certification issued by the State of Kentucky Department of Housing, Buildings and Construction. This certificate must be current and in good standing with no history of violations;

(ii) Proof of passing the State of Kentucky Department of Housing, Buildings and Construction journeyman electrician examination; and

(iii) A copy of certificate of completion from an approved apprenticeship program.

(I) Applicants from the State of New Mexico must provide:

(i) A copy of a valid journeyman electrician certification issued by the State of New Mexico Regulation and Licensing Department. This certificate must be current and in good standing with no history of violations;

(ii) Proof of passing the State of New Mexico Regulation and Licensing Department journeyman electrician examination; and

(iii) A copy of certificate of completion from an approved apprenticeship program.

(J) Applicants from the State of Oklahoma must provide:

(i) A copy of a valid journeyman electrician certification issued by the State of Oklahoma Construction Industries Board. This certificate must be current and in good standing with no history of violations;

(ii) Proof of passing the State of Oklahoma Construction Industries Board journeyman electrician examination; and

(iii) A copy of certificate of completion from an approved apprenticeship program.

(K) Applicants from the State of South Dakota must provide:

(i) A copy of a valid journeyman electrician certification issued by the South Dakota State Electrical Commission. This certificate must be current and in good standing with no history of violations;

(ii) Proof of passing the South Dakota State Electrical Commission journeyman electrician examination; and

(iii) A copy of certificate of completion from an approved apprenticeship program.

(L) Applicants from the State of Texas must provide:

- (i) A copy of a valid journeyman electrician certification issued by the State of Texas Department of Licensing and Regulation. This certificate must be current and in good standing with no history of violations;
  - (ii) Proof of passing the State of Texas Department of Licensing and Regulation journeyman electrician examination; and
  - (iii) A copy of certificate of completion from an approved apprenticeship program.
- (M) Applicants from the State of Washington must provide:
- (i) A copy of a valid journeyman electrician certification issued by the Washington State Department of Labor and Industries. This certificate must be current and in good standing with no history of violations;
  - (ii) Proof of passing the Washington State Department of Labor and Industries journeyman electrician examination; and
  - (iii) A copy of certificate of completion from an approved apprenticeship program.
- (5) Individuals who have taken but failed the Oregon general journeyman electrician license examination more than once are not eligible to apply under these rules. These individuals may still apply for an Oregon general journeyman electrician license under OAR 918-282-0170.

#### **918-282-0475**

#### **Effective Dates**

- (1) Applications for a provisional general journeyman electrician license issued under OAR 918-282-0470 must be submitted to the division prior to July 30, 2017. Applications will not be accepted after this date.
- (2) All provisional general journeyman electrician licenses issued under OAR 918-282-0470:
  - (a) Are valid from the date of issuance;
  - (b) Expire effective February 1, 2020; and
  - (c) Are not eligible for renewal.
- (3) OAR 918-282-0465 to 918-282-0475 are repealed effective July 30, 2017.

### **DIVISION 283**

#### **ELECTRICAL TRAINING PROGRAM REQUIREMENTS**

##### **In-Plant Training Programs for Limited Journeyman Manufacturing Plant Electricians**

#### **918-283-0100**

#### **Procedures for Submitting Training Proposals**

The employer shall submit to the board a detailed description of the electrical training program in a recognized branch of the electrical trade the employer will conduct.

#### **918-283-0110**

#### **Program Description**

Program description shall include:

- (1) The term of on-the-job training including any procedures for evaluating and crediting prior electrical experience of the trainee;
- (2) A breakdown of work categories and the number of hours of on-the-job training to be devoted to each category;
- (3) Provisions for related instructional training, including:
  - (a) The total hours or related training in addition to the on-the-job training;
  - (b) A breakdown of the related training into the segments of instruction and hours to be devoted to each segment;
  - (c) The location and hours of the related training; and
  - (d) The name of the related training instructor and the instructor's qualifications in subject matter or the name of the correspondence course, together with any supplemental material to be used; and
- (4) The type and degree of on-the-job supervision of the trainee, including provision for assigning trainees to work under the supervision of a licensed electrical journeyman or supervising electrician to insure the safety of all employees.
- (5) The employer shall establish:
  - (a) Procedures for periodic evaluation and reporting of the trainee's progress and records which shall be made available to the division upon request;
  - (b) Methods of evaluating the trainee and reporting the evaluations at least annually to the division. Evaluations on division forms shall include rating the trainee's on-the-job progress by the instructor or through a correspondence course; and
  - (c) Criteria for disciplining, reassigning, or terminating the trainee for failure to progress in training.

**918-283-0120**

### **Standards for Approval of Electrical Training Programs**

The following training standards for approval of programs are established. When the training program appears to prepare the trainee for the limited journeyman manufacturing plant license, the division may waive any of the following minimum requirements and approve the employer's training program. The division shall consider the terms and conditions of any collective bargaining agreement covering work to be performed.

- (1) The term of training shall be for at least four years and not more than five years including any credit given for prior experience.
- (2) The on-the-job experience for a limited journeyman manufacturing plant electrician license shall provide at least 4,000 hours in the following classifications:
  - (a) Installation of electrical circuits, 1,000 hours;
  - (b) Motors and generators, 500 hours;
  - (c) Manual and automatic controls, including magnetic and solid state, 1,000 hours;
  - (d) Trouble shooting, 500 hours; and
  - (e) Power distribution, 1,000 hours.
- (3) In addition to the 4,000 hours, the balance of the hours of on-the-job training shall be in training appropriate for the license.

(4) Related Training Classes. Classes of at least 96 classroom hours per year shall be given until a total of 384 hours is completed, or its rated equivalent in a correspondence course. Related training shall:

(a) Include fundamental electricity, electrical mathematics, the **National Electrical Code**, electrical theory, safety and accident training, electrical nomenclature, industrial electronics, materials, tools and equipment, layout and blueprint reading; and

(b) Be given by a qualified instructor, or through a division-approved correspondence course.

(5) The ratio of trainees employed by each employer at each plant shall not exceed one trainee to the first journeyman and one trainee to each additional two journeymen. Trainees employed on any work shift shall be under the direct supervision of a journeyman or supervising electrician on the same shift at the same plant.

(6) The trainee shall receive at least 50 percent of the journeyman's wage paid by the employer when starting this program.

[Publications: Publications referenced are available from the agency.]

### **918-283-0130**

#### **Responsibilities of the Employer**

The employer is responsible to see the trainee receives the necessary on-the-job training experience and related technical instruction.

(1) The employer shall register all trainees with the division and make annual trainee progress reports on division forms. No later than at the end of five years, the employer shall notify the division and the trainee of trainee's eligibility to take the examination.

(2) The division shall furnish each registered trainee in an approved program an identification card semi-annually. The identification card, signed by the Chief Electrical Inspector, shall be mailed to the employer. The employer and the trainee shall sign the card. The trainee shall keep the card in trainee's possession while a registered trainee. The identification card serves as the trainee's license, permitting the trainee to perform appropriate electrical work while in training and under the direct supervision of a properly licensed journeyman or supervising electrician on the same shift at the same plant. If the trainee is terminated or removed from the training program, the employer shall return the identification card to the division or notify the division in writing.

(3) The identification card shall be furnished free until the trainee passes the examination or for the maximum period allowed to complete training. If the trainee fails the examination after completion of the maximum training period, trainee's license shall be renewed for not more than two six-month periods of training, and the trainee shall be given one opportunity during each period to pass the examination. If the trainee fails to pass the last examination, trainee's name shall be removed from the employer's training program, the trainee license shall be canceled, and the employer shall cease to employ the trainee on any electrical work for which trainee does not have a license.

### **918-283-0140**

#### **Compliance with Approved Programs**

The division may:

(1) Make periodic inspections of any employer conducting an approved electrical training program to insure the program is proceeding in the manner approved by the division and that the trainee is making satisfactory progress;

(2) Examine the training records of registered trainees, discuss the training program and the trainee's progress with the trainee's supervisor and related training instructor, observe the trainee in on-the-job or related training situations and interview the trainee;

(3) Investigate any evidence of an employer's failure to register trainees in an approved electrical training program;

(4) Suspend the training program if an employer fails to submit required periodic training reports; and

(5) Investigate failures by an employer's trainees to pass the examination.

#### **918-283-0150**

#### **Procedures to Revoke Programs and Licenses of Trainees**

(1) When the division has evidence the employer is not conducting approved training, the division shall notify the employer in writing of employer's right to a hearing to present evidence in support of the training program.

(2) After hearing, the division shall determine whether the employer has failed to conduct an adequate program.

(3) If the division rules that the employer has failed to conduct an adequate program, the training program may be suspended until the employer brings the program up to approved standards.

(4) If the employer continues to fail to meet basic standards for training, the division may revoke approval of the employer as a training facility and the training licenses of those trainees registered with the employer.

### **DIVISION 305**

#### **ELECTRICAL CODES AND STANDARDS**

#### **The Electrical Specialty Code — In General**

#### **918-305-0000**

#### **Existing Electrical Installations**

Wiring installation in existing buildings in the State of Oregon that complied with the minimum electrical safety code standards, **National Electrical Code** or **Oregon Electrical Specialty Code** in effect at the time of installation shall not be considered in violation of the current minimum **Electrical Specialty Code** standards, unless the use or occupancy of the building is changed requiring different methods, alterations, or additions.

[Publications: Publications referenced are available from the agency.]

#### **918-305-0005**

#### **Interpretations**

All electrical interpretations dated prior to October 1, 2014, issued by the Building Codes Division are withdrawn.

#### **918-305-0010**

#### **Scope of the Electrical Specialty Code**

The **Electrical Specialty Code** applies to all nonexempt electrical installations except as covered by the electrical provisions of the **Oregon Residential Specialty Code** and is inspected by an **Electrical Specialty Code** inspector.

[Publications: Publications referenced are available from the agency.]

#### **918-305-0020**

#### **Governing Codes**

The applicable **Electrical Specialty Code** for electrical installations and alterations is:

(1) The Electrical Specialty Code provisions in effect at the earlier of a request for plan review or application for a permit; or

(2) At the option of the applicant, the current Electrical Specialty Code.

[Publications: Publications referenced are available from the agency.]

### **918-305-0030**

#### **Other Codes or Publications that Impact Electrical Installations**

Other codes and publications that impact electrical installations include, but are not limited to those listed below:

(1) Chapter 9 of the Oregon Structural Specialty Code relating to fire protection systems and Chapter 3 of the Oregon Residential Specialty Code relating to smoke alarm installations.

(2) ORS 455.420 requiring individual electric meters for dwelling units.

(3) The Oregon Energy Efficiency Specialty Code, and chapter 11 of the Oregon Residential Specialty Code which address the energy efficiency issues of motors, electric lighting and other electric equipment; and

(4) Chapter 16 and 17 of the Oregon Structural Specialty Code which addresses the seismic requirements of nonstructural components and special inspection requirements.

(5) Publications and requirements of the serving utility.

(6) Public Law 101-336, the Americans with Disabilities Act, Part III; Department of Justice Regulations of Friday, July 26, 1991; 28 CFR Part 36, as amended, including the 2010 ADA Standards for Accessible Design and Public Law 100-430, the Fair Housing Act and the regulations adopted thereunder.

(7) Chapter 11 of the Oregon Structural Specialty Code which relates to the Americans with Disabilities Act for mounting height requirements for electrical and communication receptacles located in affected buildings and structures.

(8) The interconnection of all net-metering facilities and solar photovoltaic systems operated as interconnected power production sources shall comply with the Oregon Electrical Specialty Code. In addition, the interconnection of all net-metering facilities utilizing solid-state inverters shall comply with OAR 860-039 Net Metering.

(9) Oregon Manufactured Dwelling Installation Specialty Code. The electrical installations shall be in accordance with the requirements of the Oregon Electrical Specialty Code.

(10) The electrical portions of the installation or product standards identified in OAR 918-306-0005. These standards are informational only and are to be used to clarify code intent. They may be used as installation guides when not specifically referenced or covered in the Oregon Electrical Specialty Code. Examples include, but are not limited to, the electrical sections of NFPA 20, NFPA 54, NFPA 99, NFPA 101, NFPA 110, NFPA 780 and NFPA 820.

[Publications: Publications referenced are available from the agency.]

### **918-305-0100**

#### **Adoption of Oregon Electrical Specialty Code**

(1) The **Oregon Electrical Specialty Code** is adopted pursuant to OAR chapter 918, Division 8.

(2) Effective October 1, 2014, the 2014 Oregon Electrical Specialty Code consists of the following:

(a) 2014 Edition of the NFPA 70, National Electrical Code (NEC), and as further amended by the division in Table 1-E;

(b) 2012 Edition of the IEEE C2-2012, National Electrical Safety Code (NESC); and

(c) The electrical provisions of the Oregon Elevator Specialty Code adopted in OAR 918-400-0455.

(3) In the event of a conflict between the NEC and NESC requirements, the NEC requirement, as amended in subsection (2) of this rule, applies.

(4) As used in this rule:

(a) "ANSI" is the American National Standards Institute;

(b) "ASME" is the American Society of Mechanical Engineers;

(c) "IEEE" is the Institute of Electrical and Electronics Engineers; and

(d) "NFPA" is the National Fire Protection Association.

**NOTE:** Table 1-E is printed at the end of Division 305 and is available on the division's website at <http://www.bcd.oregon.gov/rules.html#oar>

[ED. NOTE: Tables referenced are not included in rule text. [Click here for PDF copy of table\(s\).](#)]

[Publications: Publications referenced are available from the agency.]

### **Amendments to the NEC**

#### **918-305-0105**

#### **Amendments to the Oregon Electrical Specialty Code**

(1) The **Oregon Electrical Specialty Code** is amended pursuant to OAR chapter 918, division 8. Amendments adopted for inclusion into the Oregon Electrical Specialty Code are placed in this rule, showing the section reference and a descriptive caption. Amendments to the Oregon Electrical Specialty Code are printed in their entirety in Table 1-E.

(2) Effective April 1, **2015 the Oregon Electrical Specialty Code** Table 1-E is amended according to the following:

(a) Amend Section 110.26(C)(3) by adding a reference to Section 1008.1.10.1 of the Oregon Structural Specialty Code for listing and installation requirements for panic and fire exit hardware; and

(b) Amend Section 210.12(A) by deleting the reference to the statewide code interpretation for 210.12(A).

(3) Effective September 7, 2016 the Oregon Electrical Specialty Code Table 1-E is amended according to the following:

(a) Amend section 110.10 by adding an exception allowing a temporary service to be energized without demonstrating compliance with this section; and,

(b) Amend section 110.24(A) by adding an exception allowing a temporary service to be energized without demonstrating compliance with this section.

[ED. NOTE: Tables referenced are not included in rule text. [Click here for PDF copy of table\(s\).](#)]

### **Electrified Fixed Guideway Passenger Railway Systems General**

#### **918-305-0400**

#### **Scope**

(1) The rules contained in 918-305-0400 to 918-305-0700 shall apply to all electrified fixed guideway passenger railway systems and electrical products associated with such systems installed in the State of Oregon. Any related structure or system that is not an electrified fixed guideway passenger railway system shall be governed by the state building code as defined in ORS 455.010.

(2) Except as otherwise provided in these rules, the **National Electrical Code** as adopted by Oregon shall apply to all installations or repairs of all electrified fixed guideway rail systems. Installation shall be made by licensed electricians under ORS 479.630.

(3) Nothing in these rules shall be construed to:

(a) Alter or change the laws or rules applicable to persons licensed to perform installation of electrical systems or products;

(b) Exempt any electrical wiring used for general lighting or general power purposes, such as heating, cooling, ventilating, elevators or pumping equipment; or

(c) Exempt any feeder, service, switchboard, branch circuit panel board or standby power generator used in whole or in part for general building operation purposes.

[Publications: Publications referenced are available from the agency.]

## **918-305-0410**

### **Definitions**

(1) For the purposes of OAR 918-305-0400 to 918-305-0470, unless otherwise specified, the following shall apply:

(a) "Electrified Fixed Guideway Passenger Railway" means any train, trolley, car, streetcar or other vehicle that is designed to operate on fixed rails for public transportation of passengers and is powered by service voltage equaling or exceeding 600 volts AC and less than 100,000 volts AC;

(b) "Substation" means the building or facility that houses the system or systems; and

(c) "System" or "Systems" means the electrical equipment, components and products used for traction electrification, signals, communications and fare collection equipment, or any combination thereof, used for the operation of an electrified fixed guideway passenger railway and installed, or to be installed, on the load side of the electrical utility service point, including any medium voltage AC service and distribution equipment.

(2) Unless terms are specifically defined by these rules, terms shall have a meaning as defined by the **National Electrical Code (NEC)**, or if no **NEC** definition, their ordinary meaning.

[Publications: Publications referenced are available from the agency.]

## **918-305-0420**

### **Electrified Fixed Guideway Passenger Railway System Permits**

(1) The signature of a general supervising electrician or limited supervising electrician shall be required on each permit to aid inspections by the division and indicate responsibility under ORS 479.950.

(2) A permit is required prior to start of any electrical work. Expansion of work under a permit may be added to an existing permit prior to final inspection.

(3) A permit must be posted in a conspicuous place near the main electrical panel location. If there is no main panel installed, the permit shall be posted in a conspicuous place on the job site.



(4) An electrical permit issued to one person or firm is not transferable and shall not permit any other person or firm to perform any electrical work thereunder.

(5) Any permittee holding an unexpired permit may apply for an extension of the time within which work may be completed.

(6) Permit fees shall be charged at \$69 per hour including travel and office time with a minimum charge of one hour for any and all inspections performed on that permit.

### **918-305-0430**

#### **Requests for Inspection and Notice of Results**

(1) All persons who take out an electrical permit shall request an inspection within 24 hours of:

(a) The completion of any electrical installation intended to be covered or concealed or that is intended to be placed into service before the final electrical inspection; and

(b) The completion of all electrical installations for the job site covered by a particular permit.

(2) Except as provided in Section (3) of this rule, an inspecting jurisdiction, shall inspect within 48 hours of a written request for inspection unless the time for inspection is extended to a set date by mutual agreement. The 48 hours excludes Saturdays, Sundays and holidays.

(3) The inspecting jurisdiction shall inspect an installation at a remote location within a reasonable time of the request.

(a) For the purpose of this section, a "remote location" is:

(A) An inspection location that is more than 60 miles one way using the most direct route, measured from the closest of the inspector's station, inspection office or the inspecting jurisdiction's primary offices; or

(B) An inspection location that requires more than one hour of normal driving, one way, using the most direct route from the closest point mentioned in paragraph (A) of this subsection.

(b) For the purposes of this section, "within a reasonable time" means a response time that takes into account the time, distance and number of inspection requests, but shall not exceed seven consecutive calendar days including the date the request was received, unless the time for inspection is extended to a set date by mutual agreement. If the seventh calendar day falls on a weekend or holiday, this is extended to include the next business day.

(4) Reasonable procedures designed to provide actual notice of inspection results shall be used by all inspecting jurisdictions to notify the person requesting inspections, of the results of electrical inspection. "Reasonable procedures designed to provide actual notice" shall include posting at the job site and:

(a) Nothing more, when the installation is by an owner;

(b) Nothing more, when the installation is approved;

(c) Notification of any deficiencies on a specific permit by:

(A) FAX transmittal to the electrical contractor;

(B) Personal delivery to the electrical contractor or signing supervisor;

(C) Mailing; or

(D) Telephone followed by written notification;

(d) By written confirmation of inspection approval if a permit holder requests confirmation.

(4) If the inspection mentioned in Sections (1) and (2) of this rule involves a cover inspection, the work cannot be covered unless:

(a) Inspection clearance is given; or

(b) The request for inspection is in writing communicated to the inspecting jurisdiction, with notice that a cover inspection is involved, no extensions are agreed to and the maximum time for making the required inspection under Sections (1) and (2) of this rule are exceeded. For the purposes of this subsection:

(A) Written request includes a letter, telegram or FAX transmittal; and

(B) The burden of proof is on the person requesting the electrical inspection to prove that a written request was communicated.

#### **918-305-0440**

##### **Correction of Defects**

(1) Defects in electrical installations noted by the electrical inspector shall be corrected and an inspection request made within 20 calendar days of the date of actual notice of deficiency. For the purpose of this rule, actual notice is given when the inspecting jurisdiction does everything required in OAR 918-271-0020.

(2) If corrections cannot reasonably be made within the specified time in section (1) of this rule, or an interpretation or written appeal has been requested, the permit holder shall contact the inspecting jurisdiction and request an extension of time to a specified date or until deficiency is resolved.

(3) Requests for inspection and requests for extension may be communicated in any way. However, if challenged, the burden of proof is on the requester to document the request was in fact communicated. Responses may also be communicated in any way, but if challenged, the burden of proof is on the inspecting jurisdiction.

#### **918-305-0450**

##### **Electrical Products**

(1) The service equipment of a system substation powered by AC shall be certified by an electrical testing laboratory or field evaluation firm approved by the State of Oregon.

(2) The DC transformation, rectification and distribution equipment within a system substation, including the traction power transformer, shall meet **ANSI** standards where applicable. Compliance shall be demonstrated by the operating entity by:

(a) Furnishing the required **ANSI** test reports upon request;

(b) Demonstrating the equipment is certified by an electrical testing agency approved by this state; or

(c) Having the equipment otherwise approved by the division as meeting applicable standards. Where there are no applicable **ANSI** standards for such electrical products, an exception may be granted by the division. All DC distribution equipment outside a substation is exempt from product certification.

(3) All electrical products and components installed for signaling systems are exempt from electrical product certification, the **Electrical Specialty Code** and the **National Electrical Code**. The main power supplies shall be certified by an electrical testing agency approved by this state as meeting applicable **ANSI** standards or otherwise be approved by the division. Where there are no applicable **ANSI** standards for such electrical products, an exception may be granted by the division.

(4) All electrical products installed for communications systems or components to such systems are exempt from regulation under this rule, the **Electrical Specialty Code** and the **National Electrical Code**. The main power supply shall

be certified by an electrical testing agency approved by this state, or otherwise be approved by the division as meeting applicable **ANSI** standards. Where there are no applicable **ANSI** standards for such electrical products, an exception may be granted by the division.

[Publications: Publications referenced are available from the agency.]

**918-305-0460**

### **Grounding**

(1) System substations shall be installed with a grounding grid to limit touch and step potentials to safe levels as recommended by **IEEE 80**, "**Guide for Safety in Substation Grounding**." AC and low-voltage equipment shall be bonded or grounded to this grid, except as otherwise provided for the utility neutral or ground. Calculations and ground resistance test reports for every substation shall be furnished to the division prior to final inspection and maintained by the operating entity.

(2) The service neutral conductor is not required to be bonded to the substation grounding grid, provided that:

(a) A warning sign is posted on the service equipment to provide notice of potential hazards to technical persons who may have access to the service equipment. The notice shall clearly indicate that the neutral is isolated and not grounded;

(b) An isolation barrier is installed over the neutral termination within the service equipment; and

(c) The ground grid is installed in a manner that will demonstrate a ground resistance of 5 ohms or less when tested in accordance with **IEEE 81**, "**Guide for Testing Grounding Systems**."

(3) Free-standing signal system cabinets, bungalows or buildings shall be separately grounded by means of a driven ground electrode or electrodes to obtain ground resistance of 25 ohms or less when tested in accordance with **IEEE 81**.

(4) 60 Hz, 120-volt AC systems for accessory power or lighting located within station platforms or substations shall meet the requirements of the **Electrical Specialty Code**.

(5) All service equipment receiving service voltage from the utility shall be posted with warning signs to provide notice of potential hazards to technical persons who may have access to the panel. The notice shall clearly indicate that the neutral is isolated and not grounded.

(6) All fencing located within 10 feet of a metallic railway substation, building, ground grid, bungalow or other structure shall be constructed of nonmetallic material.

[Publications: Publications referenced are available from the agency.]

**918-305-0470**

### **Appeals**

(1) Appeals of decisions recommended by a deputy inspector in relation to the application of the **Oregon Electrical Specialty Code** shall be to the chief electrical inspector in accordance with OAR chapter 918, division 251, provided that no notice needs to be given to any local jurisdiction.

(2) The chief electrical inspector's determination may be appealed to the director who may consult with the Electrical and Elevator Board or other consultants on any technical issues deemed necessary by the director.

[Publications: Publications referenced are available from the agency.]

### **Plan Review**

**918-305-0500**

## **Standards for Electrical Plan Submissions**

A plan review shall be performed prior to the issuance of a permit. Fees shall be based on an hourly rate of \$69 per hour. The plan review under these rules shall be limited to the review of the electrified fixed guideway railway system(s) being installed. Other permits and plan reviews may be required by the jurisdiction administering the state building code as defined in ORS 455.010.

### **918-305-0510**

#### **Standards for Electrified Fixed Guideway Railway Plan Review**

A person performing electrical plan review shall be certified under OAR 918-311-0030 and do the following as a minimum when performing plan reviews:

- (1) Load Calculations. Check load calculations for appropriateness, completeness and accuracy.
- (2) Equipment. Check and determine if the equipment is:
  - (a) Suitable for the environment; and
  - (b) Properly sized and rated to meet the minimum code requirements.
- (3) Service and Feeder. Check service and feeder installations for code compliance related to:
  - (a) Wiring method;
  - (b) Conduit and box fill;
  - (c) Conductor size and ampacity rating;
  - (d) Clearances;
  - (e) Locations;
  - (f) Accessibility; and
  - (g) Service grounding conductor size.

### **918-305-0520**

#### **Time Limit for Plan Review**

(1) Plan reviews shall be approved or denied within ten working days from receipt of the complete electrified fixed guideway railway system plans by the jurisdiction requiring plan review. A reviewed set of plans shall be returned to the plan applicant:

- (a) If a plan is rejected, the deficiencies must be set out in writing. Upon resubmission of the necessary items, the ten-day requirement starts again;
- (b) If, because of the complexity or size of the installation, additional time beyond the ten working days is required to complete the review, the jurisdiction shall notify the person taking out the electrical permit of the reasons for the delay and the date the review will be completed.

(2) Nothing in this rule shall prohibit a jurisdiction from issuing a complete or partial permit before the entire plans and specifications are submitted or approved, provided adequate information is provided showing compliance with pertinent portions of the code. The permittee proceeds at risk, without assurance that the permit for the entire installation will be granted, or that corrections will not be required including those portions permitted.

## Inspectors

**918-305-0600**

### **Role of an Electrical Inspector When Inspecting Electrified Fixed Guideway Railway Systems**

An electrical inspector certified under OAR 918-281-0020 shall inspect all electrified fixed guideway rail installations as provided in these rules and provide public information on the meaning or application of an electrical code provision, but shall not lay out work or act as a consultant for electrical contractors, property owners or users.

## Enforcement

**918-305-0700**

### **Electrified Fixed Guideway Railway Systems -- Penalty Guidelines**

(1) Scope and authority. This rule sets guidelines for civil penalties for violations of any provision of the rules relating to electrified fixed guideway railway systems.

(2) "Continuing Offense" means violation of a code, rule or law on one or more additional days after having been notified that the act in question, or failure to act, is a violation.

(a) An additional day is any day, other than the first day, an offense takes place; however, defects noted by an inspector in an element of assembly or construction shall not be considered an offense if the defect is corrected and an inspection request made in no more than 20 calendar days.

(b) Notification is not dependent upon a penalty having been assessed.

(c) "Continuing Violation" has the same meaning as "continuing offense."

(3) Amount of penalty that may be assessed by the administrator:

(a) Not more than \$1,000 for each violation; or

(b) Not more than \$1,000 for each day of a continuing violation.

(4) In determining the penalty amount, any appropriate factors may be taken into account, including but not limited to, prior history of violations, extent to which corrective action was taken and the element of risk or danger to any person caused by the violation.

(5) Civil penalties may be reached by stipulation or consent and may be stayed in whole or in part according to the terms of a stipulation or consent order.

(6) Civil penalties may be assessed in addition to, or in lieu of, the suspension or revocation of a license, certificate of competency or similar authority issued by the division.

(7) Procedures:

(a) Civil penalties shall be brought by staff and assessed by the administrator.

(b) If a dispute concerning the application of the rules relating to electrified fixed guideway railway systems is appealed to the director under ORS Chapter 455 or 479, or:

(A) No civil penalty shall be sought or assessed for violation of the code provision that was appealed, until after the appeal or interpretation is resolved and if corrections are necessary, they are made in not more than 30 calendar days.

(B) Notwithstanding an administrative appeal, civil penalties can be brought or assessed for failure to obtain a permit if the issues on appeal do not involve the question of whether a permit was necessary.

(C) The obligation is on the person charged, or about to be charged, with a violation to advise of an appeal under this subsection.

(c) The division shall adopt operating procedures to promote equity and uniformity in proposing the amount and terms of civil penalties and conditions under which the penalties may be modified based on the circumstances in individual cases.

## **DIVISION 306**

### **QUALIFYING ELECTRICAL PRODUCTS FOR SALE OR DISPOSAL IN OREGON**

#### **General**

#### **918-306-0000**

##### **Scope and Authority for Rule**

(1) The rules in OAR 918-306-0000 to 918-306-0530 deal with the different ways to qualify an electrical product for sale, disposal and installation in Oregon.

(2) Authority for rules.

(a) ORS 479.540 authorizes partial and complete product exemptions;

(b) ORS 479.610 requires products for sale in Oregon to be certified; and

(c) ORS 479.730 authorizes creation of procedures for product certifications, administration and enforcement and field evaluation of electrical products.

Stat. Auth.: ORS 479.730

Stats. Implemented: ORS 479.540, ORS 479.610, ORS 479.730 & ORS 479.760

Hist.: BCD 19-1996, f. 9-17-96, cert. ef. 10-1-96; Suspended by BCD 12-2003(Temp), f. & cert. ef. 6-24-03 thru 10-31-03; BCD 15-2003, f. & cert. ef. 10-1-03

#### **918-306-0005**

##### **Standards for Product Evaluations**

The following standards shall be adopted for use when completing product evaluation:

(1) NFPA standards on list dated October 1, 2014, maintained by the division titled "NFPA Standards"; and

(2) UL standards on list dated October 1, 2014, maintained by the division titled "UL Standards."

Stat. Auth.: ORS 479.730

Stats. Implemented: ORS 479.730

Hist.: BCD 19-2002, f. 8-1-02, cert. ef. 10-1-02; BCD 23-2004, f. 12-15-04, cert. ef. 4-1-05; BCD 12-2014, f. 9-30-14, cert. ef. 10-1-14

#### **918-306-0010**

##### **Overview**

(1) ORS 479.610 establishes certification requirements for electrical products.

(2) The certification process generally involves inspection, testing and evaluation of the product. This is done through:

(a) Listing and application of listing label by a Nationally Recognized Testing Laboratory (NRTL);

(b) Special Deputy Evaluation and Certification. A product can be submitted to the division for certification under ORS 479.760. The special deputy procedures, rules and limitations are located in OAR 918-306-0510 to 918-306-0530; or

(c) Field Evaluation of Products. Field evaluation involves inspection, testing, evaluation and application of an evaluation label utilizing the 2014 NFPA Recommended Practice and Procedures for Unlabeled Electrical Equipment Evaluation.

[Publications: Publications referenced are available from the agency.]

### **Approval of Field Evaluation Firms**

#### **918-306-0340**

##### **General Requirement for Approval of Field Evaluation Firms**

Approval of a field evaluation firm requires:

(1) The firm to meet Oregon approval standards in these rules for each type of product for which it seeks approval and be approved according to OAR 918-306-0350;

(2) Examination and continued approval under OAR 918-306-0360;

(3) Payment of actual expenses of examination and evaluation; and

(4) The address and contact person representing the field evaluation firm be provided.

#### **918-306-0350**

##### **Checklist for Applicants**

The application for approval as a field evaluation firm shall require proof that the firm:

(1) Is an independent, third-party inspection company with no direct or indirect affiliation with manufacturers, suppliers or vendors of the products it evaluates;

(2) Is primarily engaged in the business of testing electrical products, equipment and systems;

(3) Does not engage in the promotion or design of the product being evaluated;

(4) Has sufficient diversity of clients or activity and financial net worth, so loss or award of an evaluation contract would not be a material factor in the financial well-being of the firm;

(5) Operates in accordance with generally accepted professional and ethical business practices; and

(a) Performs inspections, tests and evaluations required under the field evaluation programs in accordance with the referenced recommended practice in OAR 918-306-0010;

(b) Assures that reported values accurately reflect the inspection measurement data and final evaluation assessment; and

(c) Limits its work to that for which it has the competence and capacity to fulfill;

(6) Provides in its client agreement that it may report to appropriate jurisdictions information concerning safety hazards and failures to meet applicable product safety standards and to provide any information requested by regulatory agencies;

(7) Maintains a consumer complaint file dealing with written complaints and resolve complaints contesting test results and evaluations fairly and promptly;

(8) Is able to do all examinations, tests, evaluations and inspections for field evaluating and labeling of products for which it is approved;

(9) Maintains an independent relationship between its clients, client affiliates or other organizations so the firm's ability to issue reports and certifications objectively and without bias is not adversely affected;

(10) Has a quality control manual as provided in OAR 918-306-0380;

(11) Has personnel meeting the requirements of OAR 918-306-0390;

(12) Has test and measurement equipment meeting the requirements of OAR 918-306-0400;

(13) Maintains records according to OAR 918-306-0410; and

(14) Maintains an up-to-date library of all product safety standards as defined in OAR 918-306-0005 relating to each product being evaluated.

### **918-306-0360**

#### **Examination Schedule for Field Evaluation Firms**

(1) Approved field evaluation firms shall be examined under the following schedule:

(a) Firms initially approved shall be examined at the end of two years; and

(b) Firms in good standing shall be examined every three years.

(2) Firms examined shall make all arrangements and pay all fees in advance of the re-examination.

(3) Field evaluation firms shall provide submittals to the division for the initial examination and re-examinations according to the schedule in Section (1) for review of the company's field evaluation program including procedures, processes, equipment calibration program, personnel qualifications and training, controls and record keeping as specified in OAR 918-306-0340 to 918-306-0410. Approval of field evaluation firms shall be for all company locations.

(4) On re-examination, field evaluation firms shall be specifically examined for corrections in prior examinations and to determine whether the firm continues to meet Oregon requirements.

### **918-306-0380**

#### **Quality Control Manual**

The firm shall:

(1) Maintain a quality control system to assure accuracy and technical integrity;

(2) Have a quality control manual or a firm operations control manual with written procedures, references and information covering evaluation of each product for which approval is sought. The contents must be adequate to guide a testing technician or inspector through the required tests and inspection; and

(3) Keep an updated copy of all applicable manuals and standards at the work site for use by firm personnel and make manuals available to the division for review and audit.

### **918-306-0390**



## **Field Evaluation Firm Personnel**

- (1) Firm personnel shall be competent to perform the tests, examinations, reevaluations and inspections for field evaluation of each product for which approval is sought.
- (2) Staff competency shall be verified at least annually by observations and/or examinations by qualified persons selected by the manager having technical responsibility for the firm's field evaluation operations.
- (3) A training program to assure new or untrained staff will be able to perform tests and inspections properly and uniformly to the requisite degree of precision and accuracy shall be maintained.
- (4) The firm shall maintain records, including dates of training, observation or examination of personnel performance.

**918-306-0400**

## **Electrical Evaluation Equipment**

The firm shall calibrate, verify and maintain its test and measurement equipment used to conduct any field evaluation. It shall maintain:

- (1) A description of the procedures used in calibrating, verifying and maintaining the test equipment, including as applicable:
  - (a) Calibration and verification equipment or services used;
  - (b) Reference standards and materials used;
  - (c) Measurement assurance, corroborative references, or other programs in which the laboratory participates;
  - (d) Specified maintenance practices.
- (2) Calibration and verification records, including as applicable:
  - (a) Equipment description or name;
  - (b) Name of manufacturer;
  - (c) Model, style and serial number, or other identification;
  - (d) Equipment variables subject to calibration and verification;
  - (e) Statement of the instrument's allowable error and tolerances of readings;
  - (f) Calibration and verification schedules (intervals);
  - (g) Dates and results of last calibrations including "as received" results or verifications and schedule of future calibrations or verifications;
  - (h) Name of laboratory person or outside contractor providing the calibration or verification service;
  - (i) Traceability to National Institute of Standards and Technology or other standard reference authority as required.

**918-306-0410**

## **Records**

(1) The firm shall maintain reports and supporting data as records of evaluation activities associated with each product inspected and tested for which approval is sought. The firm shall make available to the division, upon request, a typical completed test or inspection report deleting the name of the client and installation location.

(2) Test and inspection reports shall be retained for at least three years and contain as applicable:

(a) Name and address of the evaluation firm;

(b) Pertinent dates and identification of tests or inspections;

(c) Name of client;

(d) An appropriate title;

(e) Identification of the test, inspection or procedure as specified for the field evaluation program;

(f) Known deviations, additions to or exclusions from testing, inspection and evaluation activities to be appropriate to new or innovative products not contemplated by the standard;

(g) Measurements, examinations, derived results and identification of test anomalies;

(h) A statement whether or not the results comply with the requirements of the standard;

(i) Name of the person completing the inspections, testing and evaluation and the signature of the person having responsibility for the report;

(j) Data generated during testing if not included in the test report, such as raw data, calculations, table, graphs, sketches and photographs;

(k) Records of its quality control checks and audits for monitoring its test work associated with its evaluation programs.

### **Certification through Special Deputies**

#### **918-306-0510**

#### **Special Deputy Certification Procedures**

When a product is accepted for special deputy certification under ORS 479.760:

(1) A division inspector determines if the product meets applicable minimum safety standards adopted by the board by:

(a) Examining the product and its components for compliance with applicable board-approved standards;

(b) Reviewing the assembly of labeled, listed, recognized or noncertified components for correct and applicable application, installation and circuit protection. Noncertified components are subject to the requirements of ORS 479.760(2); and

(c) Reviewing code compliance.

(2) A certification label is attached by the special deputy inspector on the product, or placement of a certification label is authorized.

#### **918-306-0520**

#### **Submission Requirements for Product Approval by Special Deputy**

Applications for:

(1) Product approval by a special deputy shall be accompanied by a specimen, sample or prototype, or advice on the location of a site-specific or use-specific product that was field assembled, and engineering data, wiring diagrams and other test data available to evaluate the product; and

(2) Certification of production produced in volume shall, in addition to section (1) of this rule, provide documentation of the quality control process proposed to be used in the manufacturing, assembly or production of the product.

#### **918-306-0530**

#### **Fees and Procedures**

(1) Applicants requesting product approval by special deputies shall pay hourly fees in OAR 918-309-0070 for "other inspections" or any successor rule. If it is determined by the division testing or evaluation through a laboratory or engineering firm is needed, the person requesting special deputy certification shall pay the company doing the testing or evaluation directly.

(2) Inspection fees shall be paid prior to inspection. If the exact amount cannot be determined in advance, an amount sufficient to pay the estimated fee shall be deposited with the division prior to inspection. Any portion of the deposit not required for the fee shall be refunded to the applicant upon written request.

### **DIVISION 308**

#### **ELECTRICAL PROGRAM MUNICIPAL ADMINISTRATION**

#### **Delegation and Oversight**

#### **918-308-0000**

#### **Electrical Delegation Rules**

(1) The rules in OAR 918-308-0000 to 918-308-0430 shall be referred to as the Electrical Delegation Rules.

(2) For the purposes of OAR chapter 918, division 308, unless otherwise specified, "third party" means a person or business required to be licensed under ORS 455.457.

#### **918-308-0010**

#### **Standards for Delegation**

Municipalities seeking initial delegation of an electrical program under ORS chapters 455 and 479 shall meet the requirements of OAR 918-308-0010 to 918-308-0180. Administration and enforcement of the electrical program shall only be delegated under ORS 479.855 to municipalities meeting the following minimum performance standards:

(1) The municipality shall be ready, willing and able to fully operate the electrical program on the effective date of delegation, July 1, except when a municipality is assuming the program from the division.

(2) The municipality shall create and maintain minimum services at least each weekday, excluding holidays as defined in ORS 187.010, to include electrical administrative, enforcement, and inspection services. Minimum administrative, enforcement, and inspection services include the "Ongoing Requirements" in the Electrical Delegation Rules.

(3) Operation of the program shall be financially feasible without unduly increasing short or long-term costs of electrical inspection services to the public, both in the areas delegated and, if applicable, the remaining program in the surrounding area. To be considered financially feasible, the municipality must:

(a) Demonstrate that feasibility to the satisfaction of the Board by providing:

(A) Projected electrical program revenue for the first two years of program operation, which is based on the program revenues collected for work in that municipality by the current service provider for the most recent four fiscal years preceding the date of application;

(B) Projected electrical program activity for the first two years of program operation, which is based on the permits issued for work in that municipality by the current service provider for the four most recent fiscal years up to the date of application;

(C) Projected electrical program expenses for the first two years of program operation which includes the plan review and inspection staff necessary to serve projected program activity; and

(D) Any other information as requested by the Board.

(b) Agree, as a condition of delegation, to indemnify the State for any and all claims related to any personal injury, death, or property damage arising from any act, omission, or error on the part of the municipality in the operation of the electrical program;

(c) If contracting with a third party to provide some or all of the services of the jurisdiction's electrical program, include a provision in its contract with the third party in which the third party agrees to indemnify the municipality and the State for any and all claims related to any personal injury, death, or property damage arising from any act, omission, or error on the part of the contractor in its work for the municipality's electrical program;

(d) Agree, as a condition of delegation, that it shall not adopt or implement any fee increases for the first two years of its initial operation term;

(e) Carry a minimum of \$1,500,000 per occurrence of insurance against tort liability and property damage arising out of acts, errors, and omissions in its operation of the electrical program; and

(f) If contracting with a third party to provide some or all of the services of the jurisdiction's electrical program, demonstrate that the third party carries a minimum of \$1,500,000 per occurrence of insurance against tort liability and property damage arising out of the acts, errors, and omissions in its work for the municipality's electrical program.

(4) The municipality shall demonstrate its ability to carry out the proposed electrical program.

(5) The requirements in the Electrical Delegation Rules are in addition to rules adopted by the department in OAR 918-020-0070 through 918-020-0220 for municipalities that apply to undertake inspection programs. When any provision of this section conflicts with or contains greater, more stringent, or more detailed requirements than another section of this division, this section shall control.

## **918-308-0020**

### **Check List for Application for Delegation of Electrical Program**

Except when a municipality requests responsibility for an electrical program administered by the division, a municipality seeking delegation or renewal of delegation of the electrical program shall:

(1) Comply with ORS 455.148 or 455.150; and

(2) File an application for delegation of the electrical program under the Electrical Delegation Rules, if the municipality is applying for delegation for the first time. The application shall:

(a) Be filed by the governing body of the municipality by October 1 prior to the year for which delegation is sought;

(b) Be based on a resolution of the municipality formally authorizing the application, and representing if the application is granted, that the municipality and all persons under it will comply with and be bound by the Electrical Delegation Rules;

(c) Include a proposed ordinance for administration and enforcement of the electrical program;

(d) Include an operating plan showing it meets the minimum standards for delegation in the Electrical Delegation Rules; and

(e) Note any differences in services or inspections from present services and inspections to be provided upon delegation.

(3) If the municipality is requesting its first renewal, it shall file relevant amendments or updates to its initial application and note this is its first renewal application.

(4) A municipality requesting delegation of the electrical program administered by the division must meet the requirements of ORS 455.148(7) and 11(c). Notwithstanding the timelines in 455.148(11)(c), a municipality assuming the program from the division must submit an assumption plan prior to administering the program.

### **918-308-0030**

#### **Check List for Proposed Ordinance**

The proposed ordinance establishing the municipal electrical program shall, among other things, adopt:

(1) The **Oregon Electrical Specialty** and **Oregon Residential Specialty Codes** by reference;

(2) Identical or compatible administrative provisions for the electrical program, including requirements for permits and authority to issue stop work and correction orders;

(3) Enforcement authority dealing with persons who start work without permits, fail to call for inspections, fail to make corrections, or otherwise violate the electrical requirements;

(4) Plan review requirements, if any;

(5) Minor label and bulk label procedures, as applicable;

(6) Temporary permit procedures; and

(7) Electrical fees.

[Publications: Publications referenced are available from the agency.]

### **918-308-0040**

#### **Check List for Operating Plan and Documentation**

An "operating plan" is the municipality's strategy for carrying out the goals and objectives of its electrical inspection program. "Strategy" means what, how, and when it will be done. The operating plan for a municipality assuming the electrical program from another municipality shall include:

(1) Strategies and written agreements, where relevant, for handling the transition from the losing municipality to applicant, including arrangements made for:

(a) Open permits and inspections ongoing as of July 1;

(b) Enforcement actions pending on July 1;

(c) Being fully operational on July 1, including staffing and training of permit and other personnel;

(d) Informing contractors and others of the changeover of inspecting jurisdictions, jurisdictional boundaries and requirements covering permits and procedures, inspection procedures, temporary permit procedures, plan review requirements, and fees; and

(e) Employees presently providing the electrical inspection services in the area covered by the application and how applicant will deal with ORS 236.605:

(A) If the matter was resolved by the applicant and losing jurisdiction, or with the jurisdiction and the inspector, provide a copy of the agreement and a statement by applicant's municipal counsel that all employee rights under ORS 236.605 were preserved;

(B) Any assertion that ORS 236.605 is not applicable to the transaction must be from applicant's municipal counsel.

(2) Strategies for electrical operations including:

(a) Inspectors and inspections:

(A) When will certified electrical inspectors be hired, how will applicant be operational by July 1, and how will inspectors be used to carry out the program;

(B) Where more than one inspection office is involved, how will inspectors be deployed;

(C) If the electrical program is offered jointly with another municipality or parts of another municipality, the agreement between municipalities, which ordinances will apply in the different areas, what offices and staff assignments will be made and what boundaries are involved; and

(D) If electrical services will be provided by a contractor, the operating plan to be followed including inspection, coverage of prolonged absences and administration and an agreement by the contractor to be bound by the Electrical Delegation Rules.

(b) Code interpretations. How will code interpretations be provided and when will electrical inspectors be available to provide them. This should cover each office;

(c) Conflict resolution. How will conflicts in electrical code interpretations between inspectors, or inspectors and the public, be resolved at the local level, what rights of appeal will the public be advised of, and how will conflicts of interest involving staff be resolved;

(d) Plan review. Will plan review be required and if so, which installations require plan review;

(e) Turn-around time. What will be the response time to inspection requests, what correction notices will be used, when will reinspection be required, and how and where will permit and inspection records be kept. If a contractor is used, will contractor records be made available at the municipality's offices in the event of a review of electrical operations. Attach related forms to be used;

(f) Enforcement. How and when will license checks and permit and code compliance be monitored, who will be involved and how will corrections be enforced. If the electrical inspector is not full time with the municipality, who will do license checks and other enforcement during the inspector's absence;

(g) Use of labels. What labels will be used and what internal procedures will be followed for minor installation labels and bulk labels if the municipality uses bulk labels;

(h) Temporary permits. What temporary permit procedures are adopted by the municipality to deal with OAR 918, division 309 or for days during a regular workweek when the municipality is not open for permit sales;

(i) Forms and records. What electrical permit application, appeal, and other forms will be used and where will formal permit and inspection records be kept. Attach forms;

(j) Accounting. How will electrical revenues, direct and indirect including interest earned, be segregated from other revenues and accounted for; how will payments from and charges to that account be accounted for; and if there are electrical surpluses, will these be carried over for the electrical program between fiscal years. How will overhead, including all administrative costs, be allocated;

(k) Projections. What is applicant's projection for electrical income and expenses for the fiscal period for which the application is filed and what assumptions, such as growth or increased inspections, are relied on. What are the projections for following periods if losses are projected for the first period. If losses are projected, how these will be funded. If a contractor is used, show projections for the municipality and the contractor.

(l) Contingency plan. A plan for "back-up" inspection services.

#### **918-308-0050**

##### **Effect on Losing Municipality**

(1) The division shall request the municipality losing inspection territory to provide:

(a) Projected revenue loss if the area involved is delegated, strategies for operations and advice if fee increases will be necessary to sustain its electrical program;

(b) Estimates of impact on staffing and continuity of services on remaining territory;

(c) Comments concerning assertions made by the applicant regarding enforcement and services presently provided; and

(d) Estimated monthly number of calls for electrical inspections and days per week required to serve the area.

(2) Responses from the losing municipality shall also be provided to applicant.

#### **918-308-0060**

##### **Review and Approval Process**

(1) The division shall, after review of the application, submit the application to the board for comments and recommendations, and grant or deny the application, or seek clarification or corrections. If additional information or technical corrections are necessary, comments may be provided and the municipality may be allowed to submit changes.

(2) If a complete and acceptable plan is not on file by January 1, the request for delegation shall be denied for that year. An extension may be granted if agreed to by the municipality, division, and county involved, if the municipality is a city.

(3) If a municipality whose authority was previously revoked reapplies for delegation of the electrical program, it shall, in addition to its application, show how past deficiencies were corrected and how they will be prevented in the future.

(4) A new delegation of authority shall be provisional for a year. A municipality receiving a provisional delegation shall amend its application, if necessary, to reflect desired changes. If no amendments are filed by January 1, the prior application shall be used. The division shall make site visitations as necessary to inform itself of how the electrical program is being administered and how the operating plan is being followed and file its report with the application. Once the application is renewed no new applications are necessary unless the delegation is revoked or yielded by the municipality.

##### **Follow-Through Requirements**

#### **918-308-0070**

##### **Filing of Municipal Ordinance and Review of Operations**

Within 60 days of delegation of the electrical program, the municipality shall file its electrical program ordinance, including adoption of local fees, with the division.

## **918-308-0080**

### **Updating by Existing Municipalities**

(1) If a municipality is unable to implement the program following delegation, the municipality shall notify the division explaining why and outlining how enforcement will be accomplished.

(2) Municipalities with ongoing electrical programs shall update their ordinances and operating plans, to reflect current operations according to the Electrical Delegation Rules.

### **Ongoing and Minimum Requirements**

## **918-308-0090**

### **Employment of Electrical Specialty Code Electrical Inspector**

(1) Each municipality shall employ at least one electrical inspector certified to inspect under the Oregon Electrical Specialty Code. This requirement may be satisfied by contracting with another municipality having a qualified inspector. Regardless of how the staffing is provided, the minimum operating requirements in these rules shall also be met.

(2) The municipality shall provide the division with names and qualifications of its certified inspectors for general electrical and for one- and two- family dwelling inspections.

[Publications: Publications referenced are available from the agency.]

## **918-308-0100**

### **Public Contact Procedure**

Each office having electrical inspectors shall publicize and post regular office hours providing at least one hour per day when electrical inspectors are available to take calls and provide interpretations.

## **918-308-0110**

### **Code Interpretation Dispute Resolution**

Municipalities shall provide:

(1) A reasonable method to resolve conflicts in code interpretation within the municipality; and

(2) Information concerning appeal rights to the division under ORS 479.853.

### **Permits and Permit Issuance**

## **918-308-0120**

### **Permit Sales Office**

A municipality shall establish at least one office within each noncontiguous service area where electrical permits can be obtained directly or have self-issuing or temporary permit procedures for all regular work days, which excludes weekends and holidays.

## **918-308-0130**

### **Electrical Permits**



Notwithstanding OAR 918-309-0010, which requires uniform permit forms and procedures, a municipality may include legal descriptions of the property where the electrical installation will be made or other information on the electrical permit application as long as the permit applicant is not required to provide the information.

#### **918-308-0140**

##### **Internal Operations**

The municipality shall have written handouts or instructions on:

- (1) Whether electrical plan review is required and when plan review is required; and
- (2) How the municipality will deal with the temporary permit requirements.

#### **918-308-0150**

##### **Plan for Inspection Operations**

The municipality shall:

- (1) Offer and provide inspection services within its service area excluding weekends and holidays, to meet the electrical 48-hour inspection notice requirements in the inspection section of the electrical rules.
- (2) Establish a written policy showing estimated response time for inspection requests, how and when correction notices will be used, when reinspection will be required, and how and where permit and inspection records will be kept.
- (3) Provide inspections normally between 7 a.m. and 6 p.m. unless otherwise agreed to by the inspecting authority and the permit holder.

#### **918-308-0160**

##### **Plan for Compliance**

- (1) The municipality shall have a plan on how electrical permit and code violations will be handled. It shall have an ordinance allowing enforcement actions for violations.
- (2) The plan shall describe in detail how the municipality will carry out compliance actions, including the number of staff members who will perform investigations, qualifications of those staff members, number of days per week those staff members will conduct investigations, and a description of how those staff members will conduct checks for electrical licensure on jobsites, including how jobsites will be identified and selected for investigation.
- (3) The municipality shall report data as required by the Board and shall annually report compliance actions taken pursuant to the enforcement of the electrical inspection program.

#### **918-308-0170**

##### **Accounting Plan**

The municipality shall have an accounting system which segregates electrical revenues, shows the source of electrical income including interest earned on held funds, shows charges, and where electrical revenues were spent. If overhead charges to the inspecting organization are based on allocations, the allocations must be supportable under general accounting principles.

#### **918-308-0180**

##### **Formation of Municipal Program**

(1) Municipalities combining electrical programs shall, to the extent practicable, centralize administration and use similar procedures, regulations, permit application, and permit fees within the area served.

(2) Nothing in this rule prevents a municipality from being served by more than one combination of municipalities.

### **Maintenance and Amendment of Plans**

#### **918-308-0190**

##### **Review and Update of Plans and Ordinances**

Each municipality shall annually review and update its electrical ordinance and operating plan to meet the requirements of the Electrical Delegation Rules.

#### **918-308-0200**

##### **Amendment of Plans by All Municipalities with Electrical Programs**

All municipalities providing electrical inspections shall submit:

(1) Ordinance amendments and intended effective dates and change of electrical fees, regardless of whether fees are adopted by ordinance, at least 45 days prior to the adoptive date.

(2) Amendments and intended effective dates regarding the operating plan at least 30 days prior to implementation.

#### **918-308-0210**

##### **Automatic Renewal**

(1) A municipality finishing its first term of operations under its delegation must reapply for delegation the second term as provided in the Electrical Delegation Rules.

(2) Subject to OAR 918-020-0070 through 918-020-0220, once a municipality receives a renewal of delegation when it provides subsequent timely notice prior to January 1, as required by ORS 455.148 and 455.150, the electrical delegation is continued without further action by the division, unless during the interim the division revokes the delegation.

### **Program Review**

#### **918-308-0300**

##### **Review of Municipality Program**

(1) The division shall conduct a comprehensive review of each municipality delegated administration of the electrical program at least every five years.

(2) A comprehensive review shall be conducted by a minimum team of:

(a) One local building official;

(b) One electrical contractor or contractor's representative;

(c) Division chief electrical inspector or **Oregon Electrical Specialty Code** inspector if the chief inspector is unable to serve; and

(d) One division representative;

(e) Optionally, a general contractor registered with the Construction Contractors Board, if nominated by the municipality involved;

(f) Optionally, additional persons, depending on the size and complexity of the municipality involved, as determined and selected by the division.

(3) A single-purpose review shall be conducted by the division chief electrical inspector or designee and others selected by the division if the operations of the municipality are at variance with its approved operating plan.

[Publications: Publications referenced are available from the agency.]

### **918-308-0310**

#### **Notice of Review**

(1) The division shall notify a municipality 60 days in advance of a comprehensive review.

(2) The division shall notify a municipality at least 48 hours in advance of a single purpose review.

### **918-308-0320**

#### **Initial Interview**

(1) The division shall conduct an initial interview with the building official or designated representative as the first step in the comprehensive review process.

(2) The initial interview shall give the building official or representative an understanding of the manner in which the review will be performed.

### **918-308-0330**

#### **Review of Records**

(1) The municipality shall maintain and make records available for division review. For the purpose of this rule except where the context requires otherwise, a "previous year" is the last full fiscal year for the municipality. The required records are:

(a) Electrical permits issued during the previous two years;

(b) Minor installation labels issued during the previous year;

(c) Inspections performed by electrical inspectors during the previous fiscal year;

(d) Written code interpretations made during the previous two years;

(e) Written or recorded complaints about the program lodged with the municipality and disposition of the matters for the previous fiscal year; and

(f) Records of revenues from electrical permits, inspections, and penalties, and expenses incurred in the administration and enforcement of the electrical program for the previous fiscal year.

(2) The municipality shall report the number of electrical, structural, mechanical, plumbing, and manufactured structures set-up permits issued, the number of minor labels issued, and the number of electrical inspections performed by the municipality during the previous fiscal year.

(3) The program review team:

(a) Will review the operating plan for program delegation submitted to the division under these rules to determine if the municipality is following the plan;

(b) May require additional financial information if municipal records do not satisfactorily show application of permit and inspection funds, including interest, to the electrical program or shows charges not related to the electrical program.

#### **918-308-0340**

##### **Inspection Review**

The division shall reinspect jobs previously inspected by municipality inspectors and accompany municipality inspectors on inspections.

#### **918-308-0350**

##### **Inspector Performance Ratings**

(1) During a comprehensive review, the division shall review selected electrical inspections.

(2) The reviewer shall assess points for any electrical violation not noted by the inspector on the following basis:

(a) Ten points for each mandatory item in OAR Chapter 918, Division 271;

(b) One-tenth point for each secondary item in OAR Chapter 918, Division 271;

(3) An individual performance rating for selected municipality inspectors shall be determined by dividing the total points assessed for all inspection items missed by the number of inspections reviewed.

#### **918-308-0360**

##### **Program Inspection Rating**

An inspection rating for the municipality program shall be determined by dividing the combined points assigned for all inspections reviewed pursuant to these rules by the total number of inspections reviewed.

#### **918-308-0370**

##### **Exit Interview**

(1) Immediately following completion of a comprehensive review, the division shall conduct an exit interview with the building official or designated representative.

(2) The exit interviewer shall provide:

(a) The general result of the review;

(b) Formal notification of any items requiring immediate attention; and

(c) Specific information to the extent such is available.

#### **918-308-0380**

##### **Program Report**

The division shall provide the municipality a written report of its findings within 60 days of completion of a comprehensive review or within 15 days of completion of a single-purpose review.

## Deficiency Citation

### 918-308-0400

#### Deficiency Citation

(1) Notice of deficiencies shall only be issued following a comprehensive or single-purpose review of the municipal electrical program.

(2) A notice of deficiency shall be served on the building official by certified mail when:

- (a) The municipality has an inspection rating of over 6.0;
- (b) Any inspector has an inspection rating over 8.0;
- (c) The municipality fails to provide minimum services as outlined in its plan; or
- (d) The municipality fails to comply with the the Electrical Delegation Rules.

(3) Within 30 days from the date of receipt of the deficiency notice, the municipality shall file with the division a written proposal for correcting the deficiencies noted in the audit report. The proposal shall include:

- (a) Specific methods by which the municipality intends to correct the deficiencies; and
- (b) A proposed timeline for completing the corrections.

(4) The division shall review the proposed correction plan and notify the municipality in writing of any items in the plan found to be unsatisfactory. The division shall set a date for submission of the final correction plan.

(5) Subject to OAR 918-308-0410 providing for a contested case hearing, if no objection is made, it will be presumed that the municipality agrees to the terms of the deficiency notice or correction requirements.

### 918-308-0410

#### Appeal of Deficiency Citations

A municipality aggrieved by a notice of deficiency or the denial of proposed correction procedures may ask for a contested case hearing under ORS Chapter 183 and the Attorney General's Model Rules of Procedure.

### 918-308-0420

#### Notice of Program Revocation

(1) A municipality shall be considered to be failing to comply with standards adopted by the board or as not effectively carrying out duties assumed by the municipality under [ORS 479.855](#) if it:

- (a) Receives an inspection rating that exceeds 6.0 and fails to submit an acceptable correction plan; or
- (b) Fails to submit a corrective plan after receiving a notice of deficiency.

(2) The provisions of section (1) of this rule are not intended to limit the conditions when the division can seek revocation under ORS 479.855.

### 918-308-0430

#### Appeal of Program Revocation

A municipality served with a notice of proposed program revocation under [ORS 479.855](#) may ask for a contested case hearing under ORS Chapter 183 and the Attorney General's Model Rules of Procedure.

## DIVISION 309

### ELECTRICAL PERMITS AND FEES

#### 918-309-0000

#### Electrical Permits

(1) Except as provided by OAR 918, division 282, dealing with restricted energy transactions, limited maintenance specialty contractor-HVAC/R, and registered telecommunications service provider, the signature of a signing supervising electrician or limited supervising electrician must be required on each permit to aid inspections by the division and indicate responsibility under ORS 479.710. Any person providing false or incorrect information or false or an incorrect signature to obtain a permit may be subject to compliance action by the board.

(2) The following may purchase electrical permits:

(a) Electrical contractors; and

(b) Registered telecommunications service providers (TSP) as defined in ORS 759.005, including competitive carriers, competitive local exchange carriers (CLEC) and telecommunications utilities. These telecommunications service providers are listed as such by the Public Utilities Commission (PUC).

(3) A permit is required prior to start of electrical work. See OAR 918-309-0080 for temporary permit criteria. Expansion of work under a permit may be added to an existing permit prior to final inspection.

(4) A permit must be posted in a conspicuous place near the main electrical panel location. If there is no main panel installed, the permit must be posted in a conspicuous place on the job site.

(5) An electrical permit, other than a restricted energy electrical permit as provided in OAR 918-309-0400, issued to one person or firm is not transferable and may not permit any other person or firm to perform any electrical work thereunder.

(6) Any permittee holding an unexpired permit may apply for an extension of the time within which work may be completed.

(7) Permits issued by an inspection jurisdiction under the provisions of the Oregon Electrical Specialty Code and these rules expire and become null and void if the work authorized by the permit is:

(a) Not started within 180 days from the date of permit issuance; or

(b) Suspended or abandoned for a period of 180 days after the work is started.

(8) Corrections to electrical installations must be completed regardless of 180-day suspension or abandonment of work. All corrections to electrical installations must be completed within 20 calendar days of notice of deficiency. See OAR 918-271-0030 for requirements.

(9) In addition to other signing supervising electricians, the following are authorized to sign permits:

(a) A person whose qualifications are relied upon for licensing under OAR 918-282-0140 is a "supervisor" under ORS 479.560 and can sign for electrical permits or labels for work under a limited maintenance specialty contractor-HVAC/R license;

(b) A Class "A" or Class "B" limited energy technician can sign permits or labels for 100 volt-ampere or less electrical installations performed by those licensees;

(c) A "supervisor" as used in ORS 479.630 who can sign restricted energy permits includes:

- (A) A Class “A” or “B” limited energy technician when the electrical installation is within the scope of the person’s license;
- (B) Persons whose qualifications are relied upon for the issuance of a restricted energy electrical contractor license under OAR 918-282-0060; and
- (C) Any other electrical licensee authorized to sign a permit provided the work is within the scope of the person’s license.

(10) No electrical permit is required:

(a) To replace light bulbs, fluorescent tubes, or approved fuses, or to connect approved portable electrical equipment to permanently installed and properly wired receptacles;

(b) For experimental electrical work or testing of electrical products in testing laboratories of electric shops, educational institutions, industrial plants, or recognized testing laboratories;

(c) For those minor electrical installations for which the board has authorized an installation label;

(d) To install components exempted by OAR 918, division 261;

(e) To replace an existing garbage disposal, dish washer, electric water heater or similar appliance of 30 amps or less, single phase; or

(f) To install cord and plug connected Class 2 irrigation control systems.

(11) Unless noted otherwise in these rules, a permittee is entitled to two inspections for each electrical installation or portion thereof for which a permit fee is assessed. The total number of inspections under a permit are aggregated and used to inspect any of the installations under the permit. A permittee is considered to have received an inspection only when the permittee has requested and received an inspection from the municipality. Inspections are counted based on a single visit, in person or through an approved electronic inspection method, to a job site. See examples below:

**Example 1:** A permittee installing a service (OAR 918-309-0040), two feeders (918-309-0040), and ten branch circuits (918-309-0060) is entitled to eight inspections.

Permit Type(s): Installation of service, feeders (2) and branch circuits (10)

Inspections: One Service x 2 inspections/installation = 2 inspections

Two Feeders x 2 inspections/installation = 4 inspections

Ten Branch Circuits x 2 inspections/20 circuits = 2 inspections

(or portion thereof)

Total inspections 8 inspections

**Example 2:** A permittee installing a service, two feeders, and ten branch circuits requests an inspection from the municipality to inspect the service and feeders. The inspector arrives the next day and inspects the service and feeders. The permittee has received one inspection, and is entitled to seven further inspections. The remaining inspections may be used to inspect any of the installations under the permit.

[Publications: Publications referenced are available from the agency.]

## 918-309-0010

### Electrical Permit Form and Format

The division has adopted a:

(1) Standardized statewide electrical permit application format; and

(2) Uniform statewide method for calculating permit fees:

(a) Fees can only be charged for the categories and under the procedures and requirements established in OAR chapter 918, division 309.

(b) The fees set out in OAR 918-309-0070 are for state permits. Local jurisdictions may set different fees as authorized by ORS 479.845.

(c) The fees established for the various categories adopted in this rule shall be inserted in the permit application form for local jurisdictions.

(d) The surcharge required by ORS 455.210 and 455.220 shall be added to the fees established.

### **918-309-0020**

#### **State Electrical Permit Fees**

The Building Codes Division electrical fees and method of computation of electrical permit fees are established in OAR 918-309-0030 to 918-309-0070.

### **918-309-0025**

#### **Phased Permitting**

(1) During the plan review process, an electrical contractor may request a complete or partial permit before the entire plans and specifications are submitted or approved, if adequate information is provided showing compliance with pertinent portions of the code. The permittee proceeds at his or her own risk, without assurance that the permit for the entire installation will be granted, or that corrections will not be required, including those portions permitted. The partial permit shall allow the electrical contractor to proceed with work pertaining to the electrical system of the structure.

(2) Any inspections performed by the local jurisdiction on the site or of the ground work shall be counted toward the number of electrical inspections allowed by the full permit once plan review is complete and the permit is issued.

### **918-309-0030**

#### **Permits for Residential Wiring**

(1) The permittee is entitled to four inspections for a one-family dwelling, and eight inspections for a two-family dwelling. Fees are based on square footage for each one- or two-family dwelling (including attached garage) for residential wiring as follows:

(a) Wiring of not more than 1,000 square feet, \$106;

(b) Each additional 500 square feet or portion thereof, \$19.

(2) Permit fee for Manufactured Home or Modular Dwelling including service or feeder to unit served, \$63.

(3) Permit fee for Limited Energy:

(a) One and Two Family Residential, \$25. This permit fee covers all limited energy type systems installed in the building when installed at the same time by the permittee. A permit holder working under a residential wiring permit calculated under section (1) of this rule is not required to obtain a limited energy permit to install wiring for doorbells, garage door openers and heating and air conditioning systems.



(b) Multi-family residential, \$45. This permit fee covers all limited energy systems installed in the building, except protective signaling as defined in ORS 479.905(5). The fee is assessed once per floor, regardless of the number of dwelling units on each floor. The permittee is entitled to two inspections per floor.

(c) Multi-family residential protective signaling, \$63. This permit fee includes all protective signaling systems installed in the building as defined in ORS 479.905(5). The fee is assessed once per floor, regardless of the number of dwelling units on each floor. The permittee is entitled to two inspections per floor. See example below. [ED. NOTE: Example available from the agency.]

(4) Items Covered in this Section:

(a) When computing the area, include the square footage of attached garages;

(b) The residential fee covers services, feeders and all branch circuits on and inside each dwelling unit and includes garages that are attached to the dwelling unit, including the limited energy systems for the doorbell, garage door opener, and the heating and air conditioning control wiring in one and two family dwellings only;

(c) New Construction. Use this fee in connection with new construction;

(d) Remodels, Additions, Alterations or Repairs. Compute the fee under this section using the square footage of the area remodeled or added, then compute the fee under OAR 918-309-0060 "branch circuits." Use the lower fee;

(e) Reconnection only. See OAR 918-309-0040(9).

(5) Application of Fees:

(a) One- or Two-Family Dwellings. To calculate the fee for a one or two-family dwelling, obtain the square footage of each unit. Include the garage if it is attached to any unit. There is an exception in subsection (c)(A) of this section if a detached garage or accessory building is built at the same time as the dwelling unit. Compute the fee using the procedure shown for each dwelling unit. Record the number of units under "Items" in the permit and multiply this with the fee shown;

(b) Multi-family Building. In the case of a multi-family building containing three or more apartments, determine the square footage of the largest apartment in the building and compute the fee. For each additional apartment in the building, a fee of one-half of the first unit fee must be used. The house panel fee for general service equipment such as apartment unit lights, washer-dryer, outdoor lighting and the like is calculated using OAR 918-309-0060(1) services and feeders, and OAR 918-309-0060(2)(b) dealing with branch circuits. The permittee is entitled to four inspections per floor;

(c) Detached Garages. Detached garages and accessory buildings are not considered part of the residential unit. The permit fee is based on the method of supplying power to the unit:

(A) Exception — Simultaneous Construction with Single Branch Circuit. If the structure receives power through a branch circuit from the house panel with a single branch circuit, include the square footage of the garage with the living unit, provided the garage is built at the same time as the dwelling unit. If separate construction is involved, use the fee for branch circuits under OAR 918-309-0060;

(B) Sub-Panel. If the detached structure has a sub-panel powered from the house service, the fee is computed using the "feeder" section, OAR 918-309-0040 and branch circuits, OAR 918-309-0060(1);

(C) If the detached structure is built first, the fee is based on service, feeder and branch circuits;

(D) Separate Service. If the structure has a separate service, the fee is based upon service, feeder and branch circuits.

(d) Reconnect Only. See OAR 918-309-0040(9);

(e) House Moves. In most instances, the fee will only involve a service reconnect:

(A) If changes to the service are made, a new service charge is made under OAR 918-309-0040;

(B) For each new, extension or alteration of branch circuits, use OAR 918-309-0060;

(C) If the building was moved in sections and there is no upgrading of the service, use the fees in this section using square footage.

(f) Manufactured Dwellings and Modular Homes. Manufactured dwellings and modular homes usually require a service and a feeder from the service to the home. In mobile home parks, usually only the feeder is necessary because the service already exists. Where there is a detached garage or accessory building, refer to subsection (5)(c) of this rule dealing with detached structures.

[ED. NOTE: Example referenced are available from the agency.]

#### **918-309-0040**

#### **Permit for the Installation, Alteration, or Relocation of an Electrical Service or Feeder**

Permanent service or feeder.

(1) Each service or feeder of 200 amps or less, \$79.

(2) Each service or feeder in excess of 200 amps but not more than 400 amps, \$94.

(3) Each service or feeder in excess of 400 amps but not more than 600 amps, \$156.

(4) Each service or feeder in excess of 600 amps but not more than 1,000 amps, \$204.

(5) Each service or feeder over 1,000 amps or volts, \$469.

(6) General Procedure for a Separate Service. If a structure has a separate service, the fee is based on the service size (amps), plus feeders, if any, plus the number of branch circuits.

(7) Fees in this rule are in addition to any other fees required under ORS 479.510 to 479.855.

(8) Where the service constitutes a load center, the permit fee must be calculated the same as any service panel. The charges must be for the size of the service and the branch circuits or feeders to the load center.

(9) Reconnect Only. This rule applies to reconnection where the service was disconnected for repair or by the serving utility company and no change in service capacity or location is made. This allows the replacement of a meter base, a service mast, a service panel, a subpanel, the feeder to one of the items listed or the repair or replacement of damaged service mast and meter on the exterior of a building. The \$63 fee covers one inspection for this item.

(a) If a major violation of the service exists, a new service and new permit fee is required;

(b) It may also be used for house moves. If a major violation of the code or a dangerous condition exists in a house move, repair or replacement and a permit are required.

(10) Fees charged under this rule may not be charged both for amps and volts.

(11) In commercial and industrial buildings, separately metered premises that are divided from each other by walls are classified as a separate building for the purpose of computing permit fees. A different permit is required for each separate building:

(a) Master Service. For buildings with a master service, such as an office building, compute fees by the service (amps), the feeders (amps) and branch circuits. If there is more than one service, each service is charged separately along with its related feeders and branch circuits;

(b) Single Occupant. In single occupant buildings, the fee is based on the service (amps), the number of feeders (by amps) and branch circuits;

(c) Tenants. Where tenants are involved, the shell receives a permit for any service, feeders and branch circuits that involve only the shell. Each tenant space requires a separate permit. Each tenant space is charged for service (amps), the number of feeders by amps and branch circuits.

#### **918-309-0050**

##### **Permits for the Temporary Service or Temporary Feeder**

(1) Permit for each temporary construction service or temporary feeder for light and power:

(a) 200 amps or less, \$63;

(b) 201 amps to 400 amps, \$86;

(c) 401 to 600 amps, \$125;

(d) Temporary service or temporary feeder of over 600 volts or amps use fee schedule in OAR 918-309-0040(4), (5) and (6).

(2) OAR 918-309-0040(7) to (12) are applicable.

(3) The fee used in this section includes the branch circuits.

#### **918-309-0060**

##### **Branch Circuits**

Branch circuits, alterations or extensions.

(1) The fee for branch circuits with purchase of service or feeder fee for each branch circuit, \$4.

(2) The fee for branch circuits without purchase of service or feeder fee:

(a) The first branch circuit, \$54;

(b) Each additional branch circuit, \$4.

(3) For signs and outline lighting refer to OAR 918-309-0070(2).

(4) The permittee is entitled to two inspections for every 20 branch circuits or portion thereof.

#### **918-309-0070**

##### **Miscellaneous**

Special fees are established for the following items in lieu of fees set under OAR 918-309-0060.

(1) Permit for each domestic water or sewage pump, irrigation pump or circle and its associated controls, excluding service fee, \$63;

(a) Single Circuit. If a well pump or sewage pump and its associated controls are serviced from the house main service, and the pump is installed and ready for inspection, no additional fee is charged. If the pump is installed by another contractor or later, an additional pump fee and a new permit is necessary under this part;

(b) Feeder. If the well has a subpanel, there is a fee for the feeder from the main service to the subpanel and a fee for branch circuits. If the pump is installed later, or by another contractor, a new permit and pump fee is required;

(c) Separate Service. If the well has separate service the fee is based on the service (amps) and the number of branch circuits. If the pump is installed later, or by a different contractor, a new permit and pump fee is required.

(2) Permit for the installation of each electrical sign or outline lighting system supplied by a single branch circuit, \$63.

(3) Each limited energy circuit panel, one or more air-conditioning or heater thermostats installed at a job site, multiple circuit terminal board or installation or extension of limited energy circuits, \$63.

(4) The permit fees in this rule, except as noted in subsection (11), are for up to two inspections and are charged in addition to other fees for electrical service.

(5) Note the exception under OAR 918-309-0030(3)(a)(A) dealing with residential limited energy.

(6) Installation of signal circuits in buildings over three floors. Each floor in excess of three is considered a separate panel for the purpose of calculating fees.

(7) Fees for inspections in excess of those allowed under OAR 918-309-0030 through 918-309-0060, \$55.

(8) Fees for other inspections not covered by this rule. All inspections not provided in this rule must be charged at \$86 per hour including travel and office time with a minimum charge of one hour.

(9) Fees for Bulk Labels:

(a) Bulk labels sold only to electrical contractors, \$25 per label;

(b) Contractors working under a bulk label system are billed for any difference in the cost of the bulk label and the cost of the permit fees required in this rule.

(10) The fee for swimming pools is permitted as provided in OAR 918-309-0040 and 918-309-0060. The inspection of the grounding of the pool is included in the permit for the pool and counted as one of the number of allowed inspections under the permit.

(11) Permit fees for renewable electrical energy systems. For renewable electrical energy permit applications, see OAR 918-309-0410. For repairs and maintenance of renewable electrical energy systems, see OAR 918-309-0220(5).

(a) (A) 5 KVA or less: \$79;

(B) 5.01 KVA to 15 KVA: \$94;

(C) 15.01 KVA to 25 KVA: \$156.

(b) For wind generation systems in excess of 25KVA:

(A) 25.01 KVA to 50 KVA: \$204;

(B) 50.10 KVA to 100 KVA: \$469;

(C) For wind generation systems that exceed 100 KVA the permit fee is calculated in accordance with OAR 918-309-0040.

(c) For solar generation systems in excess of 25KVA:

(A) Each additional KVA over 25 will be charged an additional \$6.25 per KVA.

(B) The permit charge will not increase beyond the calculation for 100 KVA.

(d) Permits issued under this sub-section include three inspections. Additional inspections will be billed at an hourly rate.

(12) Work Commencing before permit issuance. Any person who commences electrical work on a building or structure before obtaining the necessary permits will be subject to an investigative fee. The amount of the investigative fee is the average or actual additional cost of ensuring that a building or structure is in conformance with the Oregon Electrical Specialty Code and is in addition to the required permit fees.

#### **918-309-0075**

##### **Provision of Services**

(1) For any project requiring plan review, once the initial permit and plan review fees have been paid, a building official, inspector, or plans examiner may not stop work on-site or otherwise delay or refuse to provide inspection services in order to compel payment of outstanding fees.

(2) Stop-work orders may only be issued for permitted projects for violations of the minimum safety standards.

(3) Any violation of these rules is a failure to administer a building inspection program for the purposes of ORS Chapters 455 and 479, and may result in sanctions including but not limited to civil penalties and actions on certifications and other division approvals.

#### **918-309-0080**

##### **Temporary Electrical Permit Rule**

(1) Authority and Scope of Rule. This rule:

(a) Is required by ORS 479.550;

(b) Applies to the Building Codes Division and all municipalities that enforce the electrical laws;

(c) Can only be used by a licensed electrical contractor.

(2) Definitions. For the purposes of this rule only, the following definitions are adopted:

(a) "Emergency Electrical Work" is an acute, unplanned and immediate need for electrical repair or replacement involving an existing electrical installation or product or both;

(b) "Licensed Electrical Contractor" or "Contractor" means any type of electrical contractor licensed by the Building Codes Division;

(c) "Jurisdiction" means the Building Codes Division, a municipality enforcing the electrical laws or municipality issuing electrical permits having authority over the electrical work;

(d) "Unanticipated Electrical Work" is electrical work, including a new installation, requested by a customer where the timing of a request for commencement of work does not reasonably allow the contractor time to obtain an electrical permit before starting the work:

(A) This includes, but is not limited to, additional work assigned at the work site as well as preassigned work when the customer requests service at an unplanned date or time;

(B) This does not include electrical work where a permit already exists covering all or part of the work.

(3) Temporary Permit. A jurisdiction shall recognize the existence of a temporary electrical permit when the contractor encounters "emergency electrical work" or "unanticipated electrical work," complies with section (4) of this rule and does electrical work.

(4) Temporary Permit Procedures. The contractor must comply with subsection (a) of this section and with one of the requirements of subsections (b) to (d) of this section:

(a) Prior to commencing work, the contractor shall fill out a standard form electrical permit application for any jurisdiction, identify the proper jurisdiction, identify the contractor, and provide the electrical contractor and Construction Contractors Board identifications:

(A) The standard permit application form covering electrical installations can be used in any transaction, except the fees shall be that of the jurisdiction where the work is done;

(B) A restricted energy electrical application can only be used if the work is strictly covered by that permit;

(C) The temporary permit must be signed by the journeyman or technician that does the work or by a supervising electrician;

(D) A copy must be posted at the job site marked "temporary permit," showing the starting work date and the ending date of the temporary permit. The ending date shall not be more than seven days from the starting date.

(b) FAX a copy to the jurisdiction and mail the original with proper payment to the jurisdiction all within five days of the start of the work;

(c) If the jurisdiction does not have a FAX machine, telephone the jurisdiction informing it of the time, place and type of work that was started within 24 hours of the opening for business by the jurisdiction, and mail a copy of the completed application and payment within seven days of the start of the work; or

(d) If the jurisdiction has a recording device, call in the time, place and type of work within 12 hours of the start of work and complete the electrical permit application and payment within seven days of the start of the work.

(5) If bulk label or minor label procedures are appropriate for the electrical installation and are allowed by the jurisdiction, those procedures may be followed in lieu of the requirements of this rule.

(6) An inspection shall be requested at any time following the temporary permit procedures. A jurisdiction may, but is not required to, require permit fees before providing an inspection.

(7) Burden of Proof and Assumed Risks. The contractor who uses this rule has:

(a) The burden of proving that an "emergency" or "unanticipated electrical work" existed which justified using this rule; and

(b) Assumes all risks that are inherent with starting electrical installations before review and approval by the jurisdiction.

(8) In addition to civil penalties that may be assessed for violation of this rule, the use of this rule may be suspended, restricted or denied to a contractor who violates this rule more than once.

**918-309-0090**

### **Rules for Electrical Contractors Desiring to Make Electrical Installations Under Working Permits**

Any electrical contractor who elects to use a working permit authorized by ORS 479.840 shall:

(1) Submit to the division a \$2,000 corporate surety bond or a cash bond on a division-approved form guaranteeing the payment of all fees provided for under ORS 479.510 to 479.850.

(2) Apply to the division for the working permit and affix at the job site before any electrical installation is commenced.

(3) Submit the supplementary permit application and the total permit fee as soon as the fees for that job can be determined and in no case, more than three months from the date work commenced on the job. Provided, that in special long term construction projects such as high rise buildings and large industrial buildings, where the electrical contractor has procured the prior approval of the division, a new working permit may be issued for three months for the same building if all fees for the electrical installations under the working permit issued for the preceding three-month period have been paid in full.

(4) Agree that the aggregate amount of unpaid fees outstanding at any time shall not exceed the amount of the bond. No working permit shall be issued and any existing working permit shall become null and void when fees totaling over \$2,000 are owed.

(5) Agree that if any unresolved dispute arises as to the amount of fees due on a particular installation, job, or in the aggregate shall be decided by the division after a hearing before the board.

### **Master Permit Program**

**918-309-0100**

#### **Master Permit Program Under ORS 479.560(3)**

(1) Authority for Rule. This rule is authorized by ORS 479.560, only deals with electrical master permits and shall not be interpreted as changing any licensing requirement.

(2) Definitions. For the purpose of this rule:

(a) "Applicant" is an owner, building operating manager or an electrical contractor of a covered facility who complies with ORS 479.630;

(b) "Covered Facility" is one or more industrial plants as defined in OAR 918-251-0090 or any successor rule; commercial office buildings; buildings owned, leased, managed or operated by a state or local government entity; or other facilities designated by the board:

(A) Under common ownership or operating management;

(B) Located within the boundaries of the same inspecting jurisdiction; and

(C) Within the same complex or contiguous lots located at the same geographic site.

(c) "Inspecting Jurisdiction" is the state or municipality having authority to inspect a covered facility under a master permit program.

(d) "Master Permit" is an annual permit issued under ORS 479.560 and these rules by the inspecting jurisdiction.

(3) Additional Facilities Designated by the Board. "Covered facilities" also include:

(a) Where only a single building or structure is involved, the grounds and adjacent facilities under common control or management that make up the complex containing the building or structure;

(b) Isolated buildings and structures in multiple sites within the area served by the inspecting jurisdiction that individually meet the definition of "covered facility" but only when acceptable by both the inspecting jurisdiction and owner or operating manager; and

(c) Incidental buildings and structures adjacent or connected to a commercial office building, industrial plant, government building or building designated by the board, provided the building or structure is under the same ownership or management as the covered facility.

(4) Scope of Master Permit Program:

(a) Under ORS 479.540 which allows electrical master permit for "repair, alteration or replacement of existing electrical products," an "electrical product replacement" includes installing a product in place of another that shall not exceed the capacity or design of the existing electrical system;

(b) The following do not constitute "repair, alteration or replacement of existing electrical products" and require a separate permit and inspection:

(A) Electrical installations in a new building shell, structural retrofits, installation or alteration of load bearing walls, foundations or exit passageways;

(B) Any electrical installation in connection with changing the type of use or occupancy classification of the building or structure;

(C) Any addition which increases the square footage of the building or structure;

(D) Remodeling within an occupied existing shell which results in:

(i) Vacation of more than 25 percent of occupants within a floor or building resulting from remodel;

(ii) Termination of a tenant's usual activities for more than ten working days; or

(iii) Construction that involves more than 25 percent of the contiguous area of any floor.

(E) Electrical installations a part of construction within a covered facility that also involve a plumbing, structural or mechanical permit other than a master permit under ORS 455.154.

(5) Interpretation. Who can use a master permit:

(a) A master permit shall only be provided to an electrical contractor, owner or operating manager responsible for all electrical installations in the whole covered facility;

(b) An owner, electrical contractor or operating manager of a covered facility can obtain a permit only if appropriately licensed electricians are to do the work.

(6) Operation of the Master Permit Program:

(a) An applicant electing to have a covered building inspected under the master permit program shall take out a master permit with the inspecting jurisdiction and pay required fees;

(b) If applicant is an owner or operating manager, applicant shall file a roster with the inspecting jurisdiction of all electricians currently employed by applicant showing name, electrical license number and type of electrical license, and all electrical contractors whose work is included under a master permit taken out by the owner or operating manager. The roster must be filed at the same time as the permit application:

(A) When an electrical contractor under a continuing retainer ceases to serve the covered facility, notice of termination shall be filed with the inspecting jurisdiction by the permit holder within ten working days of termination;

(B) An updated roster shall be available to the inspecting jurisdiction at any regularly scheduled inspection;

(C) An updated roster shall be filed with the inspecting jurisdiction at each master permit renewal.

(c) If applicant is an owner, operating manager or contractor, applicant shall:

(A) Create and keep records of all electrical work done under the master permit, show the person doing the work, electrical license number, date of work and have the records available for the electrical inspector at the covered facility at site or sites agreed to in writing with the inspecting jurisdiction. If there is no written agreement, each building shall have a record of electrical work done and of persons employed electrically for that building and its adjacent facilities;

(B) Set up an inspection schedule with the inspecting jurisdiction which shall be at least once a year;

(C) Call for inspections when necessary under the electrical requirements and not cover electrical work until an inspection is performed;

(D) Call for immediate inspections, if applicant chooses to discontinue the electrical master permit program. All future work must be by separate permit and inspection.



(7) Enforcement. The inspecting jurisdiction shall:

- (a) Report and document all electrical licensing violations by a person holding an electrical master permit to the board;
- (b) Take enforcement actions against persons who violate the scope of the master permit or compliance requirement and report the violations and actions taken to the board; and
- (c) Make inspections at more frequent intervals to insure that licensing and scope of master permit requirements are being complied with.

(8) Limited Maintenance Electrician. Work by a limited maintenance electrician licensed under ORS 479.630 and performed under the scope of that license can be combined with a master permit program, provided separate records are kept and there is an annual inspection.

(9) Operations by Electrical Contractors. Electrical contractors:

- (a) Shall be issued a separate master permit only if the contractor is a general electrical contractor, has a licensed signing supervisor on staff and is authorized by the owner or operating manager;
- (b) Can work under the master permit of the applicant if the work is recorded together with the applicant's electrical installations and the work is within the scope of the contractor's license; and
- (c) Shall comply with the applicable requirements of section (6) of this rule.

(10) Inspection Fees:

- (a) A person obtaining a master inspection permit does not have to pay the normal permit inspection fees of the inspecting jurisdiction for installations within the scope of the permit. A separate permit, fees and individual inspections are required for installations outside the scope of a master permit;
- (b) By the Division. Building Codes Division inspection charges are the division's miscellaneous fee for hourly inspections where no specific fee category is established, OAR 918-309-0070(5) and successor rules;
- (c) By Municipalities. Municipal inspection charges shall be the municipality's miscellaneous fee for hourly inspections where no specific fee category is established;
- (d) A one-time, set-up fee may be charged by the inspecting jurisdiction when a master permit is obtained, which shall not exceed \$100;
- (e) To determine time charges, the "cost of making the inspection" in ORS 479.560 includes the inspector's travel time from the inspector's office to return, actual lodging and per diem expenses as established by the jurisdiction and preparation and review of reports whether this is done at the plant or at the inspector's office. The lodging and per diem expenses shall not exceed the standard amounts allowed by the inspecting jurisdiction.

(11) Delegation Standards. Delegation shall only be granted to municipalities that also serve essentially the same area with basic electrical inspection services:

(a) A municipality requesting delegation of the master permit program shall, in addition to the notice required by ORS 455.148 or 455.150, file an application prior to January 1 of the year for which delegation is requested and provide:

(A) The number of master permits anticipated to be issued and the names of electrical inspectors certified to inspect under the Oregon Electrical Specialty Code who are or will be assigned to the program;

(B) A master permit inspection operating plan. Initial applicants, excluding those who were doing industrial plant inspections under contract with the division on the effective date of this rule, shall also show what arrangements are to be operational on July 1;

(C) An agreement with each surrounding inspecting jurisdiction having covered facilities crossing municipal boundaries, providing who will inspect each covered facility, if the facility elects to be inspected under the master permit program. The agreement:

(i) Shall cover all electrical inspections for the facility;

(ii) May identify specific facilities but shall also include a method of determining who shall serve those facilities that become operational or make elections during the term of the agreement; and

(iii) Shall show how fees will be established for the complete covered facility that elects to be inspected under the master permit program.

(D) An authorization to the division that if the agreement in paragraph

(C) of this subsection fails to include a contingency or method of resolving a contingency and there is any disagreement between the jurisdictions over who should serve a complete facility, the division is authorized to immediately assign the facility to an inspecting jurisdiction as it deems appropriate and that each will enter into intergovernmental agreements as needed to carry out the assignment;

(E) A prototype agreement with a facility that crosses municipal boundaries covering the terms and conditions of electrical inspection services unless other arrangements are made which gives the municipality enforcement and fee setting authority over the complete facility.

(b) Delegation shall only be granted where it is affirmatively found that the jurisdiction is clearly able to perform the new master permit program with no loss of efficiency or effectiveness to its basic electrical inspection program.

(12) Renewal of Delegation:

(a) Prior to January 1 of any year, when the municipality applies for renewal of the master permit program, it shall provide a report of number of master permits issued and number inspected during the prior calendar year. It shall be granted the delegation automatically if its basic electrical program is also renewed, unless the division expressly notifies the municipality to the contrary by April 30;

(b) All notices of discontinuation of the master permit program shall be filed by the same date shown in subsection (a) of this section;

(c) All amendments to the filing made under section (11) of this rule should be filed as soon as amendments are available, but no later than the date shown in subsection (a) of this section to allow review by division staff.

### **Minor Installation Labels**

**918-309-0210**

#### **Use of Minor Installation Labels**

(1) Persons who may be issued and use minor labels. Minor installation labels may only be issued to and used for installations under the minor label programs permitted by OAR 918-100-0000 through 918-100-0060 by:

(a) An electrical contractor employing a properly licensed general supervising electrician only as authorized by OAR 918-309-0220;

(b) A limited maintenance specialty contractor or a limited maintenance specialty contractor-HVAC/R only as authorized by OAR 918-309-0220;

(c) A restricted energy contractor only as authorized by OAR 918-309-0220;

- (d) A limited renewable energy contractor only as authorized by OAR 918-309-0220;
- (e) A limited pump installation specialty contractor only as authorized by OAR 918-309-0220;
- (f) A limited energy contractor only as authorized by OAR 918-309-0220; and
- (g) A registered telecommunications service provider only as authorized by OAR 918-309-0220.

(2) Except as allowed under OAR 918-309-0220(3)(a) and (b), minor labels shall not be used for:

- (a) Underground electrical installations;
- (b) Electrical installations that require a cover inspection;
- (c) Installations involving GFCI or AFCI devices other than 15 or 20 amp, 125-volt receptacles and circuit breakers;
- (d) Any electrical installations that are covered by **Chapter 5** or **Article 680** (Swimming Pools, Fountains, or Similar Installations) of the **National Electrical Code**, as adopted in OAR 918-305-0100, or Chapter 41 of the **One- and Two-Family Dwelling Specialty Code**, as adopted in OAR 918-480-0005;
- (e) Protective signaling; and
- (f) New construction.

[Publications: Publications referenced are available from the agency.]

Stat. Auth.: ORS 479.540, ORS 455.154, & ORS 455.155

Stats. Implemented: ORS 479.540, ORS 455.154, & ORS 455.155

Hist.: BCA 10-1988, f. & cert. ef. 7-20-88; BCD 5-1994, f. 2-25-94, cert. ef. 7-1-94; BCD 19-1996, f. 9-17-96, cert. ef. 10-1-96; Renumbered from 918-310-0030; BCD 4-1999, f. & cert. ef. 4-1-99; BCD 4-2002, f. 3-8-02, cert. ef. 4-1-02; BCD 4-2004, f. 3-31-04, cert. ef. 4-1-04; BCD 22-2004, f. & cert. ef. 10-1-04

## **918-309-0220**

### **Scope of Electrical Work Allowed with Minor Installation Label**

Except as provided in OAR 918-309-0200 which allows a person to insist on using a permit rather than a label, or where the transaction involves a component of an appliance exempted under OAR 918-261-0020, minor installation labels shall be used by:

- (1) A contractor with a signing supervisor, where the installation does not exceed 240 volts for:
  - (a) Extension of not more than two existing branch electrical circuits limited to 30 amps each and, if relevant, connection of an appliance authorized under sections (2) and (3) of this rule;
  - (b) Installation of one new electrical circuit limited to 30 amps and, if relevant, connection of an appliance authorized under sections (2) and (3) of this rule;
  - (c) Repair or replacement of damaged components of existing electrical equipment including services not to exceed 200 amps, provided a reconnect is not required by the serving utility. For reconnects, see OAR 918-309-0040(10) for services; and
  - (d) The single installation of the appliances, repair or replacement activities authorized by sections (2) and (3) of this rule;
  - (e) Replacement of multiple switches, circuit breakers, receptacles, light fixtures, smoke detectors, or GFCI or AFCI circuit breakers and receptacles of 15-20 amp, 125-volt in a dwelling unit.

(2) A limited maintenance specialty contractor or a limited maintenance specialty contractor-HVAC/R where the installation does not exceed 120-240 volts single phase for repair or replacement of:

- (a) A furnace, oil or gas, not to exceed 20 amps;
- (b) A fan not to exceed 20 amps;
- (c) A dishwasher or garbage disposal, not to exceed 20 amps;
- (d) A water heater, which involves an electrical circuit, not to exceed 30 amps;
- (e) An electrical furnace, air conditioning unit or refrigeration unit;
- (f) A defective ballast, or up to five ballasts under one label. (For more than five ballasts, inspections shall be performed as a branch circuit permit or hourly rate authorized under OAR 918-309-0070(8)); or
- (g) An item in this section and any related transaction under section (3) of this rule if the contractor employs a licensed general supervising electrician or Class "A" or "B" limited energy technician, the work is within the person's scope of license, and that person does the work allowed.

(3) A restricted energy contractor, limited energy contractor, registered telecommunications service provider, or an electrical contractor using an appropriately licensed person if required to make the installation, may use a minor installation label for:

- (a) Installation, repair and replacement in new or existing construction of one-and two family dwellings, of HVAC, telephone, garage door, vacuum systems, door bells, burglar, fire alarm and security systems, and audio/stereo systems not exceeding 100 volt-amperes, in Class 2 or 3 installations; or
- (b) Installation, repair and replacement of up to 5 devices under one label for the following installations not exceeding 100 volt-amperes in Class 2 or 3 installations in other existing buildings, provided:
  - (A) The equipment is not located in an area classified as hazardous, as described in Chapter 5 of the **National Electrical Code**, as adopted in OAR 918-305-0100;
  - (B) The system does not penetrate any fire protection system(s) or air-handling space(s), as defined in the currently adopted Oregon Electrical Specialty Code; and
  - (C) The installation is limited to the following
    - (i) Thermostats;
    - (ii) Data communication devices;
    - (iii) Intercom, music and paging devices;
    - (iv) Door or gate control, monitor or access devices;
    - (v) Cable television and closed circuit television devices;
    - (vi) Burglar, security and fire alarm devices, including "Power Limited Fire Alarm Circuits" as defined in Article 760 of the **National Electrical Code**, as adopted in OAR 918-305-0100; or
    - (vii) Notwithstanding the 5 devices in subsection (3)(b) of this rule, central vacuum clean control devices, one label per system.

(4) This rule does not allow any person to make an installation that is not authorized by the scope of the person's license.

(5) A limited renewable energy contractor or an electrical contractor using a licensed journeyman or limited renewable energy technician may use a minor label for repair and maintenance of renewable electrical energy systems as set forth in ORS 479.630(17)(a).

(6) A limited pump installation specialty contractor may use a minor label for repair, replacement and maintenance of installed pump or irrigation systems of the same horsepower and voltage, as set forth in ORS 479.630(13).

[Publications: Publications referenced are available from the agency.]

## **918-309-0260**

### **Misuse of Minor Installation Labels**

Violations of the minor label rules are subject to civil penalties or license revocations or both.

### **Bulk Label Procedures**

## **918-309-0310**

### **Local Jurisdiction Enforcement**

Each seller shall enforce the requirements of OAR chapter 918, division 309.

## **918-309-0400**

### **Restricted Energy Electrical Permit Application**

(1) A separate Restricted Energy Electrical Permit Application Form and Restricted Energy Electrical Installer Log are created and adopted.

(2) The Restricted Energy Electrical Permit can be taken out by a general or subcontractor, limited energy installer or property owner for the fee set by the board in OAR 918-309-0030 for limited energy transactions provided the requirements of this rule are met. The person applying for the permit must:

(a) Assume responsibility to call for an inspection when the permits are signed by appropriate persons, installations are completed and after all corrections are made and comply with the requirements of the restricted energy electrical laws and the restricted energy electrical rules;

(b) Be responsible for all corrections required by the inspector under the permit, regardless of who performs the work;

(c) Call for a final inspection when corrections are made and the work is completed.

(3) Options. The person obtaining the permit may:

(a) Limit the permit to only the work of the permittee; or

(b) Include any and all limited energy installations including those done by separate installers, but the installations must be ready for inspection at the first inspection call. When this is done, the permit must be completed and separately signed by the person, also identifying the business responsible for each type of limited energy electrical installation.

(4) The restricted energy activities to be covered by the permit must be declared at the time of the purchase of the permit:

(a) It is not necessary to identify the contractor at the time of permit issuance;

(b) New permits must be purchased for all other restricted energy installations;

(c) If a contractor is changed, the contractor who completed the work must be identified.

(5) Regardless of what was initially intended the permit only covers those installations that are in place at the time of the first call for limited energy electrical inspection. A separate permit must be purchased for all other limited energy installations whether the installations become ready for inspection at a later date or are done at a later date.

(6) This rule does not apply to an industrial plant when ORS 479.560 is applicable.

(7) The Restricted Energy Electrical Installer Log must be posted at the job site for signing by appropriate persons installing the separate electrical systems as shown on the form. A municipality may require more than one log to be completed and left at the job site if it chooses to.

## **918-309-0410**

### **Renewable Electrical Energy Permit Application**

(1) A separate Renewable Electrical Energy Permit Application Form and Renewable Electrical Energy Installer Log are to be used for renewable energy electrical system installations. The Renewable Electrical Energy Permit:

(a) Covers the renewable electrical energy system installation and the alternating current feeder connection to the structure where applicable. The permit shall include an installer log to document all work performed under the permit; and

(b) May be purchased by a general contractor, subcontractor, limited renewable energy contractor or property owner provided the requirements of this rule are met.

(2) The renewable electrical energy activities covered by the permit shall be declared at the time the permit is purchased. New permits must be purchased for all other renewable electrical energy installations;

(3) The person applying for the permit shall:

(a) Assume responsibility to call for an inspection after the permits are signed by; the limited renewable energy contractor, signing supervisor or property owner and that these installations are completed and comply with the requirements of the renewable electrical energy laws and these rules;

(b) Be responsible for all corrections required by the inspector under the permit, regardless of who performs the work; and

(c) Call for a final inspection when needed corrections are made and the work is completed.

(4) The person obtaining the permit may:

(a) Include any and all renewable electrical energy installations including those done by separate installers, but the installations must be ready for inspection at the first call for inspection. When this is done, the permit shall be completed and separately signed by the person, also identifying the business responsible for each type of renewable electrical energy installation.

(b) Receive up to two inspections. For inspections in excess of those allowed under this rule, a charge of \$86 per hour including travel time and office time with a minimum charge of one hour for each additional inspection shall be paid in advance.

(5) All parties performing work under the permit shall be identified at the time of permit is issued. If the party performing the work is changed, the party who completed the work must be identified.

(6) Notwithstanding the activities identified in the permit application, the permit only covers those electrical installations that are in place at the time of the first call for inspection of the renewable electrical energy work. A separate permit shall be purchased for all other renewable electrical energy installations whether the installations become ready for inspection at a later date or are done at a later date.

(7) The Renewable Electrical Energy Installers Log shall be posted at the job site for signing by appropriate persons installing the separate electrical systems as shown on the form. The jurisdiction may require more than one installer log to be completed and left at the job site.

## DIVISION 311

### MISCELLANEOUS ELECTRICAL RULES

#### 918-311-0000

##### **Design, Planning and Lay Out of Electrical Installations by Supervising Electricians**

A licensed supervising electrician may design, plan and lay out electrical installations for:

- (1) The customers of the electrical contractor for whom the supervising electrician is employed; or
- (2) The industrial plant that employs the supervising electrician.

#### 918-311-0010

##### **Electrical Plan Review Rules**

(1) Authority for Rules. The rules in OAR 918-311-0010 to 918-311-0050 are authorized by ORS 479.870 and are referred to as the "Electrical Plan Review Rules."

(2) Application:

(a) The electrical plan review rules only apply when a jurisdiction, the state or a municipality, enforcing the **Electrical Specialty Code** or the electrical aspect of the **One and Two Family Dwelling Specialty Code**, requires mandatory electrical plan review in connection with a permit for the construction, alteration or repair of electrical installations;

(b) When the state or municipality requires mandatory plan review it shall not adopt requirements that go below the threshold standards set in OAR 918-311-0040. The minimum starting point cannot be changed.

(3) Transition:

(a) An applicant for an electrical permit or a person who had submitted electrical plans for review with any jurisdiction shall be allowed to follow the plan review requirements that were in place with the jurisdiction at the time the application was filed;

(b) If a bid for electrical work was made, relying in good faith on plan review practices in place at a jurisdiction prior to a change due to the Electrical Plan Review Rules, and the bid is accepted not more than 60 days from the effective date of the change, the electrical contractor shall be allowed to follow the prior plan review procedures upon proof that the new requirements create significant unanticipated expenses or delay.

[Publications: Publications referenced are available from the agency.]

#### 918-311-0020

##### **Time Limit for Electrical Plan Review**

(1) Electrical plan reviews shall be approved or denied within ten working days from receipt of the complete electrical plans by the jurisdiction requiring plan review. A reviewed set of plans shall be returned to the plan applicant:

(a) If a plan is rejected, the deficiencies must be set out in writing. Upon resubmission of the necessary items, the ten-day requirement starts again;

(b) If, because of the complexity or size of the installation, additional time beyond the ten working days is required to complete the review, the jurisdiction shall notify the person taking out the electrical permit of the reasons for the delay and the date the review will be completed.

(2) Phased permits may be issued as described in OAR 918-309-0025.

### **918-311-0030**

#### **Qualifications for Persons Performing Electrical Reviews**

Electrical plan reviews shall be conducted only by persons certified by the division to enforce the **Electrical Specialty Code** as an **Electrical Specialty Code** inspector, or its equivalent, and who have one of the following:

(1) Two years of experience as an Oregon supervising electrician;

(2) A degree in electrical engineering and three years experience in design, inspection or supervision of installations covered by the **National Electrical Code** or **Oregon Electrical Specialty Code**; or

(3) Equivalent experience and training approved by the board.

[Publications: Publications referenced are available from the agency.]

### **918-311-0040**

#### **Electrical Plan Review for Complex Structures**

(1) A jurisdiction providing electrical code plan review services may only require electrical plan review for a complex structure. For the purpose of this rule, "complex structures" have an electrical system designed, constructed or reconstructed with any of the following:

(a) A service or feeder beginning at 400 Amps where the available fault current exceeds 10,000 Amps at 150 Volts or less to ground or exceeds 14,000 Amps for all other installations; or

(b) Installation of a 150 KVA or larger separately derived system as defined in Article 100 of the **National Electrical Code** (NEC); or

(c) Addition of a new motor load of 100 HP or more; or

(d) Fire pump installations as defined in Article 695 of the NEC; or

(e) Emergency systems installations as defined in Article 700 of the NEC; or

(f) A service or feeder rated at 600 Amps or over; or

(g) Voltage. More than 600 supply volts nominal; or

(h) Renewable Energy. Renewable electrical energy systems rated over 25 KVA; or

(i) Height. More than three stories; or

(j) Occupancy.

(A) Six or more residential units in one structure; or

(B) An "A" (Assembly) occupancy, "E" (Educational) occupancy, or "I-2" or "I-3" (Institutional) occupancy as defined in the adopted **Oregon Structural Specialty Code**; or



(C) Any of the following special occupancies as described in Chapter 5 of the NEC adopted by the board in OAR 918-305-0100:

- (i) Hazardous (Classified) locations as defined in Articles 500 to 516; or
- (ii) Installations in patient care areas of health care facilities as defined in Article 517; or
- (iii) Agricultural buildings used for commercial purposes, as defined in Article 547; or
- (iv) Floating buildings as defined in Article 553; or
- (v) Marinas and boat yards as defined in Article 555; or
- (k) Recreational Vehicle Park. A new recreational vehicle park, or any addition or alteration to an existing park.

(2) Plan review is not required for work permitted through minor installation labels under OAR 918-309-0210 to 918-309-0260.

(3) A jurisdiction requiring electrical plan review may not require plan review on more than one building or structure under construction or reconstruction at the same job site, as long as:

- (a) The electrical systems of the buildings or structures are materially alike, and;
- (b) A person obtains electrical permits for the buildings or structures within a reasonable time.

(4) Standardized Format for Plan Review. When electrical plan review is required the electrical plan shall meet the following requirements:

- (a) Copies. Submit two sets of electrical plans;
- (b) Readability. The plans shall be drawn to scale, contain definitions for legends used, be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the applicable electrical code requirements, laws, ordinances, rules and regulations;
- (c) Contents. The plans shall contain the following minimum requirements:
  - (A) Feeder riser diagram showing panel location and circuit schedules;
  - (B) One line riser diagram showing bonding and grounding and conductor sizes;
  - (C) Available fault current on the line side of service disconnect;
  - (D) Complete load calculations, or provide applicable load records, for all new installations and for additions to existing installations;
  - (E) Fixture schedule, showing type, location and layout of the fixtures;
  - (F) Address of the installation and name of owner and address;
  - (G) Identification of the employer, identification and signature of person who prepared the plan, license number if the person is an electrical supervisor and professional registration number if the person is an architect or registered professional electrical engineer; and
  - (H) Location of emergency systems, identifying the power source and the system on plan.
- (5) Nothing in these rules shall prohibit a jurisdiction from requiring a lighting energy budget.

(6) Nothing in these rules shall prohibit the owner or the owner's agent from requesting and receiving plan review for non-complex structures.

[Publications: Publications referenced are available from the agency.]

#### **918-311-0050**

##### **Standards for Electrical Plans Review**

A person performing electrical plan review shall do the following as a minimum:

- (1) Load Calculations. Check load calculations for appropriateness, completeness and accuracy.
- (2) Equipment. Check and determine if the equipment is:
  - (a) Suitable for the environment; and
  - (b) Properly sized and rated to meet the minimum code requirements.
- (3) Service and Feeder. Check service and feeder installations for code compliance related to:
  - (a) Wiring method;
  - (b) Conduit and box fill;
  - (c) Conductor size and ampacity rating;
  - (d) Clearances;
  - (e) Locations;
  - (f) Accessibility; and
  - (g) Service grounding conductor size.

#### **918-311-0055**

##### **Fees for Electrical Plan Reviews Performed by Building Codes Division**

- (1) For electrical plan reviews performed on structures meeting the installation requirements of OAR 918-311-0040 and that are in jurisdictions where the Building Codes Division administers and enforces the electrical program, the plan review fee shall be an amount equal to 25 percent of the electrical permit fee(s).
- (2) These fees do not apply to prefabricated structures, which are addressed in OAR 918-311-0060, or to electrified fixed guideway railway system installations, which are addressed in 918-305-0500.

#### **918-311-0060**

##### **Electrical Plan Review for Prefabricated Structures**

- (1) Authority. The rule is authorized by ORS 479.870 and sets electrical plan review requirements for the electrical aspects of prefabricated buildings and components intended for use in Oregon.
- (2) Definitions. For purpose of this rule:
  - (a) A "prefabricated building" is a "prefabricated permanent building" or "prefabricated relocatable building" defined in OAR 918-674-0005.

(b) A "prefabricated component" is a "component" defined in OAR 918-674-0005;

(c) "Intended for use in Oregon" means:

(A) The structure is manufactured in Oregon and is intended to be used in Oregon, or Oregon and other states; or

(B) Manufactured in another state but intended to be first delivered to Oregon for use in Oregon regardless of whether it is intended to also be used in other states;

(d) "State of manufacture" is the state where a prefabricated building or component is manufactured.

(3) Applicability:

(a) Electrical plan review is required for all prefabricated buildings and components manufactured in Oregon or manufactured out of state for use in Oregon, unless:

(A) The electrical inspector waives the plan review upon a determination that only one unit will be built and code requirements can be verified by inspection;

(B) The unit is listed by a recognized testing laboratory; or

(C) The unit is certified by special deputies.

(b) When a plan review is required by this rule, the relevant prefabricated structures rules in OAR chapter 918, division 674 are applicable except to the extent a different requirement is provided in this rule.

(4) Requirements. When plan review under this rule is required, the manufacturer shall:

(a) Pay an electrical plan review fee as provided in section (5) of this rule;

(b) Meet the requirements of OAR 918-311-0040 for electrical plan reviews for number of copies, readability and contents; and

(c) Submit a timely request allowing the division at least ten business days to complete the plan review.

(5) Fees. The electrical plan review fees shall be \$69 per hour with a minimum charge of \$69.

## **918-311-0065**

### **Electric Vehicle Charging Station Statewide Permit and Inspection Protocol**

To ensure a path for the emerging technology and enable the installation of charging systems for electric vehicles the following permit and inspection protocols will apply throughout the state, notwithstanding contrary provisions contained in the **Oregon Electrical Specialty Code**. This Electric Vehicle Supply Equipment (EVSE) permit covers the installation of all electrical components dedicated to the operation of an electric vehicle charging system. No other state building code permit is required.

(1) Building officials and inspectors shall permit and allow installation of an electric vehicle charging system that has a Building Codes Division special deputy certification label without further testing or certification.

(2) Persons installing an electric vehicle charging system must obtain a permit from the inspecting jurisdiction for the EVSE.

(3)(a) The permit shall be a flat fee based on an inspecting jurisdiction's feeder permit fee for circuit of equivalent size to cover the cost of enforcement and inspection of the items listed in sub-section (4).

(b) Permits issued under this rule include up to two inspections.

(4) Inspection of an EVSE installation is limited to determining compliance with the following **Oregon Electrical Specialty Code** provisions:

(a) Overcurrent protection, per articles 225 and 240;

(b) Physical protection of conductors, per article 300;

(c) Separation and sizing of the grounding and neutral conductors, per article 250.20; and

(d) Provisions for locking out the disconnecting means for maintenance, per chapter 4.

(5) If an electric vehicle charging system is mounted in or on a pedestal that is not attached to a structure, as defined by the **Oregon Electrical Specialty Code**, the installation of a grounding electrode system to supplement lightning protection is allowed but cannot be required.

(6) An electrical contractor employing a general supervising electrician in accordance with OAR 918-282-0010 is authorized to use a minor installation label to install a new branch circuit limited to 40 amps 240 volts for the purpose of installing a wall mounted EVSE unit in the garage of one and two family dwellings, and connect a listed wall mounted EVSE unit to that branch circuit. The electrical panel where the circuit originates must be in the garage within sight from the EVSE unit. This provision does not apply to installations in wet or damp locations.

### **918-311-0070**

#### **Use and Content of a Written Request to Reconnect an Electrical Installation**

(1) As used in this rule:

(a) "Authority having jurisdiction" means the state or local government agency with authority under ORS Chapter 455 to inspect an electrical installation.

(b) "Electric utility" has the meaning given that term in ORS 469.300(10).

(c) "Uncontrollable event" means an event beyond the reasonable control of any person, including but not limited to, fire, floods, and severe weather.

(d) "Remote location" has the meaning given that term in OAR 918-271-0020.

(2) A licensed general supervising electrician may request that an electric utility energize a completed electrical installation before an authority having jurisdiction has inspected the completed electrical installation. Upon receipt of a request from a licensed general supervising electrician, an electric utility may energize an electrical installation to:

(a) Restore electrical service that was interrupted or disconnected because of a service change or uncontrollable event; or

(b) Initiate or restore electrical service to a remote location.

(3) A request made by a licensed general supervising electrician under subsection (2) of this rule shall be made in writing, using a form prescribed by the Building Codes Division, and must include the following information:

(a) The name, license number, and signature of the general supervising electrician who directed, supervised, made, or controlled the making of the electrical installation described in subsection (2) of this rule;

(b) The name and license number of the electrical contractor employing the general supervising electrician described in paragraph (a) of this subsection;

(c) The name and address of the electrical contractor's customer who contracted for the electrical installation;

(d) The address or location of the electrical installation if different than the customer's

address;

(e) The date on which the electrical installation was completed by the general supervising electrician described in paragraph (a) of this subsection;

(f) The name, mailing address, and telephone number of the authority having jurisdiction to inspect the completed electrical installation;

(g) The name, mailing address, and telephone number of the electric utility receiving the request;

(h) Either the number of an electrical permit, if a permit is attached to the electrical installation, or a copy of a temporary permit, if a copy of the permit is posted at the job site; and

(i) Whether the request is for the purpose of restoring electrical service that was interrupted or disconnected because of a service change or uncontrollable event, or initiating or restoring electrical service to a remote location.

(4) A licensed general supervising electrician who makes a request under subsection (2) of this rule shall provide a copy of that request to:

(a) The electrical contractor described in subsection 3(b) of this rule;

(b) The customer described in subsection 3(c) of this rule; and

(c) The authority having jurisdiction described in subsection 3(f) of this rule.

(5) By the close of business on the first business day following the energizing of an electrical installation by an electric utility in response to a request submitted under subsection (2) of this rule, the electrical contractor described in subsection 3(b) of this rule shall:

(a) Notify the authority having jurisdiction described in subsection 3(f) of this rule that the electrical installation has been energized; and

(b) Request that the authority having jurisdiction described in subsection 3(f) of this rule inspect the completed electrical installation.

(6) Notwithstanding ORS 756.040, 756.060, 757.035, and any rules adopted under those statutes, an electric utility may not energize a completed electrical installation as requested by a licensed general supervising electrician before an authority having jurisdiction has inspected the completed installation, unless the submitted request complies with subsection (3) of this rule.

(7) A civil penalty may be assessed against a person for violating subsections (2) through (6) of this rule in a manner provided by OAR 918-001-0036. In assessing a penalty under this subsection, the director may consider any appropriate factors, including, but not limited to, any prior violations of:

(a) Subsections (2) through (6) of this rule; or

(b) The Electrical Safety Law, ORS 479.510 to 479.945 and 479.995, and any rules adopted under the Electrical Safety Law.

#### **918-311-0080**

#### **Alternate Certification for Installation of Small Wind Turbines**

(1) Wind turbines with a name plate capacity of not more than 100kW that meet the following criteria are considered certified as required by ORS 479.610.

(2) Certification under this rule only applies to small wind turbines where:

(a) The product design is reviewed for compliance with appropriate product safety and functionality standards and stamped by an Oregon-licensed professional electrical engineer; and

(b) The inverter is listed or labeled by a Nationally Recognized Testing Laboratory.

(3)(a) To ensure the safety of the components under this rule:

(A) The manufacturer must submit one of each model of the product to an approved field evaluation firm for evaluation and approval as meeting electrical product safety standards;

(B) The manufacturer must certify that each additional turbine of the same model meets the approved electrical product safety standards of the evaluated model; and

(C) The field evaluation firm will provide for random evaluation of additional units as necessary, in accordance with the recommended practices required by OAR 918-306-0010(2)(c).

(b) If the approved model is changed it must be re-evaluated.

(4) Documentation demonstrating compliance with section (3) of this rule must be provided to the inspecting jurisdiction.

(5) Installations performed under this rule are required to comply with all appropriate permit, inspection, and licensing requirements.

(6) The provisions of this rule expire on January 1, 2011.