

**For L&I Staff Use Only**

*Christina Chance 2/17/2023*

L&I Apprenticeship Consultant

*Teri Gardner 2-21-23*

L&I Admin

Department of Labor and Industries  
Apprenticeship Section  
PO Box 44530  
Olympia WA 98504-4530



# Request for Approval of Proposed Standards

TO: Washington State Apprenticeship & Training Council

FROM: Okanogan County Electric Cooperative Meter Electrician

**Check the appropriate box:**

☐ Committee

☒ Plant

☐ OJT

Occupation(s)	SOC Code	Hours
Meter Electrician	43-5041.00	6000

**Form must be signed by Committee Chair and Secretary or Program's Authorized Signer**

<input type="checkbox"/> Chair	Date	<input type="checkbox"/> Secretary	Date
<input checked="" type="checkbox"/> Authorized Signer	<i>2-1-2023</i>		
Print Name: Glenn Huber		Print Name:	
Signature: <i>[Signature]</i>		Signature:	

Approved By:

**Washington State Apprenticeship & Training Council**

Signature of the WSATC:

Date:

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## Journey Level Wage Rate

From which apprentices' wage  
rates are computed

TO: Washington State Apprenticeship & Training Council

FROM: Okanogan County Electric Cooperative Meter Electrician

Occupation:	County(ies):	Journey Level Wage Rate:	Effective Date:
Meter Electrician	Okanogan	\$ 53.55	1/1/2023
		\$	
		\$	
		\$	

Sponsors must submit the journey-level wage at least annually or whenever changed to the Department.

**Form must be signed by Committee Chair and Secretary or Program's Authorized Signer**

<input type="checkbox"/> Chair	Date <u>2-1-2023</u>	<input type="checkbox"/> Secretary	Date
<input checked="" type="checkbox"/> Authorized Signer			
Print Name: Glenn Huber		Print Name:	
Signature:		Signature:	

Christina Chance 2/17/2023  
Christina Chance 3/7/2023  
Teri Gardner 3-8-23  
Teri Gardner 2-21-23



**APPRENTICESHIP PROGRAM STANDARDS**  
**adopted by**

**OKANOGAN COUNTY ELECTRIC COOPERATIVE METER ELECTRICIAN**

(sponsor name)

Occupational Objective(s):

**METER ELECTRICIAN**

SOC#

**43-5041.00**

Term [WAC 296-05-015]

**6000 HOURS**



**APPROVED BY**  
**Washington State Apprenticeship and Training Council**  
**REGISTERED WITH**  
**Apprenticeship Section of Fraud Prevention and Labor Standards**  
Washington State Department Labor and Industries  
Post Office Box 44530  
Olympia, Washington 98504-4530

**APPROVAL:**

\_\_\_\_\_  
Provisional Registration

\_\_\_\_\_  
Standards Last Amended

\_\_\_\_\_  
Permanent Registration

By: \_\_\_\_\_  
Chair of Council

By: \_\_\_\_\_  
Secretary of Council

# OKANOGAN COUNTY ELECTRIC COOPERATIVE METER ELECTRICIAN

## INTRODUCTION

This document is an apprenticeship program standard. Apprenticeship program standards govern how an apprenticeship works and have specific requirements. This document will explain the requirements.

The director of the Department of Labor and Industries (L&I) appoints the Washington State Apprenticeship and Training Council (WSATC) to regulate apprenticeship program standards. The director appoints and deputizes an assistant director to be known as the supervisor of apprenticeship who oversees administrative functions through the apprenticeship section at the department.

The WSATC is the sole regulatory body for apprenticeship standards in Washington. It approves, administers, and enforces apprenticeship standards, and recognizes apprentices when either registered with L&I's apprenticeship section, or under the terms and conditions of a reciprocal agreement. WSATC also must approve any changes to apprenticeship program standards.

Apprenticeship programs have sponsors. A sponsor operates an apprenticeship program and declares their purpose and policy herein to establish an organized system of registered apprenticeship education and training. The sponsor recognizes WSATC authority to regulate and will submit a revision request to the WSATC when making changes to an apprenticeship program standard.

Apprenticeships are governed by federal law (29 U.S.C 50), federal regulations (29 CFR Part 29 & 30), state law (49.04 RCW) and administrative rules (WAC 296-05). These standards conform to all of the above and are read together with federal and state laws and rules

Standards are changed with WSATC approval. Changes are binding on apprentices, sponsors, training agents, and anyone else working under an agreement governed by the standards. Sponsors may have to maintain additional information as supplemental to these standards. When a standard is changed, sponsors are required to notify apprentices and training agents. If changes in federal or state law make any part of these standards illegal, the remaining parts are still valid and remain in force. Only the part made illegal by changes in law is invalid. L&I and the WSATC may cooperate to make corrections to the standards if necessary to administer the standards.

Sections of these standards identified as bold "insert text" fields are specific to the individual program standards and may be modified by a sponsor submitting a revised standard for approval by the WSATC. All other sections of these standards are boilerplate and may only be modified by the WSATC. See WAC 296-05-003 for the definitions necessary for use with these standards.

Sponsor Introductory Statement (Required):

**The following Standards for the development of apprentices have been prepared by representatives of the Okanogan County Electric Coop. within Okanogan County.**

# OKANOGAN COUNTY ELECTRIC COOPERATIVE METER ELECTRICIAN

## **I. GEOGRAPHIC AREA COVERED:**

The sponsor must train inside the area covered by these standards. If the sponsor wants to train outside the area covered by these standards, the sponsor must enter a portability agreement with a sponsor outside the area, and provide evidence of such an agreement for compliance purposes. Portability agreements permit training agents to use apprentices outside the area covered by the standards. Portability agreements are governed by WAC 296-05-009.

**Okanogan County**

## **II. MINIMUM QUALIFICATIONS:**

Minimum qualifications must be clearly stated and applied in a nondiscriminatory manner [WAC 296-05-015(17)].

Age: **At least eighteen (18) years of age at the time of hire.**

Education: **Must be a High School graduate or equivalent.**

Physical: **Be physically capable of performing the job requirements, with or without reasonable accommodation.**

Testing: **None**

Other: **None**

## **III. CONDUCT OF PROGRAM UNDER WASHINGTON EQUAL EMPLOYMENT OPPORTUNITY PLAN:**

Sponsors with five (5) or more apprentices must adopt an Equal Employment Opportunity (EEO) Plan and Selection Procedure (chapter 296-05 WAC and 29 CFR Part 30).

The recruitment, selection, employment and training of apprentices during their apprenticeship shall be without discrimination because of race, sex (including pregnancy and gender identity), sexual orientation, color, religion, national origin, age, genetic information, disability or as otherwise specified by law. The sponsor shall take positive action to provide equal opportunity in apprenticeship and will operate the apprenticeship program as required by the rules of the Washington State Apprenticeship and Training Council and Title 29, Part 30 of the Code of Federal Regulations.

### **A. Selection Procedures:**

## OKANOGAN COUNTY ELECTRIC COOPERATIVE METER ELECTRICIAN

**Exempt under WAC 296-05-405(1)(a).**

**B. Equal Employment Opportunity Plan:**

**Exempt under WAC 296-05-405(1)(a).**

**C. Discrimination Complaints:**

Any apprentice or applicant for apprenticeship who believes they have been discriminated against may file a complaint with the supervisor of apprenticeship (WAC 296-05-443).

### **IV. TERM OF APPRENTICESHIP:**

The term of apprenticeship for an individual apprentice may be measured through the completion of the industry standard for on-the-job learning (at least two thousand hours) (time-based approach), the attainment of competency (competency-based approach), or a blend of the time-based and competency-based approaches (hybrid approach) [WAC 296-05-015].

**The term of apprenticeship for meter electrician shall be 6000 hours of reasonably continuous employment and experience in the principal operations of the trade.**

### **V. INITIAL PROBATIONARY PERIOD:**

An initial probationary period applies to all apprentices, unless the apprentice has transferred from another program. During an initial probationary period, an apprentice can be discharged without appeal rights. An initial probationary period is stated in hours or competency steps of employment. The initial probationary period is not reduced by advanced credit or standing. During an initial probationary period, apprentices receive full credit for hours and competency steps toward completion of their apprenticeship. Transferred apprentices are not subject to additional initial probationary periods [WAC 296-05-003].

The initial probationary period is [WAC 296-05-015(22)]:

- A. the period following the apprentice's registration into the program. An initial probationary period must not be longer than twenty percent of the term of the entire apprenticeship, or longer than a year from the date the apprenticeship is registered. The WSATC can grant exemptions for longer initial probationary periods if required by law.

## **OKANOGAN COUNTY ELECTRIC COOPERATIVE METER ELECTRICIAN**

- B. the period in which the WSATC or the supervisor of apprenticeship may terminate an apprenticeship agreement at the written request by any affected party. The sponsor or the apprentice may terminate the agreement without a hearing or stated cause. An appeal process is not available to apprentices in their initial probationary period.

**All apprentices employed in accordance with these Standards shall be subject to a probationary period not exceeding the first 1200 hours\* of employment.**

**\*All reference to hours shall mean straight time or regular hours of work.**

### **VI. RATIO OF APPRENTICES TO JOURNEY LEVEL WORKERS**

Supervision is the necessary education, assistance, and control provided by a journey-level employee on the same job site at least seventy-five percent of each working day, unless otherwise approved by the WSATC. Sponsors ensure apprentices are supervised by competent, qualified journey-level employees. Journey level-employees are responsible for the work apprentices perform, in order to promote the safety, health, and education of the apprentice.

- A. The journey-level employee must be of the same apprenticeable occupation as the apprentice they are supervising unless otherwise allowed by the Revised Code of Washington (RCW) or the Washington Administrative Code (WAC) and approved by the WSATC.
- B. The numeric ratio of apprentices to journey-level employees may not exceed one apprentice per journey-level worker [WAC 296-05-015(5)].
- C. Apprentices will work the same hours as journey-level workers, except when such hours may interfere with related/supplemental instruction.
- D. Any variance to the rules and/or policies stated in this section must be approved by the WSATC.
- E. The ratio must be described in a specific and clear manner, as to the application in terms of job site, work group, department or plant:

**There shall not be more than one (1) apprentice to one (1) journey-level worker in the classification of work involved providing that the apprentice shall work under the direction of the journey-level worker on each job site. For the purpose of this rule, the foreman shall be considered a journey-level worker.**

### **VII. APPRENTICE WAGES AND WAGE PROGRESSION:**

## OKANOGAN COUNTY ELECTRIC COOPERATIVE METER ELECTRICIAN

- A. Apprentices must be paid at least Washington's minimum wage, unless a local ordinance or a collective bargaining agreement require a higher wage. Apprentices must be paid according to a progressively increasing wage scale. The wage scale for apprentices is based on the specified journey-level wage for their occupation. Wage increases are based on hours worked or competencies attained. The sponsor determines wage increases. Sponsors must submit the journey-level wage at least annually or whenever changed to the department as an addendum to these standards. Journey-level wage reports may be submitted on a form provided by the department. Apprentices and others should contact the sponsor or the Department for the most recent Journey-level wage rate.
- B. Sponsors can grant advanced standing, and grant a wage increase, when apprentices demonstrate abilities and mastery of their occupation. When advanced standing is granted, the sponsor notifies the employer/training agent of the wage increase the apprenticeship program standard requires.

### C. Wage Progression Schedules: **Meter Electrician**

Step	Hour Range or competency step	Percentage of journey-level wage rate*
<b>1</b>	<b>0000-1000</b>	<b>65%</b>
<b>2</b>	<b>1001-2000</b>	<b>70%</b>
<b>3</b>	<b>2001-3000</b>	<b>75%</b>
<b>4</b>	<b>3001-4000</b>	<b>80%</b>
<b>5</b>	<b>4001-5000</b>	<b>85%</b>
<b>6</b>	<b>5001-6000</b>	<b>90%</b>

## VIII. WORK PROCESSES:

The apprentice shall receive on the job instruction and work experience as is necessary to become a qualified journey-level worker versed in the theory and practice of the occupation covered by these standards. The following is a condensed schedule of work experience, which every apprentice shall follow as closely as conditions will permit. The following work process descriptions pertain to the occupation being defined.

### A. **Meter Electrician**

#### **Approximate Hours/Competency Level**

1. **Installation .....2000**
  - a. **Single phase self-contained meters**
  - b. **Single-phase transformer-rated meters**
  - c. **Poly-phase self-contained meters**
  - d. **Poly-phase transformer-rated meters**



## OKANOGAN COUNTY ELECTRIC COOPERATIVE METER ELECTRICIAN

- e. Instrument transformers
  - f. Customer related trouble calls
  - g. Totalized metering
  - h. Crew Coordination
  - i. Primary metering
2. Lab/Shop .....800
- a. Meter testing
  - b. Meter programming
  - c. Meter recycling
  - d. Shop practices
  - e. Instrument transformer testing
  - f. Standards testing
  - g. Instrument repair, calibration and acceptance testing
  - h. Special fabrications
  - i. Programming meter devices
3. Substation Metering.....500
- a. Transformer loss compensation
  - b. Transducer
  - c. Station print-reading
  - d. Energy and indicating meter and instrument maintenance
  - e. Trouble calls
  - f. Intertie testing
  - g. Generation and co-generation metering
  - h. Meter programming
4. Audit.....1300
- a. Field testing (Meter accuracy and CT accuracy)
  - b. Hi-Bill complaints
  - c. High/low voltage investigation
  - d. Current Diversion (Check Meters and Field Investigation)
  - e. Surveys (Customer Requested and Conservation Load Survey)
  - f. Meter data programs (CCB, MDM, Command Center)
5. General.....880
- a. Distribution system recognition
  - b. Work practices and procedures
  - c. Clearance and grounding procedures
  - d. Meter record systems familiarization
  - e. Familiarization with DPPS
  - f. Service requirements
  - g. Construction standards
  - h. National Electric Code
  - i. EUSERC standards

## OKANOGAN COUNTY ELECTRIC COOPERATIVE METER ELECTRICIAN

j.	Customer relations	
6.	Safety .....	160
a.	Safety meeting attendance	
b.	First-aid training	
c.	Care and inspection of safety equipment and PPE	
d.	OSHA and WISHA safety standards	
e.	Chapter 296-45 WAC (Safety Standards)	
f.	Driving safety	
7.	Unit Outside Rotations .....	360
a.	Distribution-Overhead (40 hours) Underground	
	Residential (40 hours) .....	80
b.	Distribution-Network Underground (Cable Splicer) .....	40
c.	Station Construction and Maintenance .....	40
d.	Power Dispatchers .....	40
e.	Operators .....	16
f.	Electrical Shop .....	40
g.	Electrical Service Reps – 8 hours each	
	(Residential/Commercial/Service Eng.) .....	24
h.	Distribution Engineering.....	40
i.	Relay (16 hours)/Communications (24 hours).....	40

**Total Hours: 6000**

### **IX. RELATED/SUPPLEMENTAL INSTRUCTION:**

The apprentice must attend related/supplemental instruction (RSI). Time spent in RSI shall not be considered as hours of work and the apprentice is not required to be paid.

RSI must be provided in safe and healthy conditions as required by the Washington Industrial Safety and Health Act and applicable federal and state regulations.

Hours spent in RSI are reported to L&I each quarter. Reports must show which hours are unpaid and supervised by a competent instructor versus all other hours (paid and/or unsupervised) for industrial insurance purposes.

For purposes of coverage under the Industrial Insurance Act, the WSATC is an employer and the apprentice is an employee when an unpaid, supervised apprentice is injured while under the direction of a competent instructor and participating in RSI activities.

If apprentices do not attend required RSI, they may be subject to disciplinary action by the sponsor.

A. The methods of related/supplemental training must be indicated below (check those that apply):

## OKANOGAN COUNTY ELECTRIC COOPERATIVE METER ELECTRICIAN

☒ Supervised field trips

☐ Sponsor approved training seminars (specify)

☐ Sponsor approved online or distance learning courses (specify)

☐ State Community/Technical college

☐ Private Technical/Vocational college

☒ Sponsor Provided (lab/classroom)

☒ Other (specify): **Approved courses provided by NW Technical Training**

B. **(144)** Minimum RSI hours per year defined per the following [see WAC 296-05-015(6)]:

☒ Twelve-month period from date of registration.\*

☐ Defined twelve-month school year: (insert month) through (insert month).

☐ Two-thousand hours of on the job training.

*\*If no selection is indicated above, the WSATC will define RSI hours per twelve-month period from date of registration.*

C. Additional Information:

**None**

### **X. ADMINISTRATIVE/DISCIPLINARY PROCEDURES:**

A. Administrative Procedures:

The sponsor may include in this section a summary and explanation of administrative actions performed at the request or on the behalf of the apprentice. Such actions may include but are not limited to:

1. Voluntary Suspension: A temporary interruption in progress of an individual's apprenticeship agreement at the request of the apprentice and granted by the sponsor. The program sponsor shall review apprentices in suspended status at least once each year to determine if the suspension is still appropriate.
2. Advanced Standing or Credit: The sponsor may provide for advanced standing or credit for demonstrated competency, acquired experience, training or education in or related to the occupation. All sponsors need to ensure a fair and equitable process is applied to all apprentices seeking advanced standing or credit per WAC 296-05-015(11).

## OKANOGAN COUNTY ELECTRIC COOPERATIVE METER ELECTRICIAN

### 3. Sponsor Procedures:

**None**

### B. Disciplinary Procedures

1. The obligations of the sponsor when taking disciplinary action are as follows:
  - a. The sponsor shall be responsible for enacting reasonable policies and procedures and applying them consistently. The sponsor will inform all apprentices of their rights and responsibilities per these standards.
  - b. The sponsor shall notify the apprentice of intent to take disciplinary action and reasons therefore 20 calendar days prior to taking such action. The reason(s) supporting the sponsor's proposed action(s) must be sent in writing to the apprentice.
  - c. The sponsor must clearly identify the potential outcomes of disciplinary action, which may include but are not limited to discipline, suspension or cancellation of the apprenticeship agreement.
  - d. The decision/action of the sponsor will become effective immediately.
2. The sponsor may include in this section requirements and expectations of the apprentices and an explanation of disciplinary actions imposed for noncompliance. The sponsor has the following disciplinary procedures to adopt:
  - a. Disciplinary Probation: A time assessed when the apprentice's progress is not satisfactory. During this time the sponsor may withhold periodic wage advancements, suspend or cancel the apprenticeship agreement, or take further disciplinary action. A disciplinary probation may only be assessed after the initial probation is complete.
  - b. Disciplinary Suspension: A temporary interruption in the progress of an individual's apprenticeship agreement. Conditions will include not being allowed to participate in On-the-Job Training (OJT), go to Related Supplemental Instruction (RSI) classes or take part in any activity related to the Apprenticeship Program until such time as the sponsor takes further action. The program sponsor shall review apprentices in such status at least once each year.
  - c. Cancellation: Refers to the termination of an apprenticeship agreement at the request of the apprentice, supervisor, or sponsor. [WAC 296-05-003].
3. Sponsor Disciplinary Procedures:  
**None**

## OKANOGAN COUNTY ELECTRIC COOPERATIVE METER ELECTRICIAN

### C. Apprentice Complaint Procedures:

1. The apprentice must complete his/her initial probationary period in order to be eligible to file a complaint (WAC 296-05-105).
2. Complaints involving matters covered by a collective bargaining agreement are not subject to the complaint procedures in this section.
3. Complaints regarding non-disciplinary matters must be filed with the program sponsor within 30 calendar days from the date of the last occurrence. Complaints must be in writing.
4. If the apprentice disagrees with the resolution of the complaint or wishes to contest the outcome of a disciplinary action by the program sponsor, the apprentice must file a written request for reconsideration with the program sponsor within 30 calendar days from the date the apprentice received written notice of action by the program sponsor.
5. The program sponsor must reply, in writing, to the request for reconsideration within 30 calendar days from the date the program sponsor receives the request. The program sponsor must send a copy of the written reply to the apprentice within the 30 calendar days.
6. If the apprentice disagrees with the program sponsor's decision, the apprentice may file an appeal with the Apprenticeship Program, (WAC 296-05-105). If the apprentice does not timely file an appeal, the decision of the program sponsor is final after 30 calendar days from the date the program sponsor mails the decision to the apprentice. See section "D" below.

### D. Apprentice Complaint Review/Appeals Procedures:

1. If the apprentice disagrees with the program sponsor's decision, the apprentice must submit a written appeal to L&I's apprenticeship section within 30 calendar days from the date the decision is mailed by the program sponsor. Appeals must describe the subject matter in detail and include a copy of the program sponsor's decision.
2. The L&I apprenticeship section will complete its investigation within 30 business days from the date the appeal is received and attempt to resolve the matter.
3. If the Apprenticeship section is unable to resolve the matter within 30 business days, the Apprenticeship section issues a written decision resolving the appeal.
4. If the apprentice or sponsor is dissatisfied with L&I's decision, either party may request the WSATC review the decision. Requests for review to the WSATC must be

## OKANOGAN COUNTY ELECTRIC COOPERATIVE METER ELECTRICIAN

in writing. Requests for review must be filed within 30 calendar days from the date the decision is mailed to the parties.

5. The WSATC will conduct an informal hearing to consider the request for review.
6. The WSATC will issue a written decision resolving the request for review. All parties will receive a copy of the WSATC's written decision.

### **XI. SPONSOR – RESPONSIBILITIES AND GOVERNING STRUCTURE**

The following is an overview of the requirements associated with administering an apprenticeship program. These provisions are to be used with the corresponding RCW and/or WAC. The sponsor is the policymaking and administrative body responsible for the operation and success of this apprenticeship program. The sponsor may assign an administrator or a committee to be responsible for day-to-day operations of the apprenticeship program. Administrators and/or committee members must be knowledgeable in the process of apprenticeship and/or the application of chapter 49.04 RCW and chapter 296-05 WAC and these standards. If applicable, sponsors must develop procedures for:

#### **A. Committee Operations (WAC 296-05-009): (Not applicable for Plant Programs)**

Apprenticeship committees must be composed of an equal number of management and non-management representatives from a minimum of four to a maximum of twelve members. Committees must convene meetings at least three times per year attended by a quorum of committee members as defined in these approved standards.

#### **B. Program Operations**

The sponsor will record and maintain records pertaining to the administration of the apprenticeship program and make them available to the WSATC or Department upon request. Records required by WAC 296-05-100 will be maintained for five (5) years; all other records will be maintained for three (3) years. Apprenticeship sponsors will submit required forms/reports to the Department of Labor and Industries through one of the two prescribed methods below:

Sponsors shall submit required reports through assigned state apprenticeship consultant.

Sponsors shall submit required forms/reports through the Apprentice Registration and Tracking System (ARTS).

1. The following is a listing of forms/reports for the administration of apprenticeship programs and the time-frames in which they must be submitted:
  - a. Apprenticeship Agreements – within first 30 days of employment
  - b. Authorization of Signature forms - as necessary
  - c. Approved Training Agent Agreements– within 30 days of sponsor action

## OKANOGAN COUNTY ELECTRIC COOPERATIVE METER ELECTRICIAN

- d. Minutes of Apprenticeship Committee Meetings – within 30 days of sponsor approval (not required for Plant program)
  - e. Request for Change of Status - Apprenticeship/Training Agreement and Training Agents forms – within 30 days of action by sponsor.
  - f. Journey Level Wage Rate – annually, or whenever changed as an addendum to section VII. Apprentice Wages and Wage Progression.
  - g. Related Supplemental Instruction (RSI) Hours Reports (Quarterly):
    - 1st quarter: January through March, due by April 10
    - 2nd quarter: April through June, due by July 10
    - 3rd quarter: July through September, due by October 10
    - 4th quarter: October through December, due by January 10
  - h. On-the-Job Work Hours Reports (bi-annual)
    - 1st half: January through June, by July 30
    - 2nd half: July through December, by January 31
2. The program sponsor will adopt, as necessary, local program rules or policies to administer the apprenticeship program in compliance with these standards. Requests for revision to these standards of apprenticeship must be submitted 45 calendar days prior to a quarterly WSATC meeting. The Department of Labor and Industries, Apprenticeship Section's manager may administratively approve requests for revisions in the following areas of the standards:
- a. Program name
  - b. Sponsor's introductory statement
  - c. Section III: Conduct of Program Under Washington Equal Employment Opportunity Plan
  - d. Section VII: Apprentice Wages and Wage Progression
  - e. Section IX: Related/Supplemental Instruction
  - f. Section XI: Sponsor – Responsibilities and Governing Structure
  - g. Section XII: Subcommittees
  - h. Section XIII: Training Director/Coordinator
3. The sponsor will utilize competent instructors as defined in WAC 296-05-003 for RSI. Furthermore, the sponsor will ensure each instructor has training in teaching techniques and adult learning styles, which may occur before or within one year after the apprenticeship instructor has started to provide instruction.

### C. Management of Apprentices:

1. Each apprentice (and, if under 18 years of age, the parent or guardian) will sign an apprenticeship agreement with the sponsor, who will then register the agreement with the Department before the apprentice attends RSI classes, or within the first 30 days of employment as an apprentice. For the purposes of industrial insurance coverage and prevailing wage exemption under RCW 39.12.021, the effective date of registration will be the date the agreement is received by the Department.

## OKANOGAN COUNTY ELECTRIC COOPERATIVE METER ELECTRICIAN

2. The sponsor must notify the Department within 30 days of all requests for disposition or modification to apprentice agreements, which may include:
  - a) Certificate of completion
  - b) Additional credit
  - c) Suspension (i.e. military service or other)
  - d) Reinstatement
  - e) Cancellation
  - f) Corrections
  - g) Step Upgrades
  - h) Probation Completion date
  - i) Other (i.e., name changes, address)
  - j) Training Agent Cancellation
3. The sponsor commits to rotate apprentices in the various processes of the skilled occupation to ensure the apprentice is trained to be a competent journey-level worker.
4. The sponsor shall periodically review and evaluate apprentices before advancement to the apprentice's next wage progression period. The evidence of such advancement will be the record of the apprentice's progress on the job and during related/supplemental instruction.
5. The sponsor has the obligation and responsibility to provide, insofar as possible, reasonably continuous employment for all apprentices in the program. The sponsor may arrange to transfer an apprentice from one training agent to another or to another program when the sponsor is unable to provide reasonably continuous employment, or they are unable to provide apprentices the diversity of experience necessary for training and experience in the various work processes as stated in these standards. The new training agent will assume all the terms and conditions of these standards. If, for any reason, a layoff of an apprentice occurs, the apprenticeship agreement will remain in effect unless canceled by the sponsor.
6. An apprentice who is unable to perform the on-the-job portion of apprenticeship training may, if the apprentice so requests and the sponsor approves, participate in related/supplemental instruction, subject to the apprentice obtaining and providing to the sponsor written requested document/s for such participation. However, time spent will not be applied toward the on-the-job portion of apprenticeship training.
7. The sponsor shall hear and decide all complaints of violations of apprenticeship agreements.
8. Upon successful completion of apprenticeship, as provided in these standards, and passing the examination that the sponsor may require, the sponsor will recommend the WSATC award a Certificate of Completion of Apprenticeship. The sponsor will make an official presentation to the apprentice who has successfully completed his/her term of apprenticeship.



## OKANOGAN COUNTY ELECTRIC COOPERATIVE METER ELECTRICIAN

### D. Training Agent Management:

1. The sponsor shall offer training opportunities for apprentices by ensuring reasonable and equal working and training conditions are applied uniformly to all apprentices. The sponsor shall provide training at an equivalent cost to that paid by other employers and apprentices participating in the program. The sponsor shall not require an employer to sign a collective bargaining agreement as a condition of participation.
2. The sponsor must determine whether an employer can adequately furnish proper on the job training to an apprentice in accordance with these standards. The sponsor must also require any employer requesting approved training status to complete an approved training agent agreement and to comply with all federal and state apprenticeship laws, and these standards.
3. The sponsor will submit training agent agreements to the Department with a copy of the agreement and/or the list of approved training agents within thirty calendar days from the effective date. Additionally, the sponsor must submit rescinded training agent agreements to the Department within thirty calendar days of said action.

### E. Committee governance (if applicable): (see WAC 296-05-009)

1. Apprenticeship committees shall elect a chairperson and a secretary who shall be from opposite interest groups, i.e., chairperson-employers; secretary-employees, or vice versa. If the committee does not indicate its definition of quorum, the interpretation will be "50% plus 1" of the approved committee members. The sponsor must also provide the following information:
  - a. Quorum: **None**
  - b. Program type administered by the committee: **None**
  - c. The employer representatives shall be:  
  
**None**
  - d. The employee representatives shall be:  
  
**None**

### F. Plant programs

## **OKANOGAN COUNTY ELECTRIC COOPERATIVE METER ELECTRICIAN**

For plant programs the WSATC or the Department designee will act as the apprentice representative. Plant programs shall designate an administrator(s) knowledgeable in the process of apprenticeship and/or the application of chapter 49.04 RCW and chapter 296-05 WAC and these standards.

The designated administrator(s) for this program is/are as follows:

**Glenn Huber, Operations Manager  
PO Box 69  
93 West Cewuch Rd  
Winthrop, WA 98862**

### **XII. SUBCOMMITTEE:**

Subcommittee(s) approved by the Department, represented equally from management and non-management, may also be established under these standards, and are subject to the main committee. All actions of the subcommittee(s) must be reviewed by the main committee. Subcommittees authorized to upgrade apprentices and/or conduct disciplinary actions must be structured according to the same requirements for main committees.

**None**

### **XIII. TRAINING DIRECTOR/COORDINATOR:**

The sponsor may employ a person(s) as a full or part-time training coordinator(s)/ training director(s). This person(s) will assume responsibilities and authority for the operation of the program as are delegated by the sponsor.

**None**

**For L&I Staff Use Only***Christina Chance 3/8/2023**Christina Chance 1/26/2023*

L&amp;I Apprenticeship Consultant

*Teri Gardner 3-8-23**Teri Gardner 2-21-23*

L&amp;I Admin

Department of Labor and Industries  
 Apprenticeship Section  
 PO Box 44530  
 Olympia WA 98504-4530



## Apprenticeship Related/Supplemental Instruction (RSI) Plan Review

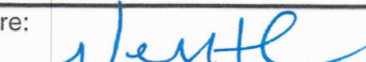
Program Name <b>OKANOGAN COUNTY ELECTRIC COOPERATIVE METER ELECTRICIAN</b>	
Occupation <b>Meter Electrician</b>	
Term/OJT Hours <b>6000 Hours</b>	Total RSI Hours <b>432 Hours</b>
Training Provider <b>NW Technical Training</b>	

By the signature placed below, the **program sponsor** agrees to provide the prescribed RSI for each registered apprentice and assures that:

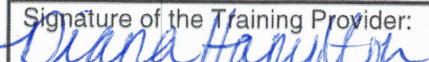
1. The RSI content and delivery method is and remains reasonably consistent with the latest occupational practices, improvements, and technical advances.
2. The RSI is coordinated with the on-the-job work experience.
3. The RSI is provided in safe and healthful work practices in compliances with WISHA and applicable federal and state regulations.
4. The RSI Plan is maintained, updated and submitted to the Department a minimum of once every 5 years (WSATC Policy 2015-01; rev, 10-21-21).
5. The RSI will be conducted by instructors who meet the qualification of the "competent instructor" as described in WAC 296-05-003:
  - a. Has demonstrated a satisfactory employment performance in her/her occupation for a minimum of three years beyond the customary learning period for that occupation; and
  - b. Meets the State Board for Community and Technical Colleges requirements for a professional technical instructor (see WAC 131-16-080 through -094), or be a subject matter expert, which is an individual, such as a journey worker, who is recognized within the industry as having expertise in a specific occupation; and
  - c. Has training in teaching techniques and adult learning styles, which may occur before or within one year after the apprenticeship instructor has started to provide the related technical instruction.
6. If using alternative forms of instruction, such as correspondence, electronic media, or other self-study, instruction shall be clearly defined.

**Signatures on next page**

**Form must be signed by Committee Chair and Secretary or Program's Authorized Signer**

<input type="checkbox"/> Chair	Date	<input type="checkbox"/> Secretary	Date
<input checked="" type="checkbox"/> Authorized Signer	12-14-22		
Print Name: Glenn Huber	Print Name:		
Signature: 	Signature:		

**Training Provider Signature**

Approved By (Print Name): Diana Hamilton	Title: NW Technical Training Manager
Signature of the Training Provider: 	
Date: 12/14/22	

If additional training providers are needed, go to page 4.

**SBCTC**

Print Name:	Title:
Signature of the Program Administrator:	
Date:	
<input type="checkbox"/> SBCTC recommends approval <input type="checkbox"/> SBCTC recommends return to sponsor	

Program Name OKANOGAN COUNTY ELECTRIC COOPERATIVE METER ELECTRICIAN	Occupational Objective Meter Electrician
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**Note:** The description of each element must be in sufficient detail to provide adequate information for review by the SBCTC and Review Committee. To add more elements, click on the plus sign that appears below the "Description of Element/Course" field.

**Describe minimum hours of study per year in terms of (check one):**

- ☒ 12-month period from date of registration.  
☐ Defined 12-month school year.  
☐ 2,000 hours of on-the-job training.

Element/Course: Basic Math/General Math Concepts/Math for Metering	Planned Hours: 20
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: NW Technical Training	
Description of element/course: General Math skills and concepts for meter reading.	

Element/Course: Introduction to Metering	Planned Hours: 14
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: NW Technical Training	
Description of element/course: Purpose of metering, where it sits in utility and metering concepts.	

Element/Course: Electrical Principles and AC Concepts	Planned Hours: 40
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: NW Technical Training	
Description of element/course: Ohms Law, Series and parallel circuits, resistant, inductance/reactance, phasor diagrams, power usage and sinewaves.	

Element/Course: Safety in Meter Work	Planned Hours: 10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: NW Technical Training	
Description of element/course: Meter Socket checks, Hazards associated with metering and PPE.	

Element/Course: Principles of Magnetism	Planned Hours: 5
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: NW Technical Training	
Description of element/course: Fluxes, Eddy currents, current coil and potential coil interactions.	

Element/Course: Watthour Meter Principles	Planned Hours: 20
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: NW Technical Training	
Description of element/course: How a meter works. ANSO form numbers, KH disk constants, Registers, Demans, Fluxes etc.	

Element/Course: Meter Wiring	Planned Hours: 10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: NW Technical Training	
Description of element/course: Actual hands-on wiring single phase application and determining ANSI meter form numbers for services, includes troubleshooting mis-wired applications (4 hrs in class/6 hrs lab)	

Element/Course: Instrument Transformers	Planned Hours: 10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: NW Technical Training	
Description of element/course: Potential and current transformers, how instrument transformers work to include ratios, burdens, rate factors and limitations of each transformer, selection of correct transformer for a service installation	

Element/Course: Distribution transformers	Planned Hours: 10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: NW Technical Training	
Description of element/course: Recognition of various distribution transformer connections to determine voltage and meter, understanding difference between Delta and Wye banked connection, Hands-on banking of transformer connections and their limitations (6 hrs in class/4 hrs lab)	

Element/Course: Principles of Accuracy Testing	Planned Hours: 5
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: NW Technical Training	
Description of element/course: Loadbox, Standards, Portable test equipment and accuracy testing basics.	

**1<sup>st</sup> Year Total :144 Hrs**

Element/Course: Review of Electrical Concepts	Planned Hours: 12
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: NW Technical Training	
Description of element/course: Ohms Law, Single-Phase series and parallel circuits, trigonometry, sinewaves and phasor diagrams	

Element/Course: Polyphase Systems	Planned Hours: 40
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: NW Technical Training	
Description of element/course: Three phase AC concepts, more detailed coverage of Delta and Wye voltages as it relates to meter configurations, Blondel's theorem as it relates to stator or element design of meters. Hands-on distribution of transformer connections (30 hrs classroom/10 hrs lab)	

Element/Course: Watthour Meter Testing	Planned Hours: 30
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: NW Technical Training	
Description of element/course: Testing of single phase and polyphaser applications, potential and current coil adjustments, field and shop testing application (10 hrs classroom/20 hrs lab)	

Element/Course: Self-Contained and Transformer-Rated Applications	Planned Hours: 30
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Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: NW Technical Training
Description of element/course: Classifications of meters, load calculations, and ANSI form numbers

Element/Course: Demand Metering Concepts	Planned Hours: 10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: NW Technical Training	
Description of element/course: KW demand and why we have it, rolling, block and demand interval scenarios covered by practical applications and labs (4hrs classroom/4 hrs lab)	

Element/Course: Three Phase Wiring Systems	Planned Hours: 10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: NW Technical Training	
Description of element/course: Hands-on wiring of three phase meter services, understanding of metering schematics. (2 hrs classroom/8 hrs lab)	

Element/Course: Installation Checks and Inspections	Planned Hours: 5
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: NW Technical Training	
Description of element/course: Troubleshooting metering problems and safety practices. (2 hrs classroom/3 hrs lab)	

Element/Course: Customer Relations and High Bill Complaints	Planned Hours: 2
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: NW Technical Training	
Description of element/course: Managing Customer concerns and ways to prevent potential conflict.	

Element/Course: Energy Diversion	Planned Hours: 5
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: NW Technical Training	
Description of element/course: Introduction to power or energy diversion, different way to detect and prevent power theft	

**2<sup>nd</sup> Yr Total: 144 Hrs**

Element/Course: Review of Electrical and AC Concepts	Planned Hours: 20
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: NW Technical Training	
Description of element/course: Review of Single and Three phase metering	

Element/Course: Reactive Metering Concepts	Planned Hours: 20
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: NW Technical Training	
Description of element/course: KVAR measurements of three phase systems, which includes delivered and received power. Manual plotting of phase angles from meter installation, use of computer programs to measure phase angles and power factor.	

<b>Element/Course:</b> Solid State Meters	<b>Planned Hours:</b> 25
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study <b>Provided by:</b> NW Technical Training	
Description of element/course: Basic components and their functions, programming and downloading various meter manufacturer's data from meters	

<b>Element/Course:</b> Introductions to Harmonics	<b>Planned Hours:</b> 10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study <b>Provided by:</b> NW technical Training	
Description of element/course: Identification of harmonics and what causes them and how it effects various equipment components	

<b>Element/Course:</b> Totalization Metering	<b>Planned Hours:</b> 4
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study <b>Provided by:</b> NW Technical Training	
Description of element/course: Pulse metering for larger commercial customers for load management	

<b>Element/Course:</b> Electronic Fundamentals	<b>Planned Hours:</b> 10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study <b>Provided by:</b> NW Technical Training	
Description of element/course: Basic logic diagrams to include and/or/nor/nand gates and binary number conversion	

<b>Element/Course:</b> Automated Meter Reading	<b>Planned Hours:</b> 10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study <b>Provided by:</b> NW Technical Training	
Description of element/course: The pros and cons of automated meter reading, a look at the various automated meter reading products and how they work.	

<b>Element/Course:</b> Future of Metering	<b>Planned Hours:</b> 5
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study <b>Provided by:</b> NW Technical Training	
Description of element/course: Discussion and examples of new metering concepts	

<b>Element/Course:</b> Metering Scenarios	<b>Planned Hours:</b> 40
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study <b>Provided by:</b> NW Technical Training	
Description of element/course: Troubleshooting metering problems, wiring scenarios, service evaluations, safety issues, old meter installations and other metering concepts. (15 hrs classroom/25 hrs lab)	

**3<sup>rd</sup> Yr Total: 144 hrs**



## Additional Training Providers (if necessary)

Click or tap here to enter text.

Print Name Training Provider

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Title of Training Provider

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