

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



REQUEST FOR APPROVAL OF PROPOSED STANDARDS

Received 02/08/2022
By S. Patterson
Teri Gardner 3-4-22
L&I apprenticeship
coordinator

TO: Washington State Apprenticeship & Training Council

FROM Klickitat PUD No. 1 Apprenticeship Committee

NAME OF PROGRAM STANDARDS

Check appropriate box:

Committee Plant OJT

OCCUPATION(S):	HOURS:	SOC #:
Lineman	6000	49-9051.00

Authorized Signatures:	
Chair: <i>MJMY</i>	Approved by: Washington State Apprenticeship & Training Council
Secretary: <i>Bob Dovi</i>	Secretary of Council
Date: <i>2/1/2022</i>	Date:

Teri Gardner 3-4-22

Teri Gardner 3-14-22



**APPRENTICESHIP PROGRAM STANDARDS
adopted by**

KLICKITAT PUD NO. 1 APPRENTICESHIP COMMITTEE

(sponsor name)

Occupational Objective(s):

SOC#

Term [WAC 296-05-015]

LINEMAN

49-9051.00

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

Klickitat PUD No. 1 Apprenticeship Committee

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):

It is the goal through the application of these standards to recruit and train for industry a workforce that can learn a skilled trade through a combination of on-the-job training and

Klickitat PUD No. 1 Apprenticeship Committee

post-secondary education that will offer a valued long-term benefit for the worker and employer.

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.

The area covered by these Standards shall be the service area of the Public Utility District #1 of Klickitat County.

II. MINIMUM QUALIFICATIONS:

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

Age: **At least 18 years of age.**

Education: **Applicant must have a High School Diploma or High school equivalency certificate, with at least one year of HS Algebra or equivalent required with a passing grade of C or better.**

Physical: **Physically and mentally able to safely perform or learn to safely perform essential functions of the job either with or without reasonable accommodations and without endangering the safety or health of co-workers throughout the term of the apprenticeship agreement.**

Testing: **None**

Other: **Must possess a valid Washington State Driver License.
Must possess a CDL Class A, Endorsement.**

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

Klickitat PUD No. 1 Apprenticeship Committee

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:

Exempt under WAC 296-05-405(1)(b).

B. Equal Employment Opportunity Plan:

Exempt under WAC 296-05-405(1)(b).

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 the apprenticeship shall not be less than 6,000 hours.

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

Klickitat PUD No. 1 Apprenticeship Committee

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.

- 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.

C. **The first 1200 hours of the term of apprenticeship.**

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:

The ratio of apprentices to journey-level workers shall not be more than one (1) apprentice to every one (1) journey-level worker.

VII. APPRENTICE WAGES AND WAGE PROGRESSION:

- 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.

Klickitat PUD No. 1 Apprenticeship Committee

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

Lineman

Step	Hour Range or competency step	Percentage of journey-level wage rate
1	0-1,000 hours	73%
2	1,001-2,000 hours	75%
3	2,001-3,000 hours	80%
4	3,001-4,000 hours	83%
5	4,001-5,000 hours	87%
6	5,001-6,000 hours	90%

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. **Lineman**

Approximate Hours

- 1. Transmission Work300**
 - **Wire-String, Splice, Deadend, Clip in**
 - **Guying**
 - **Wood Pole Framing and Erection**
 - **Other Related Work**

- 2. Substation Work.....300**

Klickitat PUD No. 1 Apprenticeship Committee

- **Assembly and Erection**
 - **Install Bus and Ground Materials**
 - **Connect and Adjust Switches**
 - **Other Electrical Equipment**
- 3. Underground (De-energized).....2200**
- **UG Conduits and Vaults**
 - **UG Primary Conductors**
 - **UG Transformers and Switchgear**
 - **UG Secondary Conductors and Termination**
- 4. Overhead (De-energized)2200**
- **Set Poles**
 - **Framing**
 - **Conductors and Insulators**
 - **Secondary Services, Meters, Street Lights**
 - **Transformers, Capacitors, Regulators**
 - **Guys and Anchors**
 - **Switches and Cutouts**
 - **Miscellaneous Safety Meetings/Training**
- 5. Hot Work.....1000**
- **Cut Over to Higher Voltage**
 - **Install Taps and Jumpers**
 - **Replace Poles**
 - **Replace Crossarms**
 - **Trouble Shoot**
 - **Wire-Stringing, Tie/Untie In**
 - **Other Overhead Hot Work**
 - **Underground Hot Work**
 - **Operate Equipment, i.e. Puller, Tensioner**

Total Hours: 6000 hours

Klickitat PUD No. 1 Apprenticeship Committee

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):

Supervised field trips

Sponsor approved training seminars (specify)

Sponsor approved online or distance learning courses (specify)
Provided by Northwest Line Construction Industry JATC #487

State Community/Technical college

Private Technical/Vocational college

Sponsor Provided (lab/classroom)

Other (specify): **Camp Rilea, Classroom Study provided by Northwest Line Construction Industry JATC #487**

B. **(176)** 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.*

Klickitat PUD No. 1 Apprenticeship Committee

1. RSI Hours Per Year

1st Year: 196 Hours (Classroom Study: 96 Hours, Camp Training: 100 Hours)

2nd Year: 190 Hours (Classroom Study: 96 Hours, Camp Training: 94 Hours)

3rd Year: 176 Hours (Classroom Study: 96 Hours, Camp Training: 80 Hours)

C. Additional Information:

1. Laptops with cellular data will be available for checkout by apprentices.

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).
3. Sponsor Procedures:
 - a. **Apprentices shall attend related instruction as established by the Committee.**
 - b. **Apprentices will adhere to policies and procedures established in the working agreement with Local 125 and the District Personnel Policy Manual.**
 - c. **Any apprentice may appear before the committee and the committee may call any apprentice before it. This action pertains to matters relating to the apprenticeship program.**
 - d. **The committee will discuss progress or lack of it with the apprentice as needed. An apprentice who is given notice of impending cancellation can request a hearing before the Committee. Continued employment of an employee whose apprenticeship has been cancelled under this section shall be**

Klickitat PUD No. 1 Apprenticeship Committee

at the discretion of the District. The District and Union agree to carry out the instruction of the committee in these cases.

- e. **The Committee will certify to the Union for examination all apprentices who satisfactorily complete the apprenticeship program. An apprentice shall pass this examination prior to being advanced to journey-level worker status.**
- f. **The Committee will certify to the Registration Agency and request completion certificates for all that complete the program satisfactorily.**
- g. **Failure to maintain employment as an apprentice with Klickitat PUD No. 1 will result in cancellation of the apprenticeship agreement.**

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

Klickitat PUD No. 1 Apprenticeship Committee

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:
 - a. **Apprentices shall turn in monthly progress reports by the 5th day of the following month, or they may be subject to disciplinary action by the Committee which may include disciplinary suspension or cancellation of the apprenticeship agreement.**
 - b. **In case of failure of the apprentice to fulfill the obligations of safety-related instruction or on-the-job performance, the committee shall have the authority to suspend or cancel the apprentice's agreement or withhold the apprentice's advancement.**

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.

Klickitat PUD No. 1 Apprenticeship Committee

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 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

Klickitat PUD No. 1 Apprenticeship Committee

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 forms/reports through assigned state apprenticeship consultant.

Or;

Sponsors shall submit required forms/reports through the Apprentice Registration and Tracking System (ARTS), accessed through Secure Access Washington (SAW).

Paper forms as well as ARTS external access forms are available from the sponsor's assigned apprenticeship consultant or online at:

<http://www.lni.wa.gov/TradesLicensing/Apprenticeship/FormPub/default.asp>.

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
 - 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

Klickitat PUD No. 1 Apprenticeship Committee

- 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.
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

Klickitat PUD No. 1 Apprenticeship Committee

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.

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)

Klickitat PUD No. 1 Apprenticeship Committee

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: **A quorum shall be 50% plus one, of the voting members.**
- b. Program type administered by the committee: **Individual Joint**
- c. The employer representatives shall be:

**Mike Nixon
Operations Manager
Chair
1313 S Columbus
Goldendale, WA 98620**

**Jim Brokaw
1313 S Columbus
Goldendale, WA 98620**

**John Starr
1313 S Columbus
Goldendale, WA 98620**

**Justen Greenwood
110 NE Estes Ave.
White Salmon, WA 98672**

- d. The employee representatives shall be:

**Robert Dorais, Secretary
1313 S Columbus
Goldendale, WA 98620**

**Todd Niva
1313 S Columbus
Goldendale, WA 98620**

**Jeff Speelman
110 NE Estes Ave.
White Salmon, WA 98672**

**Darren Shattuck
1313 S Columbus
Goldendale, WA 98620**

F. Plant programs

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:

None

Klickitat PUD No. 1 Apprenticeship Committee

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

Teri Gardner 3-4-22

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



Journey Level Wage Rate

From which apprentices' wages rates are computed

TO: Washington State Apprenticeship & Training Council

From Klickitat PUD No. 1 Apprenticeship Committee

(NAME OF STANDARDS)

Occupations	County(s)	Journey Level Wage Rate	Effective Date:
Lineman	Klickitat County	53.48	April 14, 2022

Teri Gardner 3-4-22

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



Apprenticeship Committee Representative Qualification Information Experience & Education History

NAME OF PROGRAM/SPONSOR:	Klickitat PUD No. 1 Apprenticeship Committee
---------------------------------	--

Committee Representative Name:

WORK EXPERIENCE			
POSITION (Most recent first)	EMPLOYER / ORGANIZATION	FROM: (Month & Year)	TO: (Month & Year)

EDUCATION HISTORY				
Name and Location of Training and/or School	Month/Year Attended		Program of Study	Type of Certificate or Degree Awarded, if any
	From	To		

OTHER TECHNICAL CERTIFICATIONS or LICENSES HELD

Sponsors may attach additional pages if necessary.

Teri Gardner 3-4-22

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



Apprenticeship Committee Representative Qualification Information Experience & Education History

NAME OF PROGRAM/SPONSOR:	Klickitat PUD No. 1 Apprenticeship Committee
---------------------------------	--

Committee Representative Name:

WORK EXPERIENCE			
POSITION (Most recent first)	EMPLOYER / ORGANIZATION	FROM: (Month & Year)	TO: (Month & Year)

EDUCATION HISTORY				
Name and Location of Training and/or School	Month/Year Attended		Program of Study	Type of Certificate or Degree Awarded, if any
	From	To		

OTHER TECHNICAL CERTIFICATIONS or LICENSES HELD

Sponsors may attach additional pages if necessary.

Teri Gardner 3-4-22

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



Apprenticeship Committee Representative Qualification Information Experience & Education History

NAME OF PROGRAM/SPONSOR:	Klickitat PUD No. 1 Apprenticeship Committee
---------------------------------	--

Committee Representative Name:	Justen Greenwood	Employer Representative
--------------------------------	-------------------------	-------------------------

WORK EXPERIENCE			
POSITION (Most recent first)	EMPLOYER / ORGANIZATION	FROM: (Month & Year)	TO: (Month & Year)
Operations Line Superintendent	Klickitat County PUD	09/2020	Present
Journeyman Lineman	Klickitat County PUD	07/2010	09/2020
Journeyman Lineman	Construction Lineman IBEW 125	09/2001	07/2010

EDUCATION HISTORY				
Name and Location of Training and/or School	Month/Year Attended		Program of Study	Type of Certificate or Degree Awarded, if any
	From	To		
NWJATC IBEW	1997	2000	Outside Electrical	Certificate of Completion
Eastern Oregon State College	1996	1997	Baseball	None
Sherman County High School	1991	1995	High School	Diploma

OTHER TECHNICAL CERTIFICATIONS or LICENSES HELD

Sponsors may attach additional pages if necessary.

Teri Gardner 3-4-22

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



Apprenticeship Committee Representative Qualification Information Experience & Education History

NAME OF PROGRAM/SPONSOR:	Klickitat PUD No. 1 Apprenticeship Committee
---------------------------------	--

Committee Representative Name:

WORK EXPERIENCE			
POSITION (Most recent first)	EMPLOYER / ORGANIZATION	FROM: (Month & Year)	TO: (Month & Year)

EDUCATION HISTORY				
Name and Location of Training and/or School	Month/Year Attended		Program of Study	Type of Certificate or Degree Awarded, if any
	From	To		

OTHER TECHNICAL CERTIFICATIONS or LICENSES HELD

Sponsors may attach additional pages if necessary.

Teri Gardner 3-4-22

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



Apprenticeship Committee Representative Qualification Information Experience & Education History

NAME OF PROGRAM/SPONSOR:	Klickitat PUD No. 1 Apprenticeship Committee
---------------------------------	--

Committee Representative Name: Mike Nixon- Chair Employer Representative
--

WORK EXPERIENCE			
POSITION (Most recent first)	EMPLOYER / ORGANIZATION	FROM: (Month & Year)	TO: (Month & Year)
Operations Manager	Klickitat PUD	01/2022	Current
Line Division Manager	Turlock Irrigation District	09/2014	01/2022
Journeyman Lineman	Turlock Irrigation District	03/2006	09/2014
Apprentice Lineman	Turlock Irrigation District	09/2002	03/2006

EDUCATION HISTORY				
Name and Location of Training and/or School	Month/Year Attended From	Month/Year Attended To	Program of Study	Type of Certificate or Degree Awarded, if any
SSC/Spokane WA	09/85	03/89	General Studies	AA
Avista/SCC/Spokane	10/01	01/02	Power Line Construction	Cert. of Comp.
WPPA (on site) Turlock	04/2016	04/2016	Leadership Skills #1 & 3	Cert. of Comp.
Line Apprenticeship Turlock	09/2002	03/2006	Power Line Construction	Journeyman Lineman

OTHER TECHNICAL CERTIFICATIONS or LICENSES HELD
Hazardous Material Handling ReCert. 08/2021
Incident Command System 02/2015
Utility Locate Cert. 03/2012
Steel Lattice Tower Training 09/2015

Sponsors may attach additional pages if necessary.

Teri Gardner 3-4-22

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



Apprenticeship Committee Representative Qualification Information Experience & Education History

NAME OF PROGRAM/SPONSOR:	Klickitat PUD No. 1 Apprenticeship Committee
---------------------------------	--

Committee Representative Name:

WORK EXPERIENCE			
POSITION (Most recent first)	EMPLOYER / ORGANIZATION	FROM: (Month & Year)	TO: (Month & Year)

EDUCATION HISTORY				
Name and Location of Training and/or School	Month/Year Attended		Program of Study	Type of Certificate or Degree Awarded, if any
	From	To		

OTHER TECHNICAL CERTIFICATIONS or LICENSES HELD

Sponsors may attach additional pages if necessary.

Teri Gardner 3-4-22

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



Apprenticeship Committee Representative Qualification Information Experience & Education History

NAME OF PROGRAM/SPONSOR:	Klickitat PUD No. 1 Apprenticeship Committee
--------------------------	--

Committee Representative Name:	Jeffrey D. Speelman Employee Representative
--------------------------------	--

WORK EXPERIENCE			
POSITION (Most recent first)	EMPLOYER / ORGANIZATION	FROM: (Month & Year)	TO: (Month & Year)
Journeyman Lineman	K.P.U.D.	8-15-11	present
Journeyman Tree trimme	K.P.U.D.	8-15-05	8-15-10
Journey Tree Trimmer	Tree's Inc.	2-1-03	8-12-05

EDUCATION HISTORY				
Name and Location of Training and/or School	Month/Year Attended		Program of Study	Type of Certificate or Degree Awarded, if any
	From	To		
JATC Line Clearance	2-1-03	8-1-05	lineclearancetree	
JATC Lineman	8-1-08	8-1-11	lineman training	

OTHER TECHNICAL CERTIFICATIONS or LICENSES HELD
Certified Crane Operator TB<21-75
SPI License holder Washington St.
Certified Rigger and hand signalman
Explosive License holder
Certified Utility Locator
Flagger Certified, First Aid, CPR AED Trained

Sponsors may attach additional pages if necessary.

Teri Gardner 3-4-22

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



Apprenticeship Committee Representative Qualification Information Experience & Education History

NAME OF PROGRAM/SPONSOR:	Klickitat PUD No. 1 Apprenticeship Committee
---------------------------------	--

Committee Representative Name:

WORK EXPERIENCE			
POSITION (Most recent first)	EMPLOYER / ORGANIZATION	FROM: (Month & Year)	TO: (Month & Year)

EDUCATION HISTORY				
Name and Location of Training and/or School	Month/Year Attended		Program of Study	Type of Certificate or Degree Awarded, if any
	From	To		

OTHER TECHNICAL CERTIFICATIONS or LICENSES HELD

Sponsors may attach additional pages if necessary.

For L&I Staff Use Only	
Received 02/24/2022 By S. Patterson	
L&I Apprenticeship Consultant	<i>Teri Gardner 3-4-22</i> L&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 Klickitat PUD No. 1 Apprenticeship Committee	
Occupation Lineman	
Term/OJT Hours 6000	Total RSI Hours 562
Training Provider Northwest Line Construction Industry JATC #487	

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 checked="" type="checkbox"/> Chair <input type="checkbox"/> Authorized Signer	Date 2-24-2022	<input checked="" type="checkbox"/> Secretary	Date 2/24/2022
Print Name: Mike Nixon		Print Name: Robert Dorais	
Signature: 		Signature: 	

Training Provider Signature

Approved By (Print Name): Terry Lowen	Title: Director Northwest Line
Signature of the Training Provider: 	
Date: 2-24-22	

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 Klickitat PUD No. 1 Apprenticeship Committee	Occupational Objective Lineman
--	-----------------------------------

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: 1st Year Classroom study	Planned Hours: 96
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Northwest Line Construction Industry JATC #487	
Description of element/course: During their apprenticeship, the Northwest apprentice shall receive such instruction and experience in all branches of the trade as necessary to develop a practical and skilled craftsman, versed in the theory and practice of the trade. At the end of the course, the student will be prepared to progress within the framework of the apprenticeship standards. The following outline breaks down the individual topics covered over the 12-class schedule:	
How to Study This Course and Achieve Your Personal Goals Knowing Your Apprenticeship and Your Responsibilities Sexual Harassment The Attributes of an IBEW/NECA Apprenticeship Your Job and the Future It Holds for You Safety Awareness – On the Job Identify Some Basic Tools of the Trade Use and Care of Hand Tools Safety Meetings, Job Briefings (Tailboard) Discussions First Aid, Safety, and Health Avoiding the Hazards of Drug Abuse Good Housekeeping	16 Hours
Introduction to OSHA Hazard Awareness Energized and Non-Energized Parts	5 Hours
Personal Protective Equipment Use and Operation of Blocks Slings and Chokers Rigging Tools and Rigging Equipment	5 Hours
Climbing Equipment Inspection and Care Fall Protection Climber Cutouts Climbing Poles Pole-Top Rescue Bucket Rescue Wood Poles—Inspection and Maintenance Setting Poles, and Setting Poles Near or Around Energized Circuits Digging Holes and Trenches	10 Hours
Shock, Arc, and Blast Rubber Gloves and Sleeves, Care and Use Protective Line Devices, Care and Use Working in Confined Spaces/Vault Rescue Hand Signals Powered Equipment Safety—Compressors and Portable Generators	5 Hours

Math Basics with Whole Numbers Fractions/Decimals/Percentages Mathematics for Parallel Circuits How to Solve Basic Algebraic Equations Solving Power Calculations What is Electricity?	5 Hours
What is Electricity? Electron Theory Electrical Units Sources and Effects of Electricity The Electrical Circuit and Ohm's Law	5 Hours
Ropes, Knots, Hitches, and Splices Wire Rope Ladders/Step Bolts Powered Equipment Safety—Underground & Digger Derricks Hazard Communication	10 Hours
Guy Types, Guy Strength and Sizes Guy Installation Anchors Line Conductors Crossarms and Attachments Insulators	5 Hours
The Principles of Magnetism Magnetic Induction Working with Ratios and Proportion The Electric System Wire Sizes, Types, and Characteristics Stringing Wire Sagging and Tying in Conductors Connecting an Overhead Service Insulate and Isolate Insulated Platforms and the Second Point of Contact	10 Hours
Understanding and explain the fundamentals of DC Theory, Including Resistance in DC Combination Circuits How Current Reacts in Combination Circuits How Voltage Functions in DC Combination Circuits How to Calculate Power in DC Combination Circuits Resistance in Series Circuits Current/Voltage/Power in Series Circuits How Voltage Functions in a DC Parallel Circuit Resistance in a DC Parallel Circuit How Current Reacts in a DC Parallel Circuit How to Calculate Power in a DC Parallel Circuit	10 Hours
Two-Way Radios – Proper Use Procedures Underground Systems Excavation and Shoring Laying Conduit Manholes and Handholes Cable Types Pulling Cables Planning and Design for Underground Systems Baskets, Aerial Lifts, and Platforms Grounding and Protective Grounds Taking A Line Out of Service Lock-out/Tag-out-Line Applications	10 Hours

Element/Course: 1st Year Camp Training	Planned Hours: 100
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: Northwest Line Construction Industry JATC #487	
Description of element/course: Expanding and reinforcing principles learned in the 1 st year classroom training, Camp provides additional instruction both in the classroom and in the pole yard on becoming a Qualified Climber, wood poles and steel tower work and the following topics:	
Classroom Topics:	50 Hours
Qualified Employee Training Requirements: Pole Top Rescue, Job Briefing, Hazardous Energy Control (Lockout/Tagout) Procedures, Enclosed Spaces, Personal Protective Equipment, Working on or near exposed energized parts, deenergizing lines and equipment, grounding for the protection of employees, mechanical equipment and overhead lines Climbing Tools (Belt, Hooks & Safety Strap) Care, Wear, Use and Inspection Line Hardware Identification Wood Pole Characteristics, Ground Line Inspection & Pole Tag Information Use of Hand Lines Conductor Ties (Copper & Aluminum) Rigging for Dead-Ending Conductor Rigging for Insulator Replacement On 115kv Steel Arm H-Structure Use of Hook Ladder Live-Line Tool Identification, Care & Testing Circuit Equipment & Apparatus Identification & Identification of Energized & Insulated Parts Close Calls and What They Tell Us Single Point Grounding Demonstration	
Rigging Class:	
Breaking Strength, Safety Factor & Safe Working Load Block, Sling & Structure Loading Rigging Analysis Using Vector Diagramming to Determine attachment Load & Angle, Block Load, Rope Tension & Fall Line Tension Sling Capacities Dead-End Load On Guy Wires & Pole Compression Calculating Crane Hand Signals Load Weight Calculating – Material & Liquids – Pounds/Cubic Ft. Synthetic Sling Safety, Inspection & Use Wire Rope Components, Inspection & Use Rigging and Signal Person Certificate	
SKILLS PRACTICED:	50 Hours
Safe Climbing Technique Wood Pole At 4', 10', 30' & 50' Wood Pole Working Position for Different Job Tasks Safe Climbing Technique Steel Tower At 50' Job Briefing Single Point Grounding Pole-Top Rescue Before Climbing Inspection of Wood Poles Pole Setting & Replacement – (By Hand) Pole Framing – On the Ground & Aloft Conductor Stringing, Sagging, Tying-In and Dead-Ending Use of Hand Lines, Grips, Slings, Blocks, Hoists, Pole Gins, Tag Ropes, Drills & Ladders Rope Inspection, Knot Tying and Rigging with Ropes including bowline, running bowline, bowline on the bight, clove hitch, square, grapevine, timber hitch, sheet bend and trucker hitch. Short splice & Eye splice	

Element/Course: 2 nd Year Classroom Study	Planned Hours: 96
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Provided by: Northwest Line Construction Industry JATC #487	
Description of element/course: Building on the 1 st year curriculum, this course of study prepares the apprentice to enter into the energized portion of training utilizing the following topics:	
This is a National Program, becoming familiar with the IBEW Constitution, Parliamentary Procedure and how it works, Understanding Local Union Bylaws Professional Personal Conduct Absenteeism Harassment Working Outdoors Emergency Response Introduction to 1910.269, Electric Power Generation, Transmission and Distribution	16 Hours
Reviewing the Applications of DC Theory Comparing Direct Current to Alternating Current Fundamentals of Alternating Current An Introduction to 3-Phase Systems Understanding how the DC generator works Understanding the design and function of AC Generators Introduction to and general use of Test Instruments	10 Hours
Introduction to Transformers, Transformer Construction, Information Characteristics, Operation, Polarity/Connections, Installation, Protection and Single-phase Connections. Transformer: Completely Self-Protected Conducting Transformer Load Checks Specific Hazards working with Transformers Vectors Working with prefixes and powers of 10 Customary and Metric systems of measurement The Circle Area and Volume Measuring and drawing angles Right Triangles	18 Hours
Blueprint lines, Introduction to Blueprints and specifications, Blueprint fundamentals Symbols, Conventions and Abbreviations Electrical Drawings and Diagrams Civil drawings Reading maps, plans and profiles Staking sheets and stakes Introduction to measuring and leveling devices	10 Hours
Introduction to Inductance Voltage Drop Metering Overvoltage protection Fault indicator Tower Footings and Erection Joining high-line conductors and sagging conductors Dampers, hold down weights and armor rods Phasing and tying in circuits	14 Hours
Overload capabilities of electrical equipment Phase Sequence Back-feed Locating Faults and Restoring Service Introduction to medium voltage cable power cable	10 Hours

Cable Splicing: safety, material and tools, cable preparation, terminations, splicing, elbows (separable connectors), ground cables, pulling cables, insulation testing, introduction to cable fault locating, underground troubleshooting and manufacturers kits.

Test Instruments – How to use a megohmmeter 10 Hours
 Confined spaces
 Mobile cranes, boom capacities and load charts
 Practical applications rigging and vector
 Lifting and digging operations

Traffic Signal Industry overview, hardware and equipment, signal cabinets 8 Hours
 Phasing and traffic flow, introduction to the Manual on Uniform Traffic Control Devices
 Transformer simulator
 Flagging, signs, and barricades

Element/Course: 2nd Year Camp Training	Planned Hours: 94
--	--------------------------

Mode of Instruction (check all that apply)

Classroom Lab Online Self-Study

Provided by: Northwest Line Construction Industry JATC #487

Description of element/course:

Building on the 2nd year classroom training, this course is designed to provide powerline distribution live line maintenance (hot sticking) and pole yard skills, including the following subjects:

Federal OSHA Regulation 29 CFR 1910.269
 Role of Safety Watcher
 Live-Line Tool (Hot-Stick) Identification
 Single Point Grounding Class and Demonstration for Transmission & Distribution
 Basic Rigging, Structure Loading, Slings, Blocks & Hoists
 Voltage Regulator Demo/Operation Procedure

SKILLS PRACTICED: **50 Hours**

Safe Climbing Technique (Using Safety Strap)
 Job Briefing
 Rubber Glove Technique For 4kv
 Installing Rubber Line Hose & Hoods
 Installing Mechanical Jumpers - Sticks & Gloves
 Using Hot Four-Parted Blocks - Sticks & Gloves
 Live Line Tool and Rubber Glove, Hot Conductor Tie Application & Removal, Copper and Aluminum
 Dead-End Insulator Replacement - Sticks & Gloves
 Arm Replacement - Stick, Wire Tongs & Lever Lifts
 Arm Replacement - 3 Phase Auxiliary Arm
 Install Automatic Conductor Splice - Sticks
 Install Automatic Dead-End Type Conductor Shoe - Sticks
 Install Bolted Type Conductor Dead-End Device - Sticks
 Spread Conductors onto Hot-Arms to Prepare for Conductor Replacement
 Conductor Replacement of Inside Pole Yard - Sticks - Gloves
 Use of Nylon Strap Hoist & Link Stick
 Hot Pole Replacement
 Transformer Bank Installation

TRANSFORMER CLASS **44 Hours**

Power Generation
 Transformer Manufacturers Voltage Rating, Winding Diagram, Terminal Designation, KVA & Polarity Explanation
 Transformer Nameplate Information
 Transformer Grounding
 Harmonic Voltages
 Ferroresonance
 Primary System Configurations Wye & Delta
 Primary Connections Wye or Delta - Open or Closed
 Secondary Coil Connection Series & Parallel

Secondary Connection Wye, Delta & Open Delta
 Primary and Secondary Vector (Phasor) Diagramming
 Angular Displacement
 Transformer Grounding ie: Case, Floating Wye, Etc.
 Transformer Bank Paralleling, Maintain Customer Service (Energized 3 Ø Motors), (Rotation Change)
 Common Transformer Connections
 Uncommon Transformer Connection

Element/Course: 3rd Year Classroom Training **Planned Hours: 96**

Mode of Instruction (check all that apply)

Classroom Lab Online Self-Study

Provided by: Northwest Line Construction Industry JATC #487

Description of element/course:

The final year of classroom instruction assists the apprentice in appraising their progress, identifying areas where improvement may be needed and focuses on the technical side of the industry, including the following topic:

Almost a Journeyman, Pride in your industry 16 Hours

Introduction to the COMET Program

Productivity

Labor Management Relations/LMCC's

The economics of unemployment

Keys to success – Motivation and Leadership

The National Electrical Benefit Fund

After apprenticeship

Foremanship

Harassment

Soon to be an Instructor

Your career – journeyman responsibilities.

Distribution circuits 20 Hours

Review of Alternating current, theory terms and definitions

Inductance

Capacitors / Distribution Capacitors

Transformers – Three-Phase voltages and connections

Transformers – Single-Phase Connections

Transformer connections

Troubleshooting Three-Phase banks

Personal Protective Grounding – body currents, basic electric circuits, grounding history, equipotential zone grounding, selection of equipment, installation of grounds, Step and Touch potential, induced voltage and multiple grounds, truck grounding, underground distribution grounding, grounding in substations, and grounding during construction activities. 10 Hours

Testing ground (earth) resistance 10 Hours

Lightning protection

Applying rubber protective devices

Live-Line Tools: Introduction, identification and care, using hot sticks and maintenance with hot sticks 10 Hours

Live-Line work practices: insulator and crossarm changes (including 138kv), tower insulator changes, helicopter timber changes and special practices

Primary metering 10 Hours

Single-phase revenue metering

Introduction to substations, safety procedures, safety and first aid, federal regulations, print reading making connections, function and types of stations, spill prevention, containment, and countermeasure plans, foundations, installing grout, underground power cables, grounding/grounding grids, steel superstructure assembly, installing insulator and installing control cables and devices

Primary fusing/fuse principles 10 Hours

Reclosers and sectionalizers

Substation equipment identification, oil circuit breakers, batteries, oil care and filtering, air switches,

Control equipment.

Fault current

Testing for line faults

Voltage regulation Step regulators and tap changing Capacitors and capacitor switching	10 Hours
Power factor Power harmonics	
Fiber Optic – fiber types, cable types, codes and standards, aerial construction, and underground construction	
Alternative Energy Sources – wind and photovoltaics	
Extra high voltage lines	

Element/Course: 3rd Year Camp Training	Planned Hours: 50
--	--------------------------

Mode of Instruction (check all that apply)
 Classroom Lab Online Self-Study
 Provided by: Northwest Line Construction Industry JATC #487

Description of element/course:
 The final component of the Camp training includes additional pole yard skills, including transmission live-line maintenance (hot sticking) as well as the following topics:

Federal OSHA Regulation 29 CFR 1910.269 10 Hours
 Role of Safety Watcher
 Wear and Care of Rubber Gloves and Blankets
 Grounding Transmission Structures
 Transmission Live Line Tool Identification
 Capacitors and their effect on power quality, practical demo & lecture
 Rigging class covering synthetic rope, wire rope, hardware, knots, splices, breaking strength, safety factor & safe working load
 Work site bonding and grounding
 Voltage regulator demonstration & lecture on operation of single phase step-regulator
 Single phase circuit review & what makes it work
 Transformer Connections Review

SKILLS PRACTICED: 40 Hours

Safe Climbing Technique Wood & Steel (Using Safety Strap)
 Job Briefing
 Proper Use of Handlines, Hoists & Blocks
 Unpinning Insulator from 115kv Steel Arm H-Structure (10')
 Proper Grounding of Transmission H & Wishbone Structures
 De-Energized Insulator Replacement Wish-Bone Structure
 Energized Suspension Insulator Replacement on 115kv Wish-Bone
 Energized Steel I-Beam Arm Replacement on 115kv H-Structure
 230kv De-Energized Suspension Insulator Replacement
 230kv Energized Suspension Insulator Replacement

Element/Course: EICA Crane Training 3rd Year Camp	Planned Hours: 30
---	--------------------------

Mode of Instruction (check all that apply)
 Classroom Lab Online Self-Study
 Provided by: Northwest Line Construction Industry JATC #487

Description of element/course:
 This course expands on the knowledge obtained in the Saturday School Crane homework assignments, preparing the student to sit for the final exam portion of the Electrical Industry Certification Association's Crane Certification, developed specifically for the electrical industry.

Preparation for the written exam including: 24 Hours
 Inspection and Maintenance
 Safety Checks
 Evaluation of worksite conditions, setup, assembly and shut down
 Managing Crane/Digger Derrick Access and Egress
 Maintain Employment Requirements

SKILLS PRACTICED: 6 Hour

Practice and demonstration of the Stationary Control crane and digger derrick, using the information learned to successfully complete the practical exam portion of the certification.

Additional Training Providers (if necessary)

Click or tap here to enter text.

Print Name Training Provider

Signature of Training Provider

Click or tap here to enter text.

Title of Training Provider

Click or tap here to enter text.

Organization of Training Provider

Click or tap here to enter text.

Print Name Training Provider

Signature of Training Provider

Click or tap here to enter text.

Title of Training Provider

Click or tap here to enter text.

Organization of Training Provider

Click or tap here to enter text.

Print Name Training Provider

Signature of Training Provider

Click or tap here to enter text.

Title of Training Provider

Click or tap here to enter text.

Organization of Training Provider

Click or tap here to enter text.

Print Name Training Provider

Signature of Training Provider

Click or tap here to enter text.

Title of Training Provider

Click or tap here to enter text.

Organization of Training Provider

Click or tap here to enter text.

Print Name Training Provider

Signature of Training Provider

Click or tap here to enter text.

Title of Training Provider

Click or tap here to enter text.

Organization of Training Provider

Click or tap here to enter text.

Print Name Training Provider

Signature of Training Provider

Click or tap here to enter text.

Title of Training Provider

Click or tap here to enter text.

Organization of Training Provider

Click or tap here to enter text.

Print Name Training Provider

Signature of Training Provider

Click or tap here to enter text.

Title of Training Provider

Click or tap here to enter text.

Organization of Training Provider

Click or tap here to enter text.

Print Name Training Provider

Signature of Training Provider

Click or tap here to enter text.

Title of Training Provider

Click or tap here to enter text.

Organization of Training Provider

Click or tap here to enter text.

Print Name Training Provider

Signature of Training Provider

Click or tap here to enter text.

Title of Training Provider

Click or tap here to enter text.

Organization of Training Provider

Click or tap here to enter text.

Print Name Training Provider

Signature of Training Provider

Click or tap here to enter text.

Click or tap here to enter text.