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



REQUEST FOR APPROVAL OF PROPOSED STANDARDS

Rc'd 3/14/2022CC Rc'd 3/3/2022 CC L&I apprenticeship coordinator

Teri Gardner 3-14-22

TO: Washington State Apprenticeship & Training Council

FROM Inland Power and Light Co Apprenticeship Committee NAME OF PROGRAM STANDARDS		Teri Gardner 3-4-2.	
Check appropriate box:	Τιο 🗌		
OCCUPATION(S):	HOURS:	SOC #:	
Lineman	6000	49-9051.00	

Authorized Signatures: Chair: Alito	Approved by: Washington State Apprenticeship & Training Council
Secretary Both Ellet	Secretary of Council
Date: 3/1/2022	Date:

Rc'd 3/14/2022 CC Rc'd 3/3/2022 CC

Teri Gardner 3-14-22 Teri Gardner 3-3-22



APPRENTICESHIP PROGRAM STANDARDS adopted by

INLAND POWER AND LIGHT CO APPRENTICESHIP COMMITTEE

(sponsor name)

Occupational Objective(s): LINEMAN
 SOC#
 Term [WAC 296-05-015]

 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:

By:

Chair of Council

Secretary of Council

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:

The following Standards were prepared by the Inland Power and Light Co. Apprenticeship Committee, and the International Brotherhood of Electrical Workers Local Union 77

(IBEW), assisted by the Office of Apprenticeship, Employment and Training Administration, U.S. Department of Labor, and the Washington State Department of Labor and Industries Apprenticeship Section. When approved by and registered with the Registration Agency, these Standards will govern the training of competent, qualified journeyman lineman.

I. <u>GEOGRAPHIC AREA COVERED</u>:

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 geographical area covered by these Standards shall be Spokane, Stevens, Pend Oreille, Lincoln, Grant, Adams, Whitman, Garfield, Asotin, Columbia, Franklin, and Walla Walla Counties in the State of Washington. Benewah, Bonner, and Kootenai Counties in the State of Idaho.

Applicants and apprentices please note that while the State of Washington has no responsibility or authority in the State of Idaho, the JATC will apply the same standards and guidelines to apprentices registered in the program while working in the Idaho counties of Benewah, Bonner and Kootenai.

II. MINIMUM QUALIFICATIONS:

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

Age:	Applicants must be at least 18 years of age
Education:	High school graduate or equivalent.
Physical:	Applicant for an apprenticeship must be physically capable of performing the work of the occupation with or without reasonable accommodations.
Testing:	None
Other:	Applicants must have completed 6 months as a Utility Groundman.
	Applicant must have a valid issued class A CDL.

III. <u>CONDUCT OF PROGRAM UNDER WASHINGTON EQUAL EMPLOYMENT</u> <u>OPPORTUNITY PLAN:</u>

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. <u>Selection Procedures:</u>

Exempt per WAC 296-05-405 (1) (a)

B. <u>Equal Employment Opportunity Plan:</u>

Exempt per 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. <u>TERM OF APPRENTICESHIP</u>:

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 Lineman apprenticeships shall be a minimum of 6000 hours of reasonably continuous employment.

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.
- 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.

The initial probationary period for an apprentice Lineman shall be the first 1200 hours of apprenticeship employment.

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 Lineman apprentices to Journey-Level workers shall always be at least be one (1) Journey-Level worker for each one (1) apprentice.

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. 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 Schedule Lineman Apprentice wages are pursuant to the Collective Bargaining Agreement between IBEW Local 77 and Inland Power and Light CO. Percentage of wages are effective January 1, 2022.

Step	Hour Range or competency step	Percentage of journey-level wage rate
1	Apprentice Step 1 (6 months)	75%
2	Apprentice Step 2 (6 months)	77%
3	Apprentice Step 3 (6 months)	79%
4	Apprentice Step 4 (6 months)	82%
5	Apprentice Step 5 (6 months)	86%
6	Apprentice Step 6 (6 months)	92%

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. <u>Lineman</u>	<u>Approximate Hours</u>
1. Safety Education & Tailboard	400
2. Operating Equipment	420
3. Overhead Construction	
4. Underground Construction	
5. Overhead Maintenance	900
6. Underground Maintenance	
7. Transmission	40
8. Substations	40
9. Field Switching	40
10. Meter Shop	40
11. Troubleshooting	120
Total Hours:	6000

IX. <u>RELATED/SUPPLEMENTAL INSTRUCTION:</u>

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:
 - (X) Sponsor approved online or distance learning courses (specify): Online courses included in Northwest Line Construction Industry JATC 487 program
 - (X) State Community/Technical college: Courses included in Northwest Line Construction Industry JATC 487 program, offered in collaboration with North Idaho College
 - () Private Technical/Vocational college
 - () Sponsor Provided (lab/classroom)
 - (X) Other (specify): Northwest Line Construction Industry JATC 487 line school offered in collaboration with North Idaho College; Camp Rilea
- B. 144 Minimum RSI hours per year defined per the following [see WAC 296-05-015(6)]:
 - (X) 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: 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)

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. <u>Voluntary Suspension</u>: 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. <u>Advanced Standing or Credit</u>: 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. <u>Sponsor Procedures:</u>
 - a. Structure of the Inland Power and Light Co's Joint Apprenticeship and Training Committee (JATC)
 - i. Members of the JATC will consist of representatives with training and experience necessary to oversee the apprentice program.
 - ii. Membership of the JATC will be composed of four (4) members with an equal number of representatives of the employer and of the union pursuant to their collective bargaining agreement.
 - **b.** Responsibilities of the JATC:
 - i. Cooperate in the selection of apprentices as outlined in this program.
 - ii. Ensure that apprentices are under written Apprenticeship Agreements and register the local apprenticeship standards and agreements with the Washington State Department Labor and

Industries, Apprenticeship Section of Fraud Prevention and Labor Standards.

- iii. Review and recommend apprenticeship activities in accordance with this program.
- iv. Establish the minimum standards of education and experience required of apprentices.
- v. Meet on a quarterly basis to review records and progress of each apprentice in training and recommend improvement or modification in training schedules, schooling and other training activities. Written minutes of the meeting will be kept.
- vi. Determine the quality and quantity of experience on the job which apprentices should have and to make every effort toward their obtaining it.
- vii. Maintain a record of all apprentices, showing their education, experience, and progress in learning the occupation.
- viii. Advise apprentices on the need for accident prevention and provide instruction with respect to safety in the workplace.
- ix. Certify that apprentices have successfully completed their apprenticeship program.
- x. Notify the Washington State Department Labor and Industries, Apprenticeship Section of Fraud Prevention and Labor Standards of all new apprentices to be registered, credit granted, suspensions for any reason, reinstatements, extensions, completions and cancellations with explanation of causes and notice of completions of Apprenticeship Agreements.

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. <u>Disciplinary Probation</u>: 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. <u>Disciplinary Suspension</u>: 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. <u>Cancellation</u>: Refers to the termination of an apprenticeship agreement at the request of the apprentice, supervisor, or sponsor. [WAC 296-05-003].
- 3. <u>Sponsor Disciplinary Procedures:</u> Sponsor will follow the disciplinary procedure as outlined in the collective bargaining agreement between Inland Power and Light and IBEW Local 77.
- 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 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. <u>SPONSOR – RESPONSIBILITIES AND GOVERNING STRUCTURE</u>

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. <u>Committee Operations (WAC 296-05-009):</u>

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. <u>Program Operations</u>

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 103rd quarter: July through September, due by October 104th 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.
- 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.
- 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. <u>Committee governance (if applicable): (see WAC 296-05-009)</u>

- 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: 50% plus 1
 - b. Program type administered by the committee: Individual Joint
 - c. The employer representatives shall be:

Travis Englehart, Secretary	Mike Roberts
Safety Manager	Operations Manager
PO Box A	PO Box A
Spokane, WA 99219	Spokane, WA 99219

d. The employee representatives shall be:

Matthew Kane, Chair	Dallas Childers
PO Box A	PO Box A
Spokane, WA 99219	Spokane, WA 99219

F. <u>Plant programs</u>

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:

N/A

XII. <u>SUBCOMMITTEE:</u>

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.

N/A

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.

N/A

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



Teri Gardner 3-3-2022 Journey Level Wage Rate

From which apprentices' wages rates are computed

TO: Washington State Apprenticeship & Training Council

From Inland Power and Light Co Apprenticeship Committee

(NAME OF STANDARDS)

Occupations	County(s)	Journey Level Wage Rate	Effective Date:
Occupations Journeyman Lineman	County(s) Spokane, Stevens, Pend Oreille, Lincoln, Grant, Adams, Whitman, Garfield, Asotin, Columbia, Franklin, Walla Walla, Bonner, Benewah and Kootenai	Level Wage Rate \$53.10	

For L&I Sta	ff Use Only
Rc'd 3/14/2022 CC	Teri Gardner 3-14-22
Rc'd 3/03/2022 CC	Teri Gardner 3-3-22
L&I Apprenticeship Consultant	L&I Admin

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



Apprenticeship Committee Representative Qualifications

The Apprenticeship Committee is responsible for the day-to-day operations of the apprenticeship and training program and operating the program consistent with the standards of apprenticeship. Pursuant to WAC 296-05-009, the Representative listed below shall be familiar with the applicable apprenticeship standards.

Name	of	Program
------	----	---------

Inland Power and Light Co. Apprenticeship Committee

Committee Representative Name Dallas Childers	Committee Representative Signature
Employer Representative Employee Representative (Does not have the authority to hire or fire)	

Work Experience

Position (most recent first)	Employer / Organization	From (mm/yy)	To (mm/yy)
Foreman	Inland Power and Light	12/19	Current
Lineman	Inland Power and Light	01/18	12/19
Lineman	NV-Energy	01/14	01/18
App. Lineman	A-B Line Builders	01/11	01/14
USDA- Hotshot	US Forest Service	01/08	11/10

Education History

Name of Training and/or School (most recent first)	Completed Date (mm/yy)	Program of Study	Degree or Certification
NW Line College	01/11	Line worker	Cert.
Firefighter 1&2 Prog	01/08	Fire Science	Cert.
Haz-Mat	01/08	Grizzly Fire Program	Cert.
ЕМТ	01/08	Grizzly Fire Program	Cert.

Other Technical Certifications or Licenses Held

For L&I Sta	aff Use Only
Rc'd 3/14/2022 CC	Teri Gardner 3-14-22
Rc'd 3/3/2022 CC	Teri Gardner 3-4-22
L&I Apprenticeship Consultant	

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



Apprenticeship Committee Representative Qualifications

The Apprenticeship Committee is responsible for the day-to-day operations of the apprenticeship and training program and operating the program consistent with the standards of apprenticeship. Pursuant to WAC 296-05-009, the Representative listed below shall be familiar with the applicable apprenticeship standards.

Name of Program		
Inland Power & Light	Co. Apprenticeship	Committee

Committee Representative Name Travis Englehart	Committee Representative Signature
Employer Representative	Employee Representative (Does not have the authority to hire or fire)

Work Experience

Position (most recent first)	Employer / Organization	From (mm/yy)	To (mm/yy)
Safety Manager	Inland Power & Light	09/19	present
Mgr Corporate Safety	Puget Sound Energy	10/17	09/19
Safety Supervisor	Puget Sound Energy	10/13	10/17
Safety, Health, & Work Practice Consultant	Puget Sound Energy	04/07	10/13
	с. Т		

Education History

Name of Training and/or School (most recent first)	Completed Date (mm/yy)	Program of Study	Degree or Certification Awarded
Central Washington University	12/06	Safety & Health Management	Bachelor of Science
	1		

Other Technical Certifications or Licenses Held

Certified Safety Professional, awarded 2014 by Board of Certified Safety Professionals

For	L&1	Staff	Use	Only
For	L&1	Staff	Use	Onl

Rc'd 3/3/2022 CC

Teri Gardner 3-3-2022 L&I Admin

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



Apprenticeship Committee Representative Qualifications

The Apprenticeship Committee is responsible for the day-to-day operations of the apprenticeship and training program and operating the program consistent with the standards of apprenticeship. Pursuant to WAC 296-05-009, the Representative listed below shall be familiar with the applicable apprenticeship standards.

Name of Program INLAND POWER AND LIGHT CO APPRENTICESHIP COMMITTEE

MATTHEW KANE	Home "
--------------	--------

Employer Representative Employee Representative (Does not have the authority to hire or fire)

Work Experience

Position (most recent first)	Employer / Organization	From (mm/yy)	To (mm/yy)
GENERAL FOREMAN	INLAND POWER AND LIGHT	03/18	PRESENT
JOURNEYMAN LINEMAN	INLAND POWER AND LIGHT	07/16	03/18
JOURNEYMAN LINEMAN	AVISTA UTILITIES	10/10	05/16
LINE APPRENTICESHIP INSTRUCTOR-3RD YR	AVISTA UTILITIES	10/12	05/16
APPRENTICE LINEMAN	AVISTA UTILITIES	10/07	09/10

Education History

Name of Training and/or School (most recent first)	Completed Date (mm/yy)	Program of Study	Degree or Certification Awarded
LEWIS AND CLARK STATE	12/06	BUSINESS MANAGEMENT	BS

Other Technical Certifications or Licenses Held

F100-528-000 Apprenticeship Committee Representative Qualifications 01-2022

For L&I Staf	f Use Only
Rc'd 3/14/2022 CC	Teri Gardner 3-14-22
Rc'd 3/3/2022 CC	Teri Gardner 3-4-22
Apprenticeship Consultant	1.8.1 Admin

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



Apprenticeship Committee Representative Qualifications

The Apprenticeship Committee is responsible for the day-to-day operations of the apprenticeship and training program and operating the program consistent with the standards of apprenticeship. Pursuant to WAC 296-05-009, the Representative listed below shall be familiar with the applicable apprenticeship standards.

Name of Program Inland Power and Light Co. Apprentices	ship Committee
Committee Representative Name Mike Roberts	Committee Representative Signature

Employer Representative Employee Representative (Does not have the authority to hire or fire)

Work Experience

Position (most recent first)	Employer / Organization	From (mm/yy)	To (mm/yy)
Operations Manager	Inland Power and Light Co.	10-2018	current
Director of Safety	Inland Power and Light Co,	2-2011	10-2018
Safety Manager	ESCI Corp	2-2009	2-2011
General Frmn	Avista Corp	1-2002	1-2009
Area Rep	Avista Corp	6-1990	1-2002
Jrmn Lineman	Avista Corp	5-1975	5-1990

Education History

Name of Training and/or School (most recent first)	Completed Date (mm/yy)	Program of Study	Degree or Certification Awarded
CLCP	10-2014	Safety / Risk Management	Certification
Warren University	6-2007	Business Management	Bachelor of Science
JATC	8-1981	Line Apprenticeship	Cretification

Other Technical Certifications or Licenses Held

F100-528-000 Apprenticeship Committee Representative Qualifications 01-2022

For L&I Sta	aff Use Only
Rc'd 3/14/2022 CC	Teri Gardner 3-14-22
Rc'd 3/3/2022 CC	Teri Gardner 3-4-22
L&I Apprenticeship Consultant	L&I Admin

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



Apprenticeship Related/Supplemental Instruction (RSI) Plan Review

Inland Power and Light Co Apprenti Occupation	ceship Committee	
Lineman		
Term/OJT Hours 6000	Total RSI Hours 532	
6000 Training Provider Northwest Line Construction Industr	Sector Sector	_

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).
- 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.
- 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

Chair	Date 3/1/2022	Secretary	Date 3/1/2022
Print Name: Matt Kane		Print Name: Travis Englehart	
Signature:	-2	Signature:	s Ellit

Training Provider Signature

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

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

SBCTC

Print Name:	Title:	
Signature of the Program Administrator:		
Date:		
SBCTC recommends approval	SBCTC recommends return to sponsor	

Program Name	Occupational Objective	
Inland Power and Light Co Apprenticeship Committee	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: 1 st Year Classroom Study	Planned Hours: 96
Aode of Instruction (check all that apply)	
🛛 Classroom 🛛 Lab 🖾 Online 🗔 Self-Study	
Provided by: Northwest Line Construction Industry JATC #487	
Description of element/course:	
During their apprenticeship, the Northwest apprentice shall receive such instruction accessary to develop a practical and skilled craftsman, versed in the theory and pra tudent will be prepared to progress within the framework of the apprenticeship stan ndividual topics covered over the 12-class schedule:	actice of the trade. At the end of the course, the
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	5 Hours
Hazard Awareness	
Energized and Non-Energized Parts	
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	5 Hours

Math Basics with Whole Numbers	5 Hours
Fractions/Decimals/Percentages	
Mathematics for Parallel Circuits	
How to Solve Basic Algebraic Equations	
Solving Power Calculations	
What is Electricity	5 Hours
Electron Theory	a ribula
Electrical Units	
Sources and Effects of Electricity	
The Electrical Circuit and Ohm's Law	
The closefour of our and office caw	
Ropes, Knots, Hitches, and Splices	10 Hours
Wire Rope	
Ladders/Step Bolts	
Powered Equipment Safety - Underground & Digger Derricks	
Hazard Communication	
Guy Types, Guy Strength and Sizes	5 Hours
Guy Installation	o nours
Anchors	
Line Conductors	
Crossarms and Attachments	
Insulators	
Insulators	
The Principles of Magnetism	10 Hours
Magnetic Induction	NE 1944 194
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	
Independent data and purple the fundamentals of DC Theory, Including	10 1/2007
Understanding and explain the fundamentals of DC Theory, Including	10 Hours
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	
חטיי נט סמוכעומנפ רטייפו ווו מ דיט רמומוופו טונטונ	
Tow-Way Radios - Proper Use Procedures	10 Hours
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	

lement/Course: 1 st Year Camp Training	Planned Hours: 100
ode of Instruction (check all that apply)	
Classroom 🛛 Lab 🔲 Online 🖾 Self-Study	
rovided by: Northwest Line Construction Industry JATC #487	
escription of element/course:	
panding and reinforcing principles learned in the 1 st year classroom training, Cam	on provides additional instruction both in the
assroom and in the pole yard on becoming a Qualified Climber, wood poles and si	
	and the second
Classroom Topics:	50 Hours
Qualified Employee Training Requirements: Pole Top Rescue, Job Briefing, Hazar	
Procedures, Enclosed Spaces, Personal Protective Equipment, Working on or nea	
ind equipment, grounding for the protection of employees, mechanical equipment	and overhead lines
Climbing Tools (Belt, Hooks & Safety Strap) Care, Wear, Use and Inspection	
ine Hardware Identification	
Vood Pole Characteristics, Ground Line Inspection & Pole Tag Information	
lse of Hand Lines	
onductor Ties (Copper & Aluminum)	
igging for Dead-Ending Conductor	
igging for Insulator Replacement On 115kv Steel Arm H-Structure	
ise of Hook Ladder	
ive-Line Tool Identification, Care & Testing	
ircuit Equipment & Apparatus Identification & Identification of Energized & Insulat	ed Parts
lose Calls and What They Tell Us	
ingle Point Grounding Demonstration	
ligging Class:	
reaking Strength, Safety Factor & Safe Working Load	
Nock, Sling & Structure Loading	
ligging Analysis Using Vector Diagramming to Determine attachment Load & Angl	e. Block Load, Rope Tension & Fall Line
ension	
ling Capacities	
ead-End Load On Guy Wires & Pole Compression Calculating	
rane Hand Signals	
oad Weight Calculating - Material & Liquids - Pounds/Cubic Ft.	
ynthetic Sling Safety, Inspection & Use	
/ire Rope Components, Inspection & Use	
igging and Signal Person Certificate	
	50.11-1-1
KILLS PRACTICED:	50 Hours
afe Climbing Technique Wood Pole At 4′, 10′ 30′ & 50′ /ood Pole Working Position for Different Job Tasks	
afe Climbing Technique Steel Tower At 50'	
b Briefing	
ngle Point Grounding	
ble-Top Rescue	
efore Climbing Inspection of Wood Poles	
ole Setting & Replacement - (By Hand)	
ole Framing - On the Ground & Aloft	
onductor Stringing, Sagging, Tyin-In and Dead-Ending	
se of Hand Lines, Grips, Slings, Blocks, Hoists, Pole Gins, Tag Ropes, Drills & La	dders
ope Inspection, Knot Tying and Rigging with Ropes Including bowline, running bo	wline, bowline on the bight, clove hitch,
quare, grapevine, timber hitch, sheet bend and trucker hitch.	
hort splice & Eye Splice	

Element/Course: 2 nd Year Classroom Study	Planned Hours: 96
Node of Instruction (check all that apply)	
🛛 Classroom 🛛 Lab 🖾 Online 🔲 Self-Study	
Provided by: Northwest Line Construction Industry JATC #487	
Description of element/course:	a contract of the second second
Building on the 1 st year curriculum, this course of study prepares the apprentice to enter into the ne following topics:	e energized portion of training utilizing
This is a National Program, becoming familiar with the IBEW Constitution, Parliamentary Proc and how it works, Understanding Local Union Bylaws Professional Personal Conduct Absenteeism	edure 16 Hours
Harassment Working Outdoors	
Emergency Response Introduction to 1910.269, Electric Power Generation, Transmission and Distribution	
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	10 Hours
Introduction to and general use of Test Instruments Introduction to Transformers, Transformer Construction, Information Characteristics, Operation	n, 18 Hours
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	
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	14 Hours
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	
Overload capabilities of electrical equipment Phase Sequence	10 Hours
Back-feed	
_ocating Faults and Restoring Service ntroduction to medium voltage cable power cable	parable
Cable Splicing: safety, material and tools, cable preparation, terminations, splicing, elbows (se connectors), ground cables, pulling cables, insulation testing, introduction to cable fault location underground troubleshooting and manufacturers kits.	

Test Instruments - How to use a megohmmeter Confined Spaces	10 Hours
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 Phasing and traffic flow, introduction to the Manual on Uniform Traffic Control Devices Transformer simulator Flagging, signs, and barricades	8 Hours

Element/Course: 2 nd Year Camp Training	Planned Hours: 94
Node 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 2 nd year classroom training, this course is designed to provide pov ticking) and pole yard skills, including the following subjects:	werline distribution live line maintenance (hot
ederal OSHA Regulation 29 CFR 1910.269	
cole of Safety Watcher	
ive-Line Tool (Hot-Stick) Identification	
ingle Point Grounding Class and Demonstration for Transmission & Distribution	
asic Rigging, Structure Loading, Slings, Blocks & Hoists /oltage 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, Co	opper 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 Designa	ation, 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 Motor	s). (Rotation Change)

F100-520-000 Apprenticeship Related/Supplement Instruction (RSI) Plan Review 01-2022 11 Uncommon Transformer Connection

Element/Course: 3 rd Year Classroom Training Planned Ho	ours;	96
Node of Instruction (check all that apply)		
🛛 Classroom 🛛 Lab 🖾 Online 🔲 Self-Study		
Provided by: Northwest Line Construction Industry JATC #487		
Description of element/course:	2. C.M	ares a s
The final year of classroom instruction assists the apprentice in appraising their progress, identifying areas where be needed and focuses on the technical side of the industry, including the following topics:	improve	ment ma
Almost a Jaumauman Drida in your industry		16 Hour
Almost a Journeyman, Pride in your industry Introduction to the COMET Program		TO HOUR
Productivity		
Labor Management Relations/LMCC's		
The economics of unemployment		
Keys to success - Motivation and Leadership		
The National Electric Benefit Fund		
After apprenticeship		
Foremanship Harassment		
Soon to be an Instructor		
Your career - journeyman responsibilities		
		00.11
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 multip grounds, truck grounding, underground distribution grounding, grounding in substations, and grounding during	e	10 Hours
construction activities.		
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, foundation	s.	
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		io rioure
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		TO HOUIS
Fiber Optic - fiber types, cable types, codes and standards, aerial construction, and under ground construction		
Fiber Optic - tiber types, cable types, codes and standards, denar construction, and under ground construction		

Alternative Energy Sources - wind and photovoltaics Extra high voltage lines

Element/Course: 3 rd Year Camp Training	Planned Hours: 50
Adde of Instruction (check all that apply)	
⊠ Classroom ⊠ Lab □ Online □ Self-Study	
Provided by: Northwest Line Construction Industry JATC #487	
Description of element/course:	the transmission live line meintenance (bet
The final component of the Camp training includes additional pole yard skills, incluc ticking) as well as the following topics:	ang transmission live-line maintenance (not
Federal OSHA Regulation 29 CFR 1910.269	10 Hours
Role of a 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	ng strength, safety factor
& safe working load	
Work site bonding and grounding	ator
Work site bonding and grounding Voltage regulator demonstration & lecture on operation of single phase step-regulation	ator
Work site bonding and grounding	ator
Work site bonding and grounding Voltage regulator demonstration & lecture on operation of single phase step-regula Single phase circuit review & what makes it work Transformer Connections Review	ator 40 Hours
Work site bonding and grounding Voltage regulator demonstration & lecture on operation of single phase step-regula Single phase circuit review & what makes it work	
Work site bonding and grounding Voltage regulator demonstration & lecture on operation of single phase step-regula Single phase circuit review & what makes it work Transformer Connections Review <u>SKILLS PRACTICED:</u> Safe Climbing Technique Wood & Steel (Using Safety Strap) Job Briefing	
Work site bonding and grounding Voltage regulator demonstration & lecture on operation of single phase step-regula Single phase circuit review & what makes it work Transformer Connections Review <u>SKILLS PRACTICED:</u> Safe Climbing Technique Wood & Steel (Using Safety Strap) Job Briefing Proper Use of Handlines, Hoists & Blocks	
Work site bonding and grounding Voltage regulator demonstration & lecture on operation of single phase step-regula Single phase circuit review & what makes it work Transformer Connections Review <u>SKILLS PRACTICED:</u> 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').	
Work site bonding and grounding Voltage regulator demonstration & lecture on operation of single phase step-regula Single phase circuit review & what makes it work Transformer Connections Review <u>SKILLS PRACTICED:</u> 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	
Work site bonding and grounding Voltage regulator demonstration & lecture on operation of single phase step-regula Single phase circuit review & what makes it work Transformer Connections Review SKILLS PRACTICED: 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	
Work site bonding and grounding Voltage regulator demonstration & lecture on operation of single phase step-regula Single phase circuit review & what makes it work Transformer Connections Review <u>SKILLS PRACTICED:</u> 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	
Work site bonding and grounding Voltage regulator demonstration & lecture on operation of single phase step-regula Single phase circuit review & what makes it work Transformer Connections Review <u>SKILLS PRACTICED:</u> 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	

Additional Training Providers (if necessary)

Click or tap here to enter text. Print Name Training Provider

Click or tap here to enter text. Title of Training Provider

Click or tap here to enter text. Print Name Training Provider

Click or tap here to enter text. Title of Training Provider

Click or tap here to enter text. Print Name Training Provider

Click or tap here to enter text. Title of Training Provider

Click or tap here to enter text. Print Name Training Provider

Click or tap here to enter text. Title of Training Provider

Click or tap here to enter text. Print Name Training Provider

Click or tap here to enter text. Title of Training Provider

Click or tap here to enter text. Print Name Training Provider

Click or tap here to enter text. Title of Training Provider

Click or tap here to enter text. Print Name Training Provider

Click or tap here to enter text. Title of Training Provider

Click or tap here to enter text. Print Name Training Provider

Click or tap here to enter text. Title of Training Provider

Click or tap here to enter text. Print Name Training Provider

Click or tap here to enter text, Title of Training Provider

Click or tap here to enter text. Print Name Training Provider

Click or tap here to enter text.

Signature of Training Provider

Click or tap here to enter text. Organization of Training Provider

Signature of Training Provider

Click or tap here to enter text. Organization of Training Provider

Signature of Training Provider

Click or tap here to enter text. Organization of Training Provider

Signature of Training Provider

Click or tap here to enter text. Organization of Training Provider

Signature of Training Provider

Click or tap here to enter text. Organization of Training Provider

Signature of Training Provider

Click or tap here to enter text. Organization of Training Provider

Signature of Training Provider

Click or tap here to enter text. Organization of Training Provider

Signature of Training Provider

Click or tap here to enter text. Organization of Training Provider

Signature of Training Provider

Click or tap here to enter text. Organization of Training Provider

Signature of Training Provider

Click or tap here to enter text.

F100-520-000 Apprenticeship Related/Supplement Instruction (RSI) Plan Review 01-2022 11