Clallam County PUD #1
Wildland Fire Mitigation Plan

September 24, 2024
Version 1.0

1.0 Executive Summary

When the Washington Legislature passed House Bill 1032 in July 2023 it stated that, *it is in the best interest of the state, our citizens, and our natural resources to identify the sources of wildland fires; identify and implement best practices to reduce the prevalence and intensity of those wildland fires; put those practices in place; and by putting those practices in place, reduce the risk of wildland fires and damage and losses resulting from those fires*.

The Legislature directed the Department of Natural Resources (DNR), in consultation with the Energy Resilience and Emergency Management Office of the Department of Commerce, to contract with an independent consultant with experience in developing electric utility wildfire mitigation plans to develop an electric utility wildfire mitigation plan format and a list of elements to be included in electric utility wildfire mitigation plans. The Wildfire Mitigation Plan (WMP) format below achieves the direction of the Legislature.

By October 31, 2024, and every three years thereafter, each consumer-owned utility and investor-owned utility must review, if appropriate revise, and adopt its wildfire mitigation plan. When reviewing or revising a wildfire mitigation plan, utilities must use the recommended format and elements contained in the WMP format. The plan must be submitted to the utility wildland fire prevention advisory committee created in RCW 76.04.780 to be posted on their website.

The template and list of elements included were developed in conjunction with the Wildland Fire Prevention Advisory Committee, electric utilities, the state fire marshal, the Governor's Office of Indian Affairs, and the public. The WMP format is intended to function as a guide and provide utilities with suggested elements for their plan which are informed by best practices demonstrated to reduce the prevalence and intensity of wildfires and which reduce the risk of wildfire and the resulting damage and losses.

Table of Contents

2.0 Wildfire Mitigation Plan Overview

2.1 Purpose of the Wildfire Mitigation Plan

This Wildfire Mitigation Plan describes in detail the range of activities that Clallam County PUD #1 is taking to mitigate the threat of utility involved wildfires, including various programs, policies, and procedures. This plan complies with the requirements of HB1032 for electric utilities to prepare a wildfire mitigation plan by October 31, 2024, and every three years thereafter.

2.2 Description of Where WMP Can be Found Online

The latest revision of this WMP can be found on Clallam County PUD #1's website at https://clallampud.net/

2.3 Best Practices Cross-Reference Table

Provide any industry standard or other best practices[1] referenced within the WMP including what section and page number in the form of hyperlinks. Standards that do not have a specific reference within the text but apply to the entirely of the plan can be listed without additional information.

If no industry-wide standards or practices are utilized, this table may be left blank.

Standard or Best Practice Name and Description	**Document, page number, or citation**
HB 1032 – By October 31, 2024, and every three years thereafter, each Investor-owner and Consumer-owned Utility must review, if appropriate revise, and adopt its wildfire mitigation plan	Sec. 1.0, p. ii
National Electric Safety Code (NESC)	Sec. 7.2.1, p. A7
WAC 468-34-290 WSDOT Vertical Clearance	Sec. 7.2.1, p. A7
American National Standard ANSI Z133.1 (2000) – the *Safety Requirements*	Sec 7.3.1, p. A8
American National Standard ANSI A300 – Part 1 (2001) – *Pruning* (Part 7 - 2006)	Sec 7.3.1, p. A8

[1] Standards may include guidance from FEMA, US Forest Service, NERC regulations, NST, OSHA guidelines, etc.

Integrated Vegetation Management for Electric Utility Rights-of-ways (EPA)	Sec 7.3.1, p. A8
OSHA 1910.269 - *Regulations (Standards – 29 CFR)*	Sec 7.3.1, p. A8

3.0 Utility Overview

Clallam PUD's Service territory consist of more than 2,000 square miles but almost all permanent customers are located in a narrow lowland belt between the Olympic National Park and the Strait of Juan de Fuca or the Pacific Ocean. The City of Port Angeles (CoPA) is excluded from Clallam PUD's service territory.

3.1 Utility Description and Context Setting Table

Table 1. Context-Setting Information Table

Utility Name	Clallam County PUD #1
Service Territory Size (sq miles)	2,000 Square Miles
Service Territory Make-up (USGS 2021 National Land Cover Database)	1.52% Open Water 0.04% Perennial Snow/Ice 2.39% Developed, Open Space 1.50% Developed, Low Intensity 0.81% Developed, Medium Intensity 0.21% Developed, High Intensity 1.03% Barren Land 1.78% Deciduous Forest 76.91% Evergreen Forest 3.30% Mixed Forest 4.11% Shrub/Scrub 2.32% Herbaceous 1.77% Hay/Pasture 0.02% Cultivated Crops 1.88% Woody Wetlands 0.41% Emergent Herbaceous Wetlands
Service Territory Wildland Urban Interface (based on total area) (USGS 2022 Wildland-urban interface maps for the conterminous U.S. based on 125 million building locations)	1.94% Wildland Urban Interface 11.83% Wildland Urban Intermix

Customers Served	
Account Demographic	75% Residential 1% Agricultural 24% Commercial/Industrial
Utility Equipment Make-up (circuit miles) Line miles are calculated from Clallam County PUD's ArcGIS map, based on point-to-point measurements.	Overhead Dist.: 686 miles (25kV and 12.47kV) Overhead Trans.: 110 miles (69kV and 115kV) Underground Dist.: 1,157 miles (25kV and 12.47kV) Underground Trans.: 0
Has developed protocols to pre-emptively shut off electricity in response to elevated wildfire risks?[2]	Yes ■ No ☐ A summary or description of protocols is provided in section 7.7.
Has previously pre-emptively shut off electricity in response to elevated wildfire risk?	Yes☐ No ■

4.0 Objectives of the Wildfire Mitigation Plan

This Wildfire Mitigation Plan documents our policies, programs, procedures, and specific actions to mitigate threats posed by utility owned assets that could start or contribute to the spread of a potential wildfire. It incorporates best practice models from risk management, operations, emergency management, communications, training, and continuous improvement, with the ultimate priority being the safety of the communities, customers we serve, personnel that serve them and safeguarding the environment. This Plan will continue to be assessed in regards to new wildfire risk reduction strategies, industry best practices and evolving technologies.

4.1 Minimizing likelihood of ignition

Proactive vegetation management – Maintain tree trimming cycles, identify and remove danger trees and trim hot spots as identified by customers, crew and servicemen. Increase cleared right of way widths in locations consisting of fast-growing vegetation that are difficult to trim routinely. (CPUD Vegetation Management Plan 2023)

Removing legacy oil circuit reclosers (OCRs) and replacing them with electronically controlled reclosers.

Perform routine inspections to identify and repair deficiencies before failures occur.

Modify standards as necessary to limit electrical contact. Examples include utilizing bird/animal guards, insulating jumpers, increasing wire spacing to reduce phase to phase contact.

Modify material standards to less flammable material such as changing from wood to fiberglass crossarms and poles.

Convert overhead distribution to underground in areas with a history of wildfire possibility due to trees/branches coming into the overhead lines with consideration of environmental concerns, easement, and ground conditions.

Modify operational practices during high fire danger times to limit chances of ignition due to equipment operation. Modified practices include not parking motorized vehicles on dry tall grass and not operating chainsaws unless necessary (See Section 7.5.1 for a complete list).

De-energize sections of line during fire season that are only needed for contingency.

Place specific circuits on non-reclose during high fire danger times and when other conditions such as high winds, low humidity and active logging operations are located adjacent to lines.

AMI Meters/OMS Advanced metering infrastructure (AMI) together with an Outage Management System (OMS) alerts dispatchers immediately regarding power outages. This improves response times so that crews can get to the scene quicker and make any necessary repairs in a timely manner.

4.2 Resiliency of the electric grid

Clallam County PUD has standardized on fiberglass transmission poles and distribution crossarms since the early 2000's. Fiberglass is more resistant and has roughly twice the service life as standard wood poles and crossarms. Polymer insulators have also been standardized in place of porcelain insulators in various applications. Polymer insulators can withstand higher temperatures than porcelain without sustaining damage.

5.0 Roles and Responsibilities

5.1 Utility Roles and Responsibilities

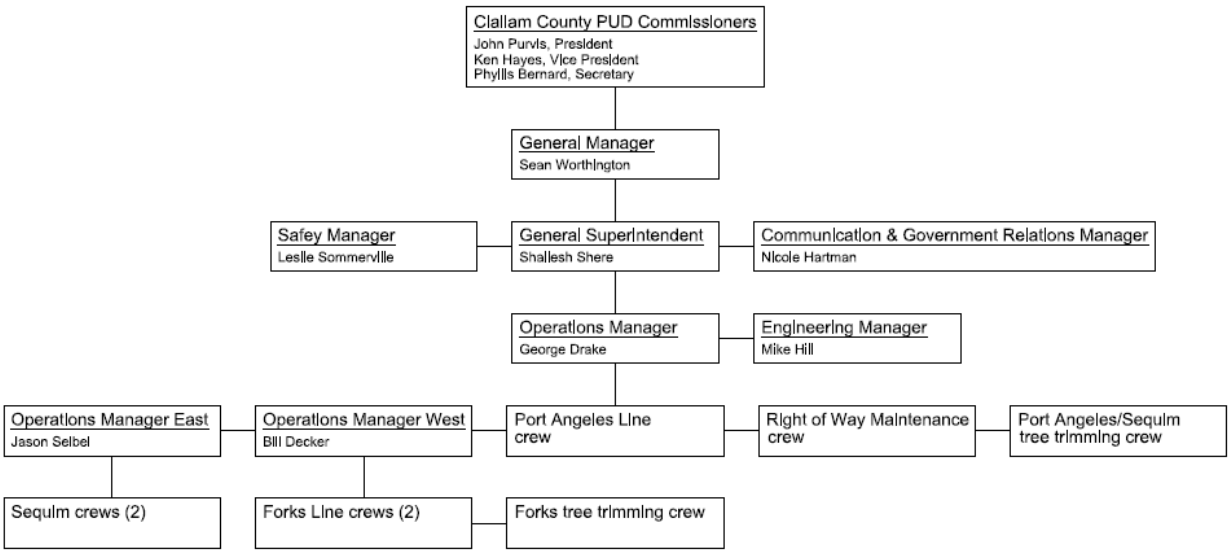
This is Clallam County's PUD org chart pertaining to positions related to wildfires (this is not a full org chart). Key positions and responsibilities are as follows:

Engineering Manager – Responsible for creating and updating the wildfire mitigation plan.

Operations Manager – Responsible for ensuring that area superintendents, powerline crews, tree trimming crews and right of way maintenance crews follow the wildfire mitigation plan.

Safety Manager – The point of contact for Clallam County PUD when Clallam County opens the Emergency Operations Center (CCEOC).

General Superintendent – Responsible for ensuring that the Operation and Engineering manager fulfil their responsibilities.



5.2 Coordination with local utility and infrastructure providers

PUD #1 of Clallam County (District) has developed an ***Emergency Response and Restoration Plan (ERRP)*** to identify and detail strategic deployment. Incident responses are identified by level, from 1 to 4. For major disasters (level 4) the District will work in coordination with Clallam County Emergency Operations Center (CCEOC). The District's ERRP anticipates that most lower level incidents will be managed locally and will utilize the District's Level 1 and 2 Incident Command System (ICS) identified as ***Operations Bulletin No. 12***. Level 3 incidents or emergencies may utilize both ***Operations Bulletin No. 12*** and the ***Major Events Restoration Procedure***.

The Clallam County Emergency Management Center plans for and responds to both natural and man-made disasters. These range from weather, floods, wildfires, tsunamis, and earthquakes to incidents involving hazardous materials, or significant law enforcement events. The division prepares and implements a countywide ***Comprehensive Emergency Management Plan*** and routinely conducts extensive exercises to test county emergency response capabilities and provides educational materials to the public to better prepare them for emergency events. This section of the Sheriff's Office is Clallam County's liaison with Federal and local agencies on emergencies of all kinds. Division staff members provide technical assistance to local governments as they prepare emergency plans and procedures and they conduct emergency operations training for local governmental agencies.

The Clallam County PUD Safety Manager and/or Communication manager will be the primary point of contact between the PUD and CCEOC if a situation warrants activating the CCEOC.

5.3 Coordination with local Tribal entities

If a wildfire were to impact electrical service to local tribal entities, then the coordination will be handled as described in section 5.2.

5.4 Emergency Management / Incident Response Organization

A Level 4 incident or emergency can rapidly expand to a multidiscipline, multijurisdictional event requiring numerous agencies. This ***Emergency Response and Restoration Plan (ERRP)*** anticipates that the Clallam County Department of Emergency Management will be the command and control center for any Level 4 incident that expands to a multidiscipline, multijurisdictional event. In this case, the ***National Incident Management System (NIMS)*** will be utilized as the Incident Command System's (ICS) guide and nomenclature. In this plan, the terms "incident" and "emergency" are used interchangeably.

During a severe Level 4 incident or emergency, where the Clallam County ***NIMS*** is implemented, the District's ***Incident Command System*** will continue to identify and repair

damages responding to its utility system needs while communicating and coordinating with the CCEOC on matters requiring multidiscipline and/or multijurisdictional effort. During major incidents, help from other jurisdictions can be critical to a timely recovery. To that end, the District will seek the assistance of other local, State, and Federal agencies as appropriate and through Mutual Aid Agreements from other utilities.

Requests for sheltering, emergency supplies and/or emergency assistance must first be communicated by the District's DEOC directly to the CCEOC, who will then communicate needs to State EOC. The State EOC will then request the supplies and assistance from FEMA, who will then disburse the supplies and assistance through their channels. To insure expedition of supplies or assistance in the event of a regional emergency (where resources will need to be shared regionally), it is recommended that a prioritized supplies/assistance request is created and submitted as soon as possible (within the first 24-72 hours) to the CCEOC.

As part of a mutual aid program, and to receive federal funding, grants, training, and reimbursement of disaster recovery costs, both FEMA and the Homeland Security Presidential Directive (HSPD-5) recommends that all District ICS team members be ***NIMS***-certified and follow NIMS when requesting assistance. The National Incident Management System ***(NIMS)*** uses a standardized language throughout all levels of government during times of disaster. Accordingly, as of January 2024, seventeen of the District's Incident Command System team members became NIMS-certified.

6.0 Wildfire Risks and Drivers Associated with Design, Construction, Operation, and Maintenance

6.1 Risks and risk drivers associated with topographic and climatological risk factors

Clallam County PUD's service area is entirely within the Very Low and Low wildfire hazard potential risk areas as shown on the map below produced by the Forest Service. Even though wildfire risk has historically been relatively low in the Pacific Northwest, climate change, low snowpack and expanding wildland-urban interface are increasing the threat of wildfires. Prolonged dry spells combined with high temperatures, low humidity, and high winds in areas with overhead power lines within or adjacent to forested areas elevate wildfire risks within Clallam County PUD's service area.

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6.2 Enterprise-wide Safety Risks

Fuel

Proactive vegetation management program

Remove fuels from around immediate vicinity of wood poles, particularly in locations that have expulsion fuses

Promote low growing vegetation in place of trees

Asset Failure

Wood pole test/treat program

Transmission/Distribution inspection program

Continued maintenance program

Engineering

Continued evaluation of emerging technologies as it applies to as to engineering standards and operational procedures that reduce the likelihood of wildfire ignition

Poles designed to meet NESC

Pole locations designed to meet clear zone requirements per jurisdiction

Operational

Install bird/animal guards

Tighten conductor/reframe to current PUD specifications to limit phase to phase contact

De-energize lines that serve as contingency only during fire season

Replace priority reject poles ASAP

7.0 Wildfire Preventative Strategies

7.1 Weather Monitoring

7.1.1 Current Strategy Overview

Clallam County PUD relies on email Alerts sent through the emergency management division of Washington, notices sent out from the DNR and local NOAA weather forecasts. The Safety manager, superintendents and dispatchers monitor the weather alerts.

7.2 Design and Construction Standards

7.2.1 Current Strategy Overview

Clallam County PUD's strategy when installing new or replacing power poles and electrical equipment is to meet all current specifications, standards and codes at the time of installation. Sparks are created anytime energized overhead power lines fall to the ground or come into contact with anything or each other. Any improvements that reduce the likelihood of creating sparks also reduce the risk of starting a wildfire.

Applicable specifications, codes and standards:

- National Electric Safety Code (NESC)
- Clallam County PUD Construction Standards
- WAC 468-34-290 WSDOT Vertical Clearance
- WSDOT, Clallam County, Jefferson County, City of Sequim, City of Port Angeles, and City of Forks vertical and clear zone requirements

Specific instances relating to re-design and hardening practices that support wildfire mitigation:

- Replacement of wood transmission poles with fire resistance fiberglass transmission poles.
- Replacement of wood crossarms with fire resistance fiberglass crossarms.
- Meeting clear zone requirements reduces likelihood of vehicles striking energized electrical equipment.
- Meeting vertical requirements reduces the likelihood of vehicles and equipment coming into contact with energized overhead powerlines.
- Tightening overhead powerlines reduces the likelihood of line-to-line contact.
- Poles that are replaced are generally replaced with stronger (higher class) poles which are less likely to break if trees fall into the power lines.
- Installation of bird/animal guards
- Installation of covered or insulated power lines (jumpers only).

- Some areas that are highly susceptible to trees falling into overhead distribution lines where additional tree trimming is not allowed or impractical are converted to underground lines.

7.3 Fuel & Vegetation Management

7.3.1 Current Strategy Overview

Right of Way Maintenance and Tree Trimming crews remove vegetation and combustible materials that are near power poles with extra focus regarding poles with expulsion fuses on them.

- American National Standard ANSI Z133.1 (2000) – the *Safety Requirements*
- American National Standard ANSI A300 – Part 1 (2001) – *Pruning* (Part 7 - 2006)
- *Integrated Vegetation Management for Electric Utility Rights-of-ways (EPA)*
- OSHA 1910.269 - *Regulations (Standards – 29 CFR)*

7.3.2 Planned Updates

Adequate staffing will be added to the Vegetation management crew. This will help maintain a full crew structure so that planned work is not disrupted if a crew member is not available. A new 125-gallon water sled capable of pumping 10-23 gpm will be utilized by the right of way maintenance crew beginning in the late summer of 2024. The water sled will be used to put out any small fires that are reported in the vicinity of where the right of way crew is working.

7.4 Asset Inspections and Response

7.4.1 Current Strategy Overview

Pole test and treat is performed every 10 years on wood poles. (Pole Inspection Management Plan 2018) Transmission lines are visually inspected yearly and detailed inspections are performed every 10 years. Distribution lines are visually inspected every 5 years with detailed inspections performed every 10 years. (Inspection Program 2022). If repair work is not completed during the field inspection, a work order is created and the repairs are scheduled and prioritized accordingly. Infrared imaging is utilized at switches, flying taps and other connection points to identify hot spots.

7.4.2 Planned Updates

Clallam County PUD is will develop a custom electric inspection app to be used by crews on phones or tablets. The app will help track areas that have been inspected and identify locations that still need to be inspected. The app will include a checklist of items to inspect and include an

option to include a photograph. This program will streamline the work order process which will result in repairs being made soon and also provide historic data.

7.5 Workforce training

7.5.1 Current Strategy Overview

Clallam County PUD's protocol for field workers during high fire danger and/or Red Flag Days:

- Do not park on or drive a vehicle on dry tall grass. Dry grasses can easily be ignited from a hot exhaust muffler
- Do not operate a chainsaw unless necessary as it can create sparks and ignite fires.
- Carry water squirt cans, fire extinguishers and shovels in the event a fire ignites.
- Vegetation management crew is to bring the water sled with them to jobsites.
- Maintain a heightened awareness of anything that can generate a spark or a flame and be prepared to take action if necessary.

7.6 Relay and Recloser Practices

7.6.1 Current Strategy Overview

Clallam County PUD has circuit breakers with protective electronic relays for all substation feeders except one hydraulic recloser. Clallam has replaced all but (3) line hydraulic reclosers with programmable electronic reclosers.

Typical Clallam County PUD practice with respect to over-current and time over-current protection is included in the following table:

	Feeder Circuit Breakers	Miro-processor Controlled Reclosers	Electronic Controlled Reclosers	Hydraulic Controlled Reclosers	Circuit Switchers with Reclosing	Circuit Switchers w/o reclosing and Transrupters
First Operation	Instantaneous Or TOC Curve	Fast Curve	Fast Curve	Fast Curve	Instantaneous Or DTOC Or TOC Curve	Instantaneous Or DTOC Or TOC Curve
First Open Time	30 Cycles	60 Cycles	60 Cycles	2 Seconds Fixed	10 Seconds	Lockout
First Reclose	TOC Curve	TOC Curve	TOC Curve	TOC Curve	TOC Curve	N/A
Second Open Time	10 Seconds	5 Seconds	5 Seconds	2 Seconds Fixed	Lock out	N/A
Second Reclose	TOC Curve	TOC Curve	TOC Curve	TOC Curve	N/A	N/A
Third Open Time	10 Seconds	5 Seconds	5 Seconds	2 Seconds Fixed	N/A	N/A
Third Reclose	TOC Curve	TOC Curve	TOC Curve	TOC Curve	N/A	N/A
Fourth Open Time	Lockout	Lockout	Lockout	Lockout	N/A	N/A
Reset	60 Seconds	60 Seconds	60 Seconds	Varies	60 seconds	N/A

7.6.2 Planned Updates

Clallam PUD intends to replace the remaining (3) hydraulic line reclosers in the system with programmable electronic reclosers within the next (3) years. The single remaining substation feeder hydraulic recloser will also be replaced within (3) years.

Conventional hydraulic reclosers are oil filled, they require consistent maintenance and can have catastrophic failures that could lead to the oil catching fire. Electronic reclosers contain a microprocessor-based protective relay that gives exact TCC curves and improved coordination capabilities. Electronic reclosers can also include data logging to better analyze events and optimize the system.

7.7 De-energization / Public Safety Power Shutoff

7.7.1 Current Strategy Overview

Clallam County PUD receives power from Bonneville Power Administration (BPA) at (4) separate points of delivery; Sequim, Port Angeles, Joyce and Sappho. If BPA elects to initiate their PSPS plan at any or all of the delivery points then Clallam County PUD's system will be de-energized in regards to the delivery points that are affected by the PSPS. If Clallam County PUD determines it necessary to quickly de-energize all or a portion of their electrical system then the on-call PUD Dispatcher would call the 24-hour BPA dispatch center, where they can immediately de-energize Clallam County PUD's entire electrical system or if warranted only the western or eastern portion of the electrical system.

Section 7 of BPA's Wildfire Mitigation Plan is written as follows:

7.0 Public Safety Power Shutoff (PSPS)

During wildfire season, typically May through October, there may be extreme conditions or weather triggers that require BPA to de-energize transmission assets to reduce the risk of ignition. These extreme weather triggers are based on industry best practices that address imminent wildfire danger and geospatial analysis of wind and humidity. BPA's criteria for standing-up its PSPS team to decide whether to de-energize assets proactively are when wind gusts exceed 60 mph within NWS RFW areas as the conditions correlate to warm temperatures and low humidity.13 BPA has calibrated these variables to its robust design standards. BPA uses data from internal and external sources to make PSPS decisions. Examples include vegetation types, urban density, asset density, asset health, ignition probability, wildfire behavior, wind, humidity, and line/load criticality. BPA recognizes the impacts to the region that come with a PSPS de-energization and is committed to making these decisions in a timely and data-informed manner. BPA's Transmission Operations organization and NERC-certified dispatchers retain the right to de-energize assets proactively for any reason, based on system conditions. As Figure 7 illustrates, PSPS de-energization is a last resort. If a PSPS decision is enacted, BPA will initiate its communication processes to its impacted utility wholesale customers and regional outreach. In the event of a PSPS, BPA's constituent and tribal account executives will communicate information to federal, state, local elected officials, tribes, and other important stakeholders. BPA does its best to avoid overlaps with other utility outreach to state, local elected, and emergency management officials by coordinating communication efforts with the affected utilities. As the event unfolds, BPA will work with impacted utilities and, if asked, augment customer utility outreach through providing information to local media and social media channels to ensure residents and others are aware of the situation. BPA will not engage in any other outreach efforts to end-use customers (residents, businesses, etc.) unless a customer utility specifically requests it. Re-energization after a PSPS event begins after the extreme weather event has passed and line crews are cleared to enter the area. BPA crews then patrol the de-energized lines and inspect for obvious damage and vegetation within the ROW that may prevent safe re-energization. When field crews find damages, they will isolate the impacted area(s) and perform repairs as quickly and safely as possible. In some instances, temporary solutions to restore power may be implemented while permanent repairs are planned. Depending on the extent of damage, utility customers may need to perform repairs on their facilities prior to having full electric service restored; these efforts are coordinated on an as-needed basis. Once the lines and structures are safe to operate, re-energization occurs followed by communications procedures similar to de-energization messaging.

Clallam County PUD currently does not have a PSPS plan but does de-energize circuits that are utilized for contingency only and also has protocols set up to set relays to non-reclose if conditions warrant. Such conditions include high winds, low humidity, warm temperatures in areas with narrow treed rights of way that have been specifically identified as high risk.

8.0 Restoration of Service

Following a PSPS initiated by BPA or a planned or un-planned outage in an area that is currently under a Red Flag Day warning crews will patrol the overhead lines before re-energization.

9.0 Evaluating the Plan

This is the initial WMP for Clallam County. Information regarding evaluating this plan is not available yet. As the plan is put into use criteria will be identified for future evaluation of the plan.

Appendix A.

CPUD Vegetation Management Plan

Electric System Inspection Program

Pole Inspection Management Plan

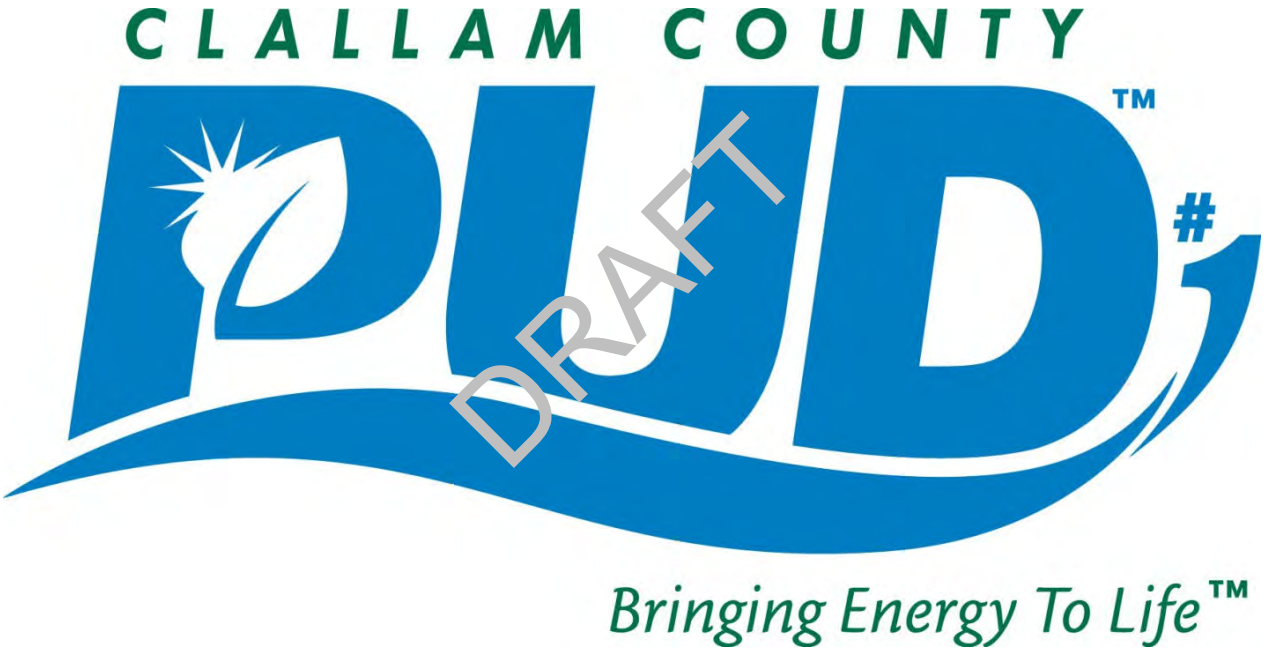
Operations Bulletin No. 12

Major Event Restoration Procedure

ICS Team Structure Flowchart

Incident Commander Checklist

Forest Service Powerline Operating Plan



Vegetation Management Plan

January 2023

Public Utility District #1 of Clallam County
104 Hooker Road
Sequim, WA 98382

Contents

1.0 SCOPE

Clallam PUD Vegetation Management Plan (VMP) is a Utility-specific program designed to proactively reduce outages caused by trees due to contact with overhead electric utility facilities and also to provide year around access to our facilities. The District is committed to balance its goal of providing reliable electrical service in a cost-effective manner and improved service to our customers. This document outlines the Vegetation Management Plan (VMP) to:

- Reduce outages caused by trees
- Improve electrical reliability to customers
- improve accessed to our poles and facilities

2.0 PROMULGATION

The District has formally adopted the Vegetation Management Plan (VMP) and educates District staff and our Customers regarding Vegetation Management policies, procedures and standards that are associated with the VMP.
The District has adopted a plan per recommendations by the Washington Forestry Consultant's 2009 report and findings.

3.0 JUSTIFICATION AND PURPOSE

Reliability and safety along the entire Transmission and Distribution System are improved significantly by a proactive Vegetation Management program as well as improved identification and removal of hazard trees, the primary cause associated with tree related outages.

4.0 PRINCIPLES

The District obtains and complies with all necessary Permits, Easements and Right-of-Way associated with Tree Trimming and the removal of vegetation. Particular attention is given to specific activities within Tribal lands, wetlands and other protective areas.

The PUD will use hand cutting, pruning, and mechanical cutting to maintain proper clearances in accordance with, but not limited to, the National Electrical Safety Code (NESC), Rural Utility Service (RUS), American National Standards Institute (ANSI), federal, state and local laws and regulations pursuant to the operation of electrical facilities. The PUD specifically requires that the ANSI A300 Tree Care Operations standard practices relating to quality tree care, pruning, and integrated vegetation management be followed where practical when planned maintenance is being performed in the vicinity of electric lines and equipment. Employees and contractors shall also adhere to ANSI Z133.1 Safety Standards.

The vegetation management work is addressed by the following industry standards:
(SEE **Key Resources**)

5.0 DISTRICT CHARACTERISTICS

5.1 Impacted Service Area

The District system service territory has over 702 miles of overhead distribution lines and 145 miles of transmission conductor, together with 46 acres of brush to maintain.

The distribution system traverses highly variable topography from the Strait of Juan de Fuca waterfront to the high elevations of the Olympic Mountains on the Olympic Peninsula in northwestern Washington.

Over 45 species of trees are identified throughout the system as requiring work along the entire Service area. The dominant tree species across the system are Douglas-fir fir (27%), red alder (21%), western red cedar (16%), western hemlock (12%), Sitka spruce (6%), bigleaf maple (4%), and grand fir (3%). The remainders are a mix of native and ornamental tree species. The predominant tree species in the urban areas are northern red oak, Leyland cypress, and apple.

Hazard trees such as slender whips appear to be one of the leading causes of outages, closely followed by uprooted red alder trees. Removal of these two types of hazard trees, along with removing trees identified having root disease and/or structurally defected are key to a proactive vegetation management program to minimize outages caused by trees.

5.2 Right-of-Ways

Standard Transmission Right-of-Ways are typically 35-feet each side of the lines. (70-foot total width.)
Standard Distribution Right-of-Ways are typically 15-feet each side of the lines (30-foot total width.)

6.0 PRIORITIZING WORK

6.1 Circuit Maintenance

Adopting maintenance cycles improves the ability to track current work, plan future work, and improve reliability with regularly scheduled and thorough maintenance of the system. Customer service requests (tickets, hotspots, slips) are drastically reduced as entire circuits are completed during regularly scheduled maintenance.

The district has adopted a 5-year completion cycle to maintain the entire system. Trimming and brushing crews are scheduled to address each System feeders by beginning at each substation and work outwardly toward the ends of each distribution feeder. In doing so, it is less likely that the entire circuit will be taken out by a tree, if storms occur during the circuit maintenance schedule.

6.2 Hot Spotting.

Vegetation Management Crews may be called upon to manage smaller areas (Hot Spots) not part of the regular maintenance schedules. Hot Spots are identified by District Servicemen and/or District Line crews when patrolling the lines while doing routine District improvements projects and/or customer projects.
When Hot spots are identified, Vegetation Management Crews are notified and are scheduled by the Operation Superintendent or Vegetation Management Foreman to clear the Hot Spot as soon as schedule allows for it to be done.

6.3 Customer Request

Vegetation Management Crews may be called upon to manage customer request not part of the regular maintenance schedules. Customer request are typically initiated by notifications from a District's customers to a District Customer Representative. Notifications by customers requested are typically to remove tree limbs found on lines, often after or during wind or winter storms. Customers may also notify the District to assist them in safely removing trees near energized Service and Distribution lines located near or on their property. State or local highway Departments and/or other Utility Agencies may also request the District to remove trees or vegetation.
Customer request are scheduled by the Operation Superintendent or Vegetation Management Forman and completed as soon as schedule allows for it to be done.

7.0 TRACKING THE WORK

7.1 Crew Responsibilities - Reporting

Tree trimming and brushing crew Forman are responsible to track and report the location of their completed work using the ArcGIS Vegetation Management Dashboard. This software is used to report completed work and contains the minimum information as follows:

- Description of work – Brushing, High Trim, Inspection only, etc.
- Date or Date Range of completed area
- District Circuit – Name of the Transmission line or Distribution Feeder from the Substation.
- Geometric line work showing Starting Pole Number and Ending Pole number to identify the location of the spans completed, including any taps along the particular circuit.
- Foreman Name or Inspector

7.2 Mapping the Work – ArcGis Software

The District has implemented ArcGIS management software. The purpose of the ArcGIS vegetation management Software is to allow for tracking, maintenance and planning for ROW vegetation management activities. The software tracks designated ROW projects and areas, and performs analysis on vegetation management data stored within the GIS mapping Geodatabase. The Crew with support as needed from engineering staff will complete data entry for ROW work completed within said software.

The Workflow for usage of the ArcGis tools are as follows:

1) The Clallam PUD Vegetation Management Trim Cycle map is used to identify Vegetation Management Cycles (1 to 5 years) for each circuit and area throughout the District. Individual hotspot data can be created using
2) The Edit Tool is used to create geometric line work and describe where ROW management projects have been performed.
3) The Edit Tool is used to indicate when a project is completed along with any relevant special information notated such as indicating if the area is a "Hot Spot". Any relevant attachments are made within this menu such as photographs or any documentation relating to the project. This tool will select what method was used, and also the Forman/Inspector of the work.
4) The Details Tool within the data entry screen or Vegetation Dashboard is used to determine the following:
    a. Miles for each project completed.
    b. Substation/Feeder and conductor information.

8.0 KEY RESOURCES

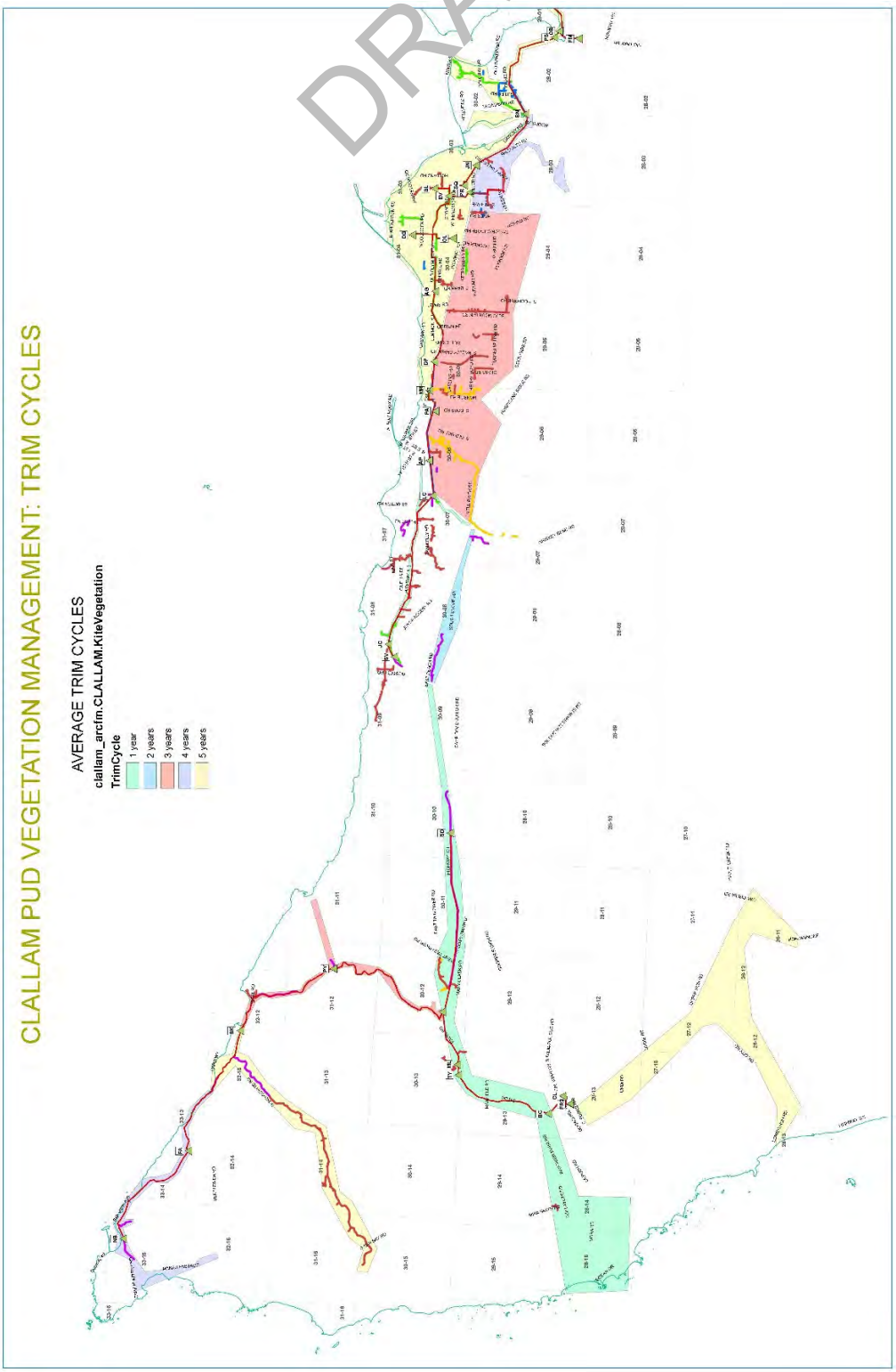
- American National Standard ANSI Z133.1 (2000) – the *Safety Requirements*
- American National Standard ANSI A300 – Part 1 (2001) – *Pruning* (Part 7 - 2006)
- *Integrated Vegetation Management for Electric Utility Rights-of-ways*
- OSHA 1910.269 - *Regulations (Standards – 29 CFR)*

9.0 REFERENCES

9.1 Washington Forestry Consultant – July 2009 Report

Public Utility District #1 of Clallam County
Vegetation Management: "An Analysis of the Transmission and Distribution System"
Washington Forestry Consultants, Inc.
1919 Yelm Hwy. SE Olympia, WA 98501 Phone - 360/943-1723

10.0 ArcGIS SOFTWARE – MAPS



Vegetation Management

Select a date
No date selected

1 of 945

Job Details

Date of work: Feb, 2018
Type of work: Tree Trimming
Foreman: Todd Remero
Crew: PUD
Revisit in: 5 - Year(s)
Months left: 10.60
Feet: 1,012(ft)
Miles: 0.19(mi)
The county came in later and side trimmed.

VegetationNightWork.jpg

Completed Jobs

12/29/2022, 3:00 PM
brenth@clallampud.net_ClallamCountyPUD

3/22/2022, 3:00 PM
brenth@clallampud.net_ClallamCountyPUD

3/22/2022, 3:00 PM
brenth@clallampud.net_ClallamCountyPUD

3/18/2022, 3:00 PM
brenth@clallampud.net_ClallamCountyPUD

3/11/2022, 3:00 PM
brenth@clallampud.net_ClallamCountyPUD

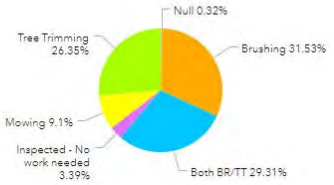
3/8/2022, 2:50 PM
kalmond@clallampud.net

3/8/2022, 2:48 PM
kalmond@clallampud.net

3/8/2022, 2:46 PM
kalmond@clallampud.net

2M feet

432.75 miles



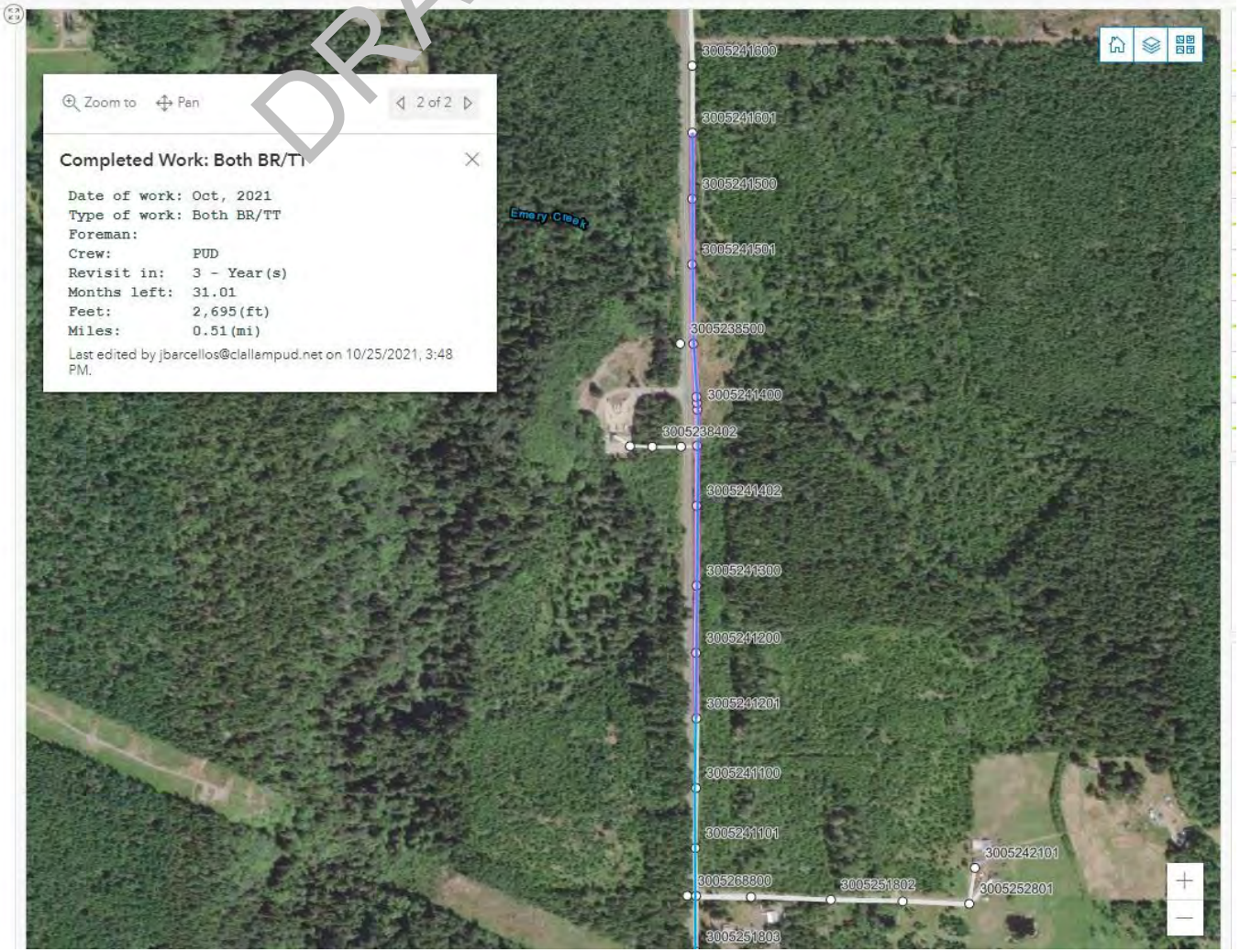
Vegetation Management

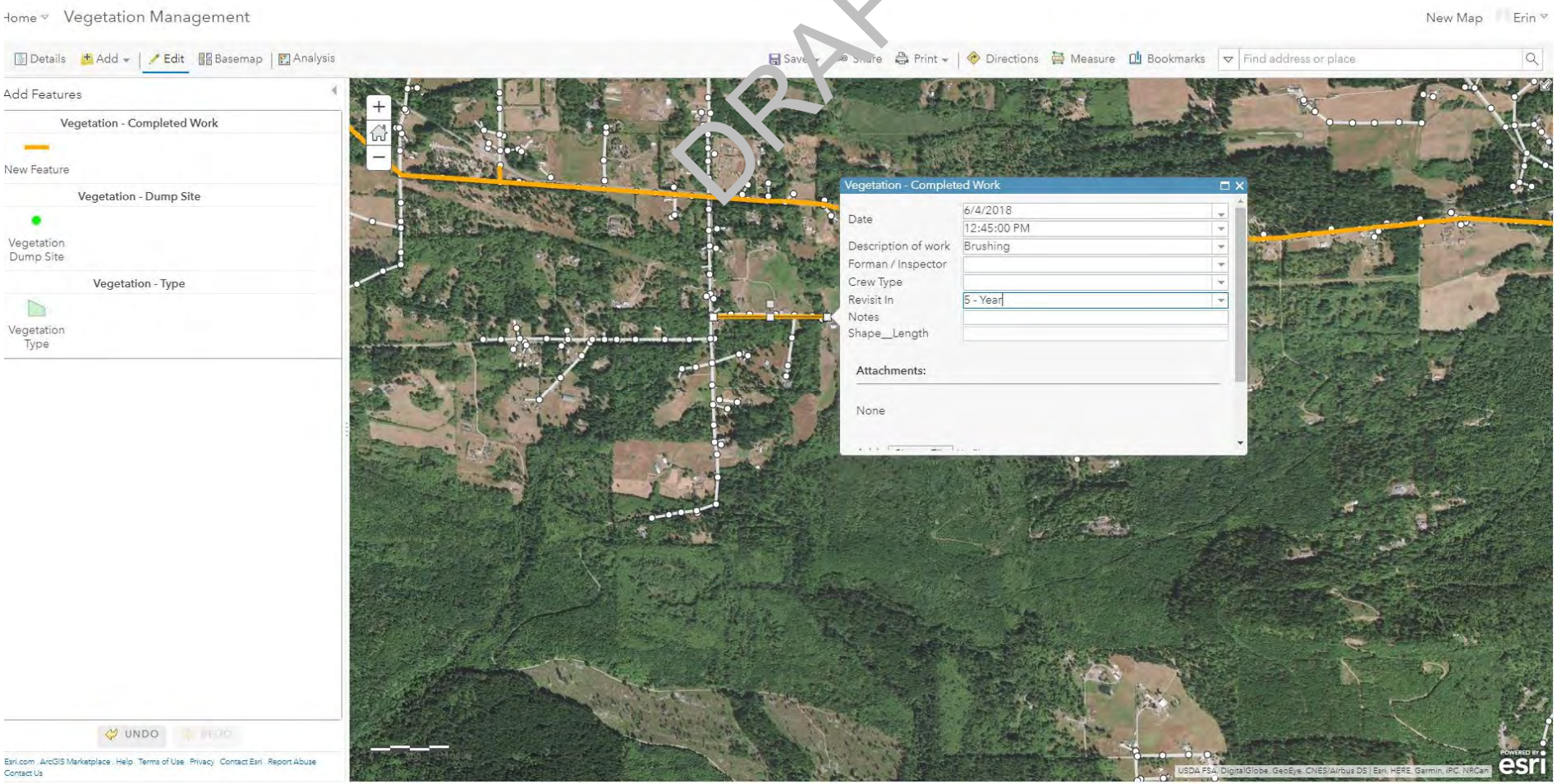
2 of 2

Job Details

Date of work: Nov, 2021
Type of work: Both BR/TT
Foreman: Seth Cook
Crew: PUD
Revisit in: 3 - Year(s)
Months left: 31.30
Feet: 10,342(ft)
Miles: 1.96(mi)

Last edited by jbarcellos@clallampud.net on 11/18/2021, 12:49 PM.




Home
Vegetation Management
New Map
Erin
Details
Add
Edit
Basemap
Analysis
Save
Share
Print
Directions
Measure
Bookmarks
Find address or place
Add Features
Vegetation - Completed Work
New Feature
Vegetation - Dump Site
Vegetation Dump Site
Vegetation - Type
Vegetation Type
UNDO
REDO
Esri.com ArcGIS Marketplace Help Terms of Use Privacy Contact Esri Report Abuse
Contact Us
DRAFT
Vegetation - Completed Work
Date
6/4/2018
12:45:00 PM
Description of work
Brushing
Forman / Inspector
Crew Type
Revisit In
5 - Year
Notes
Shape__Length
Attachments:
None
USDA FSA, DigitalGlobe, GeoEye, CNES/Airbus DS | Esri, HERE, Garmin, IPC, NRCan
esri

ELECTRIC SYSTEM

INSPECTION PROGRAM

PUD#1 OF CLALLAM COUNTY

REVISED 8/29/2024 By M.H., J.S.,

ELECTRICAL INSPECTION PROGRAM

SCOPE

This procedure covers the Electrical Inspection Program at PUD No.1 of Clallam County. The purpose of this program is to ensure the reliability of the electrical system, reduce risk to employees and the public and comply with WAC 296-45 and National Electric Safety codes. Areas to be inspected include the following:

Transmission, 69 KV and above

Substations

Distribution - both overhead and URD

METHODOLOGY

The program is to be accomplished by the following methods:

1. Scheduled vehicle/foot/helicopter inspections.
2. Unscheduled vehicle/foot/helicopter inspections.
3. Infrared inspections.
4. Visual inspections by vegetation management crews during scheduled tree trimming and right of way maintenance activities.
5. Inspections by linemen during outage/trouble calls.
6. Inspections by linemen associated with customer connects and line extensions.
7. Inspections by meter technicians during meter reads and changeouts.
8. System Alert. (System alert will involve all employees being aware of and reporting hazardous conditions. Specific inspections will normally be assigned to Line Crew personnel.)

APPLICABLE REGULATIONS

GENERAL RULES

1. Lines and equipment shall comply with safety rules when placed in service.
2. Lines and equipment in service shall be inspected at such intervals described herein.
3. When considered necessary, lines and equipment shall be subjected to practical tests to determine required maintenance.
4. Defects revealed by inspection or tests, if not promptly corrected, shall be recorded; such records shall be maintained until the defects are corrected.
5. Lines and equipment with recorded defects which could reasonably be expected to endanger life or property shall be promptly repaired, disconnected, or isolated.

Ref: NESC 214, 013, 121, 313 & WAC 296-45

PROGRAM RESPONSIBILITY

The Operations Manager

1. Ensure that this procedure is updated.
2. Develop inspection checklist for the various types of facilities.
3. Evaluate materials, engineering design, and work methods to improve reliability.
4. Coordinate with other District departments to adequately organize, budget, record, and provide resources for this project.

The Operations Superintendents

1. Schedule and accomplish system inspections.
2. Schedule and accomplish infrared inspections.
3. Complete follow up work order repairs and maintenance.

The Engineering Manager

1. Monitor report filing and work order creation.
2. Maintain Substation, Transmission, Distribution and Infrared Inspections and Maintenance records.
3. Provide maps as needed for inspections and maintenance.
4. Create and maintain a shared directory indicating the number of substations, lines or circuits inspected, number of discrepancies found, and the number of discrepancies corrected.
5. Schedule and accomplish the substation inspections.

TRANSMISSION INSPECTION

GENERAL

Transmission lines are to be visually inspected **ONCE** a year and a detailed inspection every **TEN** years. The Service Area Superintendent shall schedule inspections in their service area and submit copies of the inspections to the shared directory. Connections and switch contacts shall be inspected annually by infrared for "hot" spots. Photo records of "hot" connections shall be filed for reference and used to create necessary maintenance work orders.

Lines shall be inspected visually for items listed on the Transmission Checklist. Inspectors will submit maps to their supervisor that show sections of line that have been inspected.

Deficiencies shall be recorded by plant location number with recommended improvements according to the inspector.

Special patrols may be scheduled as deemed necessary. Records of such inspections, defects found and corrections made will be stored in the shared directory.

Items listed on Transmission Checklist shall serve as a guide. Deficiencies by plant location number shall be noted with recommended improvements according to the inspector.

REPAIRS

Repairs will be made at the time of inspection if practical. If repair work cannot be completed during the field inspection, the Operations Superintendent will schedule the corrective maintenance work as soon as practical. Inspection Reports shall be filed in the shared directory and the Engineering Department will create work orders as necessary.

RECORDS

Inspection maps and reports for the current cycle will be maintained by the Operations Superintendents and the Engineering Department in a shared directory. **Line switches will be operated or inspected at least once a year.**

Arrangements will be made to facilitate operation of switches by either circuit ties or switch jumpering. Lubrication may be applied to the moving parts and maintenance of the contacts will be performed as necessary to assure proper operation.

TRANSMISSION CHECKLIST

Switches

Insulators, jumpers, control rods, control handle locked and grounded, ground mat or platform.

Poles

Broken, split, rotten, leaning, insects, burns.

Guys and Anchors

Loose, damaged, frayed fiberglass link, not insulated, anchor eye exposed, anchor rod pulling, missing or damaged Guy Guards.

Conductors

Frayed, bird-caged, uneven sag, line clearance, conductor clamps.

Insulators

Broken, chipped.

X-Arms

Broken, rotten, split, proper bracing.

R/W and Access

Danger trees, tree trimming, access required for fiberglass pole.

Line Clearances

From ground, from buildings, from equipment, from other utilities.

TRANSMISSION DISCREPENCY GRADES

Judgment should be used in establishing an appropriate priority for correcting any condition found. The priorities shown are suggested, but may be influenced by expedient action to reduce the severity of the hazard, the remoteness of the installation, or other factors that affect the severity or accessibility to the public.

PRIORITY "A"–TO BE CORRECTED AS SOON AS POSSIBLE

1. Unauthorized equipment or persons within ten feet of energized conductor.
2. Energized conductor "down".
3. Conductor with less than 12 feet of ground clearance anywhere.
4. Conductor with less than 15 feet of ground clearance running along road where vehicles are unlikely to cross under line.
5. Transmission conductors crossing any road with ground clearance less than 19 feet. (69KV @ 21', 115KV @ 22' code min.)
6. Excavation close to poles where stability of facility is affected.
7. Danger tree.
8. Broken pole or cross arm posing hazardous condition.
9. Broken guy wires.
10. Defective switch ground system.
11. Severely leaning poles which could readily become a hazard.

PRIORITY "B"–TO BE CORRECTED WITHIN 30 DAYS

1. Damaged pole held in place by conductors with ground clearance greater than 19 feet.
2. Low pole steps near schools, playgrounds, parks, or other children's activity areas.
3. Missing, broken, or loose pole grounds.
4. Foreign objects in the primary that cannot be cleared by a patrolman (branches, kites, string, etc.)
5. Transmission conductor in "pedestrian only" areas with 12-14 feet of ground clearance. (69KV @ 16', 115KV @ 17' code min.)
6. Transmission conductor running along road where vehicles are unlikely to cross under line with 15-17 feet of ground clearance.
7. Transmission conductor crossing a road with 19-21 feet of ground clearance.
8. Frayed conductors affecting ability to electrically conduct or remain structurally sound.
9. Missing or damaged switch numbers.
10. Missing or broken switch control rod insulator.

PRIORITY "C"-TO BE CORRECTED WITHIN TWELVE MONTHS

1. Transmission conductors that do not have code clearance from buildings, tanks, signs, swimming pools, etc. (with notice to owner.)
2. Guy wires that are exposed to damage by vehicles or are an obstruction to pedestrian traffic.
3. Insulated guy wires exposed to energized conductors with insulators closer than eight feet to the ground.
4. Non-insulated and ungrounded guy wires exposed to energized conductors.
5. Transmission conductors crossing roads with less than 21 feet of ground clearance.
6. Transmission conductors running along roads where vehicles are unlikely to cross under line with 17-19 feet of ground clearance.
7. Transmission conductor in "pedestrian only" area with ground clearance between 14-16 feet.
8. Inadequate vertical clearance between telephone, CATV, and District electrical facilities.
9. Conductors that do not meet required clearance to airstrips and helipads?
10. Install conductor marker ball on required line segments. ?
11. Low pole steps that are not located near children's activity areas.

DISTRIBUTION OVERHEAD INSPECTION

GENERAL

Distribution overhead lines are to be visually inspected every **FIVE** years and a detailed inspection every **TEN** years. Service Area Superintendent shall schedule inspections in their service area and submit copies of the inspections to the shared directory.

Special patrols may be scheduled as deemed necessary. Records of such inspections, defects found, and corrections made will be maintained in the shared directory.

INSPECTION CYCLE

The distribution overhead system will be divided into **TEN** sections. Each section will be inspected every **FIVE** years, alternating between a visual inspection and a detailed inspection.

Items listed on "Overhead Distribution Checklist" shall serve as a guide. Deficiencies by plant location number shall be noted with recommended improvements according to the "priority" categories and inspector.

REPAIRS

Repairs will be made at the time of inspection if practical. If repair work cannot be completed during the field inspection, the Operations Superintendent will schedule the corrective maintenance work as soon as practical. Inspection Reports shall be filed in the shared directory and the Engineering Department will create work orders as necessary.

RECORDS

Inspection maps and reports for the current cycle will be maintained by the Operations Superintendents and the Engineering Department in a shared directory.

***Switch contacts shall be inspected every FIVE years by infrared for "hot" spots. Photo records of "hot" connections shall be filed for reference and used to create necessary maintenance work orders.**

DISTRIBUTION CHECKLIST- OVERHEAD

Major Equipment- Reclosers, Sectionalizers, Regulators, Capacitors, Switches

Leaking, bulged tank, properly grounded, bushings and insulators, control handle locked and grounded, hanging brackets.

Condition of Pole

Broken, split, rotten, leaning, insects, burns.

Guys and Anchors

Loose, damaged, frayed fiberglass link, broken johnny ball, not insulated, removed bonds, anchor eye exposed, anchor rod pulling.

Conductors

Frayed, bird-caged, broken ties, uneven sag, line clearance, conduit for pole risers.

Insulators

Broken, chipped, old g-pol or epoxy type, flashed.

X-Arms

Broken, rotten, split, wooden pins, bent pins, proper bracing.

R/W and Access

Danger trees, tree trimming, access required for fiberglass pole.

Cut-outs

Broken, chipped, hardware tight, hot taps on stirrups, jumpers, flashed.

Arresters

Broken, chipped, properly grounded, hardware tight, jumpers.

Terminations

Properly supported, flashed.

Transformers

Leaking, properly grounded, busing, rusty, hanging brackets, bug legs.

Pole Grounds

Connection to neutral and ground, missing, damaged.

R/W and Access

Danger trees, tree trimming, access.

OVERHEAD DISTRIBUTION

EXAMPLES OF POTENTIAL SAFETY HAZARDS

Judgment should be used in establishing an appropriate priority for correcting any condition found. The priorities shown are suggested, but may be influenced by expedient action to reduce the severity of the hazard, the remoteness of the installation, or other factors that affect the severity or accessibility to the public.

PRIORITY "A"–TO BE CORRECTED AS SOON AS POSSIBLE

1. Unauthorized equipment or persons within ten feet of energized conductor.
2. Damaged pole held in place by conductors with ground clearance greater than 16 feet.
3. Energized conductor "down".
4. Primary conductor crossing any road with less than 16' of ground clearance.
5. Primary conductor with less than 14' of ground clearance running along road where vehicles are unlikely to cross under line.
6. Primary crossing "pedestrian only" areas with less than 12' of ground clearance.
7. Defective switch ground system. (limit operation until repaired.)
8. Excavation close to poles where stability of facility is affected.
9. Open meter bases, current transformer cans.
10. Broken meters.
11. Broken guy wires.
12. Broken pole or cross arm posing hazardous condition.
13. Leaking transformers, regulators or reclosers.
14. Missing, broken, or loose pole grounds.

PRIORITY "B"–TO BE CORRECTED WITHIN 30 DAYS

1. Primary conductors crossing any road with ground clearance between 16' and 18.5'.
2. Low pole steps near schools, playgrounds, parks, or other children's activity areas.
3. Broken service attachment-low service.
4. Foreign objects in the primary that cannot be cleared by a patrolman. (branches, kites, string, etc.)
5. Primary conductor in "pedestrian only" areas with 12-14 feet of ground clearance.
6. Primary conductor running along road where vehicles are unlikely to cross under line with 14-16' feet of ground clearance.
7. Frayed conductors.
8. Missing or damaged switch numbers.
9. Missing or broken switch control rod insulator.

PRIORITY "C"-TO BE CORRECTED WITHIN TWELVE MONTHS

1. Accessible transformer platforms.
2. Primary conductors that do not have code clearance from buildings, tanks, signs, swimming pools, etc. (with notice to owner.)
3. Guy wires that are exposed to damage by vehicles or are an obstruction to pedestrian traffic.
4. Primary conductors running along roads where vehicles are unlikely to cross under line with 16-18' of ground clearance.
5. Primary conductor in "pedestrian only" area with ground clearance between 14'-15'.
6. Inadequate vertical clearance between telephone, CATV, and District electrical facilities.
7. Conductors that do not meet required clearance to airstrips and helipads?
8. Install conductor marker balls on required line segments.
9. Low pole steps that are not located near children's activity areas.
10. Hot line clamps on main line without stirrups.
11. "Singly grounded" transformers.
12. Poles that appear structurally weakened beyond "at replacement" code requirements.
13. Insulated guys exposed to energized conductors with insulators closer than eight feet to the ground.
14. Non-insulated and ungrounded guys exposed to energized conductors.

DISTRIBUTION UNDERGROUND INSPECTION

GENERAL

Distribution underground lines are to be visually inspected every **FIVE** years and a detailed inspection every **TEN** years. Service Area Superintendent shall schedule inspections in their service area and submit copies of the inspections to the shared directory.

INSPECTION CYCLE

The distribution underground system will be divided into **TEN** sections. Each section will be inspected every **FIVE** years, alternating between a visual inspection and a detailed inspection.

Items listed on "Underground Distribution Checklist" shall serve as a guide. Deficiencies by plant location number shall be noted with recommended improvements according to the "priority" categories and inspector.

Visual, Distribution Underground External Inspection will give a quick external overview of any and all underground equipment to ensure public and employee safety.

Detailed, Distribution Underground Internal inspection will be a more in-depth look at reliability and safety.

1. The need to install fault indicators based on outage history.
2. Input from crew personnel who have recently operated the system.
3. Cable replacement.
4. Live front transformer replacement.
5. Junction box replacements.

REPAIRS

Repairs will be made at the time of inspection if practical. If repair work cannot be completed during the field inspection, the Operations Superintendent will schedule the corrective maintenance work as soon as practical. Inspection reports shall be filed in the shared directory and the Engineering Department will create work orders as necessary.

RECORDS

Inspection maps and reports for the current cycle will be maintained by the Operations Superintendents and the Engineering Department in a shared directory.

DISTRIBUTION CHECKLIST- UNDERGROUND

VISUAL INSPECTION

Major Equipment- Switching Cabinets, Fuse Cabinets, 600 amp Vaults

Locks

Physical Damage

Level

Rust

Tags and Decals

Access

Landscaping

Enclosures- Transformers, J-Boxes, Fuse Pads, Secondary Pedestals

Locks

Physical damage and Oil Leaks

Soil erosion

Rust

Level

Access

Landscaping

Tags and Decals

DISTRIBUTION CHECKLIST- UNDERGROUND

DETAILED INSPECTION

Major Equipment – Switching Cabinets, 600 amp Vaults, Fuse Cabinets

Equipment security- lock

Secured to foundation

Live front barriers in place

Proper grounding loops

Equipment grounds

Elbows seated

Protective caps seated

Bleed wires

Terminations and wire supported

Proper tagging

Enclosures- Transformers, J-Boxes, Fuse Pads, Secondary Pedestals.

Equipment security- lock

Oil leaks

Proper grounding loop

Equipment grounds

Elbows seated

Protective caps seated

Bleed wires

Proper tagging

Secondary connections and covers

UNDERGROUND DISTRIBUTION

EXAMPLES OF POTENTIAL SAFETY HAZARDS

Judgment should be used in establishing an appropriate priority for correcting any condition found. The priorities shown are suggested, but may be influenced by expedient action to reduce the severity of the hazard, the remoteness of the installation, or other factors that affect the severity or accessibility to the public.

PRIORITY "A"–TO BE CORRECTED AS SOON AS POSSIBLE

1. Energized pad mount equipment door open, unlocked.
2. Oil leaking.
3. Unauthorized access through damaged or mis located equipment.
4. Equipment damaged by vehicle, etc.
5. Intrusions. (Sticks, wires, etc.)
6. Improperly seated elbow.
7. Deformed elbow or bushing insert.

8. Holes through doors or under equipment large enough to allow unauthorized access.
9. Drain wires not connected to ground and elbow connectors.
10. Missing protective bushing cap.
11. Defective protective bushing cap. (RTE.)

PRIORITY "B"–TO BE CORRECTED WITHIN 30 DAYS

1. Severely tipped equipment.
2. Erosion or excavation affecting stability.
3. Dirt, mud intrusions.
4. Transformer extremely out of level.

PRIORITY "C"-TO BE CORRECTED WITHIN TWELVE MONTHS

1. Missing warning or caution signs. ?
2. Rusty or severely corroded cabinet.
3. Missing ground rods.

INSPECTION SHEET (Work Needed)

DATE: _____ INSPECTED BY: _____ SUB: _____ LINE: _____

☐ DISTRIBUTION PLANT#: _____

☐ TRANSMISSION ROAD NAME OR ADDRESS: _____

PLANT TYPE: (All that apply)

☐ POLES & ATTACHMEMENTS
☐ GUYS
☐ CONDUCTOR
☐ SERVICE
☐ PAD TRANSFORMER
☐ UG OR SURFACE STRUCTURE
☐ OTHER→_____

Y	N	(check one)
☐	☐	OUTAGE NEEDED?
☐	☐	FLAGGERS NEEDED?
☐	☐	PICTURE?

DESCRIPTION:_____

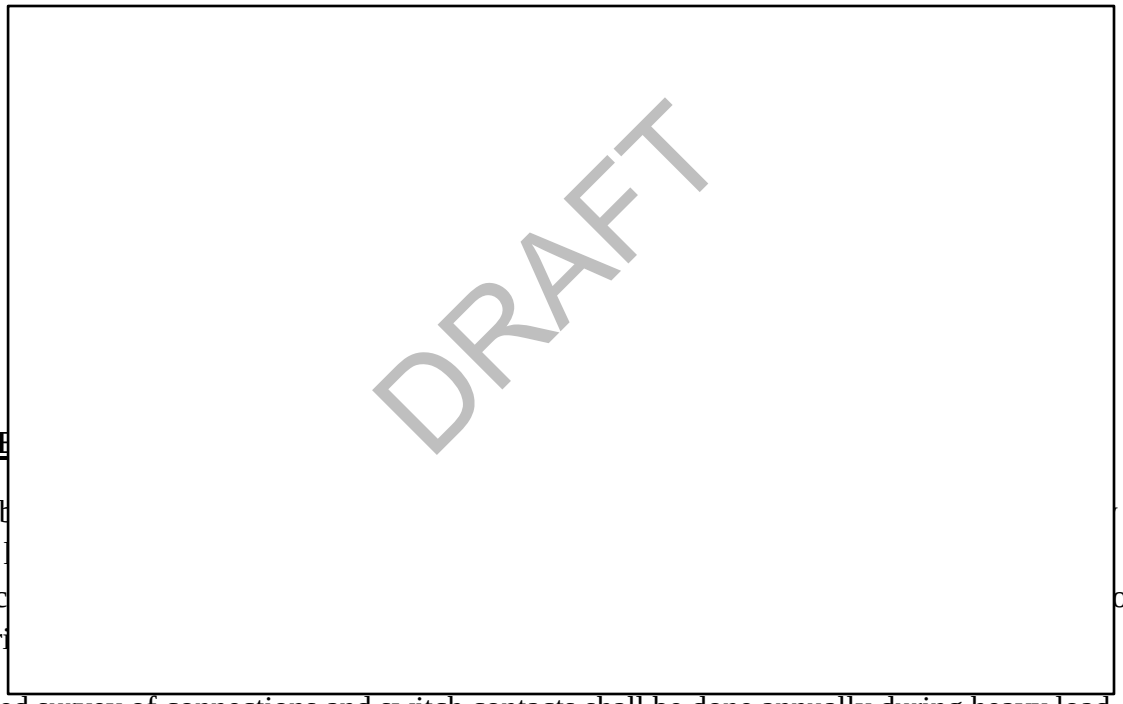
_____

_____

_____

_____

SKETCH OR PICTURE (if applicable)



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Infrared survey of connections and switch contacts shall be done annually during heavy load times. Photos of "hot spots" shall be filed for reference and used to create necessary maintenance work orders.

All switches will be operated or inspected once a year. Arrangements will be made to facilitate this operation by either circuit ties, jumpering, or during planned outages. Lubrication will be applied to the moving parts and maintenance of the contacts will be performed as necessary to assure proper operation.

REPAIRS

Repairs will be made at the time of inspection if practical. If repair work cannot be completed during the field inspection, the Substation Supervisor will schedule the corrective maintenance work as soon as practical. Inspection Reports shall be filed and appropriate work orders initiated by the Engineering Department.

RECORDS

Substation inspections data is recorded using ESRI's Survey123 mobile application. This application collects the inspection information, and submits it to ArcGIS on-line. This data is available to Engineering for analysis, inquiry, and reporting. Backups are brought in house, as the originating data is off-site

Refer to the Document ***"Survey123 Substation Inspections"*** for additional details on this recording tool.

SUBSTATION CHECKLIST

1) Access
    a. Gate
        i. Open, unlocked, damaged.
    b. Fence
        i. Gap exceeding six inches underneath, allowing access.
        ii. Erosion allowing access.
        iii. Objects leaning against on the outside, allowing EASY access.
        iv. Raised grade on the outside allowing EASY access.
        v. Excavation near the fence.
        vi. Minimum 5' between fence and trees
        vii. Climbing hazard and climbable vegetation clearance
    c. Driveway
        i. Ruts.
        ii. Obstructions.
2) Equipment
    a. Broken or chipped insulator or bushing.
    b. Burned, chipped, broken or flashed insulators or bushings.
    c. Low oil.
    d. High temperature.
    e. Blown fuse or open breaker.
    f. High or low pressure.
    g. Battery.
    h. Bulging tanks.
3) Grounds
    a. Broken or loose ground connection to equipment, fence, or structures.
4) Clearance
5) Foreign Objects
    a. On energized equipment.
    b. In Substation yard.
        i. Weeds.
        ii. Nests.
6) Signs, Warning and Facility
    a. Missing from fence or gate.
    b. Damaged, deteriorated, or illegible.

The above list serves as a guideline for Inspections. The complete list of items addressed in a Substation Inspection are below. NOTE: This list shown is for the BN Substation; the questions asked at each location is tailored to the unique configuration of each Substation.

DATE	
BN SUBSTATION	
Weed control ok?	
Sub free of storage?	
Entrance to drive ok?	
Gates ok?	
Equipment grounds ok?	
Barbed wire ok?	
Warning signs?	
Fence ok?	
Clearance - NESC	
Yard clean and orderly?	
Sub properly lighted	
Lightning arresters ok?	
Climbing hazard encroachment?	
Burrowing hazard?	
VACUUM BREAKER B010	
Indicating lamps ok?	
Heaters ok?	
Breaker status closed?	
Op Mech spring charged?	
Bushings ok?	
Visual ok?	
Infrared ok?	
Operations Counter	
Amps A Phase	
Amps B Phase	
Amps C Phase	
Neutral	
VACUUM BREAKER B020	
Indicating lamps ok?	
Heaters ok?	
Breaker status closed?	
Op Mech spring charged?	
Bushings ok?	

CLALLAM COUNTY PUD
Bringing Energy To Life™

BN SUB

Visual ok?	
Infrared ok?	
Operations Counter	
Amps A Phase	
Amps B Phase	
Amps C Phase	
Neutral	
VACUUM BREAKER B030	
Indicating lamps ok?	
Heaters ok?	
Breaker status closed?	
Op Mech spring charged?	
Bushings ok?	
Visual ok?	
Infrared ok?	
Operations Counter	
Amps A Phase	
Amps B Phase	
Amps C Phase	
Neutral	
VACUUM BREAKER B040	
Indicating lamps ok?	
Heaters ok?	
Breaker status closed?	
Op Mech spring charged?	
Bushings ok?	
Visual ok?	
Infrared ok?	
Operations Counter	
Amps A Phase	
Amps B Phase	
Amps C Phase	
Neutral	
HV Bus	
Infrared ok?	
Structure ok?	
Insulators ok?	
Switches ok?	
LV Bus	
Infrared ok?	
Structure ok?	

Insulators ok?	
Switches ok?	
CS 1180 CIRCUIT SWITCHER	
Bushings ok?	
Visual ok?	
Breaker status closed?	
SF6 Gas Pressure ok?	
Indicating lamps ok?	
Op Mech spring charged?	
Operations Counter	
CS 1190 CIRCUIT SWITCHER	
Bushings ok?	
Visual ok?	
Breaker status closed?	
SF6 Gas Pressure ok?	
Indicating lamps ok?	
Op Mech spring charged?	
Operations Counter	
CS 1200 CIRCUIT SWITCHER	
Bushings ok?	
Visual ok?	
Breaker status closed?	
SF6 Gas Pressure ok?	
Indicating lamps ok?	
Op Mech spring charged?	
Operations Counter	
BN CONTROL HOUSE	
Safety Equipment ok?	
Lighting ok?	
Phone ok?	
Tags ok?	
Garbage emptied?	
Heater ok?	
Battery charger ok?	
Battery connections ok?	
Batterly cell metered voltage	
Pilot Cell No.	
Battery Float Voltage	
Battery Specific Gravity	
Battery Cell Internal Temp (degF)	
Battery Cell water level	

BN A Phase Regulator	
Max Amps	
Oil levels normal?	
Oil leaks?	
High Voltage?	
Low Voltage?	
Tap Max	
Tap Min	
Tap Present	
Compensated Voltage	
Bushings ok?	
Amps	
Draghand reset	
Control ok?	
Counter	
BN B Phase Regulator	
Max Amps	
Oil levels normal?	
Oil leaks?	
High Voltage?	
Low Voltage?	
Tap Max	
Tap Min	
Tap Present	
Compensated Voltage	
Bushings ok?	
Amps	
Draghand reset	
Control ok?	
Counter	
BN C Phase Regulator	
Max Amps	
Oil levels normal?	
Oil leaks?	
High Voltage?	
Low Voltage?	
Tap Max	
Tap Min	
Tap Present	
Compensated Voltage	
Bushings ok?	

Amps	
Draghand reset	
Control ok?	
Counter	
BN POWER TRANSFORMER	
Visuals ok?	
Main tank levels normal?	
Radiators obstructed?	
Fans condition?	
Oil leaks?	
Surge arresters ok?	
Control cabinet heater on?	
Bushings ok?	
Control cabinet ok?	
N2 Cyl Pressure	
Winding Temp Max (deg)	
Fan switch position?	
Winding Temp Ind (degC)	
Pressure/Vacuum (+/-)	
Top Oil Temp Ind (degC)	
Top Oil Temp Max (degC)	
BN Single Blade Switches	
Condition good?	
Visuals ok?	
Insulators good?	
Infrared ok?	
Tags ok?	
Getaway Risers Infrared Testing	
BN B0100 Line A ok?	
BN B0200 Line B ok?	
BN B0300 Line C ok?	
BN B0400 Line D ok?	

SUBSTATIONS

DISCREPANCY GRADES

Judgment should be used in establishing an appropriate priority for correcting any condition found. The priorities shown are suggested, but may be influenced by expedient action to reduce the severity of the hazard, the remoteness of the installation, or other factors that affect the severity or accessibility to the public.

PRIORITY "A"–TO BE CORRECTED AS SOON AS POSSIBLE

1. Damage to the fence, wall or gate that would allow EASY access into the substation.
2. Gap between fence or gate posts exceeding six inches.
3. Gap or erosion under fence or gate exceeding six inches.
4. Equipment, material or objects placed against exterior of fence allowing EASY access into substation.
5. Any other condition that the inspector feels requires immediate corrective action.
6. Broken ground wire connection to equipment.

PRIORITY "B"–TO BE CORRECTED WITHIN 30 DAYS

1. Gap or erosion under fence or gate from four to six inches.
2. Walls, fences, trees or other objects against or near the exterior of the substation fence that could facilitate access.
3. Raised grade outside fence that could facilitate access.
4. Equipment or material stored against interior of fence that could facilitate climbing.
5. Unauthorized material or equipment stored in substation that could attract entry.
6. Broken ground wire connections or fences or gates.

PRIORITY "C"-TO BE CORRECTED WITHIN TWELVE MONTHS

1. Minor erosion that could result in gap developing under fence.
2. Danger signs that are illegible, missing from vehicle and pedestrian gates, or that do not meet company spacing standards of not on gate, no more than 50' from a corner, and no more than 75' between signs.
3. Any other condition that the inspector feels may detract from perimeter security.
4. Broken or chipped porcelain insulation.
5. Any significant gap under a fence.

NON-ROUTINE INSPECTIONS

GENERAL

Standard procedures dictate inspecting a circuit or transmission line section immediately which is de-energized from a fault. Additional non-routine inspections shall be considered with knowledge of the following events:

1. Excessive, unexplained changes on a breaker or recloser.
2. A line section has been de-energized for a significant period of time.
3. An excessive number of faults on a given circuit or line section.
4. An upgrade to a circuit or a line section is being planned.

RESPONSIBILITIES

The Distribution Systems Manager shall be responsible for monitoring circuit reliability and counter changes and will request non-routine inspections as necessary.

HELICOPTER INSPECTIONS

There will be occasion when it will be practical to utilize a helicopter for these inspections. This decision will normally be made by the Operations Superintendents or the Dispatcher after consultation with the Operations Manager.

Inspectors shall follow the pilot's instructions when flying in the helicopter. The supervisor in charge will determine who shall make the inspection. Inspections for line outages will normally be done by line crew personnel. A supervisor may elect to accompany the line crew personnel. Inspections to determine overall line condition may be conducted by supervisors, engineers, or line crew personnel.

SYSTEM ALERT

GENERAL

All employees will be encouraged and trained to watch for and report obvious hazards both on and off the job.

REPORTING

An employee should report as soon as practical to their supervisor any hazardous conditions that need repair.

TRAINING

All employees will be given training periodically regarding identifying hazards. This may be incorporated with Accident Prevention meetings.

GENERAL SAFETY HAZARDS

OVERHEAD

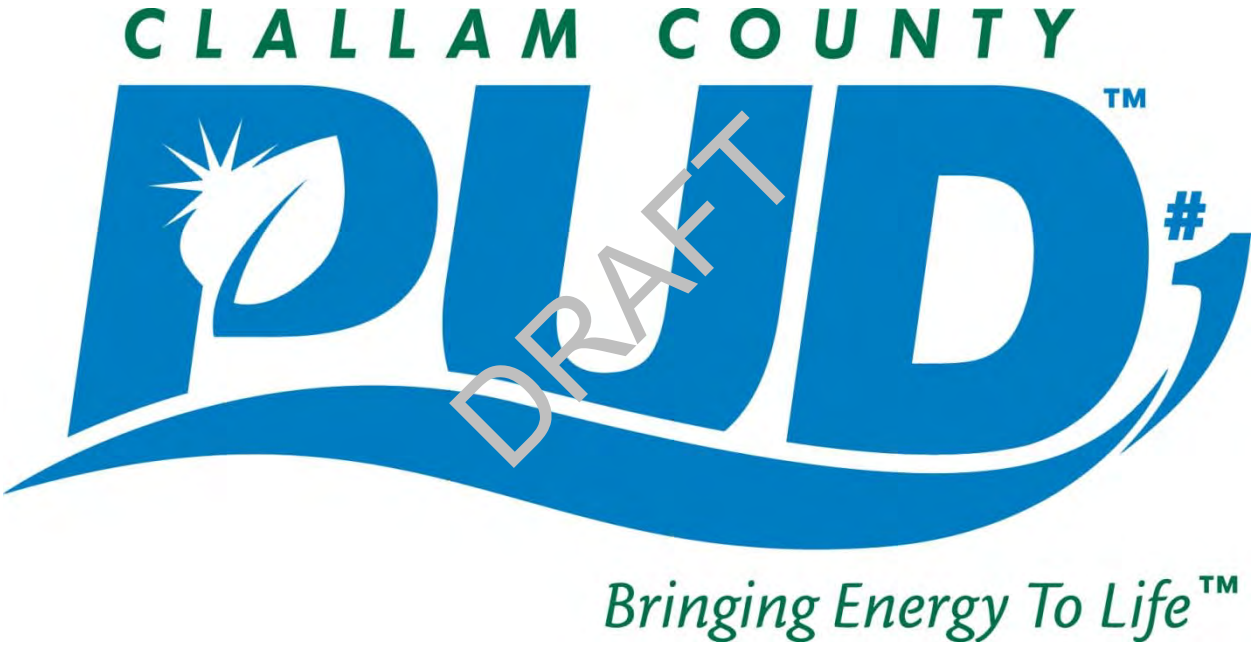
1. Poles
    a. Broken, split, hit by vehicle.
    b. Severely leaning.
2. Cross arms
    a. Broken.
3. Guy wires and anchor rods
    a. Broken or very loose guys.
    b. Broken guy insulators.
4. Transformers
    a. Leaking oil.
    b. Hanging severely out of plumb.
5. Line clearance
    a. Low conductors over highways, roads, driveways, etc.
    b. Close to buildings (roofs, walls, windows), signs.
6. Potential hazards
    a. Trees leaning toward distribution or transmission lines.
    b. Signs or other objects attached to poles.
    c. Excavation near structures.

UNDERGROUND

1. Security
    a. Enclosure near door open.
    b. Cabinet damaged by vehicle or vandal.
2. Physical
    a. Severely out of level.
    b. Leaking oil.
    c. Excavation or erosion affecting stability.
    d. Landscaping: bushes planted in front of equipment.

SUBSTATION

1. Security
    a. Gate unlocked, left open.
    b. Unauthorized access.
2. Physical
    a. Fence damaged by vehicle or vandal.
    b. Excessive gap in or under fence.
    Object leaning against fence. (e.g.: tree, ladder.)



Pole Inspection Plan

Sept 2024

Public Utility District #1 of Clallam County
104 Hooker Road
Sequim, WA 98382

Contents

1.0 SCOPE

Clallam PUD Pole Inspection Program (PIP) is a Utility-specific program designed to proactively Increase the longevity of wood distribution and transmission poles, thereby reducing annual cost necessary for pole replacements. The District is committed to balancing its goal of providing reliable electrical service in a cost-effective manner and improved service to our customers. This document outlines the Pole Inspection Program (PIP) to:

- Increase longevity of wood poles
- Reduce cost of pole replacement
- Provide visual inspection of every pole in the system.
- identify and track inspection for future references.

2.0 PROMULGATION

The District has formally adopted a Pole Inspection "Test and Treat" Program and educates District staff and our Customers regarding Pole Test and Treat policies, procedures and standards that are associated with the Pole Inspection Program.

3.0 JUSTIFICATION AND PURPOSE

Longevity and safety along the entire transmission and distribution system of wood poles is significantly increased by a proactive Inspection, pole testing and treatment program and thereby reducing the District's cost and crew time needed for replacing District poles.

4.0 PRINCIPLES

The District obtains and complies with all necessary codes, guidelines and permits associated with the inspection, maintenance, treatment and fumigation of wood poles. Particular attention is given to poles treatment activities within Tribal lands, wetlands and other protective areas.
Pole Test and Treat following industry standards:
(SEE **Key Resources**)

5.0 DISTRICT WOOD POLES CHARACTERISTICS

5.1 Impacted Service Area

The District system service territory has over 24,000 poles along 702 miles of overhead distribution lines and 145 miles of transmission conductor extending over two counties, Clallam and Jefferson, in the State of Washington.
The distribution and Transmission systems traverse highly variable topography from the Strait of Juan de Fuca waterfront to the high elevations of the Olympic Mountains on the Olympic Peninsula in northwestern Washington. The Decay severity zone for this region is classified as Zone 4 by the USDA Rural Utility Services. (*Least Severe Zone 1 - Most severe Zone 5)*.

6.0 PRIORITIZING INSPECTION

6.1 Circuit Inspection

Adopting Inspection cycles improves the ability to track current contract work, plan future contract work, and reduces the overall number of pole needing to be replaced by annually scheduling inspection and treatment of wood poles throughout the system.

The district has adopted a 10-**year completion cycle** to inspect approximately 24,000 wood poles within the system. This is based on an estimated annual pole inspection budget of $150,000 to inspect approximately 2100 to 2400 poles per year.

7.0 INSPECTION METHODS

7.1 Visual Inspection

Visual Inspection is made of each pole to verify the overall condition of the pole above the ground line, including cross arms, hardware and attachments. Included within the annual contract the inspector assures all poles in the system are numbered and all guys have guards installed.

7.2 Sound and Bore

Striking a pole with a hammer from ground line to as high as the inspector can reach is used to detect voids within the pole.
Drilling (Boring) poles is used to determine the condition and decay within the pole and to measure shell thickness where voids have been formed within the pole.

7.3 Excavation

Poles are excavated to a depth of approximately 18-inchs to inspect pole surface decay. Shell Rot and external decay pockets are removed from the pole. Poles are also measured below the ground line to determine if pole has sufficient strength with reduced circumferences. Tables develop by RUS and other agencies are used to help determine reduced circumferences strength of the pole.

7.3 Treatment and Fumigation

Treatment and fumigation to each pole is done by a qualified worker accordingly to the specifications and procedures described with the Districts annual Pole Inspection contract documents.

8.0 INSPECTION RESULTS

8.1 Marking Inspected Poles

The Inspector/Contractor marks each pole inspected by the use of:

a. A nail or tag indicating the year in which the pole was inspected, tested, and treated, and also identifying the Contractor. This tag would indicate to the District that this pole met or exceeded the minimum requirements for a good pole. Tag or nail head should not exceed two square inch in diameter.
b. A metal or rigid vinyl tag, red or yellow in color, securely attached to the pole, identifying the pole as a reject or two tags identifying it as a **"PRIORITY"** pole. These tags should be a minimum of one square inch in area.

Tags are securely attached to the pole four to six feet above ground level and on the side of the pole facing the street or highway.

8.2 Priority Reject "Danger" poles – *Replaced Immediately*

Priority Reject "Danger" Poles are identified in the field with two red tags and are replaced immediately. Field reports and notification are sent immediately to Operation's Superintendent and Engineering upon inspection, from the inspector, and a work order is sent to the crew to replace the pole.

8.3 Reject poles – *Replaced/Reinforced within One Year*

Reject Poles are identified in the field with one red tag are replaced/reinforced within a year's time of inspection. Field reports and notification are sent to Operation's Superintendent and Engineering. Operation Superintendent will do a site visit of each pole to determine if the pole shall be replaced or reinforced. A Work Order is then created by Engineering and sent to the Crew. Work Orders are marked with red Label stating the following: "Complete Work within One Year of Work Order Origination Date."

8.3 Maintenance Poles – *Complete Work as Needed*

Field reports and notification for maintenance work are sent to Operation's Superintendent and Engineering by the inspector/contractor. Typical maintenance work identified are as follows:

- Loose or broken guy wires.
- Loose or broken attachments.
- Loose or broken Cross arms or insulators.

A Work Order is created by Engineering for Poles requiring maintenance and sent to the Crew.

9.0 TRACKING THE WORK

9.1 Contractor Responsibilities – *Reporting*

Contractor/Inspectors are responsible for completing the inspection report accordingly to the specifications and procedures described with the Districts annual Pole Inspection contract documents. Electronic Reports are sent on a weekly basis to the Operations Superintendent and Engineering for review.

Upon completion of the annual inspection, an Electronic report is sent from the contractor to Engineering to be entered into ESRI GIS mapping system.

This inspection sheet shall contain the minimum information as follows for tracking purposes:

- Date Inspected
- Pole number
- Type of pole (Distribution/Transmission)
- Treated
- Reject Pole
- Fumigated

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9.1 Engineering Responsibilities – *Mapping and Analyzing data*

Engineering staff will enter the necessary information from the inspection work sheets, provided electronically by the contractor, into ESRI Geodatabase. A copy of the inspection sheets are saved within the Records Department.

9.2 Mapping Inspection – ESRI GIS

Records of pole inspection have been added to the District's ESRI GIS data base electronically since 2009.

10.0 KEY RESOURCES

- *United States Department of Agriculture – RUS Bulletin 1730B-121, August 13, 2013*
- *IEEE - National Electric Safety Code (NESC) – C2-2007*

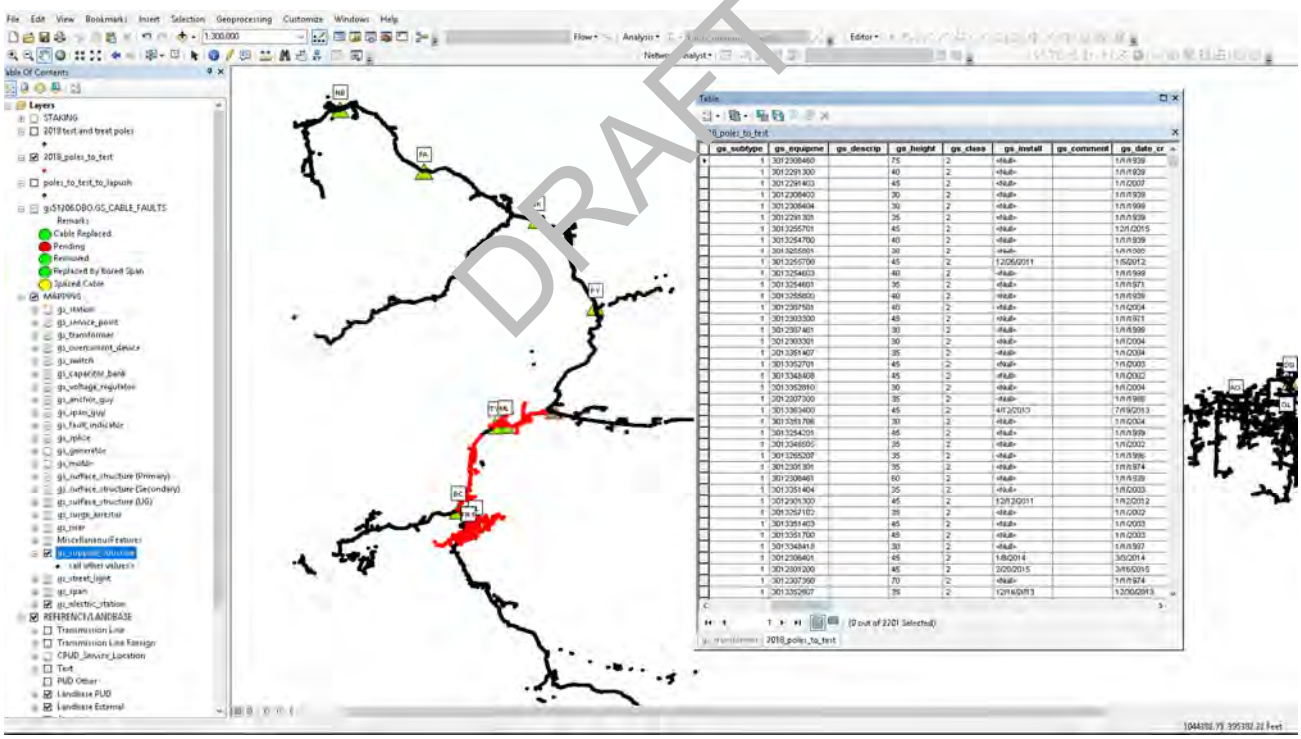
11.0 POLE TAGGING

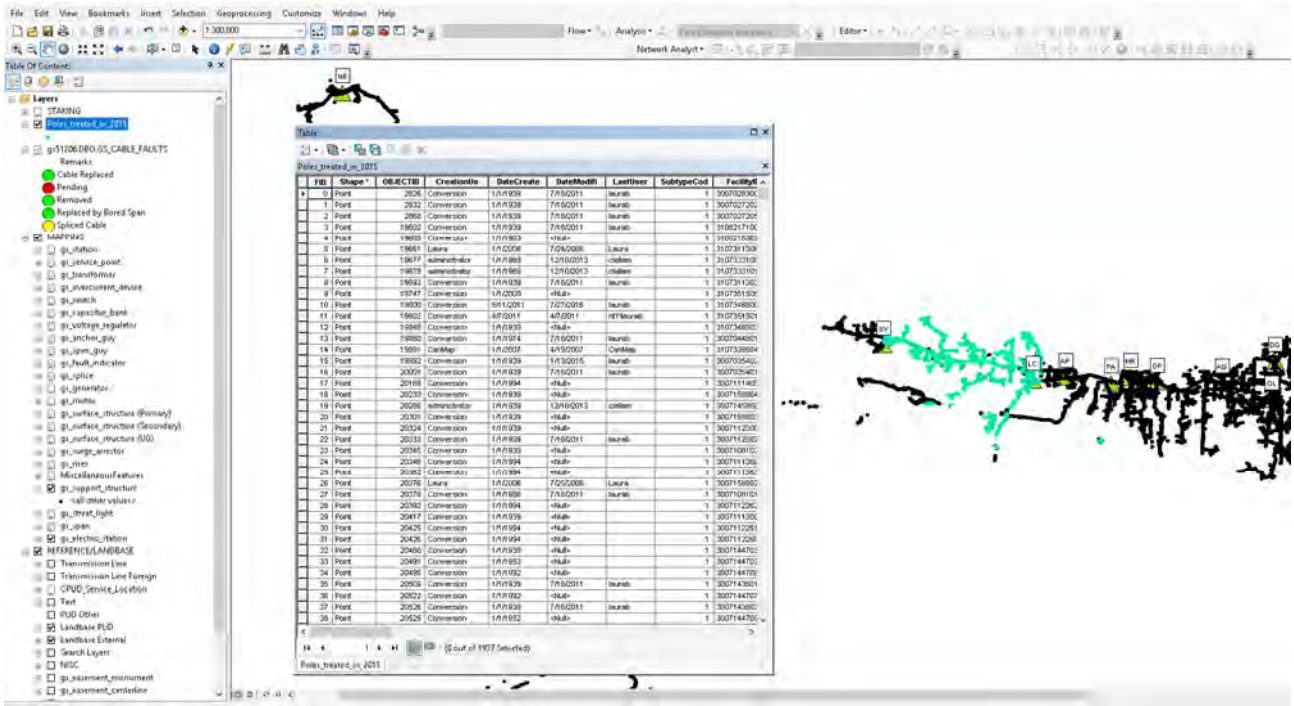
12.0 Inspection Sheet and Content

Clallam Inspection Reports shall include annotation or code for the following information in electronic form suitable for use in GIS:

- Pole Number
- Date
- Inspector
- Pole Type
- Pole Status
- Species
- Pole Year
- Pole Height
- Pole Class
- Original Treatment
- Manufacturer
- Original Circumference
- Effective Circumference
- Foreign Contacts
- Weather
- A - Good Pole - Treated
- B - Reject Pole – Treated
- C - Reject Pole – Reported
- D - Report Only
- E - Fumigant Only
- F - Transmission Pole
- G - Install Plant Unit Numbers
- H - Install Guy Guards
- Comments
- Condition Comments
- Maintenance Required
- Latitude
- Longitude

13.0 ESRI ARCGIS – MAPS





CLALLAM COUNTY PUD #1™

Bringing Energy To Life™

Operations Bulletin No. 12
Guidelines for Electrical Emergency Conditions

Revised September 20, 2023

Table of Contents

Purpose

This bulletin documents guidelines to be used by District employees which will assist in the orderly, safe, and timely restoration of service.

Scope

This bulletin will cover all the activities that would normally be related to restoration efforts upon declaration of a major event by the General Manager or General Superintendent. A major event is defined as an occurrence in which all the resources of the District are required to restore service as a result of a large number of customers being out of power and/or major damage to the electric system. It may or may not be associated with a countywide disaster. Typical causes would be an earthquake, a windstorm, fire, etc.

Responsibilities

Dispatcher

The Dispatcher shall have overall responsibility for seeing that the guidelines are utilized. The General Superintendent shall be responsible for revising these guidelines and for providing training to other employees as required.

The Dispatchers shall be responsible for knowing and following the guidelines when directing emergency restoration efforts. They will have the primary responsibility for directing the restoration efforts.

Procurement and Facilities Supervisor

Shall be responsible for providing, monitoring, and replenishing materials as required.

Engineering Manager

Shall be responsible for directing internal outage reporting.

Communications and Government Relations Manager

Shall be responsible for directing external communications and media contacts and inquiries.

All Employees Involved

All employees who are involved in the restoration efforts shall be familiar with the guidelines that pertain to their role in the process.

Guidelines

Activation

The guidelines are intended to be applicable to a major event, which is a subjective decision that the Dispatcher and others will need to make after an assessment of the situation. The following conditions will be considered in making the decision that would result in the declaration of a major event:

1. More than 3,000 customers are out of power;
2. A weather disturbance or major event is forecast to continue;
3. All line crew personnel are needed to restore power;
4. Restoration will take more than 12 hours; or
5. Crew personnel will be assigned from one service area to another,

When a major event is declared, the following functions will normally be activated:

1. The Dispatch Center – Carlsborg Operations Center
2. Expanded Phone Coverage/Call Center – Carlsborg Operations Center
3. Materials Department – Central Warehouse Facility

In the event physical or communication damages are such that the Carlsborg Operations Center is nonfunctional, these functions are transferred to:

1. Backup Dispatch Center – Administration Building Room 126
2. Backup Call Center – Administration Building CSR Work Stations

In the event physical or communication damages are such that both Carlsborg Operations Center and the Administrative Building are nonfunctional, these functions will be arranged and coordinated as best feasible between Port Angeles Operations, Forks Operations, Dispatchers/Superintendents in the field and the Answering Service.

Utilization/Rest Periods

In a major event, all District employees who can contribute to the restoration effort will be utilized to the extent possible based upon their availability and ability. The following is a listing of the groups of employees who will be utilized as necessary and guidelines for utilization:

Dispatchers

- The Dispatcher will be determined with consideration given to availability and the Dispatcher's schedule.
- Dispatchers will normally be relieved every 8 to 12 hours.
- When Dispatchers are changing shifts, they will systematically review the status of restoration efforts including; what crews are working, what crews are on rest breaks, when will crews be returning from breaks, the status of the system, etc.
- There may be occasions when dispatching will be done by a Dispatcher in the West End. Any system switching will be passed on to the Dispatch Center for entry into the master log.
- Any employees called out for assignment shall be called by the Dispatcher or approved by the Dispatcher. In some cases, informing the Dispatcher after the call out will be acceptable. The Dispatcher at all times must have knowledge of all employees who are working and those who are on rest period or meals.
- Operations Superintendents who are not assigned as Dispatchers will be used to assess damage and supervise field repairs.
- The Dispatcher will make all work assignments.

Dispatcher Assistant(s)

This position is under the direction of and in the support of the Dispatcher and will be called out from a list of Engineering Personnel who have undergone annual training in OMS and Dispatcher Assistant/Support functions, such as:

- Communication and coordination within the Dispatch Center
- Dispatcher support functions
- Staff County Emergency Operations Center as directed
- Monitor systems and maintain OMS

Crew Personnel

- This will include all servicemen, line crew personnel, maintenance personnel, etc.
- Initially, crew personnel will be assigned from the service area where the trouble is located.
- Crew personnel shall be assigned in two-person units with pickup-type vehicles or Serviceman bucket trucks to access the damage and restore service to as many customers as possible.

- Smaller crews can then be combined for larger projects.
- When, in the opinion of the Operations Superintendents or Dispatchers, restoration efforts will be extended over multiple days, rotating shifts where employees work approximately 16 hours and rest for 8 hours will be planned.
- An attempt shall be made to have rest periods occur at night so that we maximize the potential of daylight hours.
- When any crew completes a work assignment, the crew leader will report to the Dispatcher to ask for another assignment.

Substation and Metering Personnel

- Consider substation personnel for substation switching
- Perform oil spill cleanup
- Investigate trouble reports and do damage assessments
- Deliver equipment, materials, tools, etc.
- Assist crew with brushing, flagging, and other types of groundwork
- Make safe or stand by unsafe situations until crews arrive

Materials Personnel

During a major event, the materials personnel will be assigned to maintain the warehouse as long as necessary to supply materials. This will include the following functions:

- Assemble and issue materials
- Deliver materials, tools, vehicles, and supplies to the field
- Deliver meals
- Pick up salvaged materials
- In addition, materials personnel can be utilized to assist the line crew with tasks such as flagging, brushing, etc.

Line Clearance Tree Trimming Crews

- Tree trimming and removal in conjunction with damage assessment or repairs that are being made by other District personnel
- Working in conjunction with DOT crews clearing road access and downed lines, after damage assessment and the situation has been made safe electrically by other personnel
- Flagging

Auto Shop Personnel

During a major event, Shop personnel's primary responsibility will be to maintain the fleet. They may be assigned the following secondary functions:

- Flagging
- Equipment or material delivery
- Equipment operation
- Driver/helper to supplement Line Crew
- Water and Wastewater Personnel
- Ground brushing
- Deliver meals, materials, etc.
- Stand by unsafe areas until crews arrive

Other Crew-Related Assistance

- Flagging
- Engineering Personnel
- Dispatcher assistance and support
- Map confirming work
- Assess damage and provide material requirements
- Messenger - to assist in communications between Dispatcher(s) and "Outside Crews"
- Deliver meals
- Customer contacts; i.e., claims, property damage, easements, etc.
- Stand by unsafe areas until crews arrive
- Provide damage assessment reports for FEMA (Federal Emergency Assistance)

Other Personnel

- Provide expanded phone coverage/Call Center
- Assist in compiling FEMA information
- Deliver meals
- Motel reservations
- Meter Readers
- Deliver meals
- Flagging
- Stand by unsafe areas until crews arrive

Damage Assessment

As a major event unfolds, initial damage assessment is critical in determining what resources will be needed. The unit of measure to determine the magnitude of the event will be: ***the number of locations where high-voltage (12 kV and above) poles, equipment, or conductors are damaged and a line crew will be needed for repairs.*** Initially, we will attempt to have as many smaller mobile units in the field as possible assessing the damage and reporting the locations to the Dispatcher for listing on the operating map. Personnel making the assessments shall indicate the following:

- Extent of damage
- Material needed
- Other resources needed - flaggers, oil spill response, etc.

Damage assessment reports shall be made by phone or radio to the Dispatcher whenever possible. An overall assessment of the event can then be made with consideration given to the following:

- Number of cases of high-voltage trouble
- Extent of damage
- Number and type of customers affected
- Weather predictions
- Availability of crew personnel

These variables can be monitored and decisions can be made as to the need for outside resources. Experience has shown that typically it is better to make an early assessment so that if outside resources are needed they can be obtained early in the event which will ultimately shorten the overall restoration time.

Utilization of Outside Crews

Consideration will be given to the use of outside crews when the following conditions exist:

- More than 5,000 customers are without power which will not likely be restored within 48 hours
- There are more than fifty cases of primary trouble
- PUD crews need rest time
- There is major damage to critical facilities

Outside crews will normally be requested in the following order:

1. PUD Mutual Aid Plan coordinator
2. Port Angeles City Light

When requesting crews from non-commutable distances, they will be requested to bring the necessary personal needs for at least two nights. Motel reservations shall be made as soon as practicable.

When crews arrive, they will be assigned a District representative with a radio to assist the crew as necessary. The representative would typically perform the following activities:

- Provide radio or other means of communication with the Dispatcher
- Assist with meal provisions
- Assist with material provisions and salvage
- Assist in confirming with Dispatch as work is completed
- Other miscellaneous assistance such as traffic control, locate requests, etc.
- Provide one-line circuit diagrams for reference

Restoration Priorities

In general, we will initially mobilize in small mobile units to restore service to as many customers as possible. Consideration will also be given to how long customers have been out of power, crew locations, and what type of effort is needed to restore service. Hazardous conditions affecting public safety will always receive first priority.

Dispatchers will check with the Water Department to determine how critical power restoration is if a circuit feeding one of our water systems is out. The following order of priority will normally be followed for restoration efforts.

1. Transmission line and substation damage
2. Circuits feeding critical commercial or industrial loads
3. Portions of circuits feeding critical commercial customers or industrial loads
4. Circuits or portions of circuits feeding PUD water systems
5. Circuits feeding residential customers
6. Portions of circuits feeding residential customers
7. Individual customer outages
8. Individual miscellaneous customer calls such as low services, leaning poles, etc.

Material Supply

The Line Foremen shall see that the appropriate trucks are initially stocked with an extra supply of commonly used material such as splices, hand coils of wire, etc.

For major damage at a specific location, the person in the field assessing the damage or the Dispatcher shall inform the materials person in charge as to the materials needed. The Materials Department will assemble the material and have it ready for the crew to pick up. If the Dispatcher or the Line Foreman determines that it would be appropriate to have the material delivered to the job site, he shall make arrangements as necessary.

When the Line Foreman determines it is efficient to do so, he shall request the Materials Department to pick up salvaged material in the field. The Materials Department will be responsible to follow up and pick up the material at its earliest convenience. Plant unit numbers should be used to reference the location of materials that are to be picked up.

Meal Provisions

The general objective will be to provide some form of a meal every 5 to 7 hours. The person in charge at any job site should determine from their crew when a meal should be delivered to a job site, because it will not be practicable for them to take their meal at a restaurant in a timely manner. When practicable, it shall be the Dispatcher's responsibility to arrange for the meal provisions as needed. In certain instances the Line Foreman shall be responsible to arrange for meals. The Dispatcher may elect to assign meal provision responsibility to one or more individuals for a given event.

The Dispatcher or Dispatcher Assistant will make arrangements for an appropriate meal to be delivered to the crew(s). An attempt shall be made to see that restaurant meals are provided approximately every 8 to 12 hours. If power is out and restaurants are not open, consideration will be given to utilizing whatever resources are available.

When meals are delivered to the job site, we shall attempt to provide warm food, when appropriate, as well as coffee, cold drinks, and snacks to leave at the site.

The Operations Administrative Assistant will maintain an approved list of restaurants and grocery stores where we can charge meals or food. It is preferable to utilize these restaurants or stores for meal provisions.

Phone Coverage

During non-business hours: The Dispatcher in charge will be responsible to determine the level of phone coverage and if the Call Center needs to be activated.

During business hours: The Operations Administrative Assistant, in consultation with the Dispatcher in charge, will activate additional phones, as they may become necessary. Other personnel will be utilized for this purpose.

Procedures

- Telephone operators will log calls in OMS or as required.
- The Dispatchers will periodically update the operators on the expected time of restoration for specific areas.
- The operators will be informed when power is restored to an area and, when appropriate, will call to confirm restoration.
- Telephone operators including Forks Customer Service Representatives will be planned to rotate every 4 to 10 hours. They will be encouraged to take short breaks when possible.

Trouble Identification

As trouble locations are reported to the Dispatcher, they will be identified in OMS and map board as required. This will indicate date, time, and a brief description of the trouble. As the trouble is resolved, OMS or maps will be maintained current.

Vehicle and Equipment

Dispatchers and Line Foremen will work together in determining vehicle and equipment needs. When a large portion of District vehicles are in the west end, consideration will be given to assigning a mechanic to that area to be readily available for breakdowns.

Media Contacts

The general objective will be to have the Dispatcher or Dispatcher Assistant update public and media information through the Communications and Government Relations Manager in a way that minimizes disruptions to the Dispatcher. We shall be in a position to provide press releases with the following information, which should be as accurate as possible:

- Total number of customers out of power
- The general areas affected
- Any major commercial businesses affected
- Estimated restoration times
- Cause of the trouble

The Dispatcher and Communications and Government Relations Manager shall also consider asking the radio or television media to issue messages to customers such as requests to mitigate cold-load pick up.

Assisting Other Utilities

When PUD crews are dispatched to assist other utilities the Out-of-County Call-Out List in the Operations Administrative Assistant's office shall be used.

Crew staffing and vehicle assignment will be made based upon what the requesting utility needs.

A Foreman's truck to enhance trouble investigation will normally be sent.

Confirm with the requesting utility about meal and lodging arrangements. If necessary, a District credit card can be assigned to the person in charge.

Foremen shall be responsible to communicate with our Dispatcher regarding their expected return.

County Emergency Operations Center (EOC) Coordination

When the major event or disaster is such that the EOC command center is activated, the Safety Manager will establish a liaison between the EOC and PUD Dispatch. In addition, a rotated District representative will be assigned to a full time position in the EOC. This person will provide communications from our dispatch center to the EOC. This will include items such as status reports, requests for assistance, etc.

This position requires good communication skills and a general knowledge of District operations. The assignment would be rotated either on 8 or 12 hour intervals. These coordinators shall be selected from qualified Dispatcher Assistances or persons designated by the Dispatcher.

Outage Reporting

Post-event report of the outages will be performed in scheduled Dispatcher Meetings. This will normally include all major transmission and circuit outages. The source of the report will be OMS records, the Dispatcher's log, board notes, and any other trouble documentation. The Engineering Department will have the overall responsibility for outage reporting. Crews will not be required to submit individual trouble reports during major events.

Summary

These guidelines will be reviewed on an annual basis prior to the storm season and any updates or enhancements will be made and communicated as appropriate.

- Originally issued by Alan E. Drew, General Superintendent, in October 1995
- Reissued by John Purvis, Assistant Manager, on July 9, 2021
- Distributed to the following on July 9, 2021: Mike Hill, Operations Manager; Jason Sibel, Operations Superintendent; and Marina Lassila, Operations Administrative Assistant.

MAJOR EVENT RESTORATION PROCEDURE

REFERENCE TERMS

- A "major event" declaration by the general manager or management designee is any event that affects the majority of the customers throughout the District's service area that requires the utilization of all available crews and support personnel and/or that will potentially require more than 48 hours for restoration.

- The "management designee" will be either the engineering manager or operations manager.

GOALS

This procedure is to provide for both employee and public safety in order to:

1. Ensure efficiencies by utilizing daylight hours;
2. Optimize crew production resulting in quicker restoration from rested employees; and
3. Implement proactive scouting and planning during a major event.

Each employee, along with District Management, will work toward these goals. Each employee is responsible for following and complying with these procedures and accurately account for hours of rest and hours worked.

PROCEDURE

When the general manager, or management designee has declared a major event, timely restoration effort is necessary for the District's electric and water systems. During such events or when employees travel outside of the District's service area to perform mutual-aid assistance work, the overtime sections of the Collective Bargaining Agreement (CBA) will apply with the exception of the following:

1. When called out or after the regularly scheduled work day ends, those employees who are directly engaged in a declared major event restoration effort, as determined by their management supervisor or duty dispatcher, or employees dispatched to provide mutual-aid assistance, will begin working at their overtime rate.

2. Employees will remain at their overtime rate for all hours worked, before and after their 8 hour minimum rest periods, until the duty dispatcher or their management supervisor releases the employee(s) from the major event restoration effort or until said employee(s) return from mutual-aid assistance.

3. During major event restoration or while providing mutual-aid assistance, an employee will not be on duty more than 16 consecutive hours following the major event declaration.

    a. Under such conditions, when an employee is relieved from duty for a rest period, the rest period shall be a minimum of 8 hours.

    b. This cycle will continue until restoration is completed.

    c. The 16 hour maximum may be extended for a short period of time when working on critical infrastructure or in immediate hazard at the request of the person in charge of a crew or an employee working alone, with consent of the duty dispatcher. This request will only be granted to allow for the completion of a specific assignment. This extension shall under no circumstances result in the 8 hour rest period being reduced.

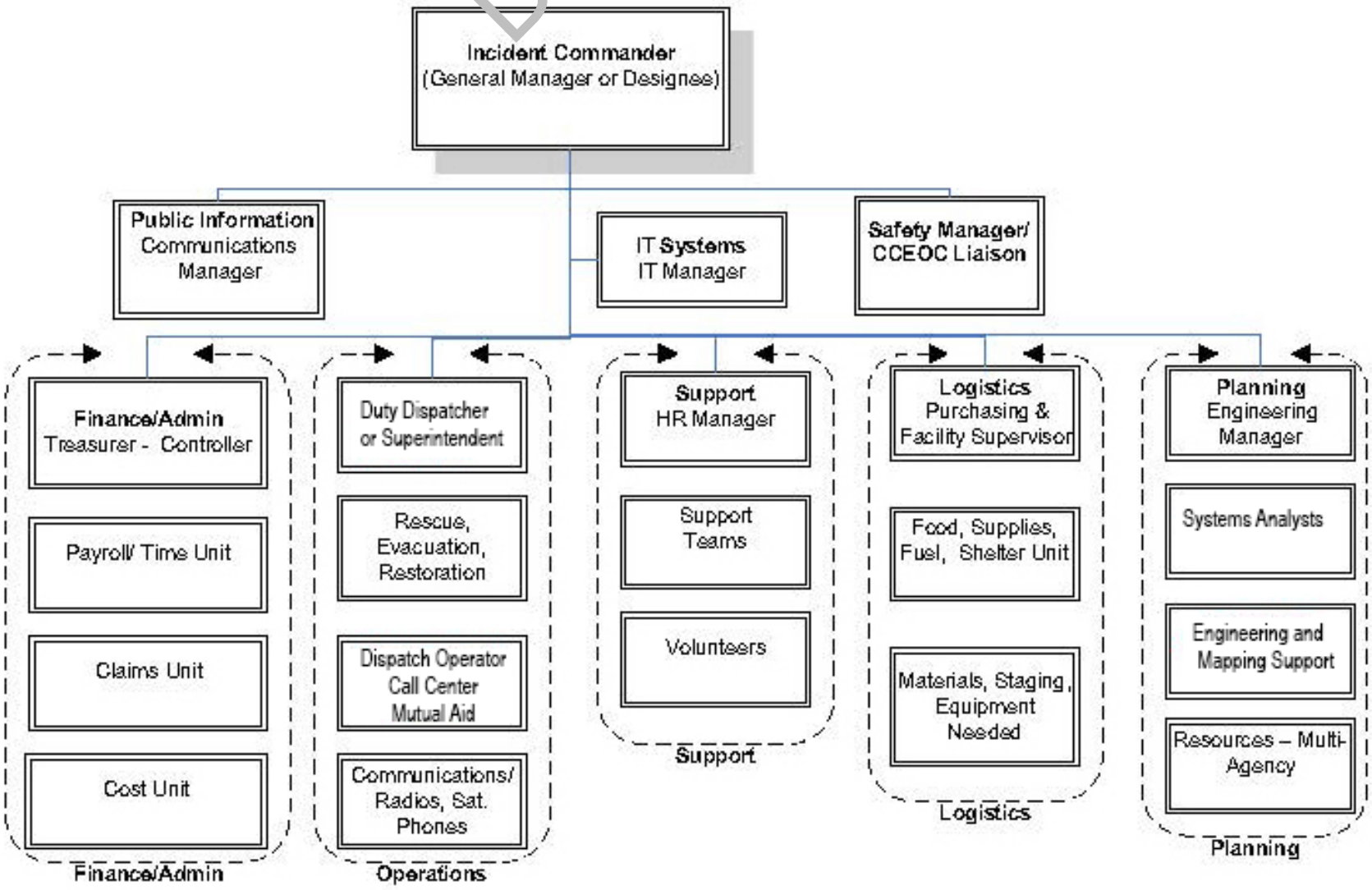
It is the responsibility of an employee or crew leader to inform the duty dispatcher of their inability to continue working safely due to fatigue, illness, or any other valid reason and to request a rest period. The duty dispatcher shall grant a rest period when requested and will initiate a rest period for any employee or crew at any time during a major event when, in their opinion, the employee or crew can no longer continue working safely.

The intent of these procedures is to ensure employee and public safety and to maximize crew work efficiency by utilizing daylight hours when possible. There may be a need to keep an adequate number of employees working nights to; continue working on critical infrastructure; respond to hazards; and for scouting to more efficiently plan for the next day's work.

NOTE: *The above 16/8 hour work schedule will be initiated at the onset of restoration efforts. However, a different alternating work schedule may be utilized if it becomes apparent to the general manager or management designee that a different schedule with specified work and rest periods would be more efficient and accelerate restoration efforts without jeopardizing crew and public safety.*

Incident Commander Team Structure

Revised 9-4-24



DEOC Checklist for Incident Commander

Self-Sufficiency Checklist the First 72 hours (at minimum)

1. _____ Call pre-emergency meetings to discuss possible impact on utility. Review emergency plans.
2. _____ Establish frequency of pre-emergency meetings and who should attend.
3. _____ Create assignments for management and all responders to complete. (Many may be based on these checklist items).
4. _____ Review manning status, since shifts will cover 24-hours during recovery. For a major storm of level three to four, figure that one or more weeks of restoration and possibly several months of cleanup work will be required.
5. _____ Determine which departments should suspend normal activities and assist with the recovery.
6. _____ Review team leader personnel roles to enforce policy; disseminate information internally and externally.
7. _____ Review special needs, e.g. reports needed, intervals, method of accumulating records.
8. _____ Review interface with emergency management and other agencies; record media announcements for release to radio/TV stations; frequency of updating information; special newsletters and bulletins.
9. _____ Discuss responsibilities/authority with key team leaders and use of decentralized authority during recovery.
10. _____ Review worst case scenarios; if time permits, briefly review historical reports of how other utilities handled storms and emergencies, such as lessons learned.
11. _____ Review emergency cash and payment systems; discuss adequacy and additional needs.
12. _____ Discuss methods of dealing with rumors and sensitive issues that may be private.
13. _____ Discuss mutual assistance policies.
14. _____ Notify emergency management of heightened alert status and review 24-hour phone contacts list. Also see “exhibits section” contact lists. Determine liaison needs with county or municipal officials, such as representation at county EOCs.
15. _____ Determine who will stay on the property when the storm arrives and how personnel may be able to get in after the storm passes.
16. _____ Review process for calling in assistance from outside the company: outside crews, vendors, contractors, mutual aid crews and support personnel. Begin contacting outside utilities to discuss arrangements.

17. _____ Review status of substations, tie-lines, interconnection stations, transmission lines, work in progress.
18. _____ Review materials and equipment status, as well as storm materials stock status.
19. _____ Review evacuation routines, safety monitoring, emergency reporting locations with employees.
20. _____ Review action for protection of facilities from high winds, e.g. boarding up windows, tie-down loose fixtures, added precautions at various buildings, service centers and substations.
21. _____ Check safety equipment status at company facilities, e.g., first-aid kits, hand lights, fire systems, etc.
22. _____ Review special communications device locations: cellular phones, pagers, and fax machines; determine who will coordinate issuing additional units.
23. _____ Prioritize use of radio systems.
24. _____ Computer status: schedule computer personnel to handle problems and/or disaster recovery contractor. Review established procedures for retrieval of data and customer records offsite, as well as applications availability.
25. _____ List existing local community contacts: clubs and associations; elected officials; civic leaders; fire company officials; school administration; industrial contacts; government installations.
26. _____ Ensure reproduction systems for reproducing large quantities of maps and diagrams.
27. _____ Check on status of maps, building diagrams, wiring diagrams, other diagrams that may be useful. Remember, if a building is destroyed or damaged, fire officials, contractors, and others will need building diagrams.
28. _____ Secure all construction sites; work in progress.
29. _____ Discuss dispatch procedures for security and facilities repair personnel to damaged facilities as soon as possible after damage assessment.
30. _____ Review emergency roster personnel and local emergency organization setup, locations for personnel, alternate reporting sites if sites are destroyed. Use of special teams.
31. _____ Discuss possible storm impact on electrical system; most vulnerable areas.
32. _____ Discuss when storm is likely to impact system, estimated storm duration, and most probable time when recovery will commence.
33. _____ Check availability of supervisory personnel; cancellation of vacation; status of personnel who are sick, or unavailable.
34. _____ Ensure crews' status; availability of crew and support personnel.
35. _____ Discuss vehicle/equipment problems known; emergency repairs carried out prior to storm's arrival; off-road vehicles availability.
36. _____ Discuss use of mobile substations, portable equipment, and availability of suppliers for loss of substation scenario.
37. _____ Determine tree and line contractor's status. Discuss notifications and reporting guidelines.
38. _____ Discuss advance placement of materials. Also, review procedures for obtaining chain saws and discuss options for placing saws on trucks prior to storm's arrival.
39. _____ Check availability of emergency transportation to get people in and for other emergency purposes, including delivery of food and materials to remote locations.

40. _____ Discuss feeding and lodging needs for personnel, including incoming crews. Which crews? Rates?
41. _____ Have personnel complete emergency preparations at all sites. For instance, communications, generator tests, building wiring and UPS systems need to be in place. Check availability of phones, printers, modems, fax, extension cords, power strips, forms, stationery supplies, sanitary supplies and status of spare parts for critical equipment.
42. _____ Discuss teams' personnel needs and supplement existing team members with retiree personnel and others from outside of the company.
43. _____ Maximize use of communications systems; minimize interference. Discuss reprogramming of any programmable radios.
44. _____ Check on availability of emergency cash, credit cards, for incidental purchases. Money Access Card machines and electronic processing of credit cards may be out of order at most locations following a storm, forcing many stores to close.
45. _____ Discuss how to handle mail delivery. Post offices may be out of operation, which will affect all mail processing, delivery.
46. _____ Determine capability of local transportation companies, bus and van companies, to assist in transporting foreign crews and other personnel.
47. _____ Discuss customer inquiry and service arrangements for customers.
48. _____ Discuss availability to rent equipment locally following a disaster, such as heavy equipment, generators, fork lifts, etc. Who else will be competing for these resources?
49. _____ Discuss need for emergency passes for specific personnel to get through roadblocks. Check with emergency management on how this will be handled.
50. _____ Discuss the likelihood of out-of-state crews and suppliers being stopped at state lines for vehicle or licensing problems.
51. _____ Determine the need for additional cellular phones, portable fax machines and hand-held radios. Check availability with area suppliers.
52. _____ Determine availability of tarps, rain gear, and other personnel needs to work in foul weather; discuss advance ordering procedures.
53. _____ Discuss status of emergency backup power resources at critical customer sites, including hospitals, schools (emergency lodging), radio stations, medical centers, pumping stations and others.
54. _____ Determine the need to get tanker trucks for gasoline/diesel fuel needs, given lack of commercial sources available following a storm.
55. _____ Have procedures in place for delivery of boxed meals for crews in the field, as well as regular refreshments.
56. _____ Determine special needs for working in adverse weather and the capability to deliver food to the field.
57. _____ Discuss security issues at all company facilities, such as security needs at buildings, materials storage facilities and reclamation areas.
58. _____ Determine needs for standby portable generator sets; for instance, emergency hookup at operations support sites and staging areas.
59. _____ Inform commercial/industrial customers of the emergency situation. Answer questions and deal with the concerns of these customers.
60. _____ Run through worst case scenario for handling customer calls. Who else will be competing for these resources?

61. _____ Discuss need for emergency passes for specific personnel to get through roadblocks. Check with emergency management on how this will be handled.
62. _____ Discuss the likelihood of out-of-state crews and suppliers being stopped at state lines for vehicle or licensing problems.
63. _____ Determine the need for additional cellular phones, portable fax machines and hand-held radios. Check availability with area suppliers.
64. _____ Determine availability of tarps, rain gear, and other personnel needs to work in foul weather; discuss advance ordering procedures.
65. _____ Discuss status of emergency backup power resources at critical customer sites, including hospitals, schools (emergency lodging), radio stations, medical centers, pumping stations and others.
66. _____ Determine the need to get tanker trucks for gasoline/diesel fuel needs, given lack of commercial sources available following a storm.
67. _____ Have procedures in place for delivery of boxed meals for crews in the field, as well as regular refreshments. — Determine special needs for working in adverse weather and the capability to deliver food to the field.
68. _____ Discuss security issues at all company facilities, such as security needs at buildings, materials storage facilities and reclamation areas.
69. _____ Determine needs for standby portable generator sets; for instance, emergency hookup at operations support sites and staging areas.
70. _____ Inform commercial/industrial customers of the emergency situation. Answer questions and deal with the concerns of these customers.
71. _____ Run through worst case scenario for handling customer calls, high call volumes, etc. Are sufficient numbers of people trained to supplement existing staff manning phones?
72. _____ Arrange for housing and feeding of all personnel coming from outside region. Also, payment procedures for housing, feeding, and services should be in place.
73. _____ Contact local volunteer organizations for assistance with foreign crew needs, such as feeding crews in the field and those that can provide personal services, such as laundry and food handling.
74. _____ Review procedures for obtaining and distributing dry ice to various locations due to lack of refrigeration.
75. _____ Maintain supply of replacement batteries for all equipment that is battery powered, including hand lights, radios, test equipment, control equipment, etc.
76. _____ Check status of crew tools, crimpers, cutters, etc., that incoming crews may also need. If crews do not come with compatible tools, work may be stalled.
77. _____ Determine when emergency operating center (EOC) will be set up and work through checklist for setup. Test all communications systems and ensure standby power Circuits and equipment are in working order. General EOC setup procedures are offered in “Exhibits” section.
78. _____ Arrange for data compilation of historical records and discuss with media communications personnel.
79. _____ Discuss prospects of making video records and obtaining video equipment for use in damage survey, such as aerial and ground patrols.
80. _____ Have area geographic maps, phasing diagrams, and substation and feeder maps on hand.

81. _____ Feeder, transmission and street lighting circuit maps should be available.
82. _____ Make maps updatable with grease pencils, markers (may need plastic covers). If recovery is being tracked via notebook PCs or desktop PCs, review backup power and battery needs for these devices.
83. _____ Create a system transmission diagram.
84. _____ Create a general directory of personnel with home phone numbers and pagers.
85. _____ Create a radio vehicle directory, or a complete list of radio-equipped vehicles.
86. _____ Priority customer restoration lists are important.
87. _____ Feeding and housing lists should also be available.
88. _____ Emergency equipment and supplies, such as hand lights, first-aid, generators, etc., need to be ensured.
89. _____ Emergency portable radios, including weather radios should be available.
90. _____ Vehicle fuel supplies should be adequate, such as top off tanks.
91. _____ Have emergency storm kits for mutual aid crews.
92. _____ Perform pre-emergency electrical system test in buildings supplied with backup generator power. Note problems with lights, copiers, fax machine, printers, and other devices which must be on backup circuits.
93. _____ Notify personnel to keep power-hungry devices off. Monitor loads while on backup supply.
94. _____ Where equipped, check UPS system carrying voltage-sensitive loads on the computer, fax machine, etc.
95. _____ Review feeder damage survey procedures. Check that an adequate number of personnel is available to perform damage surveys.
96. _____ Discuss aerial patrols procedures, availability of aircraft.
97. _____ Review personnel resources (staffing over several shifts).
98. _____ If there is a winter storm, review vehicle needs for ice and snow travel.
99. _____ Review snow, debris removal/plowing requirements.
100. _____ Review emergency materials stock.
101. _____ Review vehicle status and emergency repairs procedures.
102. _____ Have rubber goods testing procedures.

Authorization ID: SOL259
Contact Name: CLALLAM COUNTY P.U.D.
Expiration Date: 12/31/2052
Use Code: 643

FS-2700-4j (09/2020)
OMB No. 0596-0082

U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE

POWERLINE FACILITY PERMIT FOR NON-FEDERAL ENTITIES

AUTHORITY:
Title V of the Federal Land Policy and Management Act,
43 U.S.C. 1761-1772

This powerline facility permit for **7.2 kV, 12.5 kV, 14.4 kV, and 69 kV power distribution facilities** (the permit), dated April 12, 2023 is issued by the United States Department of Agriculture, Forest Service (the Forest Service), to **CLALLAM COUNTY P.U.D. #1, P.O Box 1000, Carlsborg, WA 98324** (the holder).

This permit gives the holder, subject to existing rights-of-way and other valid existing rights, a non-exclusive linear right-of-way or rights-of-way for one or more powerline facilities. The linear right-of-way, access roads and trails, and any hazard trees outside the linear right-of-way for each powerline facility authorized by this permit shall be referred to collectively as "the permit area." A legal description and a map of the permit area and applicable minimum vegetation clearance distance (MVCD) for each powerline facility authorized by this permit are contained in Appendix B, and the access roads and trails for each powerline facility authorized by this permit are listed and identified in Appendix C. The powerline facility or facilities authorized by this permit shall be referred to collectively as "the powerline facilities."

In addition, this permit gives the holder:

1. The right of ingress to and egress from the linear rights-of-way for the powerline facilities along access roads and trails, listed in Appendix C, and the right to construct, reconstruct, and maintain the access roads and trails, in accordance with the following provisions:

(a) All drawings for development, layout, construction, reconstruction, or alteration of access roads and trails, as well as revisions to those drawings, must be prepared by a professional engineer (PE) or other qualified professional acceptable to the authorized officer. These drawings and drawing revisions must have written approval from the authorized officer before they are implemented. The authorized officer may require the holder to furnish as-built drawings, maps, or surveys upon completion of the work.

(b) The Forest Service does not have an obligation to maintain the access roads and trails.

(c) The rights granted in paragraph 1 shall be subordinate to any right to use an access road or trail subsequently granted by the United States to a local public road authority for a public road, provided that the holder shall continue to have access to that right-of-way to operate and maintain the powerline facilities, manage vegetation, and address public safety related to the powerline facilities.

2. The right to install, maintain, and use gates and fences in the permit area with the prior written approval of the authorized officer. All gates shall have reflective markings in accordance with Forest Service Engineering Manual EM 7100-15.

The following appendices are attached to and incorporated into this permit:

APPENDIX A: Definitions
APPENDIX B: Permit Area Summary and Maps of the Permit Area; and MVCD for Each Powerline Facility
APPENDIX C: List and Location of National Forest System Roads Used by the Holder
APPENDIX D: Operating Plan or Agreement

I. GENERAL TERMS

A. AUTHORITY. This permit is issued pursuant to Title V of the Federal Land Policy and Management Act, 43 U.S.C. 1761-1772, and 36 CFR Part 251, Subpart B, as amended, and is subject to their provisions.

B. AUTHORIZED OFFICER. The authorized officer is the Regional Forester, the Forest or Grassland Supervisor, a District Ranger, or the Station, Institute, or Area Director with delegated authority pursuant to Forest Service Manual 2700.

C. TERM. This permit shall expire at midnight on **12/31/2052**. Expiration of this permit shall not require notice, a decision document, or any environmental analysis or other documentation.

D. CONTINUATION OF USE AND OCCUPANCY. This permit is not renewable. At least 2 years before expiration of this permit, the holder may apply for a new permit for the use and occupancy authorized by this permit. Issuance of a new permit is at the sole discretion of the authorized officer. At a minimum, before issuing a new permit, the authorized officer shall ensure that (1) the use and occupancy to be authorized by the new permit are consistent with the standards and guidelines in the applicable land management plan; (2) the type of use and occupancy to be authorized by the new permit is the same as the type of use and occupancy authorized by this permit; and (3) the holder is in compliance with all the terms of this permit. The authorized officer may prescribe new terms when a new permit is issued.

E. AMENDMENT. This permit may be amended in whole or in part by the Forest Service when, at the discretion of the authorized officer, such action is deemed necessary or desirable to incorporate new terms that may be required by law, regulation, directive, the applicable land management plan, or projects and activities implementing the land management plan pursuant to 36 CFR Part 218. The authorized officer shall review this permit every 10 years from the date of issuance and shall amend the permit in whole or in part when deemed necessary or appropriate by the authorized officer to reflect changes in applicable law, regulation, directive, the applicable land management plan, projects or activities implementing the plan, or other circumstances.

F. COMPLIANCE WITH LAWS, REGULATIONS, AND OTHER LEGAL REQUIREMENTS. In exercising the rights and privileges granted by this permit, the holder shall comply with all present and future federal laws and regulations and all present and future state, county, and municipal laws, regulations, and other legal requirements that apply to the permit area, to the extent they do not conflict with federal law, regulation, or policy. The Forest Service assumes no responsibility for enforcing laws, regulations, and other legal requirements that fall under the jurisdiction of other governmental entities.

G. RESERVATIONS. All rights not specifically granted to the holder are reserved to the Forest Service, including:

1. The right of access to the permit area, including a continuing right of physical entry to the permit area for inspection, monitoring, or any other purpose consistent with any right or obligation of the United States under any law or regulation.

2. The right to use, administer, and dispose of all natural resources and improvements other than the powerline facilities, including the right to use roads and trails and authorize rights-of-way and other uses in the permit area in any way that is not inconsistent with the holder's rights and privileges under this permit, after consultation with all parties involved. Except for any restrictions that the holder and the Forest Service agree are necessary to protect public health and safety, property, and the installation and operation of the powerline facilities, the permit area shall remain open to the public for all lawful purposes.

H. ASSIGNABILITY. This permit is not assignable or transferable.

I. TRANSFER OF TITLE TO THE POWERLINE FACILITIES

1. Notification of Transfer. The holder shall notify the authorized officer when a transfer of title to all or part of the powerline facilities is planned.

2. Transfer of Title. Any transfer of title to the powerline facilities shall result in termination of the permit. The party who acquires title to the powerline facilities must submit an application for a permit. The Forest Service is not obligated to issue a new permit to the party who acquires title to the powerline facilities. The authorized officer shall determine that the applicant meets requirements under applicable federal regulations.

J. CHANGE IN CONTROL OF THE BUSINESS ENTITY

1. Notification of Change in Control. The holder shall notify the authorized officer when a change in control of the business entity that holds this permit is planned.

(a) In the case of a corporation, control is an interest, beneficial or otherwise, of sufficient outstanding voting securities or capital of the business so as to permit the exercise of managerial authority over the actions and operations of the corporation or election of a majority of the board of directors of the corporation.

(b) In the case of a partnership, limited partnership, joint venture, or individual entrepreneurship, control is a beneficial ownership of or interest in the entity or its capital so as to permit the exercise of managerial authority over the actions and operations of the entity.

(c) In other circumstances, control is any arrangement under which a third party has the ability to exercise management authority over the actions or operations of the business.

2. Effect of Change in Control.

(a) Except as provided in clause I.J.2(b), any change in control of the business entity as defined in clause I.J.1 shall result in termination of this permit. The party acquiring control must submit an application for a special use permit. The Forest Service is not obligated to issue a new permit to the party who acquires control. The authorized officer shall determine whether the applicant meets the requirements established by applicable

federal regulations.

(b) This permit shall not terminate when a change of control of the business entity occurs through a merger or through the acquisition of stock or an ownership interest if the holder's corporate structure and operational management remain unchanged and the holder continues to have sufficient financial and technical capability to meet its obligations under this permit. An appropriate official of the holder shall submit documentation establishing that the holder's corporate structure and operational management remain unchanged and certifying that the holder continues to have sufficient management control over its operations and financial and technical capability to comply with the terms and conditions of this permit.

II. IMPROVEMENTS

A. LIMITATIONS ON USE. Nothing in this permit gives or implies permission to build or maintain any structure or facility or to conduct any activity unless specifically provided for in this permit. Any use not specifically authorized by this permit must be proposed in accordance with 36 CFR 251.54 or 251.61. Approval of such a proposed use through issuance of a new permit or permit amendment is at the sole discretion of the authorized officer.

B. DRAWINGS. All drawings for development, layout, construction, reconstruction, or alteration of improvements in the permit area, as well as revisions to those drawings, must be prepared by a PE, architect, landscape architect, or other qualified professional acceptable to the authorized officer. These drawings and drawing revisions must have written approval from the authorized officer before they are implemented. The authorized officer may require the holder to furnish as-built drawings, maps, or surveys upon completion of the work.

C. RELOCATION. This permit is issued with the express understanding that should future location of federally owned improvements or road rights-of-way require relocation of the powerline facilities, the relocation will be conducted by and at the expense of the holder within a reasonable period specified by the authorized officer.

III. OPERATIONS

A. OPERATING PLAN OR AGREEMENT.

1. Preparation. The holder shall prepare an operating plan or agreement independently or in consultation with the authorized officer or the authorized officer's designated representative. The operating plan or agreement shall be submitted by the holder and approved by the authorized officer or the authorized officer's designated representative prior to commencement of operations and shall be attached to this permit as Appendix D. At least every 10 years from the approval date of the operating plan or agreement in Appendix D, the holder shall review and, as necessary or appropriate, propose updates to the operating plan or agreement to address changed conditions. Proposed updates to the operating plan or agreement that are deemed significant by the authorized officer shall be treated as proposed modifications and shall be submitted by the holder for review and approval by the authorized officer. Proposed updates that are deemed non-significant by the authorized officer may be made by written agreement of the holder and the authorized officer.

2. Contents. The operating plan or agreement in Appendix D shall cover all operations authorized by this permit. The operating plan or agreement shall outline steps the holder will take to protect public health and safety and the environment and shall include sufficient detail and standards to enable the Forest Service to monitor the holder's operations for compliance with the terms of this permit. The contents of the operating

plan or agreement shall meet all the requirements enumerated in 36 CFR 251.56(h)(5) and Forest Service Handbook 2709.11, Chapter 80, section 84.

B. VEGETATION MANAGEMENT

1. Vegetation Management Activities. The holder shall describe vegetation management activities as part of the operating plan or agreement in Appendix D. The description of vegetation management activities shall specify best management practices for felling, pruning, and destruction of trees, brush, shrubs, and other plants (hereinafter "vegetation"); the applicable MVCD for the powerline facilities; and procedures for designating, marking, and felling or pruning hazard trees and other vegetation. The description of vegetation management activities shall also provide for prevention and control of invasive species, including invasive plants, within the permit area. For purposes of this clause, invasive plants include non-native species recognized as such by the Forest Service, which are generally, but are not limited to, state-listed noxious weeds. The holder shall follow invasive species prevention and control measures prescribed by the operating plan or agreement in Appendix D. In addition, the description of vegetation management activities shall provide for integration of native, non-invasive, low-growing vegetation that does not interfere with the powerline facilities and that promotes powerline facility reliability, reduces powerline facility maintenance costs, and is compatible with the aesthetics and health of the native plant and animal life in the permit area.

2. Routine and Emergency Vegetation Management and Planting of Vegetation. Routine and emergency vegetation management and planting of vegetation, both inside the linear right-of-way for a powerline facility and outside the linear right-of-way for a powerline facility to fell or prune hazard trees, must be conducted in accordance with Appendix D and clause III.B. For purposes of vegetation management per Appendix D and clause III.B, the MVCD for each powerline facility is enumerated in Appendix B, and vegetation management outside the linear right-of-way for a powerline facility shall be limited to felling and pruning of hazard trees.

(a) Routine Vegetation Management. Routine vegetation management, either inside the linear right-of-way for a powerline facility or outside the linear right-of-way for a powerline facility to fell or prune hazard trees, requires prior written approval from the authorized officer, unless:

(1) The holder has submitted an email or letter to the authorized officer requesting approval of a single routine vegetation management project or an annual schedule of work for routine vegetation management in accordance with the specified timeframe in Appendix D;

(2) The proposed routine vegetation management is covered by approval of the operating plan or agreement in Appendix D or by subsequent case-by-case environmental analysis and consultation; and

(3) The authorized officer has not responded to the request in accordance with the specified timeframe in Appendix D.

In conducting routine vegetation management, regardless of whether prior written approval is required, the holder shall mark or otherwise identify the vegetation to be felled or pruned.

(b) Emergency Vegetation Management. Emergency vegetation management, either inside the linear right-of-way for a powerline facility or outside the linear right-of-way for a powerline facility to fell or prune hazard trees, does not require prior written approval from the authorized officer or marking or other identification of the vegetation to be felled or pruned. The holder shall notify the authorized officer by email of the location and type of emergency vegetation management as soon as practicable, but no later than 24 hours after

completion. Within 30 days of completion, the holder shall submit to the authorized officer a written report detailing at a minimum the location, type, and scope of the emergency vegetation management conducted, the reason it was conducted, the methods used to conduct it, and the resulting benefit.

3. Disposal of Felled Trees and Planting of Vegetation. The holder shall notify the authorized officer when approved felling, pruning, or destruction of vegetation has been completed. The Forest Service shall determine in advance of felling the method of disposal of trees felled in the permit area that meet utilization standards. Disposal may be by sale or without charge per 36 CFR Part 223, as may be most advantageous to the United States. Debris from felling that does not meet utilization standards shall also be disposed of according to methods determined by the Forest Service. Planting of vegetation in the permit area must have prior written approval from the authorized officer.

C. USE OF NATIONAL FOREST SYSTEM ROADS AND NATIONAL FOREST SYSTEM TRAILS. The holder's use of National Forest System roads and National Forest System trails shall comply with applicable requirements in 36 CFR Part 212, Subpart A; 36 CFR Part 261, Subpart A; and orders issued under 36 CFR Part 261, Subpart B. Motor vehicle use shall be consistent with designations made under 36 CFR Part 212, Subpart B, unless specifically provided otherwise in the operating plan or agreement. Over-snow vehicle use shall be consistent with designations made under 36 CFR Part 212, Subpart C, unless specifically provided otherwise in the operating plan or agreement.

D. RESERVATION OF EXCESS CAPACITY AND LEASING

1. Reservation of Excess Capacity. The holder may reserve the powerline facilities for the holder's expansion and may utilize the reserved powerline facilities during the term of this permit without additional approval from the authorized officer. Leasing of powerline facilities by third parties is not authorized by this permit, except as provided in clause III.D.2.

2. Leasing of the Holder's Fiber Optic Cable. Leasing of the holder's fiber optic cable to any third party or parties must have prior written approval from the authorized officer. The Forest Service reserves the right to disapprove the holder's requests to lease fiber optic cable. The holder shall remain responsible for any third party's compliance with all the terms of this permit. The holder shall include in a third-party lease provisions requiring the third-party to obtain liability insurance for the third party's use of the holder's fiber optic cable that includes the United States as an additional insured under the policy. The holder shall pay in advance a single, additional annual land use fee for leasing fiber optic cable, regardless of the holder's eligibility for a land use fee waiver or exemption and regardless of the number of third parties, in accordance with the linear right-of-way fee schedule in Forest Service Handbook 2709.11, Chapter 30. Determine the single, additional annual land use fee for leasing fiber optic cable using the length of the authorized linear right-of-way and a width of 10 feet. The authorized officer may request any information from the holder deemed necessary for proper administration of the leased fiber optic cable.

3. Leases Involving Communications Uses and Other Third-Party Uses Involving the Powerline Facilities. Leases involving communications uses that are owned by third parties (such as antennas or other communications uses owned by third parties that are attached to a tower, pole, or other structure authorized by this permit) must have prior written approval from the authorized officer and must be authorized under a communications use authorization issued to the holder. Other third-party uses involving the powerline facilities, such as conductors attached to the powerline facilities by a third party (an underbuild) or installation of fiber optic

cable on the powerline facilities solely for use by third parties, must have prior written approval from the authorized officer and must be authorized under a separate special use authorization issued to the third party.

E. CONDITION OF OPERATIONS. The holder shall maintain the powerline facilities and permit area to standards of repair, orderliness, neatness, sanitation, and safety acceptable to the authorized officer and consistent with other provisions of this permit. Standards are subject to periodic change by the authorized officer when deemed necessary to meet statutory, regulatory, or policy requirements or to protect national forest resources.

F. GROUND SURFACE PROTECTION AND RESTORATION. The holder shall prevent and control soil erosion and gullying on National Forest System lands in and adjacent to the permit area resulting from construction, operation, maintenance, and termination of the powerline facilities. The holder shall construct powerline facilities so as to avoid accumulation of excessive amounts of water in the permit area and encroachment on streams. The holder shall revegetate or otherwise stabilize (e.g., by constructing a retaining wall) all ground where the soil has been exposed as a result of the holder's construction, maintenance, operation, or termination of the powerline facilities.

G. MONITORING BY THE FOREST SERVICE. The Forest Service shall monitor the holder's operations and reserves the right to inspect the permit area and powerline facilities at any time for compliance with the terms of this permit. The holder shall comply with inspection requirements deemed appropriate by the authorized officer. The holder's obligations under this permit are not contingent upon any duty of the Forest Service to inspect the permit area or powerline facilities. A failure by the Forest Service or other governmental officials to inspect is not a justification for noncompliance with any of the terms of this permit.

IV. RIGHTS AND LIABILITIES

A. LEGAL EFFECT OF THE PERMIT. This permit, which is revocable and terminable, is not a contract or a lease, but rather a federal license. The benefits and requirements conferred by this authorization are reviewable solely under the procedures set forth in 36 CFR Part 214 and 5 U.S.C. 704. This permit does not constitute a contract for purposes of the Contract Disputes Act, 41 U.S.C. 601. The permit is not real property, does not convey any interest in real property, and may not be used as collateral for a loan.

B. VALID EXISTING RIGHTS. This permit is subject to all valid existing rights. Valid existing rights include those derived from mining and mineral leasing laws of the United States. The Forest Service is not liable to the holder for the exercise of any such right.

C. ABSENCE OF THIRD-PARTY BENEFICIARY RIGHTS. The parties to this permit do not intend to confer any rights on any third party as a beneficiary under this permit.

D. NO WARRANTY OF ACCESS, SITE SUITABILITY, OR SERVICES. This permit authorizes the use and occupancy of National Forest System lands by the holder for the purposes identified in this permit. The Forest Service does not make any express or implied warranty of access to the permit area, of the suitability of the permit area for the authorized uses, or for the furnishing of road or trail maintenance, water, fire protection services, search and rescue services, or any other services by a government agency, utility, association, or individual.

E. RISK OF LOSS. The holder assumes all risk of loss to the powerline facilities and all risk of loss of use and occupancy of the permit area, in whole or in part, due to public health and safety or environmental hazards. Loss to the powerline facilities and of use and occupancy of the permit area may result from but is not limited

to theft, vandalism, fire and any fire-fighting activities (including prescribed burns), environmental contamination, avalanches, rising waters, winds, falling limbs or trees, and other forces of nature. If all or part of the powerline facilities are destroyed or substantially damaged, the authorized officer shall conduct an analysis to determine whether the affected portions of the powerline facilities can be safely used in the future and whether rebuilding should be allowed. If rebuilding is not allowed, this permit shall terminate as to those portions of the powerline facilities. If the authorized officer determines that all or part of the permit area cannot be safely occupied due to a public health or safety or environmental hazard, this permit shall terminate as to those portions of the permit area. Termination under this clause shall not give rise to any claim for damages, including lost profits and the value of the improvements, by the holder against the Forest Service.

F. DAMAGE TO UNITED STATES PROPERTY. The holder has an affirmative duty to protect from damage the land, property, and other interests of the United States. Damage includes but is not limited to destruction of or damage to National Forest System lands, fire suppression costs, and destruction of or damage to federally owned improvements.

1. The holder shall be liable for all injury, loss, or damage, including fire suppression costs, prevention and control of the spread of invasive species, and the costs of rehabilitation or restoration of natural resources, resulting from the holder's use and occupancy of the permit area. Compensation shall include but is not limited to the value of resources damaged or destroyed, the costs of restoration, cleanup, or other mitigation, fire suppression or other types of abatement costs, and all associated administrative, legal (including attorney's fees), and other costs. Such costs may be deducted from a performance bond required under clause IV.L.

2. The holder shall be liable for damage to all roads and trails of the United States caused by use of the holder or the holder's heirs, assignees, agents, employees, contractors, or lessees to the same extent as provided under clause IV.F.1, except that liability shall not include reasonable and ordinary wear and tear.

G. HEALTH AND SAFETY. The holder shall take all measures necessary to protect the health and safety of all persons affected by the use and occupancy authorized by this permit. The holder shall promptly abate as completely as possible and in compliance with all applicable laws and regulations any physical or mechanical procedure, activity, event, or condition existing or occurring in connection with the authorized use and occupancy during the term of this permit that causes or threatens to cause a hazard to the health or safety of the public or the holder's employees, agents, or contractors. The holder shall as soon as practicable notify the authorized officer of all serious accidents that occur in connection with these procedures, activities, events, or conditions. The Forest Service has no duty under the terms of this permit to inspect the permit area or operations of the holder for hazardous conditions or compliance with health and safety standards.

H. ENVIRONMENTAL PROTECTION

1. Compliance with Environmental Laws. The holder shall in connection with the use and occupancy authorized by this permit comply with all applicable federal, state, and local environmental laws and regulations, including but not limited to those established pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, 42 U.S.C. 9601 et seq., the Resource Conservation and Recovery Act, as amended, 42 U.S.C. 6901 et seq., the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq., the Oil Pollution Act, as amended, 33 U.S.C. 2701 et seq., the Clean Air Act, as amended, 42 U.S.C. 7401 et seq., the Toxic Substances Control Act, as amended, 15 U.S.C. 2601 et seq., the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, 7 U.S.C. 136 et seq., and the Safe Drinking Water Act, as amended, 42 U.S.C. 300f et seq.

2. Definition of Hazardous Material. For purposes of clause IV.H and section V, "hazardous material" shall mean (a) any hazardous substance under section 101(14) of CERCLA, 42 U.S.C. 9601(14); (b) any pollutant or contaminant under section 101(33) of CERCLA, 42 U.S.C. 9601(33); (c) any petroleum product or its derivative, including fuel oil, and waste oils; and (d) any hazardous substance, extremely hazardous substance, toxic substance, hazardous waste, ignitable, reactive or corrosive materials, pollutant, contaminant, element, compound, mixture, solution or substance that may pose a present or potential hazard to human health or the environment under any applicable environmental laws.

3. Environmental Site Assessment (SA). The holder shall conduct an initial SA prior to use and occupancy of the permit area for any new authorized powerline facilities and a follow-up SA prior to termination or upon revocation of this permit. The initial and follow-up SAs shall be incorporated into this permit as Appendix F.

(a) Purposes. The purpose of the initial and follow-up SAs is to identify Recognized Environmental Conditions in the permit area, that is, the presence or likely presence of any hazardous substances or petroleum products in the permit area: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. A comparison of the initial and follow-up SAs shall assist the authorized officer in determining whether any environmental cleanup or restoration is required as a result of the use and occupancy. Any cleanup or restoration shall be completed promptly by the holder in accordance with all applicable federal, state, and local laws and regulations, to the satisfaction of the authorized officer and at no expense to the Forest Service.

(b) Standard. All SAs must be conducted by the holder's environmental professional with the requisite certification and experience and must meet the objectives and performance factors of 40 CFR Part 312, Innocent Landowners, Standards for Conducting All Appropriate Inquiries. The holder may use The American Society for Testing and Materials (ASTM) guideline E1527-13, entitled Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, or the most recent version (40 CFR 312.11(b)), or select an alternate practice that constitutes all appropriate inquiries consistent with good commercial and customary practices.

(c) Exceptions. If a new permit will be issued to the same holder upon expiration of this permit, the follow-up SA shall satisfy the requirement for an initial SA for the new permit. Initial and follow-up SAs are not required when this permit is revoked at the request of the holder and a new permit is issued to the holder for the balance of this permit's term or when this permit is reissued for the balance of its term to the holder due to a modification pursuant to 36 CFR 251.61(a), provided that an initial SA shall be completed in either of these scenarios if one has not been done by the holder.

(d) Cleanup or Other Remedial Action Based on the Initial SA. If the initial SA shows that a hazardous substance release is present in the permit area, the holder shall be responsible for any cleanup or other remedial action that the Forest Service determines to be required in the permit area based on the initial SA. The level of cleanup or other remedial action shall be commensurate with the holder's intended use and occupancy of the permit area for the new authorized powerline facilities and shall be completed before that use and occupancy commence.

4. Oil Discharges and Release of Hazardous Materials. The holder shall immediately notify all appropriate response authorities, including the National Response Center and the authorized officer or the authorized officer's designated representative, of any oil discharge or of the release of a hazardous material in the permit area in an amount greater than or equal to its reportable quantity, in accordance with 33 CFR Part 153 and 40

CFR Part 302. For the purposes of this requirement, "oil" is as defined by section 311(a)(1) of the Clean Water Act, 33 U.S.C. 1321(a)(1). The holder shall immediately notify the authorized officer or the authorized officer's designated representative of any release or threatened release of any hazardous material in or near the permit area which may be harmful to public health or welfare or which may adversely affect natural resources on federal lands.

5. Remediation of Release of Hazardous Materials. The holder shall remediate any release, threat of release, or discharge of hazardous materials that occurs in connection with the holder's activities in the permit area, including activities conducted by the holder's agents, employees, contractors, or lessees and regardless of whether those activities are authorized under this permit. The holder shall perform remediation in accordance with applicable law immediately upon discovery of the release, threat of release, or discharge of hazardous materials. The holder shall perform the remediation to the satisfaction of the authorized officer and at no expense to the Forest Service. Upon revocation or termination of this permit, the holder shall deliver the site to the Forest Service in compliance with all applicable laws and regulations and free and clear of contamination.

I. INDEMNIFICATION OF THE UNITED STATES. The holder shall indemnify, defend, and hold harmless the United States for any costs, damages, claims, liabilities, and judgments arising from past, present, and future acts or omissions of the holder in connection with the use and occupancy authorized by this permit. This indemnification and hold harmless provision includes but is not limited to acts and omissions of the holder or the holder's heirs, assigns, agents, employees, contractors, or lessees in connection with the use and occupancy authorized by this permit which result in (1) violations of any laws and regulations which are now or which may in the future become applicable; (2) judgments, claims, demands, penalties, or fees assessed against the United States; (3) costs, expenses, and damages incurred by the United States; or (4) the release or threatened release of any hazardous material into the environment. The authorized officer may prescribe terms that allow the holder to replace, repair, restore, or otherwise undertake necessary curative actions to mitigate damages in combination with or as an alternative to monetary indemnification.

J. STRICT LIABILITY. If the holder has an operating plan, the holder shall be strictly liable (liable without proof of negligence) to the United States up to the limit specified in 36 CFR 251.56(d)(2), as amended, per occurrence for any injury, loss, or damage arising in tort under this permit or, if the holder has an operating agreement approved under FSH 2709.11, Chapter 80, up to $500,000 per occurrence until March 23, 2028. After that date, the holder shall be strictly liable in tort to the United States up to the same limit as a holder with an operating plan. Strict liability in tort may not be imposed on the holder for injury or damages resulting from the authorized officer's unreasonably withholding or delaying approval of an operating plan or agreement under FSH 2709.11, Chapter 80, or unreasonably failing to adhere to an applicable schedule in an operating plan or agreement approved under FSH 2709.11, Chapter 80, for activities for which requirements for environmental analysis and consultation have been met. Liability in tort for injury, loss, or damage to the United States exceeding the prescribed amount of strict liability in tort shall be determined under the law of negligence.

K. INSURANCE. The holder shall furnish proof of insurance, such as a certificate of insurance, to the authorized officer prior to issuance of this permit and each year thereafter that this permit is in effect. The Forest Service reserves the right to review the insurance policy and require any changes needed to ensure adequate coverage of the United States in connection with the authorized use and occupancy. The holder shall send an authenticated copy of any insurance policy obtained pursuant to this clause to the authorized officer immediately upon issuance of the policy. Any insurance policies obtained by the holder pursuant to this clause shall include the United States as an additional insured in an endorsement to the policy, and the additional

insured provision shall provide for insurance coverage for the United States as required under this clause and to the extent of the full limits of insurance available to the holder. The holder shall give 30 days prior written notice to the authorized officer of cancellation of or any modification to the insurance policy. The certificate of insurance, the authenticated copy of the insurance policy, and written notice of cancellation or modification of insurance policies should be sent to **Olympic National Forest, 1835 Black Lake Blvd SW, Olympia, WA 98512, Attn: Permit Administrator**. Minimum amounts of coverage and other insurance requirements are subject to change at the sole discretion of the authorized officer on the anniversary date of this permit.

1. The holder shall have in force liability insurance covering losses associated with the use and occupancy authorized by this permit arising from personal injury or death and third-party property damage in the minimum amount of $1,000,000 as a combined single limit per occurrence.

2. Depending on the holder's operations, the Forest Service may require the holder to demonstrate the availability of funds to address any release or threatened release of hazardous materials that may occur in connection with the holder's use and occupancy. Any requirements imposed would be established case by case by the authorized officer based on the degree of environmental risk from the holder's operations. The use and storage of normal maintenance supplies in nominal amounts generally would not trigger financial assurance requirements.

V. RESOURCE PROTECTION

A. WATER POLLUTION. No waste or by-product shall be discharged into water in connection with the use and occupancy authorized by this permit except in full compliance with all applicable federal, state, and local environmental and other laws. Storage facilities for materials capable of causing water pollution, if accidentally discharged, shall be located so as to prevent any spillage into waters or channels leading into water except in full compliance with all applicable federal, state, and local environmental and other laws.

B. SCENIC VALUES. The holder shall protect the scenic values of the permit area and the adjacent land to the greatest extent possible during construction, operation, and maintenance of the powerline facilities.

C. VANDALISM. The holder shall take reasonable measures to prevent and discourage vandalism or disorderly conduct and when necessary shall contact the appropriate law enforcement officer to address these problems.

D. PESTICIDE USE

1. Authorized Officer Concurrence. Pesticides may not be used outside of buildings in the permit area to control pests, including undesirable woody and herbaceous vegetation (including aquatic plants), insects, birds, rodents, or fish without prior written concurrence of the authorized officer. Only those products registered or otherwise authorized by the U.S. Environmental Protection Agency and appropriate State authority for the specific purpose planned shall be authorized for use within areas on National Forest System lands.

2. Pesticide-Use Proposal. Requests for concurrence of any planned uses of pesticides shall be provided in advance using the Pesticide-Use Proposal (form FS-2100-2). Annually the holder shall, on the due date established by the authorized officer, submit requests for any new, or continued, pesticide usage. The Pesticide-Use Proposal shall cover a 12-month period of planned use. The Pesticide-Use Proposal shall be submitted at least 60 days in advance of pesticide application. Information essential for review shall be provided in the form specified. Exceptions to this schedule may be allowed, subject to emergency request and

approval, only when unexpected outbreaks of pests require control measures which were not anticipated at the time a Pesticide-Use Proposal was submitted.

3. Safety Plan. Before applying pesticides in the permit area, the holder shall submit to the authorized officer a safety plan that includes, at a minimum, a precise statement of the treatment objectives; a description of the equipment, materials, and supplies to be used, including pesticide formulation, quantities, and application methods; a description of the lines of responsibility for project planning, project monitoring, and after-action review; a description of any necessary interagency coordination; a copy of the current Pesticide-Use Proposal for the permit; a description of the process by which treatment effectiveness will be determined; and a spill plan, communications plan, security plan, and when required by applicable local requirements, a provision for prior notification to sensitive individuals.

4. Reporting. By September 30th annually, the holder shall submit to the authorized officer a written report of each pesticide application project completed during the previous 12-month period. The report shall contain information pertaining to the pesticide application projects as requested by the authorized officer.

5. Labeling, Laws, and Regulations. Label instructions and all applicable laws and regulations shall be strictly followed in the application of pesticides and disposal of excess materials and containers. No pesticide waste, excess materials, or containers shall be disposed of in any area administered by the Forest Service.

E. ARCHAEOLOGICAL AND PALEONTOLOGICAL DISCOVERIES. The holder shall immediately notify the authorized officer of any antiquities or other objects of historic or scientific interest, including but not limited to historic or prehistoric ruins, fossils, or artifacts discovered in connection with the use and occupancy authorized by this permit. The holder shall leave these discoveries intact and in place until otherwise directed by the authorized officer.

F. NATIVE AMERICAN GRAVES PROTECTION AND REPATRIATION ACT (NAGPRA). In accordance with 25 U.S.C. 3002(d) and 43 CFR 10.4, if the holder inadvertently discovers human remains, funerary objects, sacred objects, or objects of cultural patrimony on National Forest System lands, the holder shall immediately cease work in the area of the discovery and shall leave the discoveries intact and in place. The holder shall follow the applicable NAGPRA protocols for the undertaking provided in the NAGPRA plan of action or the NAGPRA comprehensive agreement; if there are no such agreed-upon protocols, the holder shall as soon as practicable notify the authorized officer of the discovery and shall follow up with written confirmation of the discovery. The activity that resulted in the inadvertent discovery may not resume until 30 days after the authorized officer certifies receipt of the written confirmation, if resumption of the activity is otherwise lawful, or at any time if a NAGPRA plan of action has been executed by the Forest Service following tribal consultation and any preconditions have been met.

G. PROTECTION OF THREATENED AND ENDANGERED SPECIES, SENSITIVE SPECIES, AND SPECIES OF CONSERVATION CONCERN AND THEIR HABITAT

1. Threatened and Endangered Species and Their Habitat. The location of sites within the permit area needing special measures for protection of plants or animals listed as threatened or endangered under the Endangered Species Act (ESA) of 1973, 16 U.S.C. 531 et seq., as amended, or within designated critical habitat shall be shown on a map in an appendix to this permit and may be shown on the ground. The holder shall take any protective and mitigative measures specified by the authorized officer as necessary and appropriate to avoid

or reduce effects on listed species or designated critical habitat affected by the authorized use and occupancy. Discovery by the holder or the Forest Service of other sites within the permit area containing threatened or endangered species or designated critical habitat not shown on the map in the appendix shall be promptly reported to the other party and shall be added to the map.

2. Sensitive Species and Species of Conservation Concern and Their Habitat. The location of sites within the permit area needing special measures for protection of plants or animals designated by the Regional Forester as sensitive species or as species of conservation concern pursuant to FSM 2670 shall be shown on a map in an appendix to this permit and may be shown on the ground. The holder shall take any protective and mitigation measures specified by the authorized officer as necessary and appropriate to avoid or reduce effects on sensitive species or species of conservation concern or their habitat affected by the authorized use and occupancy. Discovery by the holder or the Forest Service of other sites within the permit area containing sensitive species or species of conservation concern or their habitat not shown on the map in the appendix shall be promptly reported to the other party and shall be added to the map.

3. Survey and Manage Species and Their Habitat. The survey and manage standards and guidelines were established in the 1994 Northwest Forest Plan amendments to all Forest Service land management plans in western Oregon and Washington and northern California, as amended by the January 2001 Record of Decision (2001 ROD). The list of survey and manage species in the 2001 ROD, for which the standards and guidelines apply, has been amended and is subject to periodic amendment by the Forest Service. The holder shall take any protective and mitigation measures specified by the authorized officer as necessary and appropriate to avoid or reduce effects on survey and manage species or their habitat affected by the authorized use and occupancy. The location of sites within the area occupied by survey and manage species or their habitat shall be shown on a map in an appendix to this permit and may be shown on the ground. Discovery by the holder or the Forest Service of other sites within the permit area containing survey and manage species or their habitat not shown on the map in the appendix shall be promptly reported to the other party and shall be added to the map.

H. CONSENT TO STORE HAZARDOUS MATERIALS. The holder shall not store any hazardous materials in the permit area without prior written approval from the authorized officer. This approval shall not be unreasonably withheld. If the authorized officer provides approval, this permit shall include or, in the case of approval provided after this permit is issued, shall be amended to include specific terms addressing the storage of hazardous materials, including the specific type of materials to be stored, the volume, the type of storage, and a spill or release prevention and control plan. Such terms shall be proposed by the holder and are subject to approval by the authorized officer.

VI. LAND USE FEE AND DEBT COLLECTION

A. LAND USE FEE AND HOLDER'S USE AND OCCUPANCY. Per 42 U.S.C. 15925, the holder shall pay in advance an annual land use fee as determined in accordance with the Per Acre Rent Schedule established by 43 CFR 2806.20. The initial annual land use fee shall be prorated if less than 6 months in the calendar year remain on the date this permit is issued. Otherwise, the holder shall pay the entire initial annual land use fee.

B. MODIFICATION OF THE LAND USE FEE. The land use fee for the holder's use and occupancy and for leasing of the holder's fiber optic cable may be revised whenever necessary to reflect the market value of the authorized use and occupancy or when the fee system used to calculate the land use fee is modified or replaced.

C. LAND USE FEE PAYMENTS

1. Crediting of Payments. Payments shall be credited on the date received by the deposit facility, except that if a payment is received on a non-workday, the payment shall not be credited until the next workday.

2. Disputed Fees. Land use fees are due and payable by the due date. Disputed land use fees, other than land use fees recalculated pursuant to an audit, must be paid in full. Adjustments will be made if dictated by an administrative appeal decision, a court decision, or settlement terms.

3. Late Payments

(a) Interest. Pursuant to 31 U.S.C. 3717 et seq., interest shall be charged on any land use fee amount not paid within 30 days from the date it became due. The rate of interest assessed shall be the higher of the Prompt Payment Act rate or the rate of the current value of funds to the United States Treasury (i.e., the Treasury tax and loan account rate), as prescribed and published annually or quarterly by the Secretary of the Treasury in the Federal Register and the Treasury Fiscal Requirements Manual Bulletins. Interest on the principal shall accrue from the date the land use fee amount is due.

(b) Administrative Costs. If the account becomes delinquent, administrative costs to cover processing and handling the delinquency shall be assessed.

(c) Penalties. A penalty of 6% per annum shall be assessed on the total amount that is more than 90 days delinquent and shall accrue from the same date on which interest charges begin to accrue.

(d) Termination for Nonpayment. This permit shall terminate if the holder fails to pay any land use fee, interest, or any other charges within 90 calendar days of the due date. The holder shall remain responsible for the delinquent charges.

4. Administrative Offset and Credit Reporting. Delinquent land use fees and other charges associated with this permit shall be subject to all rights and remedies afforded the United States pursuant to 31 U.S.C. 3711 et seq. and common law. Delinquencies are subject to any or all of the following:

(a) Administrative offset of payments due the holder from the Forest Service.

(b) If in excess of 90 days, referral to the United States Department of the Treasury for appropriate collection action as provided by 31 U.S.C. 3711(g)(1).

(c) Offset by the Secretary of the Treasury of any amount due the holder, as provided by 31 U.S.C. 3720 et seq.

(d) Disclosure to consumer or commercial credit reporting agencies.

VII. REVOCATION, SUSPENSION, AND TERMINATION

A. REVOCATION AND SUSPENSION.

1. The authorized officer may revoke or suspend this permit in whole or in part:

(a) For noncompliance with applicable federal, state, or local laws and regulations;

(b) For noncompliance with the terms of this permit;

(c) For failure to exercise the rights or privileges granted by

(d) At the discretion of the authorized officer, for specific and compelling reasons in the public interest.

2. The authorized officer may revoke this permit at the request of the holder. Revocation at the request of the holder must be agreed to in writing by the authorized officer. As a condition of revocation of this permit at the request of the holder, the authorized officer has discretion to impose any terms deemed appropriate as provided for in this permit.

3. Prior to revocation or suspension, other than revocation at the request of the holder under clause VII.A.2 or immediate suspension under clause VII.B, the authorized officer shall give the holder written notice of the grounds for revocation or suspension and a reasonable period, not to exceed 90 days, to cure any noncompliance.

B. IMMEDIATE SUSPENSION. The authorized officer may immediately suspend this permit in whole or in part when necessary to protect public health or safety or the environment. The suspension decision shall be in writing. The holder may request an onsite review with the authorized officer's superior of the adverse conditions prompting the suspension. The authorized officer's superior shall grant this request within 48 hours. Following the onsite review, the authorized officer's superior shall promptly affirm, modify, or cancel the suspension.

C. APPEALS AND REMEDIES. Written decisions by the authorized officer relating to administration of this permit are subject to administrative appeal pursuant to 36 CFR Part 214, Subpart C, as amended. Revocation or suspension of this permit shall not give rise to any claim for damages by the holder against the Forest Service.

D. TERMINATION. This permit shall terminate when by its terms a fixed or agreed upon condition, event, or time occurs without any action by the authorized officer. For example, this permit terminates upon expiration or upon a change in ownership of the powerline facilities. Termination of this permit does not require notice, a decision document, or any environmental analysis or other documentation. Termination of this permit is not subject to administrative appeal and shall not give rise to any claim for damages by the holder against the Forest Service

E. RIGHTS AND RESPONSIBILITIES UPON REVOCATION OR TERMINATION WITHOUT ISSUANCE OF A NEW PERMIT. Upon revocation of this permit or termination of this permit without issuance of a new permit, the holder shall remove all structures and improvements in the permit area, except those owned by the United States, within a reasonable period prescribed by the authorized officer and shall restore the permit area to the satisfaction of the authorized officer. If the holder fails to remove all structures or improvements in the permit area within the prescribed period, they shall become the property of the United States and may be sold, destroyed, or otherwise disposed of without any liability to the United States. The holder shall remain liable

for all costs associated with their removal, including costs of sale and impoundment, cleanup, and restoration of the permit area.

F. CONTINUATION OF OBLIGATIONS AND LIABILITIES BEYOND TERMINATION OR REVOCATION. Notwithstanding the termination or revocation of this permit, its terms shall remain in effect and shall be binding on the holder and the holder's personal representative, successors, and assignees until all the holder's obligations and liabilities accruing before or as a result of termination or revocation of this permit have been satisfied.

VIII. MISCELLANEOUS PROVISIONS

A. MEMBERS OF CONGRESS. No member of or delegate to Congress or resident commissioner shall benefit from this permit either directly or indirectly, except to the extent the authorized use provides a general benefit to a corporation.

B. CURRENT ADDRESSES. The Forest Service and the holder shall keep each other informed of current mailing addresses.

C. SUPERSEDED AUTHORIZATION. This permit supersedes authorizations designated SOL121002 dated 3/28/1975 and SOL121001 dated 7/31/1978.

D. SUPERIOR CLAUSES. If there is any conflict between any of the preceding printed clauses and any of the following clauses, the preceding printed clauses shall control.

E. INVASIVE PLANT PREVENTION AND CONTROL (R6-D7).

1. The holder shall be responsible for the prevention of establishment, spread or introduction, as well as the control of invasive plants of concern on the area authorized by this clause and shall provide prevention and control measures prescribed by the Forest Service. These prevention and control practices shall include those Standards and Guidelines included in local Forest Land Management Resource Plans, as amended by the FY 2005 Record of Decision for the Pacific Northwest Region (R6) Invasive Plant Program. Invasive plants of concern are defined as those species recognized by the county weed authority in which the authorized use is located or as listed in the 2005 Region 6 Invasive Plant Program FEIS (Appendix B) for Forest Service Lands in Oregon and Washington.

2. The holder shall also be responsible for prevention and control on invasive plant infestations which are not within the authorized area, but which are determined by the Forest Service to have originated with the authorized area.

3. When determined to be necessary by the authorized officer, the holder shall develop a site-specific plan for invasive plant prevention and control. Such plan shall be subject to Forest Service approval in advance of implementation, including control measures proposing the use of any herbicides. Upon Forest Service approval, the invasive plant prevention and control plan shall become a part of this authorization, and its provisions shall be enforceable under the terms of this authorization.

THIS PERMIT IS GRANTED SUBJECT TO ALL ITS TERMS.

BEFORE THIS PERMIT IS ISSUED TO AN ENTITY, DOCUMENTATION MUST BE PROVIDED TO THE AUTHORIZED OFFICER OF THE AUTHORITY OF THE SIGNATORY FOR THE ENTITY TO BIND IT TO THE TERMS OF THIS PERMIT.

CLALLAM COUNTY PUBLIC UTILITY DISTRICT #1

3.23.23

Sean Worthington
General Manager

Date

USDA FOREST SERVICE, OLYMPIC NATIONAL FOREST

4/12/2023

Kelly D. Lawrence
Forest Supervisor

Date

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond, to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0596-0082. Response to this collection of information is mandatory. The authority to collect the information is the Organic Administration Act, 16 U.S.C. 551. The time required to complete this information collection is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible agency or USDA's TARGET Center at (202) 720-2600 (voice and TYY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program

information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at How to File a Program Discrimination Complaint and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov.

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The Privacy Act of 1974 (5 U.S.C. 552a) and the Freedom of Information Act (5 U.S.C. 552) govern the confidentiality to be provided for information received by the Forest Service.

APPENDIX A

DEFINITIONS

The following definitions apply to this permit and all its appendices.

A. Powerline Facility Infrastructure

1. Conductor. Cable or wire that transmits electricity.

2. Linear Right-of-Way. An authorized right-of-way for a linear facility such as a road, trail, pipeline, powerline facility, fence, water transmission facility, or fiber optic cable, whose linear boundary is delineated by its legal description.

3. Powerline Facility. One or more electric distribution or transmission lines authorized by a special use authorization, and all appurtenances to those lines supporting conductors of one or more electric circuits of any voltage for the transmission of electric energy, overhead ground wires, and communications equipment that is owned by the holder; that solely supports operation and maintenance of the electric distribution or transmission lines; and that is not leased to other parties for communications uses that serve other purposes.

B. Powerline Facility Maintenance

1. Emergency Maintenance. Immediate repair or replacement of any component of a powerline facility that is necessary to prevent imminent loss, or to redress the loss, of electric service due to equipment failure in accordance with applicable reliability and safety standards and as identified in an approved operating plan or agreement.

2. Non-Routine Maintenance. Realigning, upgrading, rebuilding, or replacing an entire powerline facility or any segment thereof, including reconductoring, as identified in an approved operating plan or agreement.

(a) Realignment. Moving structures and associated supported cables outside the linear alignment for a powerline facility due to environmental conditions (see clause II.C of the permit).

(b) Rebuild. Replacement of existing cables as well as the majority of structures typically in the same linear alignment.

(c) Re-conductor. Replacement of existing conductor and other cables as applicable, where only very few structures are replaced, moved, or raised.

(d) Upgrade. Increasing the transfer capability of an existing powerline facility, which may also include a few structure replacements, adding intermediate structures or raising one or more structures, or ground removal to ensure conductor clearance.

3. Routine Maintenance. Repair or replacement of any component of a powerline facility due to ordinary wear and tear, such as repair of broken strands of conductors and overhead ground wire; replacement of hardware (e.g., insulator assembly) and accessories; maintenance of counterpoise, vibration dampers, and grading rings; scheduled replacement of decayed and deteriorated wood poles; and aerial or ground patrols to perform

observations, conduct inspections, correct problems, and document conditions to provide for operation in accordance with applicable reliability and safety standards and as identified in an approved operating plan or agreement.

C. Vegetation Management

1. Emergency Vegetation Management. Unplanned pruning or felling of vegetation on National Forest System lands within the linear right-of-way for a powerline facility and unplanned pruning or felling of hazard trees on National Forest System lands adjacent to either side of the linear right-of-way that have contacted or present an imminent danger of contacting the powerline facility to avoid the disruption of electric service or to eliminate an immediate fire or safety hazard.

2. Flashover. An electric discharge over or around the surface of an insulated conductor that may result in fire through the ignition of surrounding objects.

3. Hazard Tree. For purposes of vegetation management for a powerline facility, any tree, brush, shrub, other plant, or part thereof, hereinafter "vegetation" (whether located on National Forest System lands inside or outside the linear right-of-way for the powerline facility), that has been designated, prior to failure, by a certified or licensed arborist, qualified vegetation management specialist, or forester under the supervision of the holder to be:

(a) Dead; likely to die or fail before the next routine vegetation management cycle; or in a position that, under geographical or atmospheric conditions, could cause the vegetation to fall, sway, or grow into the powerline facility before the next routine vegetation management cycle; and

(b) Likely to cause substantial damage to the powerline facility; disrupt powerline facility service; come within 10 feet of the powerline facility; or come within the MVCD as determined in accordance with applicable reliability and safety standards and as identified in the special use authorization for the powerline facility and the associated approved operating plan or agreement.

4. Maximum Operating Sag. The theoretical position of a conductor when operating at 100 degrees Celsius, which must be accounted for when determining the MVCD.

5. Minimum Vegetation Clearance Distance (MVCD). A calculated minimum distance that is stated in feet or meters to prevent flashover between conductors and vegetation for various altitudes and operating voltages and that is measured from a conductor at maximum operating sag to vegetation on National Forest System lands within the linear right-of-way for a powerline facility and on National Forest System lands adjacent to either side of the linear right-of-way for a powerline facility for purposes of felling or pruning hazard trees, which the holder uses to determine whether vegetation poses a system reliability hazard to the powerline facility.

6. Non-Emergency (Routine) Vegetation Management. Planned actions as described in an approved operating plan or agreement periodically taken to fell or prune vegetation on National Forest System lands within the linear right-of-way for a powerline facility and on National Forest System lands adjacent to either side of the linear right-of-way for a powerline facility to fell or prune hazard trees to ensure normal powerline facility operations and to prevent wildfire in accordance with applicable reliability and safety standards and as identified in an approved operating plan or agreement.

D. Roads and Trails

1. Access Road or Trail. For purposes of this permit, a road or trail constructed, operated, and maintained by the holder that is necessary to access a powerline facility or its linear right-of-way.

2. Road or Trail Construction. Building a road or trail where no road or trail has previously existed.

3. Road or Trail Reconstruction. Rebuilding an existing road or trail to increase its capacity, upgrade drainage crossings, or provide improved access, which may involve increasing the road or trail prism.

4. Road or Trail Maintenance. The upkeep of an entire road or trail within the existing road or trail prism, including surface and shoulders, parking and side areas, structures, and traffic control devices, that is necessary to maintain or restore the road or trail in accordance with its original design standards.

APPENDIX B

PERMIT AREA SUMMARY AND MAPS OF THE PERMIT AREA

Permit Exhibit Map	kV	Location	Legal Description	Corridor Length (feet) * Buried	Aerial	Corridor Width (feet)	Corridor Area (acres)
JEFFERSON COUNTY							
B-1	14.4	Hoh River Seg. 1	T27N R11W Sec 28, 29	4,023		10	0.92
B-1	14.4	Hoh River Seg. 2	T27N R11W Sec 28	2,236		10	0.51
B-1	14.4	Hoh River Seg. 3	T27N R11W Sec 27	886		10	0.20
B-1	14.4	Hoh River Seg. 4	T27N R11W Sec 27	1,385		10	0.32
			Jefferson County Totals:	**8,530**			**1.96**
CLALLAM COUNTY							
B-2	7.2	Klahowya Cmpgd Seg 1	T30N R11W Sec 27, 28	1,970		10	0.45
B-2	7.2	Snider WC Seg. 1	T30N R11W Sec 28	2,041		10	0.47
B-2	7.2	Snider WC Seg. 2	T30N R11W Sec 28		377	30	0.26
B-2	7.2	Snider WC Seg. 3	T30N R11W Sec 28		1,701	30	1.17
B-2	7.2	Snider WC Seg. 4	T30N R11W Sec 28		255	30	0.18
B-3	7.2	FSR 3040 Seg. 1	T30N R11W Sec 28	4,397		10	1.01
B-3	7.2	FSR 3040 Seg. 2	T30N R11W Sec 19, 20, 29	12,974		10	2.98
B-3	7.2	FSR 3040 Seg. 3	T30N R11W Sec 29	6,275		10	1.44
B-3	7.2	FSR 3040 Seg. 4	T30N R11W Sec 22	2,724		10	0.63
B-3	7.2	FSR 3040595 Seg. 1	T30N R11W Sec 33	9,785		10	2.25
B-4	12.5	Hwy 101 Seg. 6	T30N R11W Sec 27,	1,071		10	0.25
B-4	12.5	Hwy 101 Seg. 7	T30N R11W Sec 27, 28	3,113		10	0.71
B-4	12.5	Hwy 101 Seg. 8	T30N R11W Sec 28		159	30	0.11
B-5	7.2	Hwy 101 Seg 5	T30N R10W Sec 27, 28		5,330	30	3.67
B-5	7.2	FSR 2918 Seg. 1	T30N R10W Sec 28, 29		3,189	30	2.20
B-5	7.2	FSR 2918 Seg. 2	T30N R10W Sec 28	349		10	0.08
B-5	7.2	FSR 2918 Seg. 3	T30N R10W Sec 28		3,007	30	2.07

B-6	12.5	Hwy 101 Seg. 2	T30N R10W Sec 22		429	30	2.07
B-6	12.5	Hwy 101 Seg. 3	T30N R10W Sec 23		534	30	0.37
B-6	12.5	Hwy 101 Seg. 4	T30N R10W Sec 22		1,461	30	1.01
B-6	7.2	ODT Seg. 1	T30N R10W Sec 23	1,791		10	0.41
B-7	7.2	FSR 3079011 Seg 1	T30N R9W Sec 15	3,200		10	0.73
B-7	7.2	FSR 3079011 Seg 2	T30N R9W Sec 15	73		10	0.02
B-8	7.2	Hwy 101 Seg. 1	T30N R7W Sec 30	3,226		10	0.74
B-8	7.2	Oly Hot Springs Rd Seg. 1	T30N R7W Sec 33		1,552	30	1.07
B-9	7.2	Little River Rd Seg. 1	T30N R7W Sec 26		1,368	30	0.94
B-9	7.2	Black Diamond WD Seg. 1	T30N R7W Sec 36	2,673		10	0.61
B-10	7.2	Louella GS Seg. 1	T29N R3W Sec 20	338		10	0.08
B-10	7.2	Louella GS Seg. 2	T29N R3W Sec 20		671	30	0.46
B-10	7.2	Louella GS Seg. 3	T29N R3W Sec 20	638		10	0.15
B-10	7.2	Palo Alto Rd Seg. 1	T29N R3W Sec 29		1,720	30	1.18
B-10	7.2	Palo Alto Rd Seg. 2	T29N R3W Sec 20		580	30	0.40
B-11	69	SR 113 Seg. 1	T30N R12W Sec 17		2,318	60	3.19
B-11	69	SR 113 Seg. 2	T30N R12W Sec 10		2,395	60	3.30
B-11	69	SR 113 Seg. 3	T30N R12W Sec 2		325	60	0.45
			Clallam County Totals:	**56,638**	**27,371**		**35.32**

* Segment lengths determined by ArcMap

Total Permit Area: **37.28** Acres

Total Corridor Length: **92,539** Feet

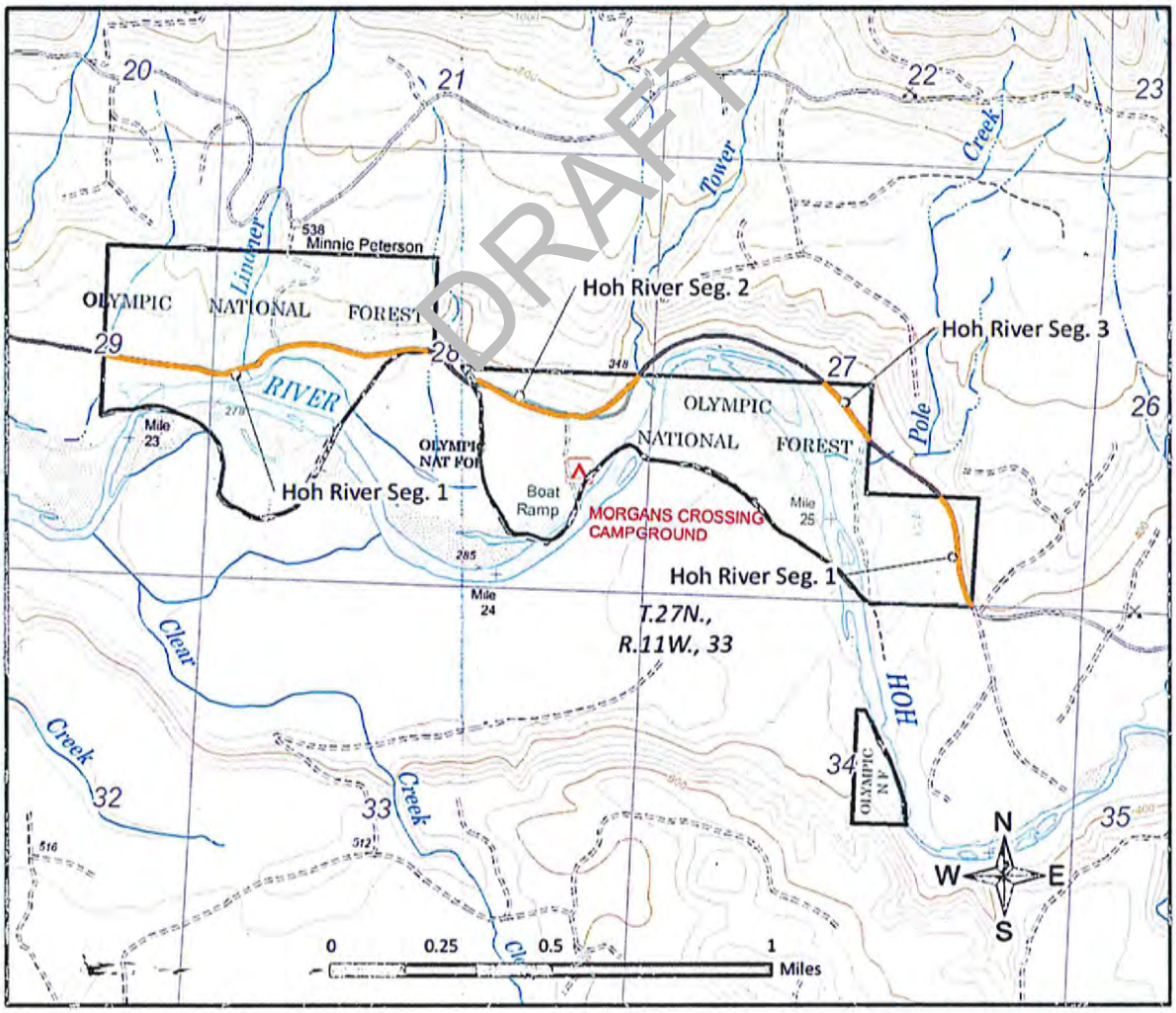
17.53 Miles

Nominal AC System Voltage (kV)	MVCD at 1.0 Gap Factor (feet)														
	Sea Level up to 500 ft	Over 500 ft up to 1,000 ft	Over 1,000 ft up to 2,000 ft	Over 2,000 ft up to 3,000 ft	Over 3,000 ft up to 4,000 ft	Over 4,000 ft up to 5,000 ft	Over 5,000 ft up to 6,000 ft	Over 6,000 ft up to 7,000 ft	Over 7,000 ft up to 8,000 ft	Over 8,000 ft up to 9,000 ft	Over 9,000 ft up to 10,000 ft	Over 10,000 ft up to 11,000 ft	Over 11,000 ft up to 12,000 ft	Over 12,000 ft up to 13,900 ft	Over 13,000 ft up to 14,000 ft
765	11.6	11.7	11.9	12.1	12.2	12.4	12.6	12.8	13.0	13.1	13.3	13.5	13.7	13.9	14.0
500	7.0	7.1	7.2	7.4	7.5	7.6	7.8	7.9	8.1	8.2	8.3	8.5	8.6	8.8	8.9
345	4.3	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0	5.1	5.2	5.3	5.4	5.5	5.6
287	5.2	5.3	5.4	5.5	5.6	5.7	5.8	5.9	6.1	6.2	6.3	6.4	6.5	6.6	6.7
230	4.0	4.1	4.2	4.3	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0	5.1	5.2	5.3
161	2.7	2.7	2.8	2.9	2.9	3.0	3.0	3.1	3.2	3.3	3.3	3.4	3.5	3.6	3.6
138	2.3	2.3	2.4	2.4	2.5	2.5	2.6	2.7	2.7	2.8	2.8	2.9	3.0	3.0	3.1
115	1.9	1.9	1.9	2.0	2.0	2.1	2.1	2.2	2.2	2.3	2.3	2.4	2.5	2.5	2.6
88	1.5	1.5	1.6	1.6	1.7	1.7	1.8	1.8	1.8	1.9	1.9	2.0	2.0	2.1	2.1
69	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.4	1.4	1.4	1.5	1.5

Table 1 – Table of MVCD values at a 1.0 gap factor (in U.S. customary units)

Clallam County PUD#1 Electric Transmission Line Permit

Olympic National Forest



Legend

Clallam County PUD Powerlines on National Forest Land

- Aerial
- Buried
- National Forest System Land

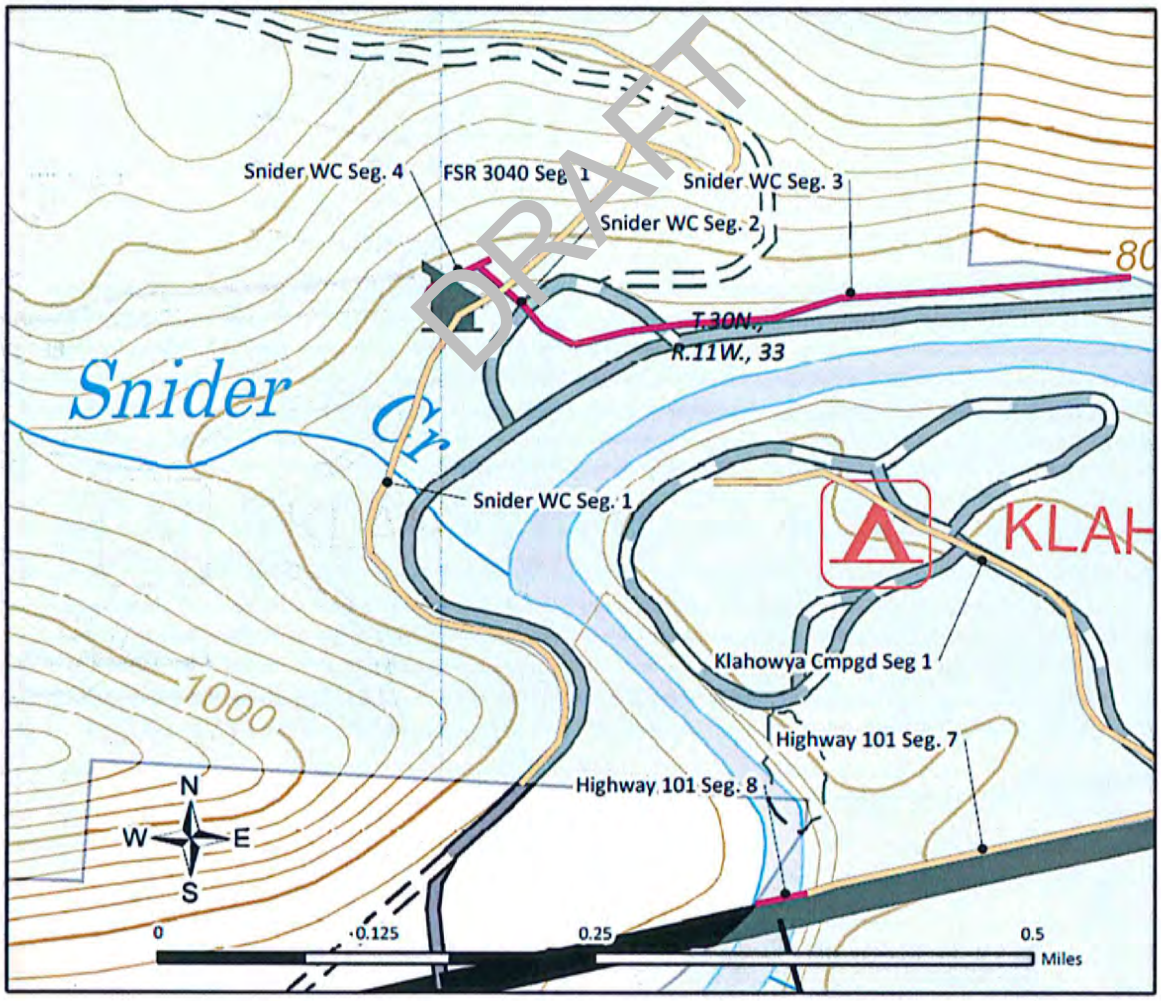
Authorization Information

Name:	Clallam County PUD #1
Authorization ID:	SOL259
Primary Use Code:	643
Use Code Name:	Powerline
Expiration Date:	December 31, 2052

Appendix B-1

Clallam County PUD#1 Electric Transmission Line Permit

Olympic National Forest



Legend

Clallam County PUD Powerlines on National Forest Land

- Aerial
- Buried

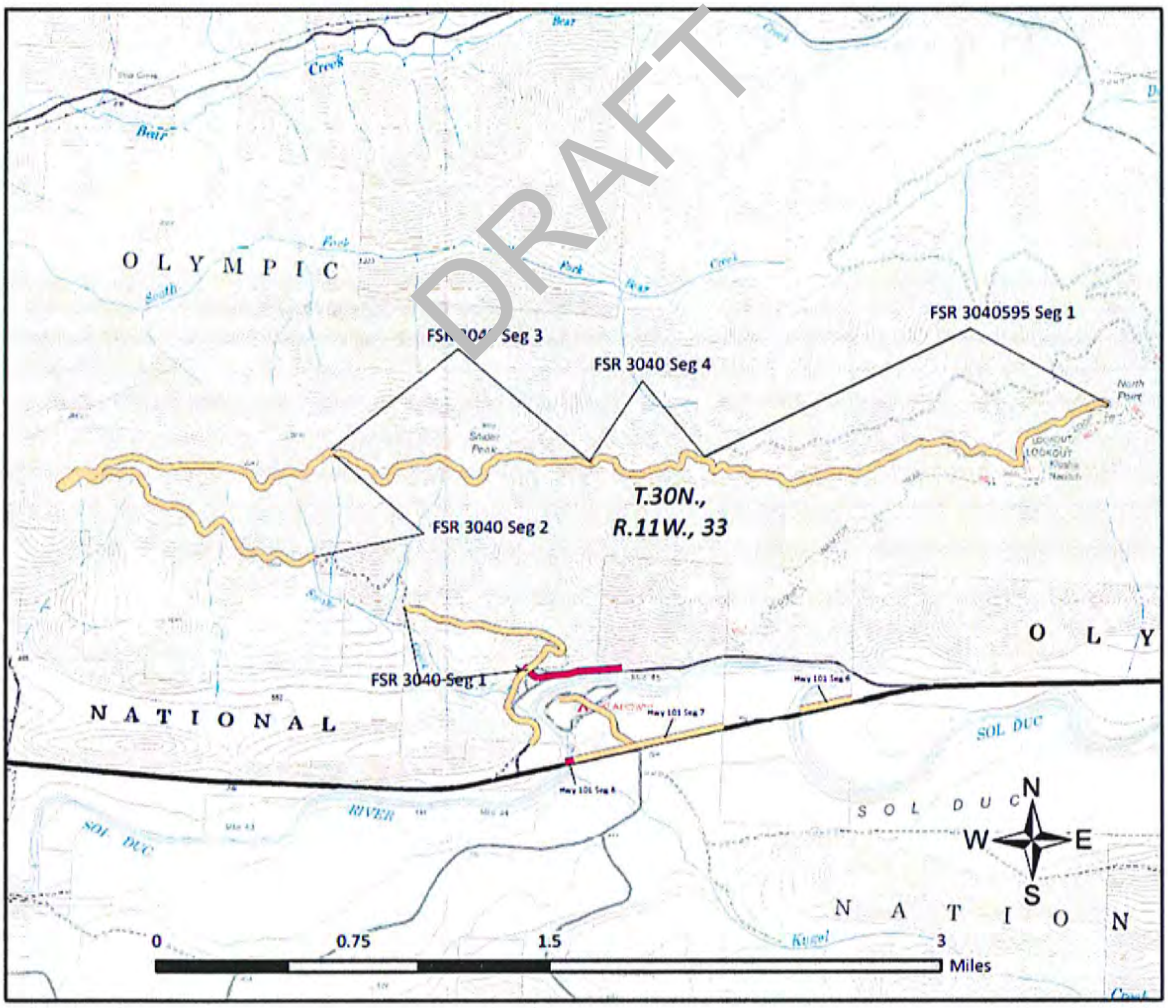
Authorization Information

Name:	Clallam County PUD #1
Authorization ID:	SOL259
Primary Use Code:	643
Use Code Name:	Powerline
Expiration Date:	December 31, 2052

Appendix B-2

Clallam County PUD#1 Electric Transmission Line Permit

Olympic National Forest



Legend

Clallam County PUD Powerlines on National Forest Land

- Aerial
- Buried

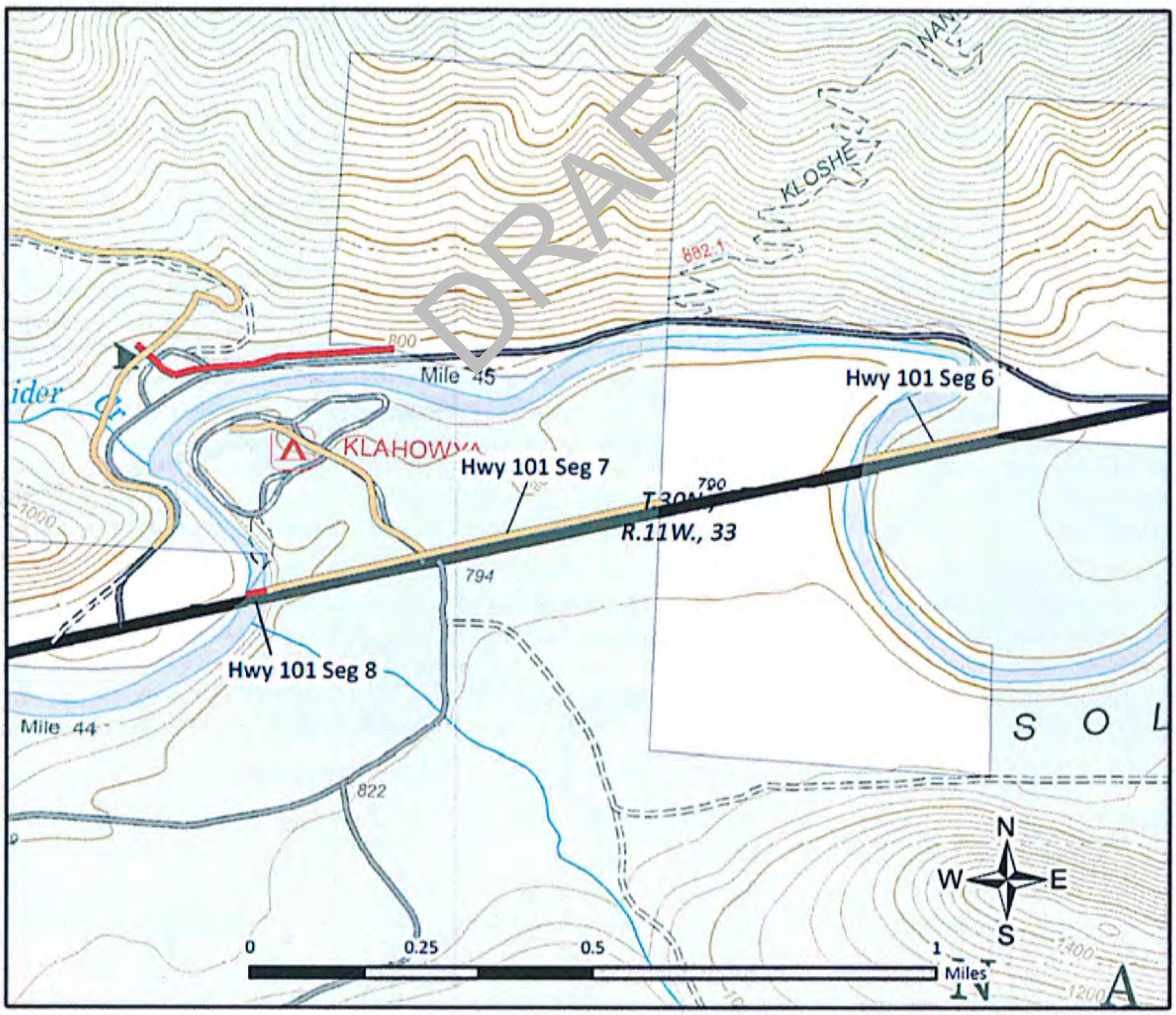
Authorization Information

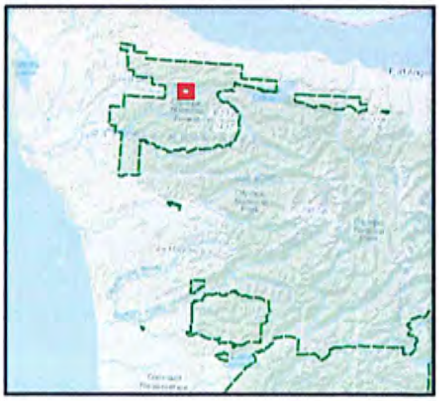
Name:	Clallam County PUD #1
Authorization ID:	SOL259
Primary Use Code:	643
Use Code Name:	Powerline
Expiration Date:	December 31, 2052

Appendix B-3

Clallam County PUD#1 Electric Transmission Line Permit

Olympic National Forest





Legend

Clallam County PUD Powerlines on National Forest Land

- Aerial
- Buried

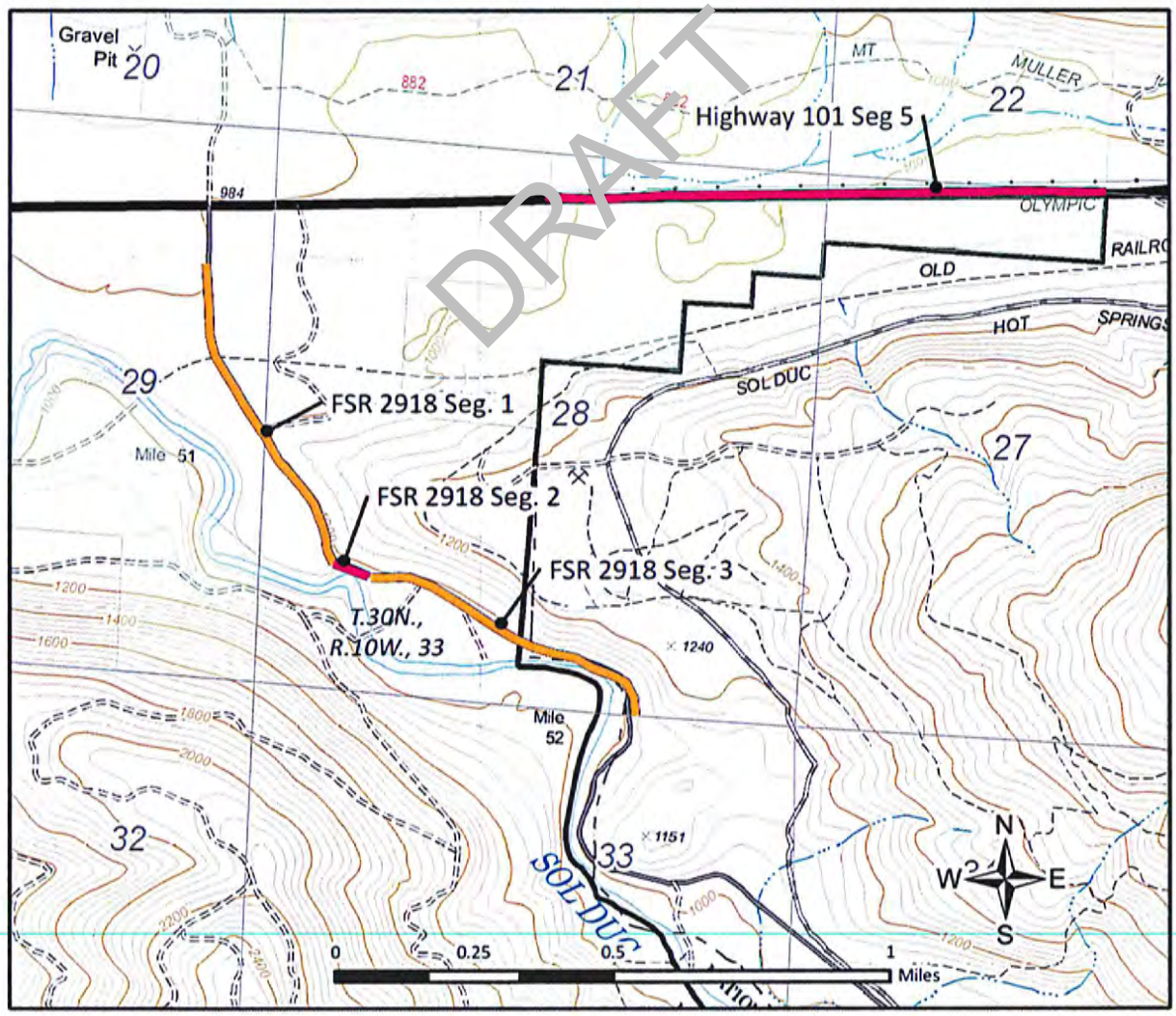
Authorization Information

Name:	Clallam County PUD #1
Authorization ID:	SOL259
Primary Use Code:	643
Use Code Name:	Powerline
Expiration Date:	December 31, 2052

Appendix B-4

Clallam County PUD#1 Electric Transmission Line Permit

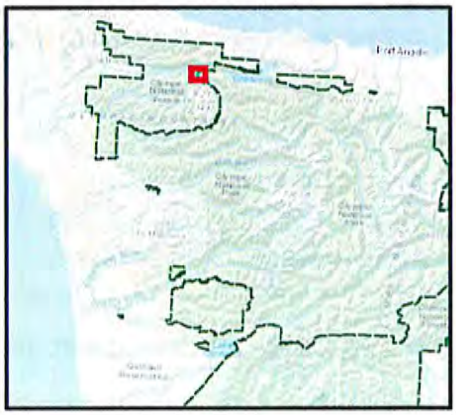
Olympic National Forest



Legend

Clallam County PUD Powerlines on National Forest Land

- Aerial
- Buried
- National Forest System Land



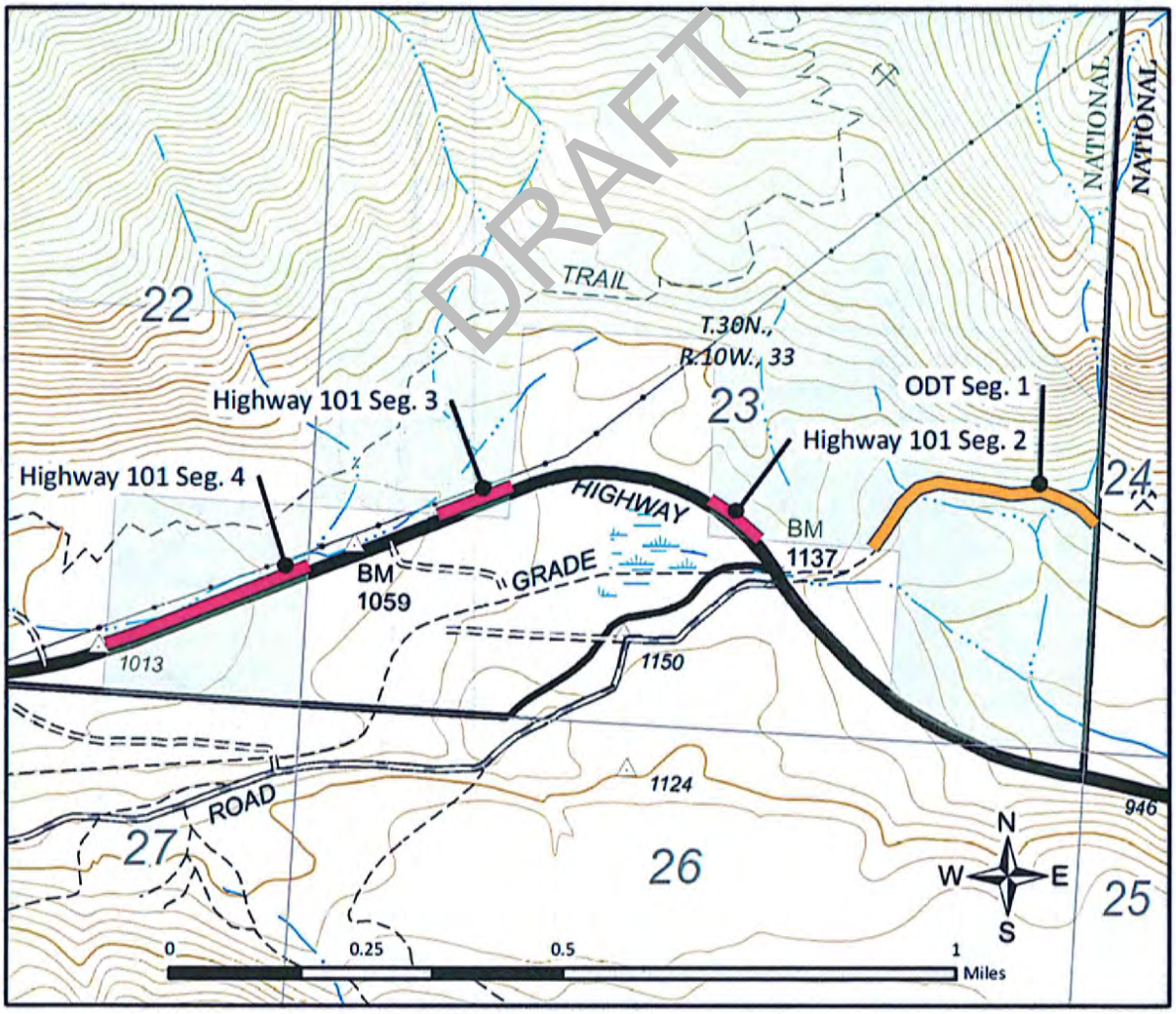
Authorization Information

Name:	Clallam County PUD #1
Authorization ID:	SOL259
Primary Use Code:	643
Use Code Name:	Powerline
Expiration Date:	December 31, 2052

Appendix B-5

Clallam County PUD#1 Electric Transmission Line Permit

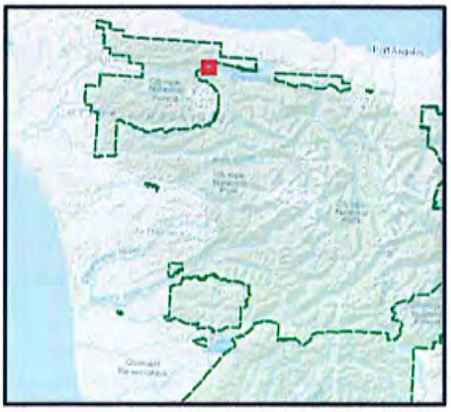
Olympic National Forest



Legend

Clallam County PUD Powerlines on National Forest Land

- Aerial
- Buried
- National Forest System Land



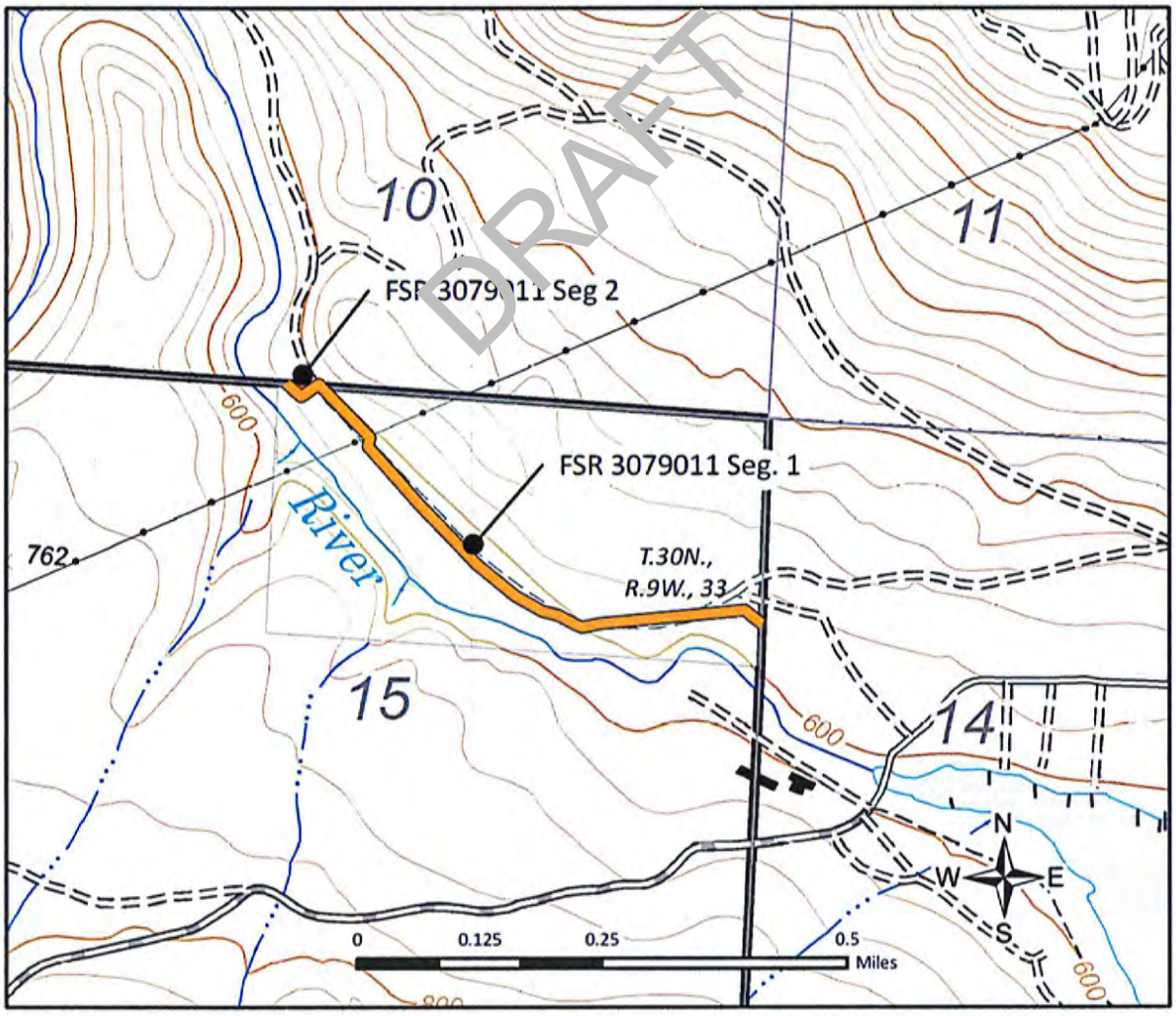
Authorization Information

Name:	Clallam County PUD #1
Authorization ID:	SOL259
Primary Use Code:	643
Use Code Name:	Powerline
Expiration Date:	December 31, 2052

Appendix B-6

Clallam County PUD#1 Electric Transmission Line Permit

Olympic National Forest



Legend

Clallam County PUD Powerlines on National Forest Land

- Aerial
- Buried
- National Forest System Land

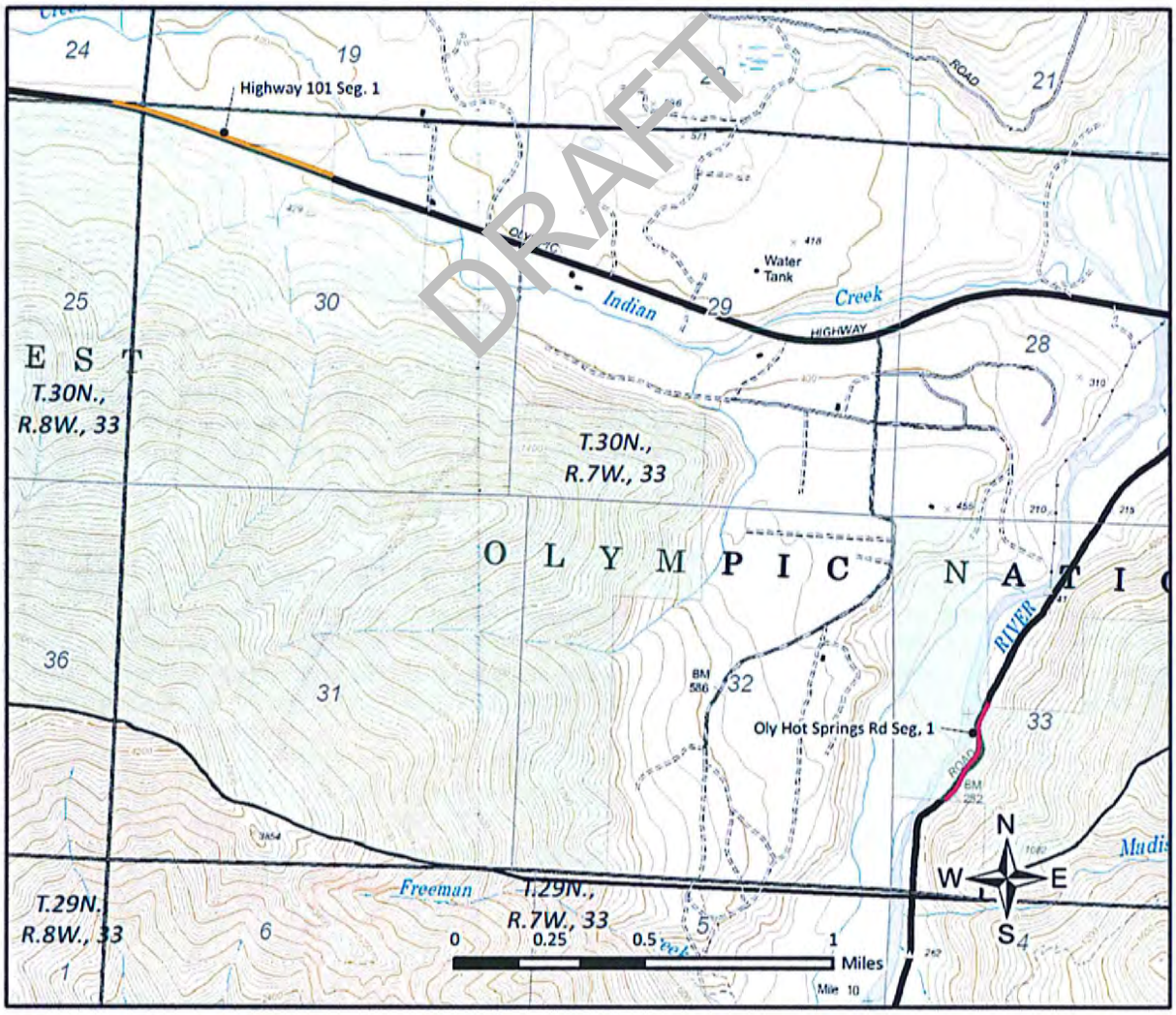
Authorization Information

Name:	Clallam County PUD #1
Authorization ID:	SOL259
Primary Use Code:	643
Use Code Name:	Powerline
Expiration Date:	December 31, 2052

Appendix B-7

Clallam County PUD#1 Electric Transmission Line Permit

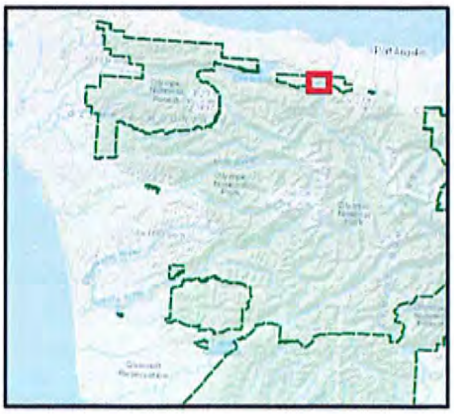
Olympic National Forest



Legend

Clallam County PUD Powerlines on National Forest Land

- Aerial
- Buried
- National Forest System Land



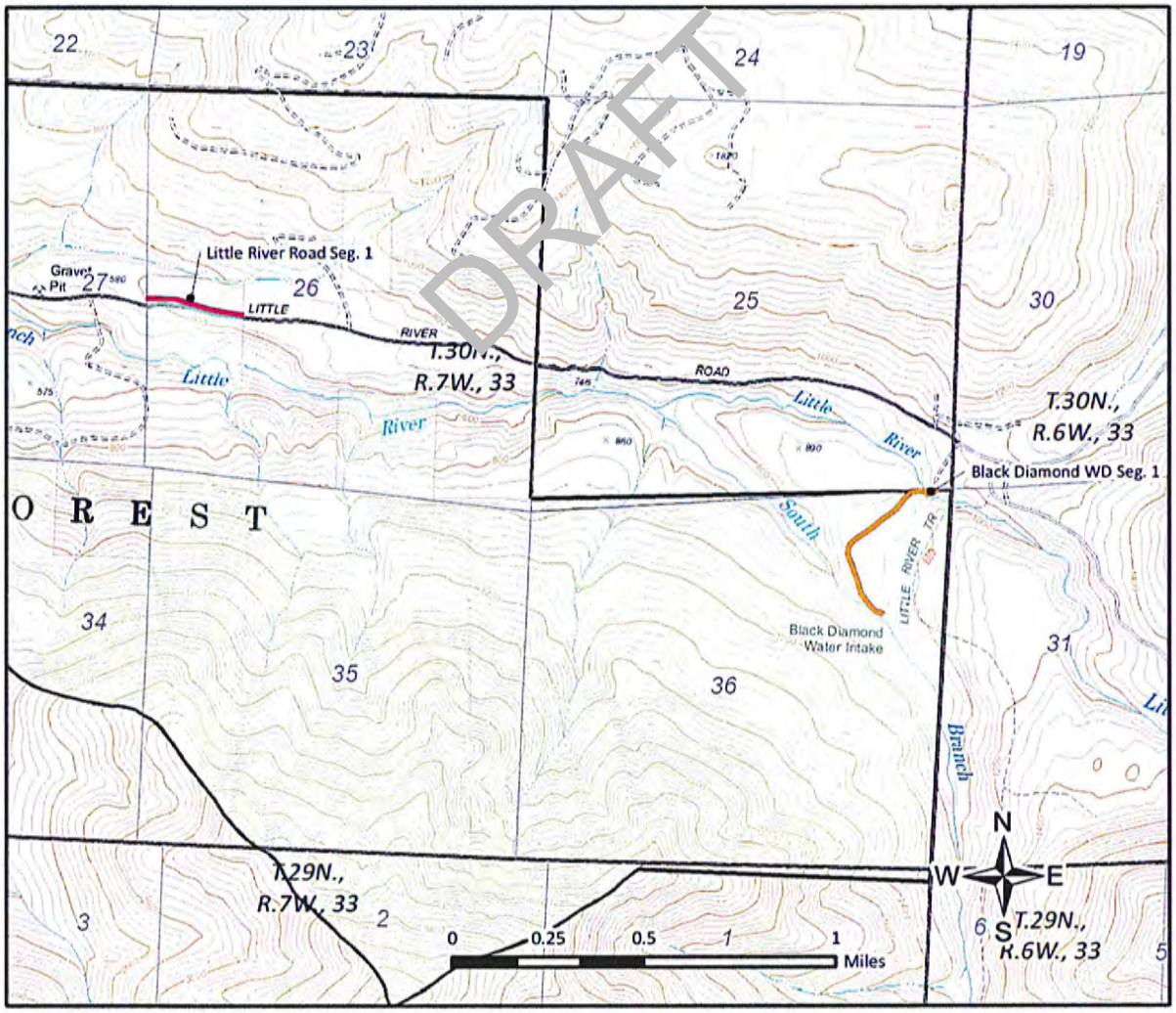
Authorization Information

Name:	Clallam County PUD #1
Authorization ID:	SOL259
Primary Use Code:	643
Use Code Name:	Powerline
Expiration Date:	December 31, 2052

Appendix B-8

Clallam County PUD#1 Electric Transmission Line Permit

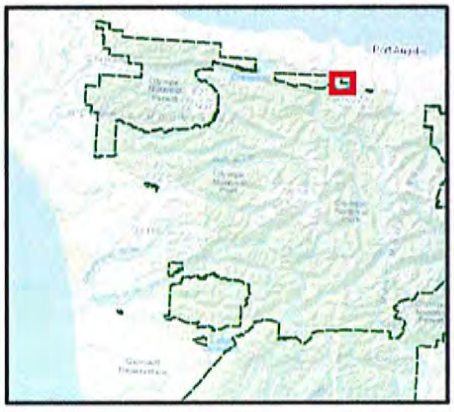
Olympic National Forest



Legend

Clallam County PUD Powerlines on National Forest Land

- Aerial
- Buried
- National Forest System Land



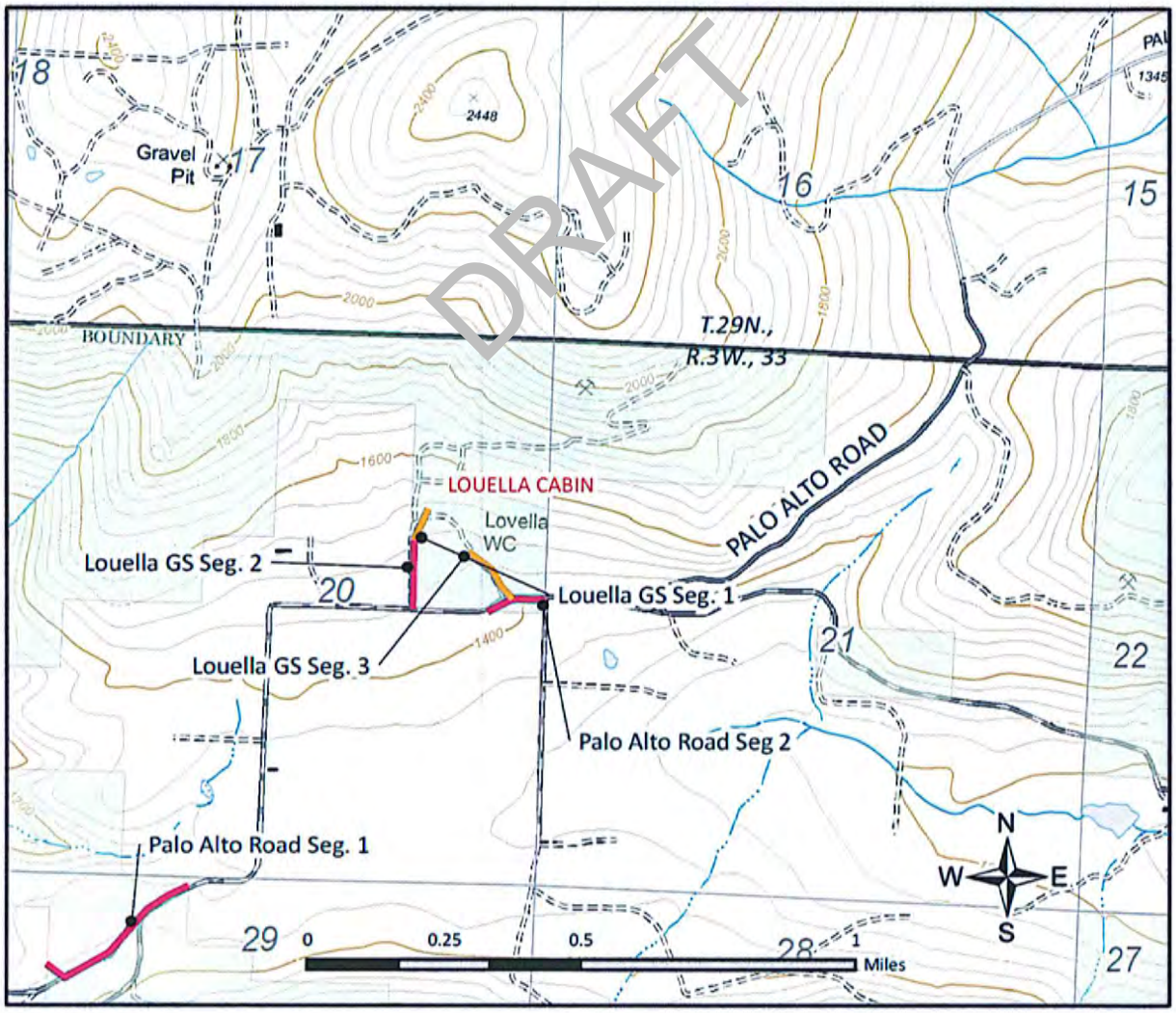
Authorization Information

Name:	Clallam County PUD #1
Authorization ID:	SOL259
Primary Use Code:	643
Use Code Name:	Powerline
Expiration Date:	December 31, 2052

Appendix B-9

Clallam County PUD#1 Electric Transmission Line Permit

Olympic National Forest



Legend

Clallam County PUD Powerlines on National Forest Land

- Aerial
- Buried
- National Forest System Land

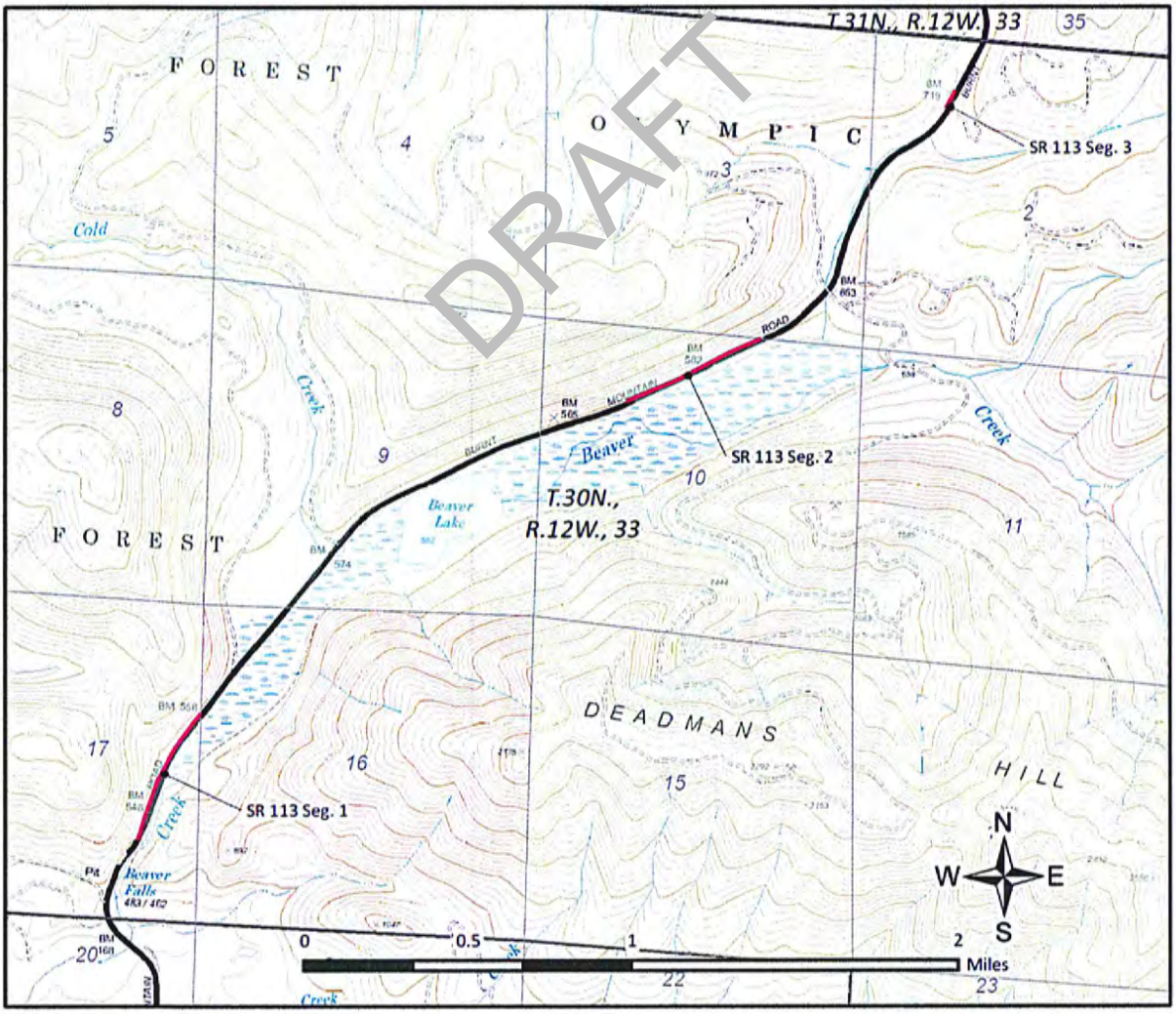
Authorization Information

Name:	Clallam County PUD #1
Authorization ID:	SOL259
Primary Use Code:	643
Use Code Name:	Powerline
Expiration Date:	December 31, 2052

Appendix B-10

Clallam County PUD#1 Electric Transmission Line Permit

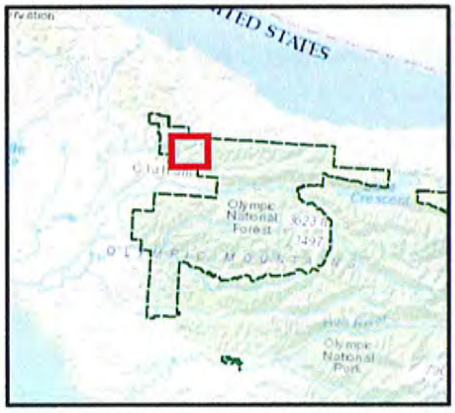
Olympic National Forest



Legend

Clallam County PUD Powerlines on National Forest Land

- Aerial
- Buried
- National Forest System Land



Authorization Information

Name:	Clallam County PUD #1
Authorization ID:	SOL259
Primary Use Code:	643
Use Code Name:	Powerline
Expiration Date:	December 31, 2052

Appendix B-11

APPENDIX C

LIST AND LOCATION OF NATIONAL FOREST SYSTEM ROADS USED BY THE HOLDER

Permit Map Exhibit	Road Number	Road Name	Road Mtce Level	Beginning Milepost	Ending Milepost
B-2	2900990	Kl[illegible]ya Campground	3	0.0	0.4
B-3	3040	Sn[illegible]der Ridge	2	0.0	5.0
B-3	3040595	North Point	2	0.0	2.0
B-5	2918	South Fork Soleduc	3	0.9	1.4
B-7	3079011	Lyre River	2	0.0	0.8
B-9	3030	Little River	2	0.2	0.7
B-10	2800350	Louella Guard Station	3	0.0	0.2

Road Maintenance Level Descriptions

LEVEL 1: These roads have been placed in storage between intermittent uses, with all vehicular traffic eliminated. Basic custodial maintenance is performed to prevent resource damage and preserve the road for future needs. These roads are not shown on Motor Vehicle Use maps.

LEVEL 2: These roads are maintained for use by high clearance vehicles. Passenger car traffic and user comfort are not considerations, and warning signs and traffic control devices are generally not provided. Log haul may occur at this level. Road may be closed by a gate.

LEVEL 3: These roads are open and maintained for travel by a prudent driver in a standard passenger car and are typically low speed with single lanes and turnouts. Warning signs and traffic control devices are provided to alert motorists of situations that may violate expectations.

LEVEL 4: These roads provide a moderate degree of user comfort and convenience at moderate travel speeds. Most roads are double lane and aggregate surfaced.

LEVEL 5: These roads provide a high degree of user comfort and convenience and are normally double lane and paved. Some may be aggregate surfaced and dust abated.

APPENDIX D

OPERATING PLAN

Operating Plan

PUD #1 of Clallam County
and
Olympic National Forest

Submitted:

Sean Worthington
General Manager
PUD #1 of Clallam County

3.23.23
Date

Approved:

KELLY D. LAWRENCE
Forest Supervisor
Olympic National Forest

4-12-2023
Date

TABLE OF CONTENTS

PURPOSE

Scope

This operating plan governs vegetation management, inspection, and operation and maintenance of the powerline facilities and the holder's roads and trails authorized by the Forest Service under a powerline facility permit issued to Clallam County PUD #1 (the permit).

The permit authorizes the specific acres, location, and improvements. This document specifies the methods that the holder plans to take to operate and maintain the powerlines, roads, and vegetation maintenance. The map and list of authorized improvements are found in the permit.

Definitions

Definitions in Attachment 1 apply to this operating plan and are taken from Forest Service Handbook 2709.11, Chapter 80, Operating Plans and Agreements for Powerline Facilities signed February 10, 2022.

COMPLIANCE WITH FEDERAL LAW AND APPLICABLE RELIABILITY AND SAFETY STANDARDS

Federal Law

This operating plan is executed under Title V of the Federal Land Policy andManagement Act (FLPMA), 43 U.S.C. 1761-1772. The Forest Service must comply withthe National Environmental Policy Act (NEPA), Endangered Species Act (ESA), and National Historic Preservation Act (NHPA) to the extent applicable in connection with the permit and this operating plan. Pursuant to section 6 the National Forest Management Act of 1976, as amended, 16 U.S.C. 1704(i), all authorized activities and projects conducted by the holder within the permit area shall be consistent with the applicable national forest land management plan and any other applicable land management plans.

Applicable Reliability and Safety Standards

The holder is subject to utility reliability standards issued by the Federal EnergyRegulatory Commission (FERC), the North American Electric Reliability Council (NERC), and, as applicable, the regional entity designated by NERC (e.g., the Western Electricity Coordination Council (WECC) and other standards, including the National Electrical Safety Code (NESC) and standards issued by the Occupational Safety and Health Administration (OSHA) and the American National Standards Institute (ANSI).

LAND MANAGEMENT PLANS, ENVIRONMENTAL COMPLIANCE and RESOURCE PROTECTION

Forest Land Management Plans

The Forest Service shall be responsible for determining whether activities conducted under the permit and this operating plan are consistent with applicable land management plans.

The holder shall coordinate with the Forest Service in the preliminary design stage for the holder's proposed non-routine powerline facility maintenance, road construction and reconstruction, and fiber optic cable installation projects in the permit area regarding whether these projects are consistent with applicable land management plans.

Environmental Compliance

See Attachment 2, Activity Charts, for guidance on environmental compliance associated with various activity levels conducted by the holder under this operating plan.

Best Management Practices

GENERAL BEST MANAGEMENT PRACTICES (BMPs)

The holder's powerline facility maintenance activities and projects in the permit area shall follow applicable Forest Service National Core BMPs, which are incorporated in the Forest Service's BMP Technical Guide. The Forest Service's BMP Technical Guide is posted at https://www.fs.usda.gov/naturalresource/watershed/pubs/FS_National_Core?BMPs_April2012.pdf.

Not all BMPs apply to every activity, and should be applied consistent with local conditions, resource values, and designated uses of water.

OLYMPIC NATIONAL FOREST BMPs

Attachment 3 details BMPs that are specific to Olympic National Forest. Topics include Invasive Non-Native Plant Species Prevention and Control; Herbicide Use; Erosion and Pollution Control; Revegetation; and Threatened, Endangered, and Sensitive Species Conservation Measures.

PERMIT HOLDER BMPs

Attachment 4 details BMPs that are specific to Clallam County PUD #1. Topics include Hazardous Materials Communication Plan, Spill Response Base, Pole Inspection Plan, Electric System Inspection Program, and Wood Pole Inspection and Maintenance Guidelines.

EMPLOYEE AND CONTRACTOR EDUCATION

Once this Operating Plan is in place the PUD will hold a meeting comprised of employees that may perform work on Forest Service Properties. The details of this Operating Plan will be discussed, and each employee will understand what they need to do to comply with this plan as it pertains to the work that they perform. The plan will be made readily available to all employees. Any current contractors that are working or scheduled to work on USFS properties for the PUD will receive a copy of this plan and will be given instructions as to how it applies to their work. Any new contracts on USFS properties will include a copy of this plan and specific guidance on how to abide by the plan.

Invasive Species

In planning activities in the permit area and in conducting supporting environmental analysis, the holder and the Forest Service shall strive to address the need to minimize the introduction and spread of invasive species as outlined in Attachment 3, Best Management Practices.

Pesticide Application

The holder shall comply with the pesticide application provision in the permit.

COORDINATION

Responsible Parties

The authorized officer for the Forest Service and the holder's designated principal contact or the programmatic contacts are responsible for implementation of this operating plan.

Types of Activities and Projects

The holder shall coordinate with the Forest Service regarding activities and projects planned or proposed by the holder under this operating plan as set forth in the permit and this operating plan and using the following activity descriptions of Classes A, B, C, and D as a guide.

Attachment 2 contains a table that lists specific activities by Class.

CLASS A ACTIVITIES

Class A includes routine activities that are deemed by qualified Forest Service specialists to involve minimal or no ground disturbance or impacts on vegetation inside and outside the linear right-of-way for the powerline facilities and that do not require additional environmental analysis or consultation for listed endangered or threatened species and cultural and historic resources.

Examples include but are not limited to mapping and inspections of poles, conductors, and other structures where large equipment, helicopters, or drones would be involved. Class A activities may be restricted during certain times or under certain conditions to prevent adverse environmental, cultural, or species or habitat impacts.

A telephone call or email from the owner or operator to the authorized officer is sufficient prior notice for Class A activities.

Class A activities approved under an operating plan or agreement must be acknowledged (not approved) by the authorized officer by telephone call or email within 24 hours of receipt of prior notice. The owner or operator may proceed with Class A activities upon authorized officer acknowledgment or if the authorized officer does not acknowledge receipt of prior notice within 24 hours.

CLASS B ACTIVITIES

Class B includes routine activities that are deemed by qualified Forest Service specialists to involve minimal ground disturbance and impacts on NFS lands inside and outside the linear right-of-way for the powerline facilities and that do not require additional environmental analysis or consultation for listed endangered or threatened species and cultural and historic resources.

Examples include but are not limited to routine vegetation management, routine powerline facility maintenance included pole and conductor replacement, routine maintenance of access roads and trails and NFS roads and NFS trails, and routine repair or replacement of fiber optic cable.

An email or letter regarding a single project or an email transmitting an annual schedule of work is sufficient prior notice for Class B activities. Prior notice must be made a minimum of 30 days before work is to begin. The negotiated time for Forest Service response to prior notice on Routine Vegetation Management listed in Class B activities in the attached Activity Chart is 30 days.

The owner or operator may satisfy prior notice for Class B activities conducted under an approved operating plan or agreement by submitting a single project notice or an annual schedule of work that identifies the activities planned for a calendar year. If deemed practical by the authorized officer, the owner or operator may be allowed to submit an annual schedule that covers up to 5 years of Class B activities.

Prior written acknowledgment from the authorized officer by email or letter is required, except for routine vegetation management where all three of the following conditions are met:

- The owner or operator has submitted an email or letter requesting approval of a single routine vegetation management project or an annual schedule of work for routine vegetation management to the authorized officer in accordance with the specified timeframe in the approved operating plan; and
- The proposed routine vegetation management is in accordance with the approved operating plan; and
- The authorized officer has failed to respond to the email or letter in accordance with the specified timeframe in the approved operating plan.

CLASS C ACTIVITIES

Class C activities involve new, changed, or additional uses or areas under 36 CFR 251.61. Due to their complexity, impacts, and scope, Class C activities will typically require additional environmental analysis and consultation for listed endangered or threatened species and cultural and historic resources.

Examples include but are not limited to new construction, rerouting of powerline facilities, and refurbishment or replacement of powerline facility components such as conductors, ground wires, and fiber optic cable; non-routine powerline facility maintenance; hazard tree felling or pruning that extends beyond the linear right-of-way for a powerline facility; road and trail construction and reconstruction; non-routine road and trail use and maintenance, such as installation of drainage features, fences, gates, or signs; and installation of fiber optic cable on powerline facilities.

Submission of an application (form FS-299) is required for prior notice of Class C activities. Prior notice must be made a minimum of 180 days before work is to begin.

Per 36 CFR 251.61, Class C activities require prior written approval in a signed letter from the authorized officer. The timeframe for approval will vary based on the complexity of the additional environmental analysis and consultation for listed endangered or threatened species and cultural and historic resources required for Class C activities. A separate special use authorization is not required. However, if Class C activities are approved, the existing powerline facility authorization must be amended to reflect the approved activities.

CLASS D ACTIVITIES

Class D activities include emergency vegetation management and emergency powerline facility maintenance. Class D activities do not require additional environmental analysis and consultation for listed endangered or threatened species and cultural and historic resources.

Examples include but are not limited to unplanned felling or pruning of hazard trees to prevent imminent contact with a powerline facility and immediate repair or replacement of powerline facility components that is necessary to restore electrical service. Ensure approved operating plans and agreements require that owners and operators take measures necessary to protect natural resources during emergency operations. Routine vegetation management and powerline facility maintenance should be planned and approved to mitigate Class D activities.

Prior notice is not required for Class D activities but is suggested to the extent practicable to allow for any necessary Forest Service actions, such as notification of the State Historic Preservation Office.

Prior acknowledgment or approval from the authorized officer is not required for Class D activities. Appropriate prior notice and response are required before conducting other classes of activities in the vicinity of the owner's or operator's emergency response.

The owner or operator must notify the authorized officer by email of the location and type of Class D activities as soon as practicable, but not later than 24 hours after completion of the activities. Within 30 days of completing Class D activities, the owner or operator must submit to the authorized officer a written report detailing at a minimum the location, type, and scope of the activities conducted, the reason they were conducted, the methods used to conduct them, and the resulting benefits. The owner or operator may be required to conduct consultation under the ESA and NHPA following Class D activities to determine impacts on listed threatened or endangered species or their habitat and cultural and historic resources (FSM 2670). The Forest Service may charge cost recovery fees for any costs incurred by the Agency in connection with consultation required after Class D activities.

Meeting Regarding Activities and Projects

The holder and the Forest Service shall plan to meet annually regarding activities and projects planned or proposed by the holder or the Forest Service within the permit area. The holder and the Forest Service may agree to shorter intervals based upon resources and planned or proposed activities or projects. Either party may request, organize, and schedule additional meetings. Discussion topics may include but are not limited to holder issues such as:

- Clarify what activity level an activity fit for USFS notification and approval.
- Annual vegetation, road and powerline maintenance planned
- Use of National Forest System roads and trails
- Operations during fire season
- Unauthorized use
- Long term planning for powerline expansion

At least 30 days prior to a scheduled meeting, the holder and the Forest Service shall provide each other with a description of and schedule for planned activities and proposed projects to be addressed at the meeting. A proposed Annual Utility Meeting Checklist is included as Attachment 7.

Notice of Forest Service Activities

The Forest Service shall give advance notice to and coordinate with the holder regarding activities and projects planned or proposed by the Forest Service within the permit area that may impact operation or maintenance of or access to the powerline facilities, such as but not limited to:

- Timber sales
- Major road maintenance
- Access restrictions and Closure Orders
- Land sales or exchanges
- Prescribed fire

- Forest Plan amendments

When preparing a package for a timber sale near the holder's powerline facilities on National Forest System lands, the Forest Service shall include the following language in the associated National Environmental Policy Act document, timber sale prospectus, and timber sale contract:

> No sale operations are allowed within XXX feet of [holder's] powerline facility right-of-way without XX days prior written notice to the [holder] and review of and compliance with [holder's] safety plan for the powerline facilities. Written notice should be given to [name, address, email address, and telephone number].

Notice of Holder Activities

The holder shall provide prior notice to the authorized officer of the holder's activities in accordance with applicable law and applicable prior notification, coordination, and acknowledgment or approval requirements in 36 CFR 251.61(a), the permit, and this operating plan, using Attachment 2, Activity Charts as a guide.

Project Managers and USFS Point of Contact

The holder shall designate a project manager for each project to represent the holder in all matters pertaining to that project. The holder shall ensure that contractors and vendors projects have a copy of the permit and this operating plan, including attachments, before commencement of project work.

The Forest Service shall designate a point of contact for each project to represent the Forest Service in all matters pertaining to that project. The Forest Service may conduct onsite monitoring and inspection of projects to ensure compliance with the permit, this operating plan, and Forest Service requirements such as environmental mitigation.

The holder or its contractor and the Forest Service may participate in the final walk-through for projects when they are complete. The holder shall give the Forest Service prior notice of completion of projects to facilitate Forest Service participation in final walk-throughs. The holder and the Forest Service shall agree on how much notice is required for each project.

The holder is responsible for contractors' and vendors' compliance with the terms and conditions of the permit and this operating plan in performing work on projects. The holder shall notify the Forest Service immediately of any damage to NFS lands or resources in connection with project work performed by contractors and vendors.

POWERLINE AND RELATED FACILITIES

Objectives and Standards

The holder's maintenance objectives for the powerline facilities are to provide for cost-effective, safe, and reliable operation while minimizing impacts on the environment. All powerline facility maintenance activities and projects shall meet all applicable safety and industrial standards, including FERC, NERC, NESC, OSHA, and WECC standards.

Inspections

Poles – Test and treat wood poles every 10 years.

Overhead Distribution System – Alternating patrol inspection and detailed inspection every 5 years.

Underground Distribution System - Alternating patrol inspection and detailed inspection every 5 years.

Transmission System – Patrol inspection yearly and detailed inspection every 10 years.

Vegetation – Overhead powerline right of way patrol inspection yearly. Underground powerline right of way patrol inspection every 5 years.

The following reference documents are incorporated in Attachment 4: Pole Inspection Management Plan and Clallam County PUD #1 Electric System Inspection Program.

Routine maintenance operations

Transportation/Equipment

Patrols, inspections, and most routine maintenance is performed utilizing pickup trucks and squirt boom bucket trucks. Pole replacements, underground cable replacements and outage restorations typically utilize larger 2-man bucket trucks, a digger derrick, and a backhoe. Right of way maintenance and tree trimming is conducted using tractor mowers and bucket trucks.

Utility Infrastructure

Poles are either cedar or fiberglass. All transmission poles going forward are fiberglass and distribution poles are typically cedar. Underground cable is direct buried cable or cable in conduit. All new underground cable installations going forward utilize cable in conduit.

Best Management Practices related to Powerline Facility Work

See Attachment 4, Best Management Practices.

ROADS, TRAILS, AND WINTER ACCESS

Use and Maintenance of National Forest System (NFS) Roads and Trails

USE OF NFS ROADS

The Forest Service uses a Motorized Vehicle Use Map (MVUM) to convey information on road use. The MVUM shows roads and trails open to motorized vehicles, and what type of motorized vehicles the public can use on each one. Roads and trails not shown on the map are closed to motor vehicle use. Olympic National Forest's MVUM can be found at the following link: Olympic National Forest - Maps & Publications (usda.gov)

Any road maintenance work on NFS roads, other than cutting out fallen trees, requires a Road Use Permit.

ROAD USE PERMITS

Road use permits authorize the use of NFS roads, NFS road segments, and associated transportation facilities of purposes of commercial hauling or as an exception to traffic rules and use restrictions. Road use permits may authorize use of a road that is otherwise closed to access non-federal property; road use that is otherwise restricted by road use order or a regulation; or motor vehicle use on NFS roads that are not designated for that use on a motor vehicle use map.

Overload road use permits or overweight bridge use permits may be required when loads exceed State law, Forest limits established by order, or posted weight limits.

Application for a road use permit should be made using form FS-7700-40.

Analysis through the NEPA process is required when:

- Public motorized traffic will be restricted during use by the holder.
- Use is on a road where motorized traffic is not designated.
- Use is on a trail which will be converted to a road under the road use permit.
- Snow removal will be authorized.
- The road is to be constructed to a higher standard.
- Whenever the authorized use is in conflict with the Motor Vehicle Use Map designation (type of vehicle or time of use).

CLEARING ROADS AND TRAILS

When cutting out trees that have fallen across NFS roads or trails, the trees should be cut out to the full clearing width of the road or trail. Cut logs should be placed in a stable position and not in a drainage feature such as a ditch or culvert intake. If emergency response does not afford time to meet this standard at the time of initial clearing, crews should follow up within 7 days to meet the standard.

GATED NFS ROADS AND TRAILS

The following gated NFS roads and trails are accessed by the PUD:

Underground cable is installed along the Olympic Discovery Trail in Section 23, T30N R10W, identified as ODT Segment 1 in the authorization. The PUD has a lock in the Discovery Trail bollard to access this area. The trail and gate are maintained and managed by Clallam County.

Underground cable is installed adjacent to NFS Road 3040-595, which provides access to the North Point Communication Site, and is closed by a gate at milepost 1.4, approximately 0.4 miles before the communications site. The gate and locks are maintained and managed by the communications site leaseholders.

Underground cable is installed adjacent to the access road for Klahowya Campground in Sections 27 and 28, T30N R11W. The road is seasonally closed by a gate near the junction with Highway 101. The gate and locks are maintained and managed by the Forest Service.

Underground cable is installed adjacent to NFS Road 3030 in Section 36, T30N R7W, which provides access to the Black Diamond Water District's intake facilities on the South Branch Little River. The road is closed by a gate near the junction with the County road. The gate is maintained and managed by the Black Diamond Water District.

Maintenance of Holder-Developed Roads and Trails

INVENTORY

N/A

STANDARDS AND INSPECTIONS

N/A

GATES
N/A

BRIDGES
N/A

Winter Access Procedures
Historically snowplows or snowmobiles have not been needed to access the power lines on USFS property.

Traffic Control
The PUD follows WSDOT's Traffic Control Plan procedures for traffic control on State roadways, and Clallam County's traffic control requirements on County roads.

Intermittent to 30-minute traffic delays controlled by flaggers can be expected during overhead tree trimming operations along FSR 2918 Segment 2 and Snider WC Segments 1, 9 and 10.

Roads and Trails Best Management Practices
See Attachment 4, Best Management Practices.

VEGETATION MANAGEMENT

Permit Requirements
Vegetation management requirements outlined in the permit take precedence over language in the operating plan.

Vegetation Management Objectives
The parties' maintenance objectives for vegetation management under this operating plan are to:

- Maintain reliability, address public safety, and eliminate the risk of vegetation-caused outages.
- Prevent the introduction and spread of invasive plant species.
- Maintain and enhance vegetation conditions to improve habitat for fish, wildlife, and plant species and water and soil resources.
- Encourage low growing, native vegetation.

Types of Vegetation Management and Activities
This section lists the activities in the Activity Chart and provides details regarding the methods and BMPs used to address those activities.

INSPECTIONS
Hazard tree inspections for overhead lines are done yearly or sooner if trees have fallen into the

overhead power lines. Underground power line inspections are conducted every 5 years. The inspections are not done at any consistent time of the year, inspections are an ongoing process throughout the entire electrical system. All powerlines identified in this operating plan are accessible via adjacent roads. Inspections are performed from vehicles and walking the right of ways.

VEGETATION MAINTENANCE STANDARDS

Overhead line vegetation maintenance typically requires that all trees within the corridor width be removed and that limbs reaching into the corridor also be removed. Overhead line corridors that are also used for equipment access during repair are also mowed to maintain a clear path for emergency repair access.

Underground line vegetation maintenance typically requires that all trees and underbrush be removed within 10 feet of pad-mounted equipment such as junction boxes and transformers. Vegetation removal over buried cables is typically not required.

The following table lists the corridor type and trimming and mowing cycles for each line segment identified in the authorization.

Location	Line KV	Corridor Type OH (overhead) UG (underground)	Trim cycle in years	Mow cycle in years
Black Diamond WD Seg. 1	7.2	UG	N/A	N/A
FSR 2918 Seg. 1	7.2	UG	N/A	N/A
FSR 2918 Seg. 2	7.2	OH	3	N/A
FSR 3040 Seg. 1	7.2	UG	N/A	N/A
FSR 3040 Seg. 2	7.2	UG	N/A	N/A
FSR 3040 Seg. 3	7.2	UG	N/A	N/A
FSR 3040 Seg. 4	7.2	UG	N/A	N/A
FSR 3040595 Seg. 1	7.2	UG	N/A	N/A
FSR 3079011 Seg. 1	7.2	UG	N/A	N/A
Hoh River Seg. 1	14.4	UG	N/A	N/A
Hoh River Seg. 2	14.4	UG	N/A	N/A
Hoh River Seg. 3	14.4	UG	N/A	N/A
Hoh River Seg. 4	14.4	UG	N/A	N/A
Hwy 101 Seg. 1	7.2	UG	N/A	N/A
Hwy 101 Seg. 2	12.5	OH	3	5
Hwy 101 Seg. 3	12.5	OH	3	5
Hwy 101 Seg. 4	12.5	OH	3	5
Hwy 101 Seg. 5	7.2	OH	3	5
Hwy 101 Seg. 6	12.5	UG	N/A	5
Hwy 101 Seg. 7	12.5	UG	N/A	5
Hwy 101 Seg. 8	12.5	OH	3	5
Klahowya Campground Seg. 1	7.2	UG	N/A	N/A
Little River Rd Seg. 1	7.2	OH	3	N/A
Louella GS Seg. 1	7.2	OH	5	N/A
Louella GS Seg. 2	7.2	OH	5	N/A
Louella GS Seg. 3	7.2	UG	N/A	N/A
ODT Seg. 1	7.2	UG	N/A	N/A
Oly Hot Springs Rd Seg. 1	7.2	OH	5	N/A
Palo Alto Rd Seg. 1	7.2	OH	5	N/A
Palo Alto Rd Seg. 2	7.2	OH	5	N/A
Snider WC Seg. 1	7.2	UG	N/A	N/A
Snider WC Seg. 2	7.2	OH	3	N/A
Snider WC Seg. 3	7.2	OH	3	N/A
Snider WC Seg. 4	7.2	OH	3	N/A
SR 113 Seg. 1	69	OH	3	5
SR 113 Seg. 2	69	OH	3	5
SR 113 Seg. 3	69	OH	3	5

CANOPY PRUNING

Typically canopy pruning is performed from bucket trucks. Canopy pruning may be performed by climbing if bucket truck access is not possible. Helicopter pruning is not a typical form of tree trimming at Clallam County PUD but may be used in specific situations in the future.

GROUND VEGETATION

Right of way mowing is performed with either a steel track excavator with multiple heads or a

forestry model rubber track loader with multiple heads. Ground mowing is used for taller, thicker brush and small trees. Once ferns, salal, snowberry and other native plants take hold then these areas are selectively ground brushed by cutting only tall growing trees by chainsaw going forward.

PESTICIDE USE RELATED TO CONTROLLING GROUND VEGETATION
Clallam County PUD only uses pesticides on Clallam County PUD owned properties at this point.

SLASH MANAGEMENT
The methods of slash disposal will be determined and agreed upon with the Forest Service during the project notification and approval process. Slash may be chipped and/or removed when equipment access is available. When equipment access is not available, slash may be left along the timbered edge of the permit corridor, such that access to power poles and structures is not affected.

INVASIVE SPECIES PREVENTION AND TREATMENT

Prevention
Equipment that has been exposed to invasive species are cleaned before being moved to another unaffected area on the same jobsite. Equipment is cleaned onsite and then washed at our operations facility wash rack before moving to the next job site. For cleaning equipment on USFS land, the PUD and ONF shall agree on methods of cleaning, locations of the cleaning, and control of off-site impacts, if any.

Inspection
Invasive species inspections are performed yearly, coincident with hazard tree inspections.

Treatment
The PUD will work with the Forest Service to determine the most effective and appropriate methods to treat invasive species within the permit area.

Best Management Practices Related to Invasive Species
See Attachment 3, Forest Service BMPs.

HAZARD TREES

Inspection and Inventory
Overhead powerline right of ways will be inspected for hazard trees yearly, typically in the fall. Underground powerline right of ways will be inspected every 5 years. If only a few trees are identified as hazard trees to be removed, then they will be marked in the field and identified on a map and submitted to the appropriate USFS representative. If more trees are identified, then the list will be submitted to the USFS via an ArcGIS layer. Individual tree data will be inventoried as follows:

- How tree is marked as hazard tree
- DBH, (diameter at breast height)
- What makes it a hazard tree
- Estimate of merchantable timber
- If it was imminent and was already removed
- If not imminent, when removal is planned
- Will it be topped or removed at the stump

- Location mapped

Review and Approval by Forest Service
Unless the situation presents an immediate emergency as defined in the Vegetation Management section of Attachment 1, all trees must be marked or otherwise designated for cutting by a Forest Officer before cutting occurs.

Treatment of Hazard Trees
Hazard trees are topped at the level that they are not a danger to adjacent power lines or structures if they are bucket truck accessible or are climbable. If the hazard tree is not safe to climb or accessible by bucket truck then they are removed at the stump.

Timber marked for cutting, unless otherwise agreed, must be cut into standard log lengths or other products as specified by the Forest Service. Standard dimensions for a minimum log are 16 feet in length and 6 inches diameter inside bark on the small end.

Payment for and Disposal of Timber
When trees need to be felled, they must be evaluated for their merchantable value and appropriate payment made to the Forest Service. This is the case even when a hazard tree that has been deemed an imminent threat and has already been taken down or topped. It is also the case when the tree is simply left on the ground.

After receiving notification from PUD that hazard tree removal is proposed, the permit administrator will work with the Forest Service timber sale staff to determine how the timber will be disposed of, which will depend on the volume, value, and location of the trees. This determination should be made after the trees are identified and before they are taken down. In some cases, the trees may be left on the ground, while other times the trees may need to be decked at an approved location so they can be easily accessed for sale.

Timber cut or destroyed shall be paid for at current stumpage rates for similar timber in the Olympic National Forest. The Forest Service reserves the right to dispose of the merchantable timber to those other than the holder at no stumpage cost to the holder. Unmerchantable timber shall be disposed of as directed by the authorized officer.

INTEGRATED VEGETATION MANAGEMENT (IVM)
The goal for IVM powerline facility vegetation management is to convert vegetation in the linear right-of-way for the powerline facilities to low-growing plant communities that are non-invasive and that keep tall- growing vegetation out.

Machine operated ground mowing is used for taller, thicker brush and small trees. Once ferns, salal, snowberry and other native plants take hold then these areas are selectively ground brushed by cutting only tall growing trees by chainsaw going forward.

BEST MANAGEMENT PRACTICES
See Attachment 4.

EMERGENCY MAINTENANCE

General

Emergency powerline facility maintenance and emergency vegetation management involve unexpected work or activities conducted in response to situations created by events such as windstorms, snowstorms, fires, floods, vandalism, or other events that interrupt or pose an imminent threat to the transmission of electricity in the permit area or road conditions that block access needed to respond to emergency events in the permit area. These situations represent potential threats to life, public safety, or property. Emergency powerline facility maintenance and emergency vegetation management shall be accomplished in an expedient manner to restore or maintain service to the communities served by the powerline facilities in the permit area, including homes, hospitals, and emergency services.

Emergency powerline facility maintenance may include clearing blocked culverts, repairing roads, replacement of downed poles or transmission towers, or repairing segments of a powerline facility. Emergency vegetation management shall be conducted in accordance with the permit.

Notice of Emergency Maintenance

The holder shall notify the Forest Service by telephone or email of the location and the type and scope of any emergency powerline facility maintenance or the quantity of emergency vegetation management as soon as possible but no later than 24 hours after initiating the response. The holder shall submit a written report within 30 days of completion of the response.

Resource Protection

The holder shall take all measures necessary to protect natural resources during emergency powerline facility maintenance and emergency vegetation management to the extent feasible. If emergency powerline facility maintenance or emergency vegetation management jeopardizes threatened or endangered species or their critical habitat, cultural resources, or human remains or objects of cultural patrimony as defined by the Native American Graves Protection and Repatriation Act, the holder shall comply with the permit and with applicable environmental laws and regulations that apply in the event of an emergency in the permit area.

FIRE PREVENTION AND CONTROL

Fire Prevention and Suppression Plan

In conducting activities and projects in the permit area, the holder's employees, contractors, and vendors shall adhere to the fire prevention and control measures that follow. Clallam County PUD is currently developing a fire prevention and control plan that will be incorporated into this operating plan by amendment when completed.

Fire Prevention Measures

The holder shall take all measures necessary in operating and maintaining the powerline facilities to prevent fires from starting and spreading, including but not limited to the following:

FIRE EQUIPMENT
The holder shall ensure that all vehicles operating in the permit area carry a serviceable shovel and a fire extinguisher with at least a 5-B:C rating from the Underwriters Laboratories.

SAFETY PROCEDURES AND FIRE PREVENTION MEASURES
The holder shall ensure that its employees, contractors, and vendors working in the permit area have training on the safety procedures and fire prevention measures in the fire prevention and suppression plan for the permit area. The holder shall ensure that its employees, contractors, and vendors follow the safety procedures in the fire prevention and suppression plan and take all measures necessary, consistent with that plan, to prevent fires from starting and spreading.

INDUSTRIAL FIRE PRECAUTION LEVEL (IFPL)
IFPL levels and corresponding restrictions and prohibitions are shown below:

IFPL Level	Industrial Fire Precaution Levels Definition
Level One **I**	**Closed Season** - Fire precaution requirements are in effect. A Fire Watch/Security is required at this and all higher levels unless otherwise waived.
Level Two **II**	**Partial Hootowl** - The following may operate only between the hours of 8 p.m. and 1 p.m. local time: power saws except at loading sites; cable yarding; blasting; welding or cutting of metal.
Level Three **III**	**Partial Shutdown** - the following are prohibited except as indicated: **cable yarding** - except that gravity operated logging systems employing nonmotorized carriages may operate between 8 p.m. and 1 p.m. when all blocks and moving lines are suspended 10 feet above the ground except the line between the carriage and the chokers. **power saws** - except power saws may be used at loading sites and on tractor/skidder operations between the hours of 8 p.m. and 1 p.m. local time. **In addition**, the following are permitted to operate between the hours of 8 p.m. and 1 p.m. local time: Tractor, skidder, feller-buncher, forwarder, or shovel logging operations where tractors, skidders, or other equipment with a

	blade capable of constructing fireline are immediately available to quickly reach and effectively attack a fire start; mechanized loading or hauling of any product or material; blasting; welding or cutting of metal any other spark emitting operation not specifically mentioned.
Level Four **IV**	**General Shutdown - All Operations**

IPFL STATUS CHECKS AND WAIVERS

The holder's employees, contractors, and vendors shall check the IFPL daily during the fire season (usually June through October depending upon fire indicators) before conducting any activities or projects in the permit area. The holder's employees, contractors, and vendors working in the permit area shall comply with the restrictions and prohibitions under the applicable IFPL, unless a waiver of the applicable IFPL granting permission to use otherwise prohibited equipment or engage in otherwise prohibited activities is obtained in writing from the Forest Service. Any IFPL waiver shall be attached as an appendix to this operating agreement. The Forest Service may require the holder's employees, contractors, and vendors to take additional resource protection measures in conducting activities and projects in the permit area to be consistent with the applicable IFPL. These measures shall be listed in the fire waiver.

FIRE SAFETY INSPECTIONS

The Forest Service may make periodic inspections to ensure the holder's employee, contractor, and vendor compliance with fire safety requirements. Failure to comply with these requirements shall result in a temporary shutdown of all activities or projects conducted by the holder's employees, contractors, and vendors in the permit area until full compliance is achieved.

COMMUNICATION

All field personnel are issued a cell phone and can reach a dispatcher at any time to report a fire. Cell phone coverage is adequate at all USFS corridor segments or available within a 10-minute drive.

FIELD CREW PREPAREDNESS

All vehicles are equipped with a 5-pound fire extinguisher and field personnel are trained on how to use them. Field crews also have a 5-gallon water source and shovels that can be used to help extinguish small fires. No specific employees are dedicated to for fire prevention. Contractors are required to submit their fire prevention plan and also will be trained to meet USFS standards when working on USFS lands.

ADDITIONAL FIRE PREPAREDNESS

Crews do not operate chainsaws in fire prone areas during red flag days.

FIRE PREVENTION RELATED TO POWERLINE INFRASTRUCTURE
Clallam County PUD performs the following to aid in fire prevention:

Replace cedar transmission poles with fire resistant fiberglass poles
Standardized fire-resistant fiberglass crossarms
De-energize circuits through treed areas that do not affect customers during fire season
Set breakers to non-reclose when logging is being performed near power lines
Convert some overhead power lines to underground in treed areas
Powerline rebuilds are built to current NESC Code, PUD specifications and WSDOT clearances per WAC 468-34-290.
Vegetation and combustible materials within 20' of power poles is removed, with extra focus on poles with fuses on them.

PUBLIC SAFETY POWER SHUTOFFS
Public Safety Power Shutoffs are triggered when wind conditions exceed 60 mph combined with RFW and/or relative humidity is less than 20%. These PSPS's are initiated by Bonneville Power Administration (BPA). BPA supplies all power to Clallam County PUD.

MISCELLANEOUS PROVISIONS

Principal Contacts and Communication Protocol

The individuals listed below are authorized to act in their respective areas for matters relating to this operating plan. The holder and the Forest Service shall update each other as soon as possible on any changes to these principal contacts. The principal contacts for each party shall contact and work with their counterparts to address any issues or concerns that arise in connection with this operating plan and to otherwise facilitate its implementation.

The Forest Service Permit Administrator will be the primary contact for all activities and coordination of approvals by the Authorized Officer (Forest Supervisor). An annual phone call between the Permit Administrator and the holder representative should occur during November each year to update contact information and share any plans that may affect operations in the coming year. The Permit Administrator will be the contact in emergency maintenance situations during Forest Service office hours. When emergencies arise after hours or on weekends, the holder Representative will notify the Permit Administrator within 24 hours of implementing emergency response.

Olympic National Forest
Annabelle Pfeffer
Permit Administrator
Olympic National Forest
1835 Black Lake Blvd SW
Olympia, WA 98512
Office Phone: 360-956-2294
Cell Phone: 360-552-5862
Email: annabelle.pfeffer@usda.gov

PUD#1 of Clallam County
Mike Hill
Engineering Manager
110 Idea Place
Carlsborg, WA 98324
Office Phone: 360-565-3286
Cell Phone: 360-460-5590
Email: mikeh@clallampud.net

Olympic National Forest
Kelly D. Lawrence
Forest Supervisor
Olympic National Forest
1835 Black Lake Blvd SW
Olympia, WA 98512
Office Phone: 360-956-2301
Email: kelly.lawrence2@usda.gov

PUD #1 of Clallam County
Terry Lind
Operations Manager
1936 W 18th
Port Angeles, WA 98363
Office Phone: 360-565-3295
Email: terrylind@clallampud.net

Olympic National Forest
After-hours emergency contact number:
Phone: 425-783-6150
Puget Sound Incident Command Center
(PSICC)

PUD #1 of Clallam County
After-hours emergency contact number:
Phone: 360-452-9771

Modifications

At any time, the holder may submit a proposed modification to this operating plan for review and approval by the authorized officer.

The authorized officer shall consider and respond to the proposed modification, to the maximum extent practicable, within 120 days from the date it was received by the authorized officer, with the understanding that such factors as the number of proposed operating plans and agreements and proposed modifications to approved operating plans and agreements under review by the authorized officer and the number of powerline facilities covered under a single operating plan or agreement may affect the practicability of approving a proposed modification within 120 days from the date of receipt.

Modifications to this operating plan proposed by the holder must be submitted in writing and, if approved by the authorized officer, must be signed and dated by the authorized officer and the holder.

Review and Expiration

Every 10 years from the approval date of this operating plan, the holder shall review and, as necessary, update this operating plan to be consistent with changed conditions and submit it to the authorized officer for review and approval.

Upon expiration of the permit, this operating plan shall expire, and the holder shall prepare a new proposed operating plan, either solely or in consultation with the authorized office, and submit it to the authorized officer for review and approval.

Use of Operating Plans and Agreements

All new and existing powerline facilities on NFS lands must have an approved operating plan or agreement that complies with section 512 of FLPMA, the Forest Service's implementing regulations, and directive FSH 2709.11 Chapter 80, except for new and existing powerline facilities on NFS lands authorized under a FERC license containing conditions on powerline facility maintenance and vegetation management that meet those requirements.

An **operating plan**, rather than an operating agreement, must be used for powerline facilities that:

1. Are subject to NERC reliability standards (200 kilovolts or more); and

2. Sold more than 1,000,000 megawatt hours of electricity during each of the 3 calendar years during the period of March 23, 2015, to March 23, 2018.

Activities conducted under an approved operating plan are subject to strict liability up to the limit specified in 36 CFR 251.56(h)(2), as amended, per occurrence (sec. 89, para. 1).

An **operating agreement** may be utilized for powerline facilities that:

1. Are not subject to NERC reliability standards (200 kilovolts or more); and/or

2. Sold less than 1,000,000 megawatt hours of electricity during each of the 3 calendar years during the period of March 23, 2015, to March 23, 2018.

Activities conducted under an approved operating agreement are subject to strict liability up to $500,000 per occurrence until March 23, 2028, at which time they are subject to strict liability up to the limit specified in 36 CFR 251.56(d)(2), as amended, per occurrence (sec. 89, para. 2).

Aircraft Operation – Manned and Unmanned

Generally, airspace is controlled by the Federal Aviation Administration (FAA), not the Forest Service. However, flight operations that are connected to activities on the ground such as infrastructure (pole/tower sets), sling loads, or vegetation work (helisaw/helicopter logging) do require advance notice and approval from the Authorized Officer. Landing sites also need specific authorization unless identified in the permit or easement.

The following are required for Unmanned Aircraft System (UAS or drones) use during utility operations:

1. Provide advance notification and obtain approval from the Authorized Officer (see Activity Chart).
2. Conduct all missions in accordance with FAA Regulations Part 107. https://www.faa.gov/uas/commercial_operators/.

3. Adhere to guidance found on page 16 of Forest Service Standards for UAS Operations at https://www.fs.usda.gov/sites/default/files/2020-07/Forest%20Service%20Standards%20for%20UAS%20Operations%2007012020.pdf

Superior Clauses

If there is any conflict between the terms of this operating plan and the terms of the permit, the terms of the permit shall control.

ATTACHMENTS

1. Definitions from USFS FSH 2709.11, Chapter 30
2. Activity Charts
3. Best Management Practices – Olympic National Forest
4. Best Management Practices - Clallam County PUD
5. NHPA Section 106 Direction
6. Project Notification Checklist
7. Annual Utility Meeting Checklist

Attachment 1. Definitions from US Forest Service Handbook 2709.11, Chapter 80

Access Road or Trail. For purposes of this directive, a road or trail constructed, operated, and maintained by an owner or operator that is necessary to access a powerline facility or its linear right-of-way.

Bulk Power System. A system consisting of powerline facilities and control systems necessary for operating an interconnected electric energy transmission network or any part of it, other than facilities used in the local distribution of electric energy, and electric energy from generation facilities needed to maintain transmission reliability.

Conductor. Cable or wire that transmits electricity.

Edison Electric Institute (EEI). The association that represents all investor-owned electric companies in the United States.

Electric Reliability Organization. An independent, self-regulating entity created by the Energy Policy Act of 2005 that has been certified by the Federal Energy Regulatory Commission (FERC) to enforce reliability standards for the bulk power system.

FERC License. An authorization issued by FERC for a non-Federal hydropower project and its primary powerline facility, which may include Forest Service conditions for powerline facility maintenance and vegetation management per section 4(e) of the Federal Power Act.

Fiber Optic Cable. An all-dielectric, self-supporting, non-conducting cable consisting of a central core surrounded by buffer tubes containing optical fibers and covered with a protective polyethylene jacket; an optical ground wire; or an overhead ground wire with optical fibers integrated into the design of the cable to provide communications capability as well as lightning protection.

Flashover. An electric discharge over or around the surface of an insulated conductor that may result in fire through the ignition of surrounding objects.

Hazard Tree. For purposes of vegetation management for a powerline facility, any tree, brush, shrub, other plant, or part thereof, hereinafter "vegetation" (whether located on NFS lands inside or outside the linear right-of-way for the powerline facility), that has been designated, prior to failure, by a certified or licensed arborist, qualified vegetation management specialist, or forester under the supervision of the owner or operator to be:

1. Dead; likely to die or fail before the next routine vegetation management cycle; or in a position that, under geographical or atmospheric conditions, could cause the vegetation to fall, sway, or grow into the powerline facility before the next routine vegetation management cycle; and

2. Likely to cause substantial damage to the powerline facility; disrupt powerline facility service; come within 10 feet of the powerline facility; or come within the minimum vegetation clearance distance as determined in accordance with applicable reliability and

safety standards and as identified in the special use authorization for the powerline facility and the associated approved operating plan or agreement.

Integrated Vegetation Management. The practice of promoting desirable, stable, low-growing plants that will resist invasion by tall-growing tree species through the use of appropriate, environmentally sound, and cost-effective methods, including a combination of chemical, biological, cultural, mechanical, and manual treatments.

Linear Right-of-Way. An authorized right-of-way for a linear facility, such as a road, trail, pipeline, powerline facility, fence, water transmission facility, or fiber optic cable, whose linear boundary is delineated by its legal description.

Master Powerline Facility Authorization. A permit or an easement that covers more than one powerline facility to streamline authorization of an owner's or operator's powerline facilities and administration of the associated powerline facility permits or easements, including consolidation of the number of powerline facility permits and easements and their expiration dates, points of contact, and operating plans or agreements.

Maximum Operating Sag. The theoretical position of a conductor when operating at 100 degrees Celsius, which must be accounted for when determining minimum vegetation clearance distance.

Minimum Vegetation Clearance Distance (MVCD). The calculated distance (stated in feet or meters) that is used to prevent flashover between conductors and vegetation for various altitudes and operating voltages. The MVCD is measured from a conductor's maximum operating sag to vegetation on NFS lands within the linear right-of-way for a powerline facility and on NFS lands adjacent to either side of the linear right-of-way for a powerline facility for purposes of felling or pruning hazard trees, which the owner or operator uses to determine whether vegetation poses a system reliability hazard to the powerline facility.

North American Electric Reliability Corporation (NERC). The Electric Reliability Organization certified by FERC for the purposes of developing and enforcing reliability standards for the bulk power system in North America.

North American Electrical Power Grid (the Electrical Grid). The interconnection of hundreds of thousands of miles of high-voltage powerline facilities and millions of miles of low-voltage powerline facilities with distribution transformers that connect thousands of power plants to hundreds of millions of electricity customers across North America.

Operating Plan or Agreement for a Powerline Facility (Operating Plan or Agreement). A plan or agreement prepared by the owner or operator of a powerline facility, approved by the authorized officer, and incorporated by reference into the corresponding special use authorization that provides for long-term, cost-effective, efficient, and timely inspection, operation, maintenance, and vegetation management of the powerline facility on NFS lands within the linear right-of-way for the powerline facility and on NFS lands adjacent to either side of the linear right-of-way to fell or prune hazard trees and to construct, reconstruct, and maintain access roads and trails, to enhance electric reliability, promote public safety, and avoid fire hazards.

Owner or Operator. For purposes of a powerline facility, the owner or operator of the powerline facility or a contractor or other agent engaged by the owner or operator of the powerline facility.

Powerline Facility. One or more electric distribution or transmission lines authorized by a special use authorization, and all appurtenances to those lines supporting conductors of one or more electric circuits of any voltage for the transmission of electric energy, overhead ground wires, and communications equipment that is owned by the owner or operator; that solely supports operation and maintenance of the electric distribution or transmission lines; and that is not leased to other parties for communications uses that serve other purposes.

Powerline Facility Maintenance.

1. Emergency Maintenance. Immediate repair or replacement of any component of a powerline facility that is necessary to prevent imminent loss, or to redress the loss, of electrical service due to equipment failure in accordance with applicable reliability and safety standards and as identified in an approved operating plan or agreement.

2. Non-Routine Maintenance. Realigning, upgrading, rebuilding, or replacing an entire powerline facility or any segment of it, including reconductoring, as identified in an approved operating plan or agreement.

3. Routine Maintenance. Repair or replacement of any component of a powerline facility due to ordinary wear and tear, such as repair of broken strands of conductors and overhead ground wire; replacement of hardware (such as insulator assembly) and accessories; maintenance of counterpoise, vibration dampers, and grading rings; scheduled replacement of decayed and deteriorated wood poles; and aerial or ground patrols to perform observations, conduct inspections, correct problems, and document conditions to provide for operation in accordance with applicable reliability and safety standards and as identified in an approved operating plan or agreement.

Reliability Standard. A requirement developed and enforced by NERC to provide for reliable planning and operation of the bulk power system in North America, including operation of existing bulk power system facilities and the design of planned additions or modifications to those facilities to the extent necessary to provide for reliable operation of the bulk power system, but not including any requirement to enlarge bulk power facilities or to construct new transmission or generation capacity.

Tort. A civil wrong, other than breach of contract, for which a remedy may be obtained, usually in the form of damages, which typically falls into one of the following four categories:

1. An intentional act resulting in harm;

2. An act involving unlawful conduct causing unintentional harm;

3. An unintentional act involving an unreasonable risk of harm; or

4. An act resulting in accidental harm for which, because of the hazards involved, the law imposes strict or absolute liability despite the absence of fault.

Vegetation Management.

1. Emergency Vegetation Management. Unplanned pruning or felling of vegetation on NFS lands within the linear right-of-way for a powerline facility and unplanned pruning or felling of hazard trees on NFS lands adjacent to either side of the linear right-of-way that have contacted or present an imminent danger of contacting the powerline facility to avoid the disruption of electric service or to eliminate an immediate fire or safety hazard.

2. Non-Emergency (Routine) Vegetation Management. Planned actions as described in an operating plan or agreement periodically taken to fell or prune vegetation on NFS lands within the linear right-of-way for a powerline facility and on NFS lands adjacent to either side of the linear right-of-way to fell or prune hazard trees to ensure normal powerline facility operations and to prevent wildfire in accordance with applicable reliability and safety standards and as identified in an approved operating plan or agreement.

Attachment 2. Activity Charts

CHART 1. ACTIVITY CLASS DESCRIPTIONS, NOTICE, AND APPROVAL

Class	Description	Prior Notice	Prior Acknowledgement or Approval	Subsequent Notice
A	Routine activities involving minimal or no ground disturbance and no impacts to vegetation and do not require additional analysis or consultation. Examples: inspections, ground and aerial patrols, and mapping.	Telephone call or email	Acknowledgment from AO by telephone or email	N/A
B	Routine activities involving minimal ground disturbance or impacts to NFS lands and do not require additional analysis or consultation. Examples: routine vegetation management, routine powerline facility maintenance, routine maintenance of roads and trails, and routine repair or replacement of fiber optic cable.	Minimum 30-day notice. Recommended use of Notification Checklist or provide at annual meeting.	Prior written acknowledgment from the authorized officer by email or letter is required with some exceptions.	N/A
C	New, changed, or additional uses or areas. Due to their complexity and scope, these activities will typically require additional analysis and consultation. Examples: new construction and rerouting of powerline facilities; non-routine powerline facility maintenance; major hazard tree removal that extends beyond the linear right-of-way; road and trail construction and reconstruction; non-routine road and trail use and maintenance, e.g., involving installation of drainage features, fences, gates, or signs; and installation of fiber optic cable on powerline facilities.	Minimum 180-day notice. Submission of an application (form FS-299) is required.	NEPA decision to approve. The existing powerline permit must be amended, or a new authorization issued to authorize the approved activities.	N/A
D	Emergency vegetation management and emergency powerline facility maintenance that do not require additional analysis and consultation. Examples: unplanned pruning or removal or hazard trees to prevent imminent contact with a powerline facility and immediate repair or replacement of powerline facility components that is necessary to restore electrical service.	N/A	N/A	Within 24 hours of initiating activity telephone or email AO. Within 30 days submit a detailed written report to AO.

CHART 2. SPECIFIC ACTIVITIES BY CLASS

Activities	Class A Activity	Class B Activity	Class C Activity	Class D Activity	Comments
INSPECTIONS					
Ground inspections	X				
Cultural surveys			X		ARPA permit needed
Other resource surveys	X				
UAS inspections with landings within the ROW		X			See USFS UAS guide.
UAS inspections with landings outside the ROW			X		See USFS UAS guide.
Manned aircraft inspections with no landings on NFS lands					No authorization or notification required.
Manned aircraft inspections with landings on NFS lands		X	X		Level of approval dependent on if landing zones were authorized at permit issuance. Always consult with forest aviation lead
ABOVE-GROUND LINE POWERLINES					
Maintenance and replacement of equipment on poles or towers	X				
Repair of downed powerline or fiber optic line				X	
Single pole replacement with like pole		X			
Replacement of several poles in one area		X			
Tower replacement		X	X		Depending on scope of project.
Emergency repairs within ROW				X	Typically storm response
Construction of new overhead powerline			X		
Relocation of overhead powerline			X		
UNDERGROUND POWERLINES					
Maintenance of line through vault boxes	X				

Activities	Class A Activity	Class B Activity	Class C Activity	Class D Activity	Comments
Replacement of aged buried line		X	X		Depends on if the line will simply be pulled through existing conduit or replacement line will be buried alongside new line
Construction of new buried powerline			X		
Relocation of buried powerline			X		
Overhead line converted to buried powerline			X		
VEGETATION MANAGEMENT					
Planned 3-5 year vegetation clearing cycle		X			
"Touch up" vegetation clearing between 3-5 year cycle		X			
Hazard tree removal within the ROW		X			
Hazard tree removal outside of the ROW			X		
Pesticide/herbicide application			X Pesticide Use Permit (PUP)		A PUP is required each year. Permit amendment not needed.
Pulling invasive plants		X			
Emergency vegetation work				X	Typically storm response
Slash management		X			If burning piles is planned, it may elevate this up to Class C.
ACCESS & ROUTE MAINTENANCE					
Routine maintenance of authorized access trails or roads that are not NFS routes including gates or traffic control devices		X			

Activities	Class A Activity	Class B Activity	Class C Activity	Class D Activity	Comments
Routine maintenance of authorized access trails or roads that are NFS routes including gates or traffic control devices.			Road Use Permit required		
Motorized travel outside of authorized access routes including unauthorized over snow routes		X	X		Depends on scale and location
Non-routine maintenance of non-USFS roads or trails.			X		For example, installing culverts or bridges
Emergency access route work				X	Typically storm response
Snowplowing of NFS roads		X	X	X	Depends on what is addressed in permit and operating plan. If nothing - then engineering would issue a road use permit unless responding to emergency.
Snowcat operations	X				If routes are outlined in operating plan
MISCELLANEOUS					
Other utilities installed onto power poles			X		When power utilities allow other entities to install lines on their facilities, the entity must submit proposal to USFS.
Routine substation maintenance	X				
Replace substation fencing		X			
Installation of power utility owned fiber			X		
Additional facilities added within substation footprint			X		

Attachment 3. Best Management Practices – Olympic National Forest

This section provides Olympic National Forest's Best Management Practices for the following areas:

- Invasive Non-Native Plant Species Prevention and Control
- Herbicide Use
- Roads
- Aquatic Habitat
- Soil Resource and Mechanical Vegetation Management
- Pollution Control
- Threatened, Endangered, and Sensitive Species Conservation Measures

INVASIVE NON-NATIVE PLANT SPECIES PREVENTION AND CONTROL

There may be infestations of invasive plants and noxious weeds in the distribution line corridor. The following criteria and mitigation measures are designed to prevent the spread of existing infestations in the vicinity of project activities, and to prevent the introduction and spread of new infestations.

Prior to beginning vegetation management or ground-disturbing activities, the permittee will survey for and treat existing invasive plant infestations of species within the project area that are listed as priority 1 or priority 2 on the most current version of the Olympic National Forest invasive plant list (the 2022 list can be found at the end of this document) and/or species on the County or State lists, which can be found at http://www.nwcb.wa.gov/nwcb_county.htm and http://www.nwcb.wa.gov/. These lists are updated annually, and the permit holder is responsible for confirming that they have the most up to date list. Surveys and treatments must be done by qualified personnel who have experience with weed identification and are licensed applicators. Contact FS Invasive Plant Program Coordinator for assistance if needed.

Whenever feasible, these treatments will be completed before vegetation control or ground disturbing activities begin using appropriate chemical, mechanical, or manual methods. Herbicide applications will follow the rules and guidelines outlined in the Olympic National Forests' weed EIS "Beyond Prevention: Site-Specific Invasive Plant Treatment Project" (2008) which can be found at http://permanent.access.gpo.gov/lps100981/1-FinalEIS.pdf . If timing or resources prevent treatment before vegetation control or ground disturbing activities begin, then infestations in the project area will be monitored and treated upon completion of the project in order to prevent the spread of invasive plants. Any treatments completed will be documented according to Forest Service protocols and documentation will be submitted to the Forest Botanist and the FS Invasive Plant Program Coordinator by the end of each fiscal year.

All species of non-native knotweed, including but not limited to bohemian, Japanese, Himalayan, and giant knotweed (*Polygonum x bohemicum, P. cuspidatum, P. polystachyum, P. sachalinense,* respectively) will not be mowed, cut, brushed or otherwise mechanically removed or damaged. All knotweed infestations will be treated with appropriate herbicides until eradicated.

Herbicide applications will follow the rules and guidelines outlined in the Olympic National Forest's weed EIS "Beyond Prevention: Site-Specific Invasive Plant Treatment Project" (2008) which can be found at http://permanent.access.gpo.gov/lps100981/1-FinalEIS.pdf. Treatments completed will be documented

according to Forest Service protocols and documentation will be submitted to the Forest Botanist and the FS Invasive Plant Program Coordinator by the end of each fiscal year.

Clean all off-road equipment of dirt/mud, seeds, and other plant parts before it is moved onto ONF land. Chainsaws, chippers, mowers and weed whackers will also be cleaned of debris that may contain invasive plant propagules prior to being brought on to Forest Service lands for use. If operating in an area infested with invasive plants, clean all equipment before moving between sites or leaving the project area. For cleaning equipment on ONF land, the permittee and ONF shall agree on methods of cleaning, locations of the cleaning, and control of off-site impacts, if any. 'Off-road equipment' includes all machinery other than log trucks, chip vans, pickup trucks or vehicles used to transport personnel on a daily basis.

ONF shall flag locations of high priority invasive plant infestations prior to work commencing and provide the permittee with a map of these locations. These areas shall be avoided during work and travel associated with the project unless otherwise directed by the Permit Administrator. If directed to work in infested area, the permittee shall be required to prevent spreading the infestation into un-infested areas by cleaning vehicles and equipment.

All material (e.g., soil, gravel, sand borrow, aggregate, etc.) transported onto National Forest System land or incorporated into the work shall be weed-free. The Permit Administrator may request written documentation of methods used to determine the weed-free status of any and all materials furnished by the permittee. The permittee-provided expertise and methods to establish weed-free status must be appropriate for species listed as priority 1 or priority 2 on the most current version of the Olympic National Forest invasive plant list (attached as Exhibit C) and/or species on the County or State lists, which can be found at http://www.nwcb.wa.gov/nwcb_county.htm and http://www.nwcb.wa.gov/.

An ONF weed specialist shall inspect proposed material sources to determine weed-free status. The permittee shall provide the Permit Administrator written notification of proposed material sources 14 days prior to use. If weed species are present in the proposed source, appropriate mitigation measures may allow conditional use of the source as required by the Permit Administrator, but if it is determined that materials from a specific source have a high likelihood of being contaminated with invasive plant propagules, use of a different source may be required.

Fill material generated from the project site containing or suspected to contain invasive plants shall be stockpiled within the project area and as close to the infested source area as possible. The material shall not be broadcast for disposal.

Mulch used on the project shall be weed-free. The Permit Administrator may request written documentation of methods used to determine the weed-free status of any and all materials furnished by MPUD. Contractor-provided expertise and methods to establish weed-free status must be appropriate for the weeds on the current Washington State noxious weed list (www.nwcb.wa.gov/weed_list/weed_list.htm). *(Refer to the North American Weed Free Forage Program standards, Regional EIS, Appendix O)*

Seed used in the project shall be weed-free and meet state and local noxious weed laws. Avoid using seed mixes containing non-native species. Consult FS Invasive Plant, Botany, or Native Plant staff for guidance.

Use seed mixes and plantings that consist of locally appropriate native species whenever possible. Locally sources and genetically appropriate native plant material of herbaceous and non-coniferous woody plants (seeds, live stakes, containerized plants, etc.) shall be used for all revegetation efforts connected with the proposed action. Non-native, non-persistent seed mixes may be used only as a last resort when native plant material is unavailable and resource damage would occur without its use. Contact FS Invasive Plant, Botany, or Native Plant staff for guidance.

Olympic National Forest 2022 Invasive Species List				
Code	**Scientific Name**	**Common Name**	**Treatment Priority**	**Documented on ONF**
AEPO	*Aegopodium podagraria*	Bishop's weed, goutweed	1	Y
ANSY	*Anthriscus sylvestris*	wild chervil	1	N
ANCA14	*Anthriscus caucalis*	bur chervil	1	N
ARMI2	*Arctium minus*	lesser burdock	1	Y
BOOF	*Borago officinalis*	common borage	1	Y
BRSY	*Brachypodium sylvaticum*	false brome	1	N
BRTE	*Bromus tectorum*	cheatgrass	1	Y
BUDA2	*Buddleja davidii*	butterfly bush	1	Y
CEDE5	*Centaurea debeauxii*	meadow knapweed	1	Y
CEDI3	*Centaurea diffusa*	diffuse knapweed	1	Y
CEJA	*Centaurea jacea*	brownray knapweed	1	Y
CESTM	*Centaurea stoebe* ssp. *micranthos*	spotted knapweed	1	Y
CLVU	*Clinopodium vulgare*	wild basil savory	1	Y
COMA2	*Conium maculatum*	poison hemlock	1	N
DALA11	*Daphne laureola*	spurge laurel	1	Y
DIFU2	*Dipsacus fullonum*	Fuller's teasel	1	Y
GELU	*Geranium lucidum*	shiny geranium	1	Y
GERO	*Geranium robertianum*	herb Robert, stinky Bob	1	Y
HEMA17	*Heracleum mantegazzianum*	giant hogweed	1	N
HEMA3	*Hesperis matronalis*	dames rocket	1	Y
HIAU	*Hieracium aurantiacum*	orange hawkweed	1	Y
HICA10	*Hieracium caespitosum*	meadow (yellow) hawkweed	1	Y
HISA4	*Hieracium sabaudum*	European hawkweed	1	Y
IMCA	*Impatiens capensis*	spotted jewelweed	1	Y
LAGA2	*Lamiastrum galeobdolon*	yellow archangel	1	Y
LIVU2	*Linaria vulgaris*	yellow toadflax, butter and eggs	1	Y
LYPU2	*Lysimachia punctata*	large yellow loosestrife	1	Y
LYVU	*Lysimachia vulgaris*	garden yellow loosestrife	1	N
MEPI	*Mentha × piperita*	peppermint	1	Y
ORVU	*Origanum vulgare*	oregano	1	Y
POCU6	*Polygonum cuspidatum*	Japanese knotweed	1	Y
POPO5	*Polygonum polystachyum*	Himalayan knotweed	1	N
POSA4	*Polygonum sachalinense*	giant knotweed	1	Y
POBO10	*Polygonum x bohemicum*	Bohemian knotweed	1	Y
PORE5	*Potentilla recta*	sulphur cinquefoil	1	Y
ROCA3	*Rosa canina*	dog rose	1	Y
SEJA	*Senecio jacobaea*	tansy ragwort	1	Y
SILAA3	*Silene latifolia ssp. alba*	bladder campion	1	Y
SOAU	*Sorbus aucuparia*	European mountain ash	1	Y
SYOF	*Symphytum officinale*	common comfrey	1	Y
TAVU	*Tanacetum vulgare*	common tansy	1	Y
TUFA	*Tussilago farfara*	European coltsfoot	1	N
VETH	*Verbascum thapsus*	common mullein	1	Y
VIMA	*Vinca major*	bigleaf periwinkle	1	Y
VIMI2	*Vinca minor*	common periwinkle	1	Y
CIAR4	*Cirsium arvense*	Canada thistle	2	Y
CIVU	*Cirsium vulgare*	Bull thistle	2	Y
COAR4	*Convolvulus arvensis*	field bindweed	2	?
CYSC4	*Cytisus scoparius*	Scotch broom	2	Y

DACA6	*Daucus carota*	Queen Anne's lace	2	Y
HEHE	*Hedera helix*	English ivy	2	Y
HYPE	*Hypericum perforatum*	common St. Johnswort	2	Y
ILAQ80	*Ilex aquifolium*	English holly	2	Y
LALA4	*Lathyrus latifolius*	everlasting peavine	2	Y
PHAR3	*Phalaris arundinacea*	reed canarygrass (including ribbon grass)	2	Y
PRLA5	*Prunus laurocerasus*	English laurel	2	Y
RUAR9	*Rubus armeniacus*	Himalayan blackberry	2	Y
RULA	*Rubus laciniatus*	cutleaf blackberry	2	Y

HERBICIDE USE

Herbicides may only be used to control specific species of invasive plants, as determined by the ONF, and only after coordination with and prior written approval from the Authorized Officer.

Herbicide use for control of aquatic plants is NOT permitted. Herbicide use for vegetation control (for example, to control woody brush, such as native alders or willows) is also NOT permitted under the terms of this permit.

A request for approval of planned uses of herbicides shall be submitted annually no later than March 15 and must include a Pesticide Use Proposal (PUP). Blank PUPs will be supplied by the ONF. It is highly recommended that the request be developed with input from ONF invasive plant staff to make the process as efficient as possible, as there are many standards that must be adhered to that are specific to the ONF, and more restrictive than what is described in the instructions for use found on herbicide labels.

The request must include species proposed for control, herbicides and adjuvants that would be used, application rate, application method, approximate size of the application area, location (road number and beginning and ending milepost, if a road edge application), approximate date of proposed applications, a description of the application site (for example "5 foot wide strip on both shoulders of paved road."), and if any of the applications being proposed will be within 15 feet of any seasonal or perennial stream, waterbody, or wetland. All herbicide applications must be documented according to Forest Service protocols, and documentation submitted to the ONF Invasive Plant program by September 15 every year. All herbicide applications must follow the applicable standards and guidelines in the ONF Weed EIS "Beyond Prevention: Site-Specific Invasive Plant Treatment Project" (2008), available upon request from the ONF.

ROADS

Road Reconstruction

Identify and locate waste areas before the start of operations. Deposit and stabilize excess and unsuitable materials only in designated sites. Establish designated areas for equipment staging.

Reconstruct existing roads to the degree necessary to provide adequate drainage and safety. Avoid disturbing stable road surfaces. Use suitable measures to avoid, to the extent practicable, or minimize direct discharges from road drainage structures to nearby waterbodies.

Install sediment and stormwater controls before initiating surface-disturbing activities, and when severe storms are expected, and prior to seasonal shutdown to the extent practicable

Sediment controls (including but not limited to sediment traps, straw or wood wattles, rock check dams, straw mulch, slash filter windrow, additions of coarse rock, and/or sediment fences) will be placed in areas where there is potential for sediments to reach the stream network. Key locations will include ditchlines, intermittent, and perennial stream crossings.

Any removal of accumulated sediment will be done when site conditions are dry and captured sediment will be relocated to a stable location away from streamcourse.

Roads that are located in potentially unstable areas and/or have potentially unstable sidecast fillslopes will have additional emphasis on road drainage and stabilization.

Unstable sidecast located along fillslopes that are within harvest units and near landings will be stabilized and/or hauled to a stable waste disposal area to the extent feasible.

Sidecasting of waste material along fill slopes and ditch lines is prohibited.

Road Operations and Maintenance

Road work will occur from June 1 through October 31 unless otherwise agreed.

As needed, shape road surfaces to drain as designed. Construct or reconstruct drainage structures as needed. Ensure that ditches and culverts are clean and functioning. Remove berms unless specifically designed for erosion control purposes.

Additional ditch relief culverts may be installed as needed to divert sediment-laden runoff away from stream channels.

Cutslope vegetation (specifically root system) will be maintained to reduce soil erosion, ditch plugging, recurrent road maintenance and impacts to water quality.

If maintenance of road surface or sediment controls cannot be performed adequately due to weather, haul will be discontinued until conditions improve and/or additional actions will be taken such as placement of additional coarse road surfacing and sediment controls (straw/wood wattles, sediment traps, straw mulch, rock check dams, slash filter windrow, and/or sediment fences) where sediment has the potential for delivery to streams.

Log haul on surfaced and un-surfaced roads will be allowed during freezing conditions, but will be suspended as roads begin to thaw

Organic debris from cleaning culverts, or other activities will be distributed away from other road drainage features including ditches.

Coordinate project work with Forest Service Special Use Administrator before and during development and implementation of activities on or adjacent to roads or areas under permits or other legal access agreements.

Stockpile and Waste

Select stockpile locations that are previously created openings (usually old rock quarries or barrow sites). Prevent weed infestation of stockpile through measures that may include but not limited to 1) a material barrier under the stockpile that is later removed 2) removing layer of topsoil before stockpiling (consult botanist for method).

Follow pit management plans for storing fill or other waste material, or contact botanist to coordinate waste pile locations.

Avoid placing waste fill material within the stream prism to avoid sedimentation to stream or spread of seed into waterways where it can travel downstream.

Temporary Roads

Practices related to road location and stormwater and erosion control should be applied to temporary roads.

Construct temporary roads between June 1 to October 31 unless otherwise identified.

Avoid construction and rehabilitation of temporary roads during times of excessively wet conditions and/or when soil has reached saturation.

Routinely inspect temporary roads to verify that erosion and stormwater controls are implemented, functioning, and appropriately maintained.

Temporary roads that are built but not used for haul prior to the onset of a winter season will require establishment and maintenance of erosion and sediment control measures. Measures may include cross-drains, seed/mulching, or waterbars to reduce risk of erosion and sedimentation.

Temporary roads will be decompacted as necessary per permit administrator instruction, to improve water infiltration and restore soil productivity. Available logging slash will be placed across the decompacted surface. Motorized access will be blocked.

Revegetate as appropriate with native plant species. Encourage spreading seed even over slash mats.

If abandoned culverts occur on temporary roads located on old, abandoned roadbeds not in INFRA remove abandoned culverts and restore drainage patterns as much as possible by stewardship or other funding.
If needed, in low/wet areas (not wetlands with hydric plants) rock may be placed on temporary roads to stabilize the route with criteria explained in the contract. Rock would normally not be compacted/graded. If compaction/grading is necessary, consult a qualified engineer for possible specified road situation.

Winter units may require extra rock on temporary roads to be described in criteria.

If needed on steeper sections, erosion control measures may be applied.

If temporary road section exceeds 12 percent grade, contact qualified engineer for possible criteria or different location.

Construction of temporary roads within or directly adjacent to potentially unstable landforms will be assessed by a Forest Service soil scientist.

If temporary road construction involves cutting a suitable nest tree change location to avoid the tree or contact wildlife biologist.

Should temporary road fills be agreed upon within wet areas, they will be removed after use and stream bank profiles reestablished to restore hydrologic function.

Establish criteria for rehabilitation if needed. Revegetate as appropriate with native plant species. Encourage spreading seed even over slash mats.

Road Decommissioning

Remove drainage structures.

Recontour and stabilize cut slopes and fill material.

Reshape the channel and streambanks at crossing sites to pass expected flows without scouring or ponding, minimize potential for undercutting or slumping of streambanks, and maintain continuation of channel dimensions and longitudinal profile through the crossing site.

Restore floodplain function. For road decommissioning projects within riparian areas, re-contour the road prism to mimic natural floodplain contours and gradient to the greatest degree possible

Revegetate as appropriate with native plant species. Encourage spreading seed even over slash mats.

Dispose of slide and waste material on stable sites and outside of drainages and flood prone areas.

Place sediment barriers prior to any ground disturbing activities around sites where significant levels of fine sediment may enter the stream directly. Maintain barriers throughout all ground disturbing activities.

For road decommissioning projects within riparian areas, re-contour the road prism to mimic natural floodplain contours and gradient to the greatest degree possible

If a road is decommissioned, effective access controls shall be employed to reduce motorized use and unauthorized activities on that road such as dumping of trash and cutting of legacy trees and other important habitat features

Where feasible, based upon topography and landform stability, road decommissioning and closure locations should be set back from the junction by 50 feet to allow for safe pullout and parking for recreation.

Stream Crossing and Standing Water Crossing

Replacement culverts are installed at natural stream grade and designed for turbulence around the inlets and outlets.

Temporary culverts or bridges on stream crossings are those in place for a single summer season. They need only be designed, installed, and maintained to accommodate flows, sediment, and wood passage anticipated during that time.

Culverts and bridges in place longer than a single summer season are not considered temporary. They shall be designed, installed, and maintained to accommodate Q100 with consideration of sediment and wood passage.

Size replacement culverts to accommodate Q100 with consideration of sediment and bedload. Q100 is a 100-year flood event that has a 1 percent probability of occurring in any given year. The number is based on the expected 100-year flood flow rate in a given creek, river, or surface water system.

Use suitable measures to stabilize or harden the streambed and approaches, including the entire bankfull width and sufficient freeboard, where necessary to support the design vehicle traffic.

Although unlikely, if standing water crossings are necessary, provide for sufficient cross drainage to minimize changes to, and avoid restricting, natural surface and subsurface water flow of the wetland under the road to the extent practicable. Use suitable measures to increase soil-bearing capacity and reduce rutting from expected vehicle traffic.

Fish-bearing Stream Crossing

Project activities will follow all applicable provisions of the current version of the Memorandum of Understanding (MOU) between the Washington Department of Fish and Wildlife and USDA Forest Service, Pacific Northwest Region, regarding hydraulic projects conducted by USDA Forest Service. Follow all applicable general and project- specific provisions found in Appendix A of the MOU.

Tentative instream work period is July 15 to September 30, pending agreement with WDFW habitat biologist.

Any culvert with water flowing would need to be dewatered for replacement.

Non-fish-bearing Stream Crossings or Ditch Relief Culverts

Tentative instream work period is July 15 to September 30, pending agreement with WDFW habitat biologist. If a stream has no water flowing at the time of replacement, then dewatering is not necessary, and work could occur outside of the work window.

Any culvert with water flowing would need to be dewatered for replacement.

Changes in the work period should be discussed with the Fish biologist and Watershed specialists and then reviewed by the WDFW habitat biologist.

AQUATIC HABITAT

No cutting of vegetation and no equipment entry within a buffer zone measured as 100 feet from the outer edge of the streambank or to the top of the slope break, whichever distance is greater.

Utilize full log suspension in skyline yarding corridors.

Upon review by a watershed and fish specialist, the no-cut buffer width, equipment access, and suspension criteria may be waived or modified to accommodate logging system feasibility.

No gap openings or heavily thinned areas will be created adjacent to no-cut buffers along fish-bearing streams, unless reviewed by fish biologist.

Operation of ground-based skidding equipment will not occur within 30 feet of harvest unit boundaries where riparian no-cut buffers serve as harvest unit boundaries on the edge of a slope break.

Reconstruction or construction of temporary or system roads must be reviewed by botanist, fish and wildlife biologists, and watershed specialist if placement or removal of fill would encroach on a wetland. If this happens develop criteria for the temporary road.

Sediment controls will be installed before initiating surface-disturbing activities to the extent practicable (including but not limited to sediment traps, straw or wood wattles, rock check dams, straw mulch, slash filter windrow, additions of coarse rock, and/or sediment fences). Sediment controls will be placed in areas where there is potential for sediments to reach the stream network. Key locations will include ditchlines, intermittent, and perennial stream crossings

Any removal of accumulated sediment will be done when site conditions are dry and captured sediment will be relocated to a stable location away from stream courses.

All screens, pump intakes, and hoses that will be in contact with a stream or waterbody must be disinfected prior to entering the National Forest lands to avoid introducing aquatic invasive species, unless otherwise agreed.

SOIL RESOURCE AND MECHANICAL VEGETATION MANAGEMENT

Ground based equipment will travel on operationally generated slash (limbs and tops) where possible. The slash mat will be thick and continuous as practicable. Yarding activities will be planned to make as few trips as possible.

If compaction occurs, skid trails will be decompacted (to a depth of 12 inches) as necessary to improve water infiltration and restore soil productivity. Available logging slash will be placed across the decompacted surface where needed.

Skid trail obliteration will not occur during times of excessively wet conditions and/or when soil has reached saturation.

Operation of ground-based equipment will be restricted to sustained slopes that are 35% or less.

Existing skid trails will be used wherever possible (unless the old skid trail is in a unsuitable location), care will be taken to assure any new skid trail construction will avoid wet areas and prevent sediment delivery to streams.

Operation of ground-based yarding and skidding equipment will generally be restricted to authorized skid trails. Equipment may be allowed to operate off designated skid trails occasionally to resolve operational issues. These instances would be intermittent and site specific and would require agreement by the Sale Administrator and will be limited to a single out and back pass by a single piece of equipment.

Avoid harvest on areas that have average sideslopes of greater than 75 percent unless they have been reviewed and approved by a Soil Scientist.

If excessive gouging or soil displacement on slopes resulting from cable/skyline yarding corridors or steep slope machines occurs, such areas will be treated to prevent rill and gully erosion and possible sediment delivery to steam courses. Erosion control treatment may include but is not limited to repositioning displaced soil to re- contour disturbed sites, creating small ditches or diversions to redirect surface water movement, installation of waterbars along slope contours, and scattering slash material to create flow disruption and surface soil stability.

Leading end of logs shall be suspended above ground during yarding to avoid detrimental soil gouging. If possible, full log suspension should be utilized to yard over steep water run in positions (inner gorges), and escarpment areas dominated by steep fillslopes.

Establish a no cut buffer 25 feet upslope from a major slope break that defines an escarpment, inner gorge, or potentially unstable area.

POLLUTION CONTROL

Equipment Refueling and Servicing

All machinery maintenance involving potential contaminants (fuel, oil, hydraulic fluid, etc.) shall occur at a site greater than 100 feet from water courses and riparian habitat. All project equipment will be equipped with hazardous spill prevention and containment equipment to minimize the effects of a fuel spill or hydraulic leak.

Plan for suitable equipment refueling and servicing sites during work activities.

Use suitable measures to avoid spilling fuels, lubricants, cleaners, and other chemicals during handling and transporting.

Ensure that hazardous spill kits are adequately stocked with necessary supplies and are maintained in accessible locations.

Clean up and dispose of spilled materials according to specified requirements in the appropriate guiding document.

Report spills and initiate suitable cleanup action in accordance with applicable state and federal laws, rules, and regulations.

Pesticide and Preservative-Treated Wood

Treated wood may not be used in a stream crossing structure that will be in or over water or permanently or seasonally flooded wetlands, except to maintain or repair an existing wood bridge. The following criteria below apply to the use of treated wood for maintenance or repair of existing wood bridges.

No part of the treated wood may be exposed to leaching by precipitation, overtopping waves, or submersion (e.g., no treated wood piles, and stringers or decking of a timber bridge can be made from treated wood only if they will be covered by a non-treated wood wearing surface that covers the entire roadway width), and all elements of the structure using the treated wood are designed to avoid or minimize impacts or abrasion that could create treated wood debris or dust.

Installation of treated wood:

- Treated wood shipped to the project area will be stored out of contact with standing water and wet soil and protected from precipitation.

- Each load and piece of treated wood will be visually inspected and rejected for use in or above aquatic environments if visible residue, bleeding of preservative, preservative-saturated sawdust, contaminated soil, or other matter is present.

- Prefabrication will be used whenever possible to minimize cutting, drilling and field preservative treatment.

- When field fabrication is necessary, all cutting, drilling, and field preservative treatment of exposed treated wood will be done above OHW to minimize discharge of sawdust, drill shavings, excess preservative and other debris.

- Tarps, plastic tubs or similar devices will be used to contain the bulk of any fabrication debris, and any excess field preservative will be removed from the treated wood by wiping and proper disposal.

Removal of treated wood:

- Evaluate all wood construction debris removed during a project, including pile, to ensure proper disposal of treated wood.

- Ensure that no treated wood debris falls into the water or, if debris does fall into the water, remove it immediately.

- After removal, place treated wood debris in an appropriate dry storage site until it can be removed from the project area.

- Do not leave any treated wood debris in the water or stacked on the streambank at or below OHW.

THREATENED, ENDANGERED, AND SENSITIVE SPECIES CONSERVATION MEASURES

The location of sites within the permit area needing special measures for protection of plants or animals listed as threatened or endangered under the Endangered Species Act (ESA) of 1973 or identified as sensitive or otherwise requiring special protection pursuant to consultation conducted under Section 7 of the ESA will be provided to the PUD if found during the term of this permit. If such sites are found, ONF will provide a map to be attached as an appendix to the special use permit.

Conservation Measures

The following conservation measures are to be incorporated into each project to avoid or minimize impacts to species. Application of these conservation measures to specific projects assists in the final determination of effect to each species or its habitat.

Timing of Nesting Seasons for Northern Spotted Owl and Marbled Murrelet

The early spotted owl nesting season for the northern spotted owl (when most young are in the nest) is considered to be from March 1 to July 15, the late spotted owl nesting season (when most young have

fledged) is from July 16 to September 30, and the entire marbled murrelet nesting season is from April 1 to September 23.

Definition of Suitable Nest Trees and Habitat for Northern Spotted Owl and Marbled Murrelet

A northern spotted owl suitable nest tree is defined as being located in suitable nesting, roosting or foraging habitat; is a conifer (alive or dead); is at least 18" dbh; and contains a nesting structure such as a broken top, cavity, nest of a large raptor, mistletoe broom, or branch platform large enough to support a spotted owl nest. Stands for nesting and roosting are generally characterized by moderate to high canopy closure (60 to over 80 percent), multilayered, multispecies canopies with large (20 to 30 inches dbh or greater) overstory trees, high diversity of different diameters of trees, high incidence of large live trees with various deformities (e.g., large cavities, broken tops, mistletoe infections, and other evidence of decadence), large snags and large accumulations of fallen trees and other woody debris on the ground.

A marbled murrelet suitable nest tree is defined as a live conifer at least 18" dbh that contains one or more platforms, defined as any horizontal tree structure such as a limb, and area where a limb branches, or a surface created by dwarf mistletoe (at least 4-inch diameter) located in the live crown of the tree 33 feet or more above the ground and is within 55 miles of marine waters. A suitable nest tree is located within or along the edges of old-growth, mature, or younger forested areas that provide both overstory (vertical) and adjacent (horizontal) canopy cover to platforms.

A buffering tree to a marbled murrelet nest tree is one that is at least half-site potential tree height of its capability that has a crown that interlocks with the crown of the potential nest tree. A forested stand that has at least 60 percent coniferous canopy cover with a minimum 40 percent of the dominant and co-dominant trees being Douglas-fir (*Pseudotsuga menziesii*), western hemlock (*Tsuga heterophylla*), western red cedar (*Thuja plicata*), or Sitka spruce (*Picea sitchensis*). There is some degree of cover to the potential nesting platform that is provided by adjacent trees.

Conservation Measures for Northern Spotted Owl, Marbled Murrelet, and their Designated Critical Habitats

1. No trees known to be active or historic nest trees for spotted owls or marbled murrelets shall be removed during any time of year, no matter how many years have passed since the tree was known to be a nest tree.

2. Trees to be removed in suitable habitat during the murrelet nesting season shall be inspected by an ONF wildlife biologist when feasible or, if necessary, a qualified, designated non-biologist to determine whether it is a suitable nest tree.

3. The number of suitable nest trees and other large trees removed shall be minimized. Trees shall be felled in a manner to minimize impacts to surrounding trees, and away from suitable habitat if it is possible and safe to do so. If the site does not meet the requirements for large woody debris, felled trees shall be left on site.

4. When feasible, projects shall: a) be designed to occur at times of the year and locations that reduce the potential for disturbance to spotted owls and murrelets; b) begin activities in the area farthest from suitable habitat when conducting activities during the nesting season that must occur within the adverse-effect threshold distances; and c) be adjusted to use topographic and vegetative buffers to minimize sound levels where it is necessary to conduct activities within the adverse-effect threshold distance of suitable habitat of either species during their nesting seasons.

5. During the early nesting season of the spotted owl and the entire nesting season of the marbled murrelet, helicopters shall maintain an altitude and distance greater than the defined disruption distance from suitable

habitat except when they are on direct approach or departure from landing zones and during emergencies. Forest Service will provide disruption distances.

6. To the extent feasible, number of overflights shall be minimized, and use of the same flight paths shall be maximized over suitable habitat during nesting seasons.

7. To the extent feasible, the smallest, quietest helicopters that can accomplish the task efficiently and safely shall be used.

8. There shall be no blasting within 0.25 mile of suitable habitat between March 1 and September 23. Effects of blasting shall be minimized following guidelines described in "Guidelines for Blasting" (Forest Service will provide).

9. An ONF wildlife biologist shall be notified immediately if a spotted owl or murrelet active nest or individual is found, and measures to minimize or eliminate disruption to normal behaviors will be applied.

Conservation Measures for Spotted Owls in Suitable Habitat

1. An ONF wildlife biologist or, if necessary, a qualified, designated non-biologist shall inspect each suitable spotted owl nest tree removed during the entire spotted owl nesting season (March 1 to September 30) for signs the tree is being used as a nest tree (e.g., spotted owls, pellets, "whitewash").

2. Trees will be directionally felled to minimize damage to adjacent trees.

3. Activities shall not result in removing or downgrading stands of nesting, roosting, or foraging spotted owl habitat.

4. Known occupied spotted owl nests shall not be exposed to noise and visual disturbance within the defined disruption distances during the early nesting season (Forest Service will provide disruption distances).

5. Since activities of this operating plan may affect spotted owls, marbled murrelets, and/or their designated critical habitats, this operating plan shall be in compliance with the ONF programmatic biological opinion, in order to meet requirements of Endangered Species Act consultation. A Project Consistency Evaluation Form will be completed to document this compliance. Actual adverse effects (disturbance and/or suitable nest tree removals) shall be tracked and recorded each year.

Conservation Measures for Marbled Murrelets

1. An ONF wildlife biologist or, if necessary, a qualified, designated non-biologist shall inspect each suitable murrelet nest tree removed during the entire murrelet nesting season (April 1 to September 23) for the presence of platforms.

2. Project activities that generate noise or visual disturbance throughout the nesting season of murrelets (April 1 to September 23) within disruption distances of unsurveyed but potentially occupied murrelet habitat shall begin at least 2 hours after sunrise and shall end at least 2 hours before sunset to lessen disturbance to murrelets flying to and from the nest. Forest Service will provide disruption distances.

3. Known occupied murrelet nest stands shall not be exposed to project activities during the entire nesting season within the disruption distances. Forest Service will provide disruption distances.

4. During all project activities any garbage including food waste shall be removed to prevent attracting corvids.

5. When feasible, removal of platforms, trees with platforms, and trees providing cover to platforms shall be avoided even if it is not known whether the stand is occupied by murrelets.

Conservation Measures for Bull Trout

1. Erosion prevention and control methods shall be used as necessary during and immediately after project implementation (and as long as necessary) to minimize the loss or displacement of soils and to prevent delivery of sediment into a waterbody. These measures may include, but are not limited to, operational techniques, straw bales, silt fencing, erosion control blankets, temporary sediment ponds, and/or immediate mulching of exposed areas. Disturbed ground with the potential to deliver sediment into waterbodies shall be revegetated or protected from surface erosion by seeding, mulching, or other methods prior to the fall rainy season. After project completion, disturbed streambanks and lakeshores shall be revegetated with site-appropriate vegetation to maintain soil stability and provide shade and future sources of large wood. Revegetation can be accomplished by planting or natural reproduction, depending on site conditions.

2. All machinery maintenance involving potential contaminants (fuel, oil, hydraulic fluid, etc.) shall occur at a site that is at least 100 feet from stream channels, water bodies, or wetlands.

3. The vegetated ditchline shall be maintained, where functional, to help control soil erosion. Grasses and other non-woody vegetation shall be retained in ditches to reduce water velocity and trap sediment. When ditches are cleaned, sediment traps shall be installed and maintained until vegetation is re-established to prevent delivery of sediment to stream channels.

4. Excess material (spoils) shall be disposed of so it does not enter stream channels or other water bodies.

5. Any trees greater than 12 inches dbh to be felled within reach of a stream (or lake) shall be felled toward the water and left in place if feasible.

6. To retain the largest pieces of downed wood possible in stream channels and floodplains, bucking of large trees during clearing activities in riparian areas shall be minimized.

Disruption and physical injury distance thresholds for Spotted Owls and Marbled Murrelets.

Distances are to occupied nest trees or unsurveyed nesting habitat and may be changed over time by U.S. Fish and Wildlife Service as new research is done.

Project Activity	Spotted Owl early nesting season disruption (injury) distance **(Mar 1–Jul 15)**	Spotted Owl late nesting season disruption (injury) distance **(Jul 16–Sep 30)**	Marbled Murrelet nesting season disruption (injury) distance **(April 1-Sep 23)**
Chainsaws (includes felling hazard/danger trees)	65 yards	NA	110 yards (potential for mortality if felled trees contain platforms)
Heavy equipment for road construction, road repairs, bridge construction, culvert replacements, etc.	65 yards	NA	110 yards
Pile-driving (steel H piles, pipe piles); rock crushing and screening equipment	120 yards (5 yards injury)	5 yards (injury)	120 yards (5 yards injury)
Blasting	0.25 mile (100 yards injury)	100 yards (injury)	0.25 mile (100 yards injury)
Helicopter: Chinook 47d	265 yards	100 yards (hovering only)	265 yards (100 yards injury/mortality)
Helicopter: Boeing Vertol 107, Sikorsky S-64 (SkyCrane)	150 yards	50 yards (hovering only)	150 yards (50 yards injury/ mortality
Helicopters: K-MAX, Bell 206 L4, Hughes 500	110 yards	50 yards (hovering only)	110 yards (50 yards injury/ mortality)
Small fixed-wing aircraft (Cessna 185, etc.)	110 yards	NA	110 yards
Tree climbing	25 yards	NA	110 yards
Burning (prescribed fires, pile burning)	0.25 mile	NA	0.25 mile

Attachment 4. Best Management Practices – Clallam County PUD #1

The PUD uses RUS standards for construction and maintenance of PUD facilities. The following standards and specifications are incorporated into this operating agreement by reference:

Electric Transmission Specifications and Drawings 115 KV – 230 kV
https://www.rd.usda.gov/files/UEP_Bulletin_1728F-811.pdf

Specifications and Drawings for 12.47/7.2 kV Line Construction
https://www.rd.usda.gov/files/UEP_Bulletin_1728F-804.pdf

Design Guide for Oil Spill Prevention and Control at Substations
https://www.rd.usda.gov/files/UEP_Bulletin_1724E-302.pdf

Design Manual for High Voltage Transmission Lines
https://www.rd.usda.gov/files/UEP_Bulletin_1724E-200.pdf

System Planning Guide, Construction Work Plans
https://www.rd.usda.gov/files/UEP_Bulletin_1724D-101B.htm

Wood Pole Inspection and Maintenance
https://www.rd.usda.gov/files/UEP_Bulletin_1730B-121.pdf

The PUD has developed written policies on the topics of pole inspection, hazardous communications program, spill response, and electric system inspection program, as follows:

Pole Inspection Plan, approved June 2018. The entire document is attached.

Hazardous Communications Program. Pages 1-4 of this document are attached, and the entire policy is incorporated by reference.

Spill Response Plan, approved 2019. Pages 1-6 of this document are attached, and the entire policy is incorporated by reference.

Electrical Inspection Program, revised January 14, 2022. Pages 1-4 of this document are attached, and the entire policy is incorporated by reference.

Pole Inspection Plan

June 2018

Public Utility District #1 of Clallam County
104 Hooker Road
Sequim, WA 98382

Contents

1.0 SCOPE

Clallam PUD Pole Inspection Program (PIP) is a Utility-specific program designed to proactively Increase the longevity of wood distribution and transmission poles, thereby reducing annual cost necessary for pole replacements. The District is committed to balancing its goal of providing reliable electrical service in a cost-effective manner and improved service to our customers. This document outlines the Pole Inspection Program (PIP) to:

- Increase longevity of wood poles
- Reduce cost of pole replacement
- Provide visual inspection of every pole in the system.
- identify and track inspection for future references.

2.0 PROMULGATION

The District has formally adopted a Pole Inspection "Test and Treat" Program and educates District staff and our Customers regarding Pole Test and Treat policies, procedures and standards that are associated with the Pole Inspection Program.

3.0 JUSTIFICATION AND PURPOSE

Longevity and safety along the entire transmission and distribution system of wood poles is significantly increased by a proactive Inspection, pole testing and treatment program and thereby reducing the District's cost and crew time needed for replacing District poles.

4.0 PRINCIPLES

The District obtains and complies with all necessary codes, guidelines and permits associated with the inspection, maintenance, treatment and fumigation of wood poles. Particular attention is given to poles treatment activities within Tribal lands, wetlands and other protective areas.
Pole Test and Treat following industry standards:
(SEE Key Resources)

5.0 DISTRICT WOOD POLES CHARACTERISTICS

5.1 Impacted Service Area

The District system service territory has over 24,000 poles along 702 miles of overhead distribution lines and 145 miles of transmission conductor extending over two counties, Clallam and Jefferson, in the State of Washington.
The distribution and Transmission systems traverses highly variable topography from the Strait of Juan de Fuca waterfront to the high elevations of the Olympic Mountains on the Olympic Peninsula in northwestern Washington. The Decay severity zone for this region is classified as Zone 4 by the USDA Rural Utility Services. (*Least Severe Zone 1 - Most severe Zone 5).*

6.0 PRIORITIZING INSPECTION

6.1 Circuit Inspection

Adopting Inspection cycles improves the ability to track current contract work, plan future contract work, and reduces the overall number of pole needing to be replaced by annually scheduling inspection and treatment of wood poles throughout the system.

The district has adopted a 10-**year completion cycle** to inspect approximately 23,000 wood poles within the system. This is based on an estimated annual pole inspection budget of $125,000 to inspect approximately 2100 to 2400 poles per year.

7.0 INSPECTION METHODS

7.1 Visual Inspection

Visual Inspection is made of each pole to verify the overall condition of the pole above the ground line, including cross arms, hardware and attachments. Included within the annual contract the inspector assures all poles in the system are numbered and all guys have guards installed.

7.2 Sound and Bore

Striking a pole with a hammer from ground line to as high as the inspector can reach is used to detect voids within the pole.
Drilling (Boring) poles is used to determine the condition and decay within the pole and to measure shell thickness where voids have been formed within the pole.

7.3 Excavation

Poles are excavated to a depth of approximately 18-inchs to inspect pole surface decay. Shell Rot and external decay pockets are removed from the pole. Poles are also measured below the ground line to determine if pole has sufficient strength with reduced circumferences. Tables develop by RUS and other agencies are used to help determine reduced circumferences strength of the pole.

7.3 Treatment and Fumigation

Treatment and fumigation to each pole is done by a qualified worker accordingly to the specifications and procedures described with the Districts Annual Pole Inspection contract documents.

8.0 INSPECTION RESULTS

8.1 Marking Inspected Poles

The Inspector/Contractor marks each pole inspected by the use of:

a. A nail or tag indicating the year in which the pole was inspected, tested, and treated, and also identifying the Contractor. This tag would indicate to the District that this pole met or exceeded the minimum requirements for a good pole. Tag or nail head should not exceed two square inch in diameter.
b. A metal or rigid vinyl tag, red or yellow in color, securely attached to the pole, identifying the pole as a reject or two tags identifying it as a **"PRIORITY"** pole. These tags should be a minimum of one square inch in area.

Tags are securely attached to the pole four to six feet above ground level and on the side of the pole facing the street or highway.

8.2 Priority Reject "Danger" poles – *Replaced Immediately*

Priority Reject "Danger" Poles are identified in the field with two red tags and are replaced immediately. Field reports and notification are sent immediately to Operation's Superintendent and Engineering upon inspection, from the inspector, and a work order is sent to the crew to replace the pole.

8.3 Reject poles – *Replaced/Reinforced within One Year*

Reject Poles are identified in the field with one red tag are replaced/reinforced within a year's time of inspection. Field reports and notification are sent to Operation's Superintendent and Engineering. Operation Superintendent will do a site visit of each pole to determine if the pole shall be replaced or reinforced. A Work Order is then created by Engineering and sent to the Crew. Work Orders are marked with red Label stating the following: "Complete Work within One Year of Work Order Origination Date."

8.3 Maintenance Poles – *Complete Work as Needed*

Field reports and notification for maintenance work are sent to Operation's Superintendent and Engineering by the inspector/contractor. Typical maintenance work identified are as follows:

- Loose or broken guy wires.
- Loose or broken attachments.
- Loose or broken Cross arms or insulator.

A Work Order is created by Engineering for Poles requiring maintenance and sent to the Crew.

9.0 TRACKING THE WORK

9.1 Contractor Responsibilities – *Reporting*

Contractor/Inspectors are responsible for completing the inspection report accordingly to the specifications and procedures described with the Districts annual Pole Inspection contract documents. Electronic Reports are sent on a weekly basis to the Operations Superintendent and Engineering for review.

Upon completion of the annual inspection, an Electronic report is sent from the contractor to Engineering to be entered into ESRI GIS mapping system.

This inspection sheet shall contain the minimum information as follows for tracking purposes:

- Date Inspected
- Pole number
- Type of pole (Distribution/Transmission)
- Treated
- Reject Pole
- Fumigated

9.1 Engineering Responsibilities – *Mapping and Analyzing data*

Engineering staff will enter the necessary information from the inspection work sheets, provided electronically by the contractor, into ESRI Geodatabase. A copy of the inspection sheets are saved within the Records Department.

9.2 Mapping Inspection – ESRI GIS

Records of pole inspection have been added to the District's ESRI GIS data base electronically since 2009.

10.0 KEY RESOURCES

- *United States Department of Agriculture – RUS Bulletin 1730B-121, August 13, 2013*
- *IEEE - National Electric Safety Code (NESC) – C2-2007*

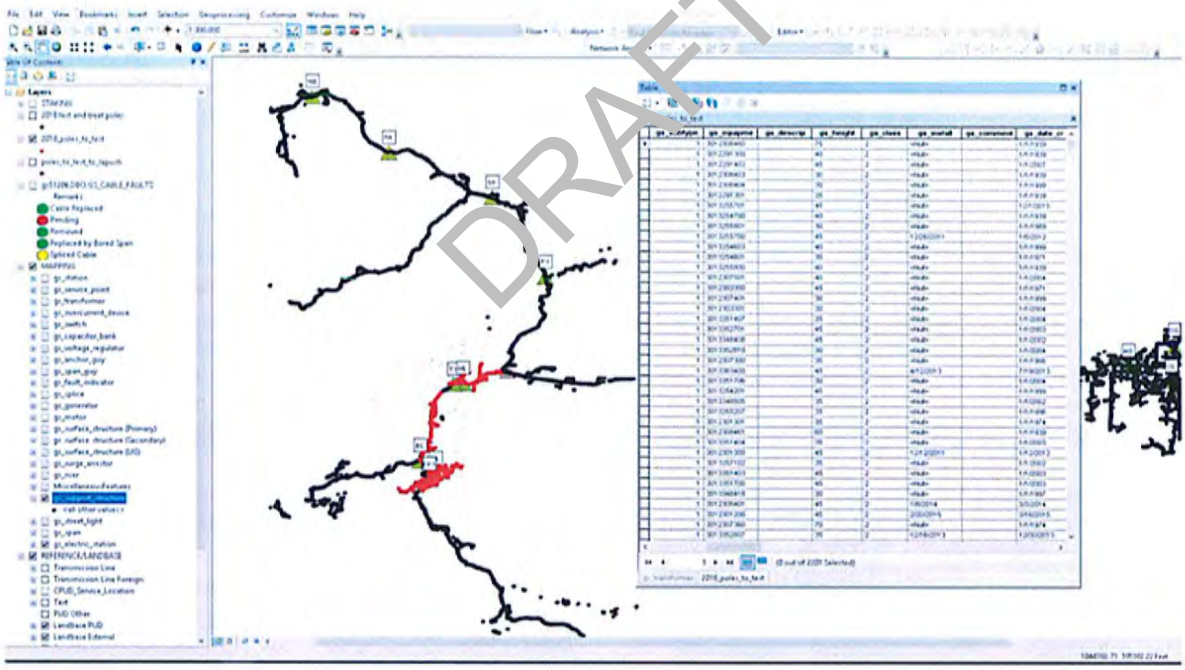
11.0 POLE TAGGING

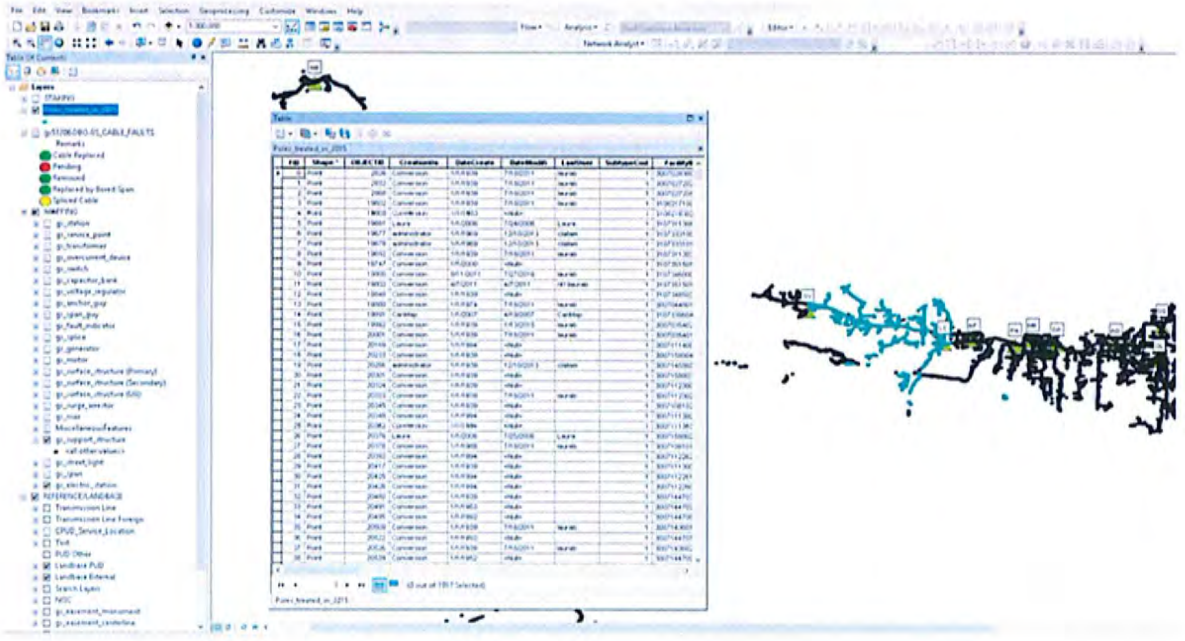
12.0 Inspection Sheet and Content

Clallam Inspection Reports shall include annotation or code for the following information in electronic form suitable for use in GIS:

- Pole Number
- Date
- Inspector
- Pole Type
- Pole Status
- Species
- Pole Year
- Pole Height
- Pole Class
- Original Treatment
- Manufacturer
- Original Circumference
- Effective Circumference
- Foreign Contacts
- Weather
- A - Good Pole - Treated
- B - Reject Pole – Treated
- C - Reject Pole – Reported
- D - Report Only
- E - Fumigant Only
- F - Transmission Pole
- G - Install Plant Unit Numbers
- H - Install Guy Guards
- Comments
- Condition Comments
- Maintenance Required
- Latitude
- Longitude

13.0 ESRI ARCGIS – MAPS





PUD
HAZARDOUS PLAN

CLALLAM COUNTY PUD #1™

Bringing Energy To Life™

HAZARDOUS COMMUNICATIONS PROGRAM

TABLE OF CONTENT

Hazardous Communication Program

A. Company Policy

Clallam PUD is committed to the prevention of exposures that result in injury and/or illness; and to comply with all applicable state health and safety rules. To make assure that all affected employees have information concerning the dangers of hazardous chemicals used by Clallam PUD. The following hazardous information program has been established.

B. Container Labeling

The District must ensure that labels on incoming containers of hazardous chemicals are not removed or defaced.

The District must maintain any safety data sheets that are received with incoming shipments of hazardous chemicals, and ensure that they are readily accessible during any work-shift to District employees when they are in their work areas.

Departments receiving and storing hazardous chemicals are responsible for hazardous containers labeling procedures, reviewing, and updating. Any changes will be sent to the Material Department as to update the District's Online Hazard Communication Data software.

The labeling system used is as follows: Type in either the name of the product or a signal word within the product in the District Online Hazard Communication data page and it will generate the product. The information below will also be presented:

Product identifier
Signal Word
Hazard statement(s)
Pictogram (s)
Precautionary Statement (s)
Name, address, and telephone number of the chemical manufacture importer, or other responsible party.

Other information listed Identification;

Hazard(s) identification;
Composition/information on ingredients;
First-aid measures;
Firefighting measures;
Accidental release measures;

Handling and storage;
Exposure controls/personal protection;
Physical and chemical properties;
Stability and reactivity;
Toxicological information;
Ecological information;
Disposal considerations;
Transport information;
Regulatory information;
Other information, including date of preparation or last revision

Secondary containers; when only a portion of a larger quantity of a chemical is to be used elsewhere, the information on that specific product can be copied from the Material Data Sheet and adhered to the container to be used.

It is the policy of Clallam PUD that no container will be released for use until the above procedures are followed.

C. Material Safety Data Sheets (MSDS)

Safety Manager is responsible to establish and monitor the employer's MSDS program. This person will make sure procedures are developed to obtain the necessary MSDSs and will review incoming MSDSs for new or significant health and safety information. This person will see that any new information is passed on to affected employees.

The procedures to obtain MSDSs and review incoming MSDSs for new or significant health and safety information are as follows:

As any new chemical received is entered into the District's Online Hazard Communication program to keep the data updated.

Copies of MSDSs for all hazardous chemicals in use will be kept on the Districts Intranet giving access to all District employees.

MSDSs will be available to all employees during any work shift. If an MSDS is not available or a new chemical in use does not have an MSDS, immediately contact Safety Manager and or the Facilities Procurement Supervisor.

All employees of Clallam PUD will participate in the hazard communication program. This written program will be available on the **District's Intranet** page under **Safety- Materials Safety Data** for review by any interested employee.

CLALLAM COUNTY PUD

2019 SPILL RESPONSE

SPILL RESPONSE

REPORTING

Any employee discovering an oil spill is responsible for immediately reporting the spill to Dispatch @ (565-3206, 565-3417 or cell @ 360-808-1279). Dispatch will gather from the reporting employee the following information:

- Employees contact number
- Location
- Equipment type
- Company number
- Serial number
- If the spill has/can reach water.

Dispatch will then relay this information to the Answering Service and the First Responders for the proper identification of any PCBs in the oil and spill response. In the event that oil has reached a tributary to a body of water, the employee will immediately notify Dispatch. Dispatch will then contact the National Response Center at 1-800-424-8802 and the contracted cleanup company to get immediate spill cleanup assistance in route. Dispatch will then notify the Answering Service and First Responders to assist in the spill response. The District has larger spill response boxes located at the Forks and Carlsborg warehouses and the Transformer Shop's truck that can assist with larger spill containment.

SAFETY & LIABILITY

No employee will risk their own or the public's safety responding to a spill. Proper steps will be taken to manage the risk(s) while responding to a

spill; this may require additional help such as traffic control, PPE, equipment and gathering more information to plan a safe and effective response. Due to the liability, cost and complexity in dealing with PCB's, all spills involving PCB's with >50ppm or assumed >50ppm shall be supervised and managed by an employee with the proper training and knowledge of EPA 40 CFR Part 761 PCB regulations and a current Hazwoper certification. Improper disposal of PCBs can result in fines of $37,500 per day and can result in criminal prosecution.

CONTROL vs. CONTAINMENT

Each spill is unique, therefore the responding employee will use their best judgment whether to control or contain the spill first. The priority will be to prevent the spill from making it into a tributary to a body of water. For example; ditches, storm drains, sewers, creeks, rivers, ponds, lakes, ocean, well sites or slopping ground leading into one of the above.

CONTROL

To assist the employee with control/containment, the oil spill kit contains pig putty, absorbent pads, booms and PPE. These kits have been issued to most in field trucks and are expected to be kept on the trucks and restocked if used. In the case of a pole-mount transformer falling or tipping over, every effort should be made to upright the unit to prevent further oil loss. Pad-mounted transformer leaks can often be stopped by putting the transformer on its back. In the event that oil has reached a tributary to a body of water, the employee will immediately notify Dispatch.

CONTAINMENT

The first oil to be contained is that which threatens any body of water or any tributary to any body of water. This includes any oil which is entering or which can potentially enter the ocean, a lake, stream, creek, ditch, sewer or well. Containment of the spilled oil can usually be accomplished by diking with dirt, rags or any other absorbent material available. If the oil has entered water, every effort should be made to remove the oil from the water with absorbent pads, booms or both.

Once oil threatening any body of water or any tributary to any body of water has been contained, all other oil should then be contained. Again, this can usually be accomplished by diking. Another part of containment includes transportation of oil from the spill site by any external forces; this includes water, pedestrians and vehicles. The method to be used to control these external forces is diversion, which includes the use of ditches and dikes for water and barricades for pedestrians and vehicles. Law enforcement personnel can be helpful in the diversion of pedestrians and vehicles.

DETERMINATION OF TYPE OF EQUIPMENT

After the oil spill has been controlled and contained, the next step is to determine the type of oil that was spilled. Electrical equipment containing oil has been divided into four categories with respect to PCBs. These four categories are:

- Less than 2 parts per million (ppm) – PCB-Free
- Less than 50 parts per million (ppm) - Non-PCB
- 50 to 499 parts per million (ppm) - PCB Contaminated
- 500 or more parts per million (ppm) — PCB

Oil from spills involving equipment in all four categories must be cleaned up to both Washington State Department of Ecology and EPA standards. Washington State Department of Ecology and EPA regulations contain both reporting and cleanup standards. To determine which category of equipment the oil falls in, first look at the nameplate. The nameplate of many new transformers will state that the oil is Non-PCB, contains less than 50 ppm PCB or contains less than 1 ppm or other wording indicating that the equipment is Non- PCB.

The second way to determine the category of electrical equipment is to give the manufacturer, serial number and company number to the Dispatcher. From this information, the Dispatcher can notify the first responders to determine if the equipment was manufactured after July 1, 1979, or has been tested by the District. If neither of the methods listed above can be used to determine the category of the equipment from which the oil originated, then the oil must be assumed >50ppm and cleaned up accordingly until a test can show the oil is <50ppm. Contact the first responders to have the oil tested. After the PCB content has been determined, an appropriate cleanup can begin.

OIL SPILL REPORT FORM

The Oil Spill Report form can be found in the spill report app on your company phone. It should be filled out as each item is completed. The Spill Report should be started by those first reporting the spill and finished by whomever completes the cleanup. The Spill Report along with before and after pictures will be sent to the Transformer Shop for proper reporting and follow up.

The following information must be included on the Oil Spill Report form:

1. Time the spill was first observed.
2. Location of the spill.
3. Equipment information that spill came from and PCB information.
4. Estimate amount of oil spilled
5. Present location of spilled oil.
6. Type of control and containment in use and spill pictures.
7. Actions that have been initiated.
8. Weather conditions.
9. Number of people on the scene.
10. Additional equipment or material that will be required.
11. Description and location of surfaces cleaned.
12. Depth of soil excavation and amount of soil removed.
13. Clean up pictures, time and date cleanup completed.
14. Confirmation samples collected from four excavation sidewalls and bottom.

Particular attention must be paid to any vehicles or any personal property that may have been contaminated by the spilled oil. The condition of all personal property prior to and after cleaning must be recorded on both the Oil Spill Report Form and the Personal Property Spill Report. All personal property shall be washed with detergent (see SPILL CLEANUP). Once all of the spilled oil has been controlled and stabilized and it has been determined that the equipment is Non-PCB, the restoration of power can proceed as normal.

ELECTRIC SYSTEM
INSPECTION PROGRAM
PUD#1 OF CLALLAM COUNTY

REVISED 1/14/2022 By M.H., J.S., T.L.

ELECTRICAL INSPECTION PROGRAM

SCOPE

This procedure covers the Electrical Inspection Program at PUD No.1 of Clallam County. The purpose of this program is to ensure the reliability of the electrical system, reduce risk to employees and the public and comply with WAC 296-45 and National Electric Safety codes. Areas to be inspected include the following:

Transmission, 69 KV and above

Substations

Distribution- both overhead and URD

METHODOLOGY

The program is to be accomplished by the following methods:

1. Scheduled vehicle/foot/helicopter inspections.
2. Unscheduled vehicle/foot/helicopter inspections.
3. Infrared inspections.
4. Visual inspections by vegetation management crews during scheduled tree trimming and right of way maintenance activities.
5. Inspections by linemen during outage/trouble calls.
6. Inspections by linemen associated with customer connects and line extensions.
7. Inspections by meter technicians during meter reads and changeouts.
8. System Alert. (System alert will involve all employees being aware of and reporting hazardous conditions. Specific inspections will normally be assigned to Line Crew personnel.)

APPLICABLE REGULATIONS

GENERAL RULES

1. Lines and equipment shall comply with safety rules when placed in service.
2. Lines and equipment in service shall be inspected at such intervals described herein.
3. When considered necessary, lines and equipment shall be subjected to practical tests to determine required maintenance.
4. Defects revealed by inspection or tests, if not promptly corrected, shall be recorded; such records shall be maintained until the defects are corrected.
5. Lines and equipment with recorded defects which could reasonably be expected to endanger life or property shall be promptly repaired, disconnected, or isolated.

Ref: NESC 214, 013, 121, 313 & WAC 296-45

PROGRAM RESPONSIBILITY

The Operations Manager

1. Ensure that this procedure is updated.
2. Develop inspection checklist for the various types of facilities.
3. Evaluate materials, engineering design, and work methods to improve reliability.
4. Coordinate with other District departments to adequately organize, budget, record, and provide resources for this project.

The Operations Superintendents

1. Provide manpower to accomplish the substation monthly inspections.
2. Provide manpower to accomplish system inspections.
3. Provide manpower to accomplish infrared inspections.
4. Complete inspections as scheduled.
5. Complete follow up work order repairs and maintenance.

The Engineering Manager

1. Monitor report filing and work order creation.
2. Maintain Substation, Transmission, Distribution and Infrared Inspections and Maintenance records.
3. Provide maps as needed for inspections and maintenance.
4. Create and maintain a shared directory indicating the number of substations, lines or circuits inspected, number of discrepancies found, and the number of discrepancies corrected.

TRANSMISSION INSPECTION

GENERAL

Transmission lines are to be visually inspected once a year. The Service Area Superintendent shall schedule inspections in their service area and submit copies of the inspections to the shared directory. Connections and switch contacts shall be inspected annually by infrared for "hot" spots. Photo records of "hot" connections shall be filed for reference and used to create necessary maintenance work orders.

Lines shall be inspected visually for items listed on the Transmission Checklist. Inspectors will submit maps to their supervisor that show sections of line that have been inspected

Deficiencies shall be recorded by plant location number with recommended improvements according to inspector.

Special patrols may be scheduled as deemed necessary. Records of such inspections, defects found and corrections made will be stored in the shared directory.

Items listed on Transmission Checklist shall serve as a guide. Deficiencies by plant location number shall be noted with recommended improvements according to the inspector.

REPAIRS

Repairs will be made at the time of inspection if practical. If repair work cannot be completed during the field inspection, the Operations Superintendent will schedule the corrective maintenance work as soon as practical. Inspection Reports shall be filed in the shared directory and the Engineering Department will create work orders as necessary.

RECORDS

Inspection maps and reports for the current cycle will be maintained by the Operations Superintendents and the Engineering Department in a shared directory. **Line switches will be operated or inspected at least once a year.**

Arrangements will be made to facilitate operation of switches by either circuit ties or switch jumpering. Lubrication may be applied to the moving parts and maintenance of the contacts will be performed as necessary to assure proper operation.

Attachment 5. NHPA Section 106 Direction

106 Review for Powerline

Operations & Maintenance Activities

on NFS Lands in WA and OR

(Excluding Bonneville Power Administration (BPA) Lines and FERC-authorized Lines[1])

Introduction

The purpose of this appendix is to describe the National Historic Preservation Act (NHPA) Section 106 review process the Forests and powerline companies will follow for powerline operations and maintenance activities. This document should be attached to every powerline Operation & Maintenance Plan reviewed and approved by the FS (Excluding Bonneville Power Administration (BPA) Lines and FERC-authorized Lines).

A. Regulatory Overview

National Historic Preservation Act

The Forest Service is mandated to comply with the NHPA[2] and its implementing regulations, 36 CFR 800. The NHPA requires the Forest Service as well as other federal agencies to consider the impact of their actions on historic properties and provide the Advisory Council on Historic Preservation (ACHP) with an opportunity to comment on projects before implementation. Because of Section 106, the Forest Service must assume responsibility for the consequences of its actions on historic properties (including approving powerline O & M activities) and be publicly accountable for its decisions.

Section 106 of NHPA

NHPA Section 106 is concerned with Federal undertakings. A Federal undertaking is a project, activity, or program either funded, permitted, licensed, or approved by the Forest Service. Undertakings may take place either on or off federally controlled property and include new and continuing projects and activities or programs funded in whole or in part and under the direct or indirect jurisdiction of the Forest Service. Section 106 requires the Forest Service to consider the effects of its undertakings on historic properties. In addition, the Forest Service is required to consult on the Section 106 process for each undertaking with State Historic Preservation Offices (SHPO), Tribal Historic Preservation Offices (THPO), and Indian Tribes. Powerline operation and maintenance activities may fall under the definition of an undertaking.

Statewide Programmatic Agreements & Applicability

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[1] Routine O&M for powerlines associated with FERC licensed hydropower projects that are covered by a FS special use authorization would fall under this guidance, but those primary powerlines on NFS lands that are authorized by FERC (and not a SUA) would be subject only to the FERC license's HPMP requirements.

[2] 54 U.S.C. 306101.

The Pacific Northwest Region (Region 6) has an Oregon Programmatic Agreement (Oregon PA)[3] and a Washington Programmatic Agreement (Washington PA)[4] that may be applicable to some of the powerline O & M activities. These PAs describe how Section 106 process that can be applied to certain classes of undertakings, provided the criteria is met, as determined by the Forest Heritage Professional (FHP).

Operating and maintenance activities eligible for review under one of the PAs require less documentation and streamlined consultation with Tribes and the SHPOs. When extraordinary circumstances exist, complex issues warrant, or when the standard measures contained in the PA cannot or will not be implemented, the Forests shall revert to standard procedures as prescribed by 36 CFR 800.

Special Use Authorizations

Special Use Authorizations (SUAs) are issued by National Forests to powerline companies and allow for the operations and maintenance of the permitted corridor, powerlines, and related facilities on National Forest System (NFS) land. The Oregon PA and Washington PA address some of these activities, such as powerline O&M, that occur on NFS land that are subject to Section 106 review. Each authorized powerline company throughout the 17 Forests within Region 6 is required to submit an operating plan that includes procedures for vegetation management, facility inspection, and O & M activities required to operate and maintain safe and reliable electric and ancillary facilities. The powerline company's routine O & M activities may be considered undertakings subject to NHPA Section 106 review and may be covered by the PAs.

B. Definitions

Advisory Council of Historic Preservation (ACHP) means the entire Council, a Council member, or an employee designated to act for the Council.

Affected Tribes is any Indian Tribe that is affected by any agency undertaking).

Agency Official/Authorized Officer (Regional Forester, Forest Supervisor, Area Manager, or District Ranger) the Forest Service Line Officer responsible for legal compliance and land management decisions on a Forest.

Archeological Resources Protection Act (ARPA)- The Archaeological Resources Protection Act of 1979, is a federal law of the United States passed in 1979 and amended in 1988. It governs the excavation of archaeological sites on federal and Native American lands in the United States, and the removal and disposition of archaeological collections from those sites.

Area of Potential Effects (APE) [36 CFR§ 800.16 (d)] the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the

[3] The *2004 Programmatic Agreement Between the United States Department of Agriculture Pacific Northwest Region (Region 6), The Advisory Council on Historic Preservation, and the Oregon State Historical Preservation Officer Regarding Cultural Resources Management in the State of Oregon by the USDA Forest Service*

[4] *The Pacific Northwest Region (Region 6), The Advisory Council on Historic Preservation, and 2) the Washington Department of Archeology and Historic Preservation Regarding Cultural Resource Management of the National Historic Preservation Act for Undertakings on National Forest System Lands in the State of Washington* (Washington PA).

scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.

Case by Case- Are those projects that need individual review on a case-by-case basis, and do not meet the criteria for the standard measures identified in the appendices in the OR or WA PAs.

Consultation [36 CFR§ 800.16 (f)] means the process of seeking, discussing, and considering the views of other participants, and, where feasible, seeking agreement with them regarding matters arising in the section 106 process.

Cultural Resources Professional- Is a professional consultant who meets the Secretary of the Interior Standards and Guidelines for Professional Qualification Standards (48 FR 44738-44739). Consultant responsibilities do not include formally approving Section 106 documents on behalf of the Forest, making official agency findings, signing consultation letters, or otherwise functioning as an agency official for the purposes of Section 106.

Effect [36 CFR§ 800.16 (i)] means alteration to the characteristics of a historic property qualifying it for inclusion in or eligibility for the National Register.

Forest Heritage Professional (FHP) or **Heritage Staff** as defined by FSM 2360.91 and FSH 2309.12 (04.1) is a Forest Service staff or advisory position with education and expertise in archaeology, history, cultural resource management, or related disciplines. They provide professional recommendations and services to help land managers meet their Heritage Program responsibilities.

Historic Property- [36CFR 800.16 (l)] means any pre-contact or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, features, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian Tribe or native Hawaiian organization and that meet the National Register criteria per the definition in 36 CFR§ 800.16(1). Unevaluated cultural resources will be treated as eligible for the NRHP (FSH 2309.12 (30.33)).

Inventory (i.e., Project Inventory, Heritage Inventory, and Archaeological Survey) is a systematic, detailed examination of an area designed to gather information about the number, location, condition, and distribution of historic properties within an undertaking's APE. This examination should consider the full range of historic properties.

Limited Review- A review for undertakings that have limited potential to affect historic properties (Appendix A OR PA, Appendix B WA PA).

Memorandum of Agreement (MOA)- is a legally binding document that commits an agency both by statute and by federal regulation to carry out the undertaking in accordance with the terms of the agreement in satisfaction of its responsibilities under Section 106

National Register of Historic Places (NRHP)- is the official list of the Nation's historic places worthy of preservation. Authorized by the National Historic Preservation Act of 1966.

OR SHPO- Oregon State Historic Preservation Office

State Historic Preservation Officer (SHPO) 36CFR§800.16 (v) means the official appointed or representative designated pursuant to section 101(b)(1) of the act to administer the State historic

preservation program. For the State of Oregon- Oregon State Historic Preservation Office (OR SHPO) and for the State of Washington, the Washington State Department of Archaeology and Historic Preservation (WA DAHP) is the SHPO.

WA DAHP- Washington Department of Archeology and Historic Preservation (Washington SHPO)

Undertaking means a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency; those carried out with Federal financial assistance; and those requiring a Federal permit, license or approval per the definition in 36 CFR§ 800.16(y).

C. Roles & Responsibilities

a. Forest Heritage Professional

The Forest Heritage Professional (FHP) is responsible for Section 106 review of powerline O & M activities that are consistent with an approved operation plan. The FHP reviews the proposed annual schedule of work for O & M activities to determine whether it qualifies as an undertaking and whether it meets the criteria for a streamlined review process under a PA. The FHP also determines the Area of Potential Effects (APE) for the activities, reviews Archaeological Research Investigation (ARI) permits, identifies appropriate Section 106 review, and documents the final Section 106 findings. The FHP coordinates consultation with the Oregon SHPO and/or Washington DAHP, ACHP, affected Tribes and other parties on behalf of the Agency Official. The FHP can also be a point of contact for any cultural resource professional a powerline company hires to help assist with the Section 106 process.

b. Special Uses Permit Administrator (SUPA)

The SUPA is responsible for issuance and administration of Special Use Authorizations for powerline facilities on NFS land. The SUPA coordinates with the powerline company, resource specialists on the Forest and the Authorized Officer on any actions related to the authorization. The SUPA, in coordination with the FHP, also processes ARI permits, issued to cultural resources professionals hired by powerline companies to assist in completing NHPA Section 106 requirements for O & M activities when required.

c. Powerline Companies

The powerline company is responsible for submitting an annual schedule of work for O & M activities. The powerline company is also responsible for providing qualified cultural resources professionals hired to assist them with the NHPA Section 106 requirements for the activity, unless the local Forest Service office has determined their Heritage staff has the capacity to complete the Section 106 work under a Cost Recovery Agreement between the Forest Service and the powerline company.

d. Cultural Resources Professional

The cultural resource professional is provided or hired by the powerline company to assist them with NHPA Section 106 requirements associated with a powerline O & M activity. Cultural Resource Professionals in the appropriate area(s) of expertise, shall conduct all actions to the professional standards referenced in

36 CFR § 800.2(a)(1) and shall meet the Secretary of the Interior's Professional Qualification Standards. The cultural resource professional is responsible for applying for an ARI permit and complying with all stipulations of the permit. All field work, documentation and reporting shall meet the requirements of the local Forest Service office and the respective SHPO.

D. Archaeological Research Investigation (ARI) Permit

ARI permits are issued under one or more of the following Acts: Antiquities Act, ARPA, or the Organic Act. The powerline company's cultural resources professional shall secure from the local Forest Service office an ARI permit prior to conducting heritage resource investigations in support of powerline O&M activities on the Forest. Activities that require testing or data recovery or other invasive resource investigations will be issued under ARPA and require an additional 30-day consultation with affected tribes. Region 6 may issue an ARI permit for multiple Forests where the permit activity crosses Forest Service administrative unit boundaries. FSM 2360, Section 2367.13. ARI permit issuance is not subject to NHPA Section 106 and is not subject to the National Environmental Policy Act (NEPA).

E. Section 106 Review Procedures

The following procedures describe how NHPA Section 106 will be implemented for routine powerline company O & M activities identified in their approved operating plans.

1) **Submit Annual Schedule of Work to SUPA**- For Section 106 review purposes, the annual schedule of work for O & M activities should contain enough detail to distinguish between each separate activity and identify any areas of potential ground disturbance for each separate activity. The Powerline O & M Annual Project review form below indicates the type of information that will be needed by the FHP to conduct the Section 106 review. The SUPA will promptly forward the project information associated with the annual schedule of work to the FHP.

2) **Forest Initial Project Review**- The FHP will review the annual schedule of work to determine if the proposed activities qualify as an undertaking. If the activity is an undertaking, the FHP will determine the APE. The FHP will also determine if the activity qualifies for a streamlined Section 106 process under a PA Appendix. For O & M activities in which a PA Appendix applies, the FHP will determine whether inspection or monitoring is required for the project. For activities that do not qualify under a PA Appendix, the FHP will determine the level of inventory required for the project. The FHP will endeavor to respond to the SUPA with the findings from their initial review within 10 calendar days.

The following are activities (not inclusive) <u>may</u> qualify for a streamlined review process under the current OR and/or WA PAs provided the PA stipulations are met:

- Powerline corridor mowing to prevent encroachment by brush species and establishment of noxious weeds.

- Installation of power pole or tower replacement when placed in the same location of previously disturbed ground.
- Recurrent brushing (hand, machine, chipping) activities to control vegetation within clearing limits of power line corridors.
- Upgrading or adding new power lines on existing poles with no change in pole configuration or new ground disturbance.

It should be noted; many of the powerline corridors within the region have not been previously surveyed. In general, activities that involve new ground disturbance in areas that have not had previous adequate archeological inventory or does not comply with Forest's established inventory design may require inventory, especially if the activity is located in an area considered to be high probability for the presence of cultural resources.

3) **Further Inventory**- If the FHP determines that an activity described in the annual schedule of work needs further inventory and the Forest Service is unable to complete the needed inventory through a cost recovery due to work load capacity, the powerline company will be required to provide a cultural resources professional to complete the inventory. The cultural resources professional will request an ARI Permit from the Forest where the activity will occur at least 60-days prior to proposed field work. The cultural resources professional will assist the powerline company with Section 106 compliance and will work with the FHP to ensure compliance with the Forest's established inventory design. The FHP will conduct tribal consultation prior to inventory to be conducted appropriate. The cultural resources professional will contact the FHP prior to the start of any inventory work to review Forest's established inventory design and review additional heritage files not available at OR SHPO or WA DAHP.

4) **Cultural Resources Professional Report Review by FHP**- The powerline company's cultural resources professional will submit electronically the inventory report and GIS shapefiles to the FHP, who will notify the SUPA when the information is received. The FHP will certify or request edits on the report's findings, determinations, and recommendations made by the cultural resources professional regarding the identification and management of historic properties. The Finding of Effects to historic properties will be determined in accordance with the procedures in the respective Oregon or Washington PA or most current versions.

   If the cultural resources professional's report meets the stipulations in the PA(or most current versions), the FHP will sign a PA approval form and email it to the powerline company, copying the SUPA and cultural resources professional indicating that the Section 106 process has been completed. Archaeological monitors may be required for some projects depending upon the findings as well as the implementation of site protection measures. For cultural resources professional reports that result in any determinations of eligibility and a finding of effect, the Forest will follow the process in their respective statewide PA. **Consultation with the affected Tribes, the SHPO and the ACHP is the responsibility of the agency and may take 60 days or more.**

5) **Adverse Effect-** If an Adverse Effect to historic properties is determined, the powerline company or cultural resources professional, in coordination with the Forest Service shall consult with the SHPO/THPO and other consulting parties, including Indian tribes, to develop and evaluate alternatives or modifications to the powerline O & M that could avoid, minimize or mitigate adverse effects on historic properties. If protection measures are identified to avoid or minimize impacts to historic properties, the powerline company will ensure that all employees and cultural resource professionals follow the protection measures for each site. If through protection measures historic properties cannot be avoided, a Memorandum of Agreement (MOA) will be developed (see www.achp.gov for more information).

6) **Resolution of Adverse Effects/Mitigations-** Through the MOA, mitigation measures that address the adverse effects will be developed in consultation between the tribes, appropriate SHPO, powerline company and Forest Service. Individual MOA stipulations need to be completed within one year of the execution of the MOA, unless there are unusual circumstances that would warrant a longer time period.

F. Inadvertent Discoveries, Emergency Undertakings, and Incident Management

With every undertaking there is a potential for discovering previously undocumented cultural resources, including human remains. Any discovery during implementation shall be treated in accordance with 36 CFR 800.13(b) and follow procedures in the local Forest Service office's Inadvertent Discovery Plan (IDP)s. The powerline company and their cultural resources professional are responsible for obtaining the IDP through the local Forest Service office prior to commencing with any O & M work.

For emergency undertakings associated with the O & M of the powerline, the process outlined in the 36 CFR 800.12 and 36 CFR Part 78 shall be followed. It is the responsibility of the powerline company to contact the affected Forest Service office and the FHP/Heritage staff to report the emergency.

If an incident occurs, that is not addressed in the section 106 plan, the powerline company will, at a minimum, provide the Forest with the following information:

1. Notification to the FHP/Heritage staff as soon as possible (typically within 48 hours of the incident).
2. A description of the incident.

A description of the heritage resources involved, if known.

Attachment 6. Project Notification Checklist

A. INFORMATION Forest:	District(s):
Date of Notification:	Proposed Implementation Date:
B. PROJECT NAME & DESCRIPTION	
Project Name & Forest Service Administrative Contact:	
Legal Description: (Township, Range, Section):	
Description of Project Location (Attach map, and send GIS Shapefiles available):	
Project Need (What is the purpose and need for the project)? :	
Proposed Activities (Describe all operations and activities)	
FS Project Manager/ Contact Information: Name & Title :_____ Email_____ Phone:_____	
C. PRELIMINARY REVIEW (COMPLETED BY UTILITY)	
Are there preliminary concerns regarding: • **Infrastructure security** • **Increases in vegetation management risk** • **Access**	
Is more information needed?	
Is a site visit needed?	
Does the project require utility specific design criteria or stipulations?	
Are there opportunities for collaborative work such as vegetation management, road maintenance, weeds treatments, etc.	

Attachment 7. Annual Utility Meeting Checklist

A. INFORMATION Forest(s):	Utility:
Date of Meeting:	Meeting Location:
Meeting Participant's:	
Follow up items from previous meeting/season?	
Description of Planned Utility Activity (Attach map, and Notification Checklist or SF 299 for each): • Vegetation management activities (including invasive species treatments) • Infrastructure maintenance activities • Construction activities (including line burials) • Road work/New access needs • Line/circuit abandonment • Other infrastructure work (communications sites, sub-stations, etc)	
Description of Planned Forest Service Activity (Attach maps and FS Notification Checklist): • Timber sales • Forest management (e.g., burning, thinning, brushing, spraying, and planting) • Travel management changes • Major road maintenance • Land sales, land adjustments, and mining operations • Changes in listing status for T&E species or special area management	
Common topics: • Public safety issues/Public use of permit area concerns • Permit re-issuance needs • Personnel changes/New contact information • Unauthorized use of NFS lands • Data sharing needs (GIS) • Collection agreements • Common issue collaboration (vegetation management, travel management, weeds treatment)	
Has the current operating plan been reviewed by both parties? **Have proposed changes to the Operating Plan or Appendices been identified?**	
Follow up items from this meeting:	