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United States Government **Department of Energy**

Bonneville Power Administration

memorandum

DATE: August 12, 2002

REPLY TO ATTN OF: KEP/Z992

SUBJECT: Supplement Analysis for the Transmission System Vegetation Management Program FEIS (DOE/EIS-0285/SA-103-Keeler-Pennwalt).

TO: Jim Jellison – TFO/Olympia
Ed Tompkins – TFO/Ross

Proposed Action: Vegetation Management for the Keeler-Pennwalt transmission line and parts of the St. John-Keeler, Rivergate-Keeler, Keeler-Oregon City, & St. John-St. Helens lines.

Location: Washington and Multnomah Counties, Oregon

Proposed by: Bonneville Power Administration (BPA).

Description of the Proposal: BPA proposes to clear targeted vegetation within the Right-of-Ways along access roads and around tower structures that may impede the operation and maintenance of the subject transmission line. See Section 1.4 of the attached checklist for a complete description of the proposed action.

Analysis: See the attached checklist for the resources present. Applicable findings and mitigation measures are discussed below.

Planning Steps:

1. Identify facility and the vegetation management need.

Work will take place along a multi-line corridor, which includes all of the Keeler-Pennwalt transmission line and parts of the St. John-Keeler, Rivergate Keeler, Keeler-Oregon City, & St. John-St. Helens lines. Project extends between towers 1/1 and 9/7 (Keeler-Pennwalt) having a variable easement width up to 380 feet. The ROW is located in Washington and Multnomah Counties, Oregon in the BPA Olympia Region.

Tall growing vegetation of the types and densities listed in section 1.2 of the attached checklist are present in the ROW and will soon pose a hazard to the lines. Project involves clearing this tall growing vegetation and treatment of the associated stumps and re-sprouts with herbicides to ensure that the roots are killed.

Vegetation on access roads and around tower sites that impede the operation and maintenance of the transmission line will also cleared and/or treated.

All off right-of-way trees that are potentially unstable and will fall within a minimum distance or into the zone where the conductors will swing will be removed.

Noxious weeds are present in the ROW and will also be cleared/treated.

This vegetation management program is designed to provide a 3-year maintenance free interval.

2. Identify surrounding land use and landowners/managers and any mitigation.

The subject corridor traverses a mixture of residential, urban, rural, and agricultural lands. It includes private and public (City of Portland, City of Beaverton, Oregon Dept. of Transportation, and Washington county and Multnomah county).

A letter will be sent by mail, notifying landowners in proximity to the Keeler-Pennwalt transmission line of the upcoming vegetation control activities. This letter will request information from landowners that needs to be considered for this action.

During treatment, landowners within 200 feet of the ROW will be contacted in person or by door hanger as crews move down the line.

3. Identify natural resources and any mitigation.

Section 3 of the attached checklist identifies the natural resources present in the area of the proposed work.

Water resources identified include riparian zones and a T&E stream. Mitigation measures include selective cutting and herbicide use in addition to the use of buffer zones as described in Sections 3.1 and 3.2 of the attached checklist. These mitigation measures are consistent with the EIS.

The work corridor crosses steep slopes. Mitigations include selective methods as described in Section 3.7 of the attached checklist. These mitigation measures are consistent with the EIS.

No other natural resource or cultural resource issues were identified.

4. Determine vegetation control and debris disposal methods.

Vegetation will be removed using manual or mechanical methods. Herbicide applications include spot, localized and foliar techniques. Debris will be disposed of using either chipping or lop and scatter techniques as described in Section 5 of the attached checklist.

5. Determine revegetation methods, if necessary.

Seeding was determined to be unnecessary.

6. Determine monitoring needs.

Periodic monitoring during the vegetation control contract period will be conducted by the Contract Officer's Technical Representative and by the vegetation control inspector. At the conclusion of the vegetation control contract a final inspection will be made. Additionally a follow-up inspection will be made the following year, in areas where herbicides were applied to evaluate control measure.

7. Prepare appropriate environmental documentation.

Findings: This Supplement Analysis finds that 1) the proposed actions are substantially consistent with the Transmission System Vegetation Management Program FEIS (DOE/EIS-0285) and ROD, and; 2) there are no new circumstances or information relevant to environmental concerns and bearing on the proposed actions or their impacts. Therefore, no further NEPA documentation is required.

/s/ Elaine Stratton
Elaine Stratton
Environmental Protection Specialist

CONCUR:*/s/ Thomas C. McKinney* DATE:08/19/2002
Thomas C. McKinney
NEPA Compliance Officer

Attachments

cc:
L. Croff – KEC-4
T. McKinney – KEC-4
M. Hermeston – KEP-4
J. Meyer – KEP-4
J. Sharpe – KEPR-4
E. Stratton – KEP/Z992
P. Key – LC-7
M. Johnson – TF/DOB-1
D. Kraus – TFO/Olympia
S. Martin – TFO/Olympia
J. Jellison – TFO/Olympia
E. Tompkins – TFO/Ross
D. Swanson – TFOP/Ross
Environmental File – KEC
Official File – KEP-4 (EQ-14)

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Vegetation Management Checklist

1. IDENTIFY FACILITY AND THE VEGETATION MANAGEMENT NEED

1.1 Describe Right-of-way.

This is a multi-line corridor, which includes all of the Keeler-Pennwalt transmission line and parts of the St. John-Keeler, Rivergate Keeler, Keeler-Oregon City, & St. John-St. Helens lines.

Corridor Name	Corridor Length & kV	Easement width	Miles of Treatment
Keeler-Pennwalt	4.76 miles; 115 kV	125’	1
Rivergate-Keeler	2 miles; 115 kV	250’	.4
St. John-Keeler	2 miles; 115 kV	380’	.43

The Right-of-way (ROW) components considered for treatment in this prescription include: ROW, Access Roads, and Transmission Structures.

Rights-of-way Clearing Requirements

- Control all tall-growing species that are now or would be a hazard to the line.
- Cut stumps are not to be taller than 4 – 6 in.

Transmission Structures Clearing Requirements

- Control all tree and shrub species within 30 ft. of transmission structures. Cut stumps are not to be taller than 2 – 4 in.
- Pull all debris and slash out of the 30-ft. area around transmission structures.

Access roads Clearing Requirements

- Control all vegetation except grasses, to enable safe driving.
- The access road is to be 14 to 25 ft. wide with a 15-ft.- high clearance. Limbs should not hang down into the access road.
- Cut stumps are not to be taller than 2 in. in the roadbed.
- Cut stumps horizontal to the ground to prevent personal injuries and tire puncture.
- Trim limbs back as flush to the trunk as possible when trees are rooted outside of the access road.
- Pull all debris back from the access road travel way

1.2 Describe the vegetation needing management.

Vegetation Types: Douglas fir, Alder, Popular, and Blackberries are present at low to medium density. Noxious Weeds -(Scotch broom) is present along the transmission line at low to medium density.

1.3 List measures you will take to help promote low-growing plant communities. If promoting low-growing plants is not appropriate for this project, explain why.

This prescription moves this transmission line toward Bonneville's overall goal of having low-growing plant communities along the ROW to control development of potentially threatening vegetation and noxious weeds.

Tall-growing vegetation that is currently or will soon be a hazard to the line will be removed. (In places where tall growing vegetation must be left in place, it may not be possible to promote low-growing plants.)

Cut-stump or follow-up herbicide treatments on Portland sprouting-type species will be carried out to ensure that the roots are killed.

Desirable low-growing plants will not be disturbed. Only selective vegetation control methods that have little potential to harm non-target vegetation will be used.

1.4 Describe overall management scheme/schedule.

Previous entry – The last entry for this line was in 1999. At that time tall growing species were removed using CLS (cut lop & scatter) as the main method of control.

Current entries – This prescription will continue the efforts of the previous entry to control tall growing species and extend already established low growing plant communities using best management practices for manual control (cut lop & scatter) and herbicide application (stump treatment of tall growing species).

Access roads and tower sites will be treated using selective and non-selective methods that include hand cutting, and herbicide spot, localized applications, including cut stubble.

Noxious weeds control methods and herbicides for noxious wed management will be based on their location and proximity to water sources. Treatment will be limited to spot, and localized treatments.

Future entries – This transmission line corridor is on a 3-year entry cycle. This cycle is due to the transmission line height above ground and growth characteristics of the vegetation to encroach into the minimum approach distance of the line within that time period. Future entries will the best management practices to establish and continue a low growing plant community. These practices may include the use manual and herbicide application. It is expected that this corridor will continue on a 3-year cycle.

2. IDENTIFY SURROUNDING LAND USE AND LANDOWNERS/MANAGERS

2.1 List the types of landowners and land uses along your corridor.

The Keeler-Pennwalt transmission line crosses a mixture of residential, urban, rural, and agricultural lands. It includes private and public (City of Portland, City of Beaverton, Oregon Dept. of Transportation. Washington county and Multnomah county)

2.2 Describe method for notifying right-of-way landowners and requesting information (i.e., door hanger, letter, phone call, e-mail, and/or meeting). Develop landowner mail list, if appropriate.

A letter will be sent by mail, notifying landowners in proximity to the Keeler-Pennwalt transmission line of the upcoming vegetation control activities. This letter will request information from landowners that needs to be considered for this action.

During treatment, landowners within 200 feet of the ROW will be contacted in person or by door hanger as crews move down the line.

2.3 List the specific land owner/land use measures — determined from the handbook or through your consultations with the entities — that will be applied.

See handbook — **Requirements and Guidance for Various Landowners/Uses** for requirements and guidance, also **Residential/Commercial**, **Agricultural**, **Tribal Reservations**, **FS-managed lands**, **BLM –managed lands**, **Other federal lands**, **State/ Local Lands.**.

Span		Landowner/use	Specific measures to be applied
From	To		
1/3	1/10+ 300	City of Tualatin	Park and T& B Agreement
1/10+ 300	2/4	Rock Creek Country Club	Gulf Course and T& B Agreement
2/8+ 200	2/8+ 300	City of Tualatin	Park and T& B Agreement-
3/1	3/2	City of Tualatin	Wetlands Mitigation LU#20010388
5/7	5/7+ 400	P/O Unknown	Xmas Tree Agreement
5/7+ 800	5/8	P/O Unknown	Xmas Tree Agreement
7/2+ 100	7/2+ 300	P/O Unknown	Ornamental Trees & Shrubs
7/5	9/6	Portland Forest City Park	Recreational Trails for Walking and Cross Country Biking

2.4 Review any existing landowner agreements (e.g. tree/brush Permits or Agreements). List in table above any provisions that need to be followed and where they are located.

Some of the trees in the T&B Agreement areas, a letter of non-compliance will be sent to Rock Creek Country Club and Tualatin City Parks.

2.5 List any known casual informal use of the right-of-way by non-owner publics. List any constraints or measure's to take due to the informal use.

Casual informal uses include non-owner uses in public parks (Washington county), a golf course and Forest Park (Multnomah county).

2.6 List other potentially affected people, agencies, or tribes (that are not landowners/managers) that need to be notified or coordinated with. Describe method of notification and coordination.

Other potentially affected groups may include Adjacent Utility (PGE), City of Beaverton Park and Recreation dept., and City of Portland Parks and Recreation dept. These groups will be notified by mail to inform them about the project.

3. IDENTIFY NATURAL RESOURCES

3.1 List any water resources (streams, rivers, lakes, wetlands) that may be impacted by vegetation control activities. For each water body describe the control methods and requirements or mitigation measures that will be used.
See Handbook — **Water Resources** for requirements for working near water resources including buffer zones.

Span		Waterbody	T&E?	Method	Herbicide	Application Technique	Buffer	Other
From	To							
1/10+ 300	2/1	Pond	No	N/A				In Gulf course
2/5	2/7+4	Pond and Rock Creek	Yes	N/A				No treatment
2/8+ 200	3/1	Wetlands	No	N/A				No treatment
3/1	3/5	No-name Creek	No	N/A				No treatment
3/8	4/1	No-name Creek	No	N/A				No treatment

6/1+ 100	170	No-name Creek	No	Selective Cut	Garlon 3A	Spot treatment	Waters edge	
6/5+ 75	145	No-name Creek	No	Selective Cut	Garlon 3A	Spot treatment	Waters edge	
7/8+ 350	420	No-name Creek	No	Selective Cut	Garlon 3A	Spot treatment	Waters edge	
7/9+ 250	320	No-name Creek	No	Selective Cut	Garlon 3A	Spot treatment	Waters edge	
8/1+ 275	345	No-name Creek	No	Selective Cut	Garlon 3A	Spot treatment	Waters edge	
8/5+ 350	420	No-name Creek	No	Selective Cut	Garlon 3A	Spot treatment	Waters edge	

3.2 If planning to use herbicides, list locations of any known irrigation source, wells, or springs (landowners maybe able to provide this info if requested).

See Handbook — **Herbicide Use Near Irrigation, Wells or Springs** for buffers and herbicide restrictions.

Span		**Well/irrigation/or spring**	**Herbicide**	**Buffer**	**Other notes/measures**
To	**From**				
		N/A	None		

3.3 List below the areas that have Threatened or Endangered Plant or Animal Species and the name of the species, and any special measures that need to be taken due to their presence. Attach any BAs, T&E maps, or letters from US Fish and Wildlife.

No T&E plants or animal species are known to occur in areas to be treated.

3.4 List any other measures to be taken for enhancing wildlife habitat or protecting species.

None

3.5 List any visually sensitive areas and the measures to be taken at these areas.

None

3.6 List areas with cultural resources and the measures to be taken in those areas.

The Grand Rhonde Tribe is not aware of any cultural sites, but if discovered during the course of vegetation control, work will stop in the immediate area and the tribe will be contacted as well as the Environmental Specialist.

3.7 List areas with steep slopes or potential erosion areas and the measure and methods to be applied in those areas.

Vegetation control primarily takes place on flats and tops of ridges. Manual cutting is required on steep slopes and sensitive soils.

3.8 List areas of spanned canyons and the type of cutting needed.

No treatment in spanned canyons

4. DETERMINE VEGETATION CONTROL METHODS

4.1 List Methods that will be used in areas not previously addressed in steps above.

See the attached Keeler-Pennwalt Prescription cut sheet.

Herbicide application method:

Stump treatment (S) – Herbicide is applied by hand (squirt bottle) or backpack to freshly cut stumps of broadleaf trees and shrubs to prevent re-sprouting.

Low-volume foliar treatment (LF) – Herbicide is applied with the use of a backpack sprayer, all terrain vehicle (ATV) or tractor with a spray gun. Herbicide is applied to the foliage of individual or clumps of plants during the growing season, just enough to we them lightly and completely. A relatively high percentage of herbicide is used mixed with water. Thickening agents are added where necessary to control drift. Dyes may also be added to identify what areas have been treated.

Manual Requirements

- When crews are working during the fire season (defined by the fire protection district with jurisdiction in the area), each crew shall have the proper fire-suppression tools and materials, as required by the responsible fire control agency.
- Equip power-cutting tools with approved spark arresters.
- Cut conifers below the lowest live limb to eliminate the continued growth of lateral branches.
- If planning follow-up herbicide stump treatment, cut stumps flat for application of the chemical.
- If planning follow-up herbicide stump treatment in rights-of-way, cut deciduous brush about 15.2 cm to 20.3 cm (6 to 8 in.) above the ground line.

Herbicides Requirements

- Follow product label directions, as required by FIFRA, including "mandatory" statements (such as registered uses, maximum use rates, application restrictions, worker safety standards, restricted entry intervals, environmental hazards, weather restrictions, and equipment cleaning).
- Follow all product label "advisory" statements (such as techniques for mixing, applying and cleaning within the mandatory requirements, recommendations for protection clothing, guidelines for differing soil types, etc).
- Always have a copy of the herbicide label and Material Safety Data Sheets (MSDS) at work sites during all mixing and applications.
- Ensure that all herbicide applications are conducted in the presence of a licensed applicator valid for the state where the work is located.
- Keep records of each application, including the active ingredient, formulation, application rate, date, time, location, etc. Records must be available to state and Federal inspectors, and may need to be supplied to landowners (e.g. Forest Service and WA DNR).
- Ensure the use of EPA-approved herbicides that have been reviewed by Bonneville for effectiveness and environmental considerations.
- Never leave herbicides or equipment unattended in unrestricted access areas.
- See **Water Resources** for herbicide mitigation measures near wetlands, streams, rivers, ponds, and wells.
- *Before application*, thoroughly review the right-of-way to identify and mark, if necessary, the buffer requirements.
- Protect drinking water sources by following all buffer zone restrictions.
- Observe restricted entry intervals specified by the herbicide label and post public warning signs where required.
- If planning follow-up herbicide stump treatment in access roads, cut deciduous stumps 5 to 10 cm (2 in.) above the ground line.
- If planning follow-up herbicide stump treatment, apply herbicides as soon as possible after cutting. (If herbicide is not applied soon after the vegetation has been cut, it may be best to wait until sprouting has occurred and then spray by foliar technique.)
- For safety, cut all brush stumps flat where possible. (Angular cuts leave a sharp point that could cause injuries if fallen upon.)
- For cutting trees close to "live" power lines, use only qualified personnel.

5. DETERMINE DEBRIS DISPOSAL AND REVEGETATION

5.1 Describe the debris disposal methods to be used and any special considerations.

Chip (Mechanical brush disposal unit cuts brush into chips 4 in. or less in diameter, and spread over ROW, piled on ROW, or trucked off site. Trunks too large for the chipper are limbed and the limbs chipped. Trunks are placed in rows along the edge of the right-of-way or scattered, as the situation requires.)

Lop and Scatter (Branches of a fallen tree are cut off (lopped) by ax or chainsaw, so the tree trunk lies flat on the ground. The trunks are occasionally cut in 1-to-2-m (4-to-8-ft.) lengths. The cut branches and trunks are then scattered on the ground, laid flat, and left to decompose.)

5.2 List areas of reseeding or replanting (those areas not already described in steps 1, 2, or 3).

No Reseeding or Replanting

5.3 If not using native seed/plants, describe why.

Not applicable

5.4 Describe timing and any follow-up that will need to take place to ensure germination/success of seeding/planting.

Not applicable

6. DETERMINE MONITORING NEEDS

6.1 Describe the follow-up/monitoring cycle that will be used to evaluate the effectiveness of the vegetation control methods used.

Periodic monitoring during the vegetation control contract period will be conducted by, Contract Officer Technical Representative and vegetation control inspector. At the conclusion of the vegetation control contract a final inspection will be made. Additionally a follow-up inspection will be made the following year, in areas where herbicides were applied to evaluate control measure.

6.2 Describe any follow-up or monitoring needed to determine if mitigation measures were effective.

See 6.1

7. PREPARE APPROPRIATE ENVIRONMENTAL DOCUMENTATION

See handbook — **Prepare Appropriate Environmental Documentation** for requirements. . Also prepare Supplement Analysis **Supplement Analysis** for signature.

7.1 Describe any potential project impacts or project work that are different than those disclosed in the Transmission System Vegetation Management Program EIS. Describe how those differences impact natural resources and if the differences are "substantial".

N/A

7.2 Is there a need for additional NEPA documentation (i.e. Forest Service requirement, Record of Decision, supplemental EIS)? If so, attach.

N/A