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(8-89)

United States Government **Department of Energy**

Bonneville Power Administration

memorandum

DATE: June 21, 2002

REPLY TO ATTN OF: KEP/Z-992

SUBJECT: Supplement Analysis for the Transmission System Vegetation Management Program FEIS (DOE/EIS-0285/SA- 75-Ross-Lexington.

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

Proposed Action: Vegetation Management for the Ross Lexington Transmission Line.

Proposed by: Bonneville Power Administration (BPA).

Description of the Proposal: BPA proposes to remove danger trees as well as unwanted vegetation in the rights-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: Please 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 on a 43+- mile stretch of the Ross-Lexington 230kV transmission line between towers 1/1 and 41/3 having a 125-foot easement width. The ROW is located in Clark and Colwitz Counties, Washington 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.

This vegetation management program is designed to provide a 4-5 year maintenance free interval. Future cycles of work will involve cut stump, basal treatments or tree cutting.

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

The subject corridor traverses residential, rural, grazing lands, industrial Forestlands and Washington State DNR lands. Landowners along the ROW will be contacted two weeks prior to initiation of the work by letter or by door-to-door contact.

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 T&E streams. 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.

Bald eagle habitat has been identified in the work corridor. Mitigation measures to assure no affect on the eagles are described in Section 3.3 of the attached checklist.

The work corridor crosses two steep slopes. Mitigations include selective methods and herbicide usage 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 chip, lop and scatter or mulch techniques as described in Section 5 of the attached checklist.

5. Determine revegetation methods, if necessary.

Re-vegetation needs have not been determined. Native grasses are present along the entire length of the ROW that will seed into areas that have been lightly disturbed. Monitoring of the success of the natural reseeding will be made the following spring. If necessary, the disturbed sites will be reseeded with native grass mixtures at that time.

6. Determine monitoring needs.

Follow up inspection will be preformed in the spring. Cut stump/foliar treatment of target vegetation will be conducted as needed based on the inspection results. The proposed mixture of herbicides is identified in Section 6.1 of the attached checklist. The herbicide mixture is consistent with the EIS. The line will be patrolled annually thereafter to monitor the effectiveness of the treatment measures.

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:07/02/2002
Thomas C. McKinney
NEPA Compliance Officer

Attachment

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
D. Kraus – TFO/Olympia
S. Martin – TFO/Olympia
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.

Corridor Name	Corridor Length & kV	Easement width	Miles of Treatment
Ross-Lexington No. 1	43 mi., 230Kv	Variable	421.9 mi.

See Handbook — **List of Right-of-way Components** for checkboxes and the requirements for the components **Rights-of-way**, **Access Roads**, **Switch Platforms**, **Danger Trees**, and **Microwave Beam paths**.

Right Of Way:
Right-of-Way – clearing in right-of-way
Transmission Structures – clearing around
Access Road clearing - approximate miles – 1.9 mi.
Reclaim ("C") Trees

1.2 Describe the vegetation needing management.

See handbook — **List of Vegetation Types**, **Density**, **Noxious Weeds** for checkboxes and requirements.

Vegetation Types:
Douglas Fir
True Fir
Hemlock
Alder
Maple
Willows
Cottonwood
Wild Cherry
Noxious Weeds - Scotch Broom
Blackberries

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.

See Handbook — for requirements and checkboxes.

Cut stump or follow-up herbicide treatments on sprouting-types species will be carried out to ensure that the roots are killed. Vegetation that will grow tall will be selectively eliminated before it reaches a height or density to begin competing with low-growing species.

1.4 Describe overall management scheme/schedule.
See Handbook - **Overall Management Scheme/Schedule**.

Initial entry – All tall growing vegetation will be cut and chemically treat the stumps to prevent grow-in trees Access, right-of-way roads and structure sites are to be cut and treated. The danger trees will be cut that is adjacent to the Ross-Lexington No. 1 lines. A follow-up chemical treatment to begin in the late summer of 2002.

Subsequent entries – Every 4-5 years, a maintenance contract will be necessary to treat sprouts. The use of herbicides on the initial and subsequent cycles should reduce the quantity and cost of work.

Future cycles – Same as above.

2. IDENTIFY SURROUNDING LAND USE AND LANDOWNERS/MANAGERS

2.1 List the types of landowners and land uses along your corridor.
See Handbook — **Landowners/Managers/Uses** for requirements, and **List of Landowners/Managers/Uses** for a checkbox list.

Landowners/Managers/Uses:
Residential
Rural
Grazing lands
Industrial Forest lands
Washington State DNR

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.
See Handbook — **Methods for Notification and Requesting Information** for requirements.

Olympia will send letters to the property owners about 2 weeks prior to cutting the brush. Door to door contact will be made where it is warranted.

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
To	**From**		
1/7+100	1/7 +200	Micheal Allen	Tree & Brush Agreement LU#980441
19/5	20/1+200	Tree Nursery	?? L.U. Agreement
23/1+300	23/1+500	Application	Xmas Tree Agreement
24/1+1165	24/2+350	Christians	Xmas Tree Agreement LU#??
25/4	25/5+600	Michael Anderson	Xmas Trees LU#79122 Trees out of compliance
33/2+300	33/3+260	Ken Bayles	Xmas trees LU#87179 Trees Out of Compliance

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.

See handbook — **Landowner Agreements** for requirements.

All the trees agreement listed above are in compliance except the Christian, Anderson and Bayles. I spoke with Christian and I will have reality send letters of non-compliance to Anderson and Bayles.

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.

See handbook — **Casual Informal Use of Right-of-way** for requirements.

N/A

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.
See handbook — **Other Potentially Affected Publics** for requirements and suggestions.

I have contacted the newly established Cowlitz tribe in Longview. I sent them an over-view map of the location of the transmission line easement. They are not aware of any cultural sites.

3. IDENTIFY NATURAL RESOURCES

See Handbook — **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		Water body	T&E	Method	Herbicide	Application Technique	Buffer	Other
To	From							
525	4/2+325	Ck. No-name	No	Cut Stump	Garlon 3A	Spot If foliar needed	Waters Edge 35 feet	Selective Cutting
1325 685	5/3+1125 6/4+615	Salmon Ck. No name Ck.	Yes No	Cut Stump Cut Stump	Garlon 3A Garlon 3A	Spot Spot If foliar needed	100 Waters Edge 35 feet	Selective Cutting Selective Cutting
1145	11/4+0	Ck. No-name	No	Cut Stump	Garlon 3A	Spot If foliar needed	Waters Edge 35 feet	Selective Cutting
650	12/1+500	Ck. No-name	No	Skip				
1178 1000	12/5+0 13/2+800	E.Fork Lewis River Mason Ck.	Yes Yes	Cut Stump	Garlon 3A	Spot	100	Selective Cutting

1275	14/3+825	Ck. No-name	No	Skip				
520	15/2+300	Ck. No-name	No	Skip				
400 1275	15/4+200 16/2+1200	Ck. No-name No name Ck.	No No	Cut Stump “	Garlon 3A “	Spot If foliar needed “	Waters Edge 35 feet “	Selective Cutting “
1220 250	17/1+0 18/1+100	Ck. No-name Jenny Ck.	No No	Cut Stump “	Garlon 3A “	Spot If foliar needed	Waters Edge 35 feet	Selective Cutting “
1170	18/4+1100	Ck. No-name	No	Cut Stump	Garlon 3A	Spot If foliar needed	Waters Edge 35 feet	Selective Cutting
1210 670 300	20/1+1030 20/2+500 20/4+100	Lewis River No name Ck. No name ck.	Yes Yes Yes	Cut Stump “ “	Garlon 3A “ “	Spot “ “	100 “ “	Selective Cutting “ “
1540	22/3+1050	Ck. No-name	No	Skip				
975	23/2+840	Ck. No-name	No	Cut Stump	Garlon 3A	Spot If foliar needed	Waters Edge 35 feet	Selective Cutting
790	23/5+0	Ck. No-name	No	Skip				
600	24/2+350	Little Kalama River	Yes	Cut Stump	Garlon 3A	Spot	100	Selective Cutting
900	25/5+650	Kalama Rv,	Yes	Cut Stump	Garlon 3A	Spot	100	Selective Cutting

1000	25/5+900	Ck. No-name	Yes	Cut Stump	Garlon 3A	Spot If foliar needed	Waters Edge 35 feet	Selective Cutting
500	26/6+0	Ck. No-name	No	Cut Stump	Garlon 3A	Spot If foliar needed	Waters Edge 35 feet	Selective Cutting
305	27/3+235	Ck. No-name	No	Cut Stump	Garlon 3A	Spot If foliar needed	Waters Edge 35 feet	Selective Cutting
1135	27/3+1065	Ck. No-name	No	Cut Stump	Garlon 3A	Spot If foliar needed	Waters Edge 35 feet	Selective Cutting
1025	28/2+870	Italian CK.	Yes	Skip	“	“	“	“
1480	28/2+1300	N. Italian	No	Skip	“	“	“	“
975	29/3+575	Ck. No-name	No	Cut Stump	Garlon 3A	Spot If foliar needed	Waters Edge 35 feet	Selective Cutting
465	30/2+0	Ck. No-name	No	Cut Stump	Garlon 3A	Spot If foliar needed	Waters Edge 35 feet	Selective Cutting
1435	30/5+1365	Ck. No-name	No	Cut Stump	Garlon 3A	Spot If foliar needed	Waters Edge 35 feet	Selective Cutting
815	31/2+775	Ck. No-name	No	Skip	“	“	“	“
1000	31/4+400	Ck. No-name	No	Skip	“	“	“	“
435	32/1+365	Ck. No-name	No	Cut Stump	Garlon 3A	Spot If foliar needed	Waters Edge 35 feet	Selective Cutting
705	32/2+630	Ck. No-name	No	Cut Stump	Garlon 3A	Spot	Waters Edge	Selective Cutting

						If foliar needed	35 feet	
1070	33/1+1000	Ck. No-name	No	Cut Stump	Garlon 3A	Spot If foliar needed	Waters Edge 35 feet	Selective Cutting
770	34/2+700	Ck. No-name	No	Cut Stump	Garlon 3A	Spot If foliar needed	Waters Edge 35 feet	Selective Cutting
2100	34/4+600	Ck. No-name	No	Cut Stump	Garlon 3A	Spot If foliar needed	Waters Edge 35 feet	Selective Cutting
605	35/3+535	Ck. No-name	No	Cut Stump	Garlon 3A	Spot If foliar needed	Waters Edge 35 feet	Selective Cutting
1735	35/4+0	Ck. No-name	No	Cut Stump	Garlon 3A	Spot If foliar needed	Waters Edge 35 feet	Selective Cutting
935	36/2+565	Ck. No-name	No	Cut Stump	Garlon 3A	Spot If foliar needed	Waters Edge 35 feet	Selective Cutting
475	36/4+400	Ck. No-name	No	Cut Stump	Garlon 3A	Spot	Waters Edge	Selective Cutting
435	36/6+365	Ck. No-name	No	Cut Stump	Garlon 3A	Spot	Waters Edge	Selective Cutting
425	37/1+225	Cowee nam Rv.	Yes	Skip	“		Skip	
2000	37/3+150	Cowee nam Rv.	Yes	Skip			Skip	
895	38/1+0	Cowee nam Rv.	Yes	Skip			Skip	
1035	38/2+0	Cowee nam	Yes	Skip			Skip	

		Rv.						
1267	39/1+800	No-named Ck.	No	Cut Stump	Garlon 3A	Spot If foliar needed	Waters Edge 35 feet	Selective Cutting
675	40/5+420	Ck. No-name	No	Cut Stump	Garlon 3A	Spot If foliar needed	Waters Edge 35 feet	Selective Cutting
680	40/6+500	Ck. No-name	No	Skip	"	"	"	"
1535	41/2+425	Cowlitz River	Yes	Skip				

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			

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.

See Handbook — **T&E Plant or Animal Species** for requirements and determining presence.

Span		T&E Species	Method/mitigation or avoidance measures
To	From		
1325	5/3+1125	Salmon/Bull Trout	Selectively cut trees whose tops are within 50' of conductor at maximum sag within riparian zone, no herbicide w/in 100' of stream bank. 100-200' AH Accord/Garlon 3A is used to spot treat cut stumps.
1178 1000	12/5+0 13/2+800	Salmon/Bull Trout	Selectively cut trees whose tops are within 50' of conductor at maximum sag within riparian zone, no herbicide w/in 100' of stream bank. 100-200' AH Accord/Garlon 3A is used to spot treat cut stumps.
1210 670 300	20/1+1030 20/2+450 20/4+100	Salmon	Selectively cut trees whose tops are within 50' of conductor at maximum sag within riparian zone, no herbicide w/in 100' of stream bank. 100-200' AH Accord/Garlon 3A is used to spot treat cut stumps.
600 1100	24/2+350 25/5+900	Bull Trout	Selectively cut trees whose tops are within 50' of conductor at maximum sag within riparian zone, no herbicide w/in 100' of stream bank. 100-200' AH Accord/Garlon 3A is used to spot treat cut stumps.
900	25/5+650	Bull Trout	Selectively cut trees whose tops are within 50' of conductor at maximum sag within riparian zone, no herbicide w/in 100' of stream bank. 100-200' AH Accord/Garlon 3A is used to spot treat cut stumps.
38/3	37/3 (4 Xings)	Salmon	Top trees cutting within riparian zone, no herbicide w/in 100' of stream bank. 100-200' AH Accord/Garlon 3A is selectively used on cut stumps.
1535	41/2+425	Salmon	Top trees cutting within riparian zone, no herbicide w/in 100' of stream bank. 100-200' AH Accord/Garlon 3A is selectively used on cut stumps.

3.4 List any other measures to be taken for enhancing wildlife habitat or protecting species.
See Handbook — **Protecting Other Species** for requirements.

Span		Species	Measures
To	From		
38/2	36/6	Bald Eagle	Seasonal restriction from Jan. 1 to August 1. No work within 0.25 miles if in line-of-sight of nesting tree, unless clearance surveys show that there is no nesting occurring or if consultation with USDWS can shows that the young have fledged. Basal/foliar treat vegetation. No work within 100 meters of any known wintering bald eagle roosts from Nov 1 through March 15 unless clearance surveys are done daily to determine that no bald eagles are present within 100 meters of activities. If roosting trees are to be removed, formal consultation with USFWS.

3.5 List any visually sensitive areas and the measures to be taken at these areas.
See Handbook — **Visual Sensitive Areas** for requirements.

Span		Describe sensitivity	Method/mitigation measures
To	From		
		N/A	Selectively cut trees whose height is greater than 20' in order to maintain a visual buffer on both sides of the freeway.

3.6 List areas with cultural resources and the measures to be taken in those areas.
See Handbook – **Cultural Resources** for requirements.

Span		Describe sensitivity	Method/mitigation measures
To	From		
			Consultation with the Colwitz Tribe indicates there are no known cultural sites along this ROW

3.7 List areas with steep slopes or potential erosion areas and the measure and methods to be applied in those areas.
See Handbook – **Steep/Unstable Slopes** for requirements.

Span		Describe sensitivity	Method/mitigation measures
To	From		
1425	20/1+ 1210	Steep Slope	Selectively apply herbicide to tall growing veg.
150	37/3+ 0	Steep Slope	Selectively apply herbicide to tall growing veg.

3.8 List areas of spanned canyons and the type of cutting needed.
See Handbook – **Spanned Canyons** for requirements.

Span		Methods, cutting
To	From	
		N/A

4. DETERMINE VEGETATION CONTROL METHODS

See Handbook — **Methods**

4.1 List Methods that will be used in areas not previously addressed in steps above.
See Handbook — **Manual**, **Mechanical**, **Biological**, **and Herbicides** for requirements for each of the methods.

Span		**Methods,** including herbicide active ingredient, trade name, application technique
To	From	
1/1	43/3	For non-sensitive areas (spans) cut stump/basal treatment with 25% Garlon 4 and 75% Forest Crop Oil (FCO). 50/50 Accord or Garlon 3A/Water for stump treatment in the riparian zones; Stubble treat structure sites and the right-of-way roads with 90% Water, 6% FCO, 3% Garlon 4 and 1% Tordon 22 K. Follow-up treatment-foliar application of the above chemicals as noted under stubble treatment, except FCO. Foliar treat Scotch broom.

5. DETERMINE DEBRIS DISPOSAL AND REVEGETATION

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

See Handbook — **Debris disposal** for a checkbox list and requirements.

Debris Disposal:

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.)

Mulch (Mulching is a debris treatment that falls between chipping and lop-and-scatter. The debris is cut into 1-to-2-ft. lengths, scattered on the right-of-way and left to decompose. This method is used when terrain and conditions do not allow the use of mechanical chipping equipment.)

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

See Handbook — **Reseeding/replanting** for requirements.

Span		Reason for Reseed/plant	Type of Seed or Plants	Native?
To	From			
		N/A		

Native grasses are present on the entire right-of-way that will seed into the areas that will have lightly disturbed soil predominately located on the right-of-way roads. BPA expects 2-3 vehicles of the brush contractor and 1 contract inspector's vehicle will be present on the site. A brush machine will mulch the structure sites and right-of-way roads where Scotch Broom and Black Berries are present.

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

N/A

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

Monitoring of the success of the brush-cutting program will begin the spring in which evaluation of soil erosion as a result of the brush-cutting program will be made. If grass seeding is necessary, native grass seed will be applied.

6. DETERMINE MONITORING NEEDS

See handbook — **Monitoring** for requirements.

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

Monitoring of the effectiveness of the herbicide treatment will begin in the spring and follow up treatment of cut stump/basal or foliar treatment of target vegetation. The mixture of the product is 25% Garlon 4 and 75% FCO or 90% water, 3% Garlon 4 with Depo-RTU drift retardant. There is virtually no drift that occurs with this mixture. Buffers described in sections above will be followed during all follow-up treatments.

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

Annually patrol the transmission line by the line crew and the Natural Resource Specialist will periodically monitor the right-of-way for effective mitigation measures.

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".

All proposed brush cutting and chemical treatment activities on this corridor is noted in the EIS.

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

No