

DECISION MEMO

BONNEVILLE POWER ADMINISTRATION (BPA) LAPINE SUBSTATION COMMUNICATIONS TOWER

USDA Forest Service
Bend/Fort Rock Ranger District, Deschutes National Forest
Deschutes County, Oregon
Township 22 South, Range 11 East, Section 18, Willamette Meridian

I. DECISION

It is my decision to issue a Special Use Permit (SUP) to BPA to construct a 140-foot communications tower within the existing BPA LaPine Substation. BPA currently operates a substation in accordance with a Memorandum of Understanding (MOU) dated January 29, 1969. BPA, as an agency with the U.S. Department of Energy (DOE), will construct, operate and maintain the communication tower for BPA's sole use as a security measure and the tower, antennae, and associated communication features will not be available for commercial use.

II. LOCATION

The project site is approximately 2.6 miles east of Finley Butte and southeast of the town of LaPine, OR. The legal description is township 22S, range 11E, section 18. The area is located on USDA Forest Service land, and managed as "General Forest" and "Scenic Views" as designated under the Deschutes National Forest Land and Resource Management Plan.

III. PURPOSE AND NEED

BPA has been given the responsibility to operate a power transmission system within the five Northwestern states. To effectively operate this system consistent with the North American Electric Reliability Council (NERC) and the Western Electricity Coordinating Council (WECC), BPA has developed a communications infrastructure to monitor, maintain and control the substations and power lines. In the past, this communications system was comprised mostly of analog microwave radios. These are no longer available on the market and therefore are being replaced with fiber optic cables and digital radios.

IV. DESCRIPTION OF PROJECT

BPA will construct a tower and mount 2 microwave antennas onto the tower within the existing substation yard at the LaPine Substation. The maximum height would be 140 feet tall and the microwave antennas would be aligned in a southwesterly direction toward the Walker Mountain microwave site. This tower/antennae height would: a.

provide line-of-sight beam clearance, b. allow for tree growth up to about 100 feet, and c. allow for beam spreading (although microwave signals are directive, they spread out over distance).

Construction of the tower will require foundations for the three legs in a footprint of about 30 feet by 30 feet next to the existing control house. No guy wires are planned to be used. Because of the characteristics of microwave signals and feeder losses, it is necessary to have the tower and antennae in close proximity to the control house which would be the power source for the microwave tower. In this case, the distance between the existing control house and proposed tower would be about 20 feet. About 100 cubic yards of onsite soil and hauled-in rock and gravel would need to be excavated so that a concrete foundation for the tower legs can be constructed. The displaced soil and gravel would be used within the substation.

Except for common above ground electrical hardware, no other infrastructure features are planned to be built. No access roads are needed or planned. The equipment expected to be used during construction include a flatbed truck, backhoe, cement truck, and boom truck or crane. The contracted work is expected to last two to three weeks and is planned for the spring of 2007. Full operation of the microwave facility is anticipated in fiscal year 2008.

V. ALTERNATIVES CONSIDERED

Because of the flat terrain around the LaPine Substation and a likely path inclination of only one degree to Walker Mountain, using a taller tower to clear a beam path over the trees was chosen over installing a lower tower height. The alternative proposal to construct a shorter tower would have necessitated cutting trees to accommodate the necessary and appropriate beam path between the LaPine Substation and the Walker Mountain microwave site.

BPA also considered the alternative of selecting Finley Butte for a microwave site instead of the proposed LaPine site, but it was ruled-out due to: 1. substantially greater environmental impacts, 2. constraints to the operational network and management logistics, 3. additional distance could reduce the reliability of the microwave system, 4. significantly higher economic impacts, and 5. not meeting all program objectives. I believe the proposed tower height at the LaPine Substation meets BPA's needs for effective and practical microwave communications while equally recognizing natural and cultural resource considerations.

VI. MEASURES TO REDUCE OR ELIMINATE UNWANTED IMPACTS, BUT NOT LIMITED TO

Weeds: BPA will be required to clean all construction equipment before entering National Forest System lands. All mud, dirt, and plant parts will be removed from equipment before it is moved onto the project area.

Archaeology: There are no known cultural sites. BPA will be required to cease operations immediately if previously unknown archaeological resources are discovered during project construction.

Visual Quality: During early coordination between the BPA and USDA Forest Service, BPA conducted the following evaluations on the proposed tower height, visual resources effects, and tree removal:

- modeling study on visibility of the proposed tower from previously identified locations,
- tree sampling report, and
- identification of tower height and tree trimming needs.

The installation of a 140-foot tower at the LaPine Substation was chosen because no trees will need to be removed or topped, now or in the future. The tower will allow line-of-sight beam clearance to the next communications site on Walker Mountain, approximately 28 miles away. A lower tower height would require the topping, trimming, or cutting of a substantial number of trees to allow for a clear beam path and ensure unobstructed microwave communications. The substation can be seen for less than one second when traveling either east or west along Finley Butte Road at 35 to 40 miles per hour and therefore will not disturb scenic values.

VII. REASONS FOR CATEGORICALLY EXCLUDING THE DECISION

Decisions may be categorically excluded from documentation in an environmental impact statement or environmental assessment when they are within one of the categories identified by the Chief of the Forest Service in Forest Service Handbook (FSH) 1909.15 section 31.2, and there are no extraordinary circumstances related to the decision that may result in a significant individual or cumulative effect on the quality of the human environment.

I find that this project may be categorically excluded from documentation in an environmental impact statement or environmental assessment as it is a routine activity within a category of exclusions and there are no extraordinary circumstances related to the decision that may result in a significant individual or cumulative effect on the quality of the human environment.

In accordance with the 40 Code of Federal Regulation, 1500.4(k) and (o), 1502.25, and 1506.4, BPA is hereby integrating and coordinating its environmental process with the USDA Forest Service under the National Environmental Policy Act.

A. Category of Exclusion

The appropriate category of exclusion is found in the Forest Service Handbook 1909.15 Section 31.2 Category 3: approval, modification or continuation of minor special uses of National Forest System lands that require less than five contiguous acres of land such as approving an additional telecommunication use at a site already used for such purposes.

Additionally, BPA has determined that the proposed action complies with, and meets the requirements of Section 1021.410 and Appendix B of Subpart D of the Department of Energy's (DOE) National Environmental Policy Act (NEPA) Regulations (57 FR 15144, Apr. 24, 1992, as amended at 61 FR 36221-36243, July 9, 1996; 61 FR 64608, Dec. 6, 1996). The proposed action does not present any extraordinary circumstances that may affect the significance of the environmental effects of potentially significant impacts, is not related to other proposed actions with cumulatively significant impacts [40 C.F.R. 1508.25(a)(2)], and is not precluded by 40 C.F.R. 1506.1 or 10 C.F.R. 1021.211. Moreover, the proposed action would not (i) threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, (ii) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities, (iii) disturb hazardous substances, pollutants, contaminants, or Comprehensive Environmental Response, Compensation and Liability Act-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases, or (iv) adversely affect environmentally sensitive resources, including the proposal. The proposal is not connected [40 C.F.R. 1508.25(a) (1)] to other actions with any threatened or endangered species or their habitat, nor would it adversely affect any cultural materials, as long as the conditions attached hereto are observed.

Accordingly, the project falls within the categorical exclusion category of "B.1.19 Siting, construction, and operation of microwave towers", as per Appendix B to Subpart D to Part 1021.

B. Relationship to Extraordinary Circumstances

In determining the appropriateness of using the categorical exclusion, a determination of the potential impact to the resource conditions identified in FSH 1909.15 Section 30.3(2) must be made. The following is the list of the potential effects to the resource conditions from the project activities.

1. Federally listed Threatened or Endangered Species or designated habitat or species proposed for Federal listing or proposed critical habitat

A review of BPA's Regional GIS Database, that includes the Oregon Natural Heritage Information Center data, in November 2006 for the proposed project area revealed no species or particular habitats that are listed or proposed threatened or endangered, or critical habitat, under the Endangered Species Act (ESA) or Essential Fish Habitat under the Magnuson-Steven Fishery Conservation and Management Act. Also in November 2006, BPA also reviewed the ESA species list for Deschutes County, entitled Federally Listed Threatened, Endangered, Proposed, Candidate Species And Species Of Concern Which May Occur Within Deschutes County, Oregon. The following were identified as listed, proposed, and candidate species: Canada lynx (T), bald eagle (T), northern spotted owl (CH T), bull trout (CH T), Pacific fisher (can), Yellow-billed cuckoo (can), and Oregon spotted frog (can). BPA made the determination that the proposed project will have no effect on listed ESA species based on the following:

- Project site is within a substation whose ground is almost entirely surfaced with small rock and gravel, which is highly disturbed by humans.
- Project site does not represent desired, preferred, selected, or sought-out habitats by the species.
- Species are not known to inhabit nor have they been observed at the project site
- There are no surface waters on or near the project site and therefore fish and aquatic species would not be affected.
- Project site is entirely on an upland habitat and no wetlands or sensitive ecological features would be affected.
- No critical habitat for the species would be affected.
- Project construction would be localized and would take only a few weeks to construct thereby minimizing any potential extent of effects.
- Project will not affect the overall status of any species or its well-being.
- Preferred food base of the animal species would not be affected by the project.
- Project would not affect the life cycle of these species.

2. Forest Service Sensitive Species

Plant species: There are no known sensitive plant species or habitat within the project area.

Aquatic Species: There are no sensitive aquatic species or habitat within the project area. There are no wetlands, intermittent or perennial streams, lakes, or fish-bearing waters within the project area.

Wildlife Species: Except for an occasional resident bird that may fly over the substation, there are no suspected sensitive wildlife species or habitat that would adversely be affected within the project area. The 30-foot-square project site does not provide unique, special or desirable habitat to sensitive wildlife species.

Floodplains: There are no floodplains within the project area.

Wetlands: There are no wetlands, shorelines, marshes, swamps or other aquatic habitat features within the project area, or that would be affected by project construction.

Municipal Watersheds: There are no municipal watersheds within the project area.

3. Northwest Forest Plan

The planning area is located outside of and to the east of the Northwest Forest Plan boundaries.

Inventoried Roadless Areas: There are no inventoried roadless areas in the planning area. The project would not construct any permanent or temporary roads.

Research Natural Areas: There are no existing or proposed Research Natural Areas in the planning area.

C. American Indian and Alaska Native religious or cultural sites, archaeological sites or historic properties of areas

Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to take into account the effect of a project on any district, site, building, structure, or object that is included in, or eligible for inclusion in the National Register. In accordance with responsibilities under Section 106 and 36 CFR 800, and as lead Federal agency proposing the project, BPA initiated consultation requirements in March 2006. Consultation included the State Historic Preservation Office (SHPO) and affected Tribes: Confederated Tribes of the Warm Springs Reservation of Oregon and the Klamath Indian Tribe.

BPA first conducted a literature survey, proceeded with an onsite survey of the proposed project, and then prepared a cultural resources survey report on May 23, 2006, for the proposed LaPine microwave tower. No archaeological or historic resources were identified in the project area during the survey. The report was submitted to the SHPO in Salem, Oregon requesting concurrence with our findings of no-effect. In their letter of June 28, 2006, the SHPO agreed with our findings that the proposed project would have no affect on any known cultural resources. The SHPO also stated that if any cultural material is found during development activities, all activities should cease immediately and an archaeologist be contacted to evaluate the discovery.

BPA also consulted with the tribes on March 13, 2006 and May 24, 2006, and the Warm Springs Tribe requested copies of any survey reports. A 106 consultation letter was also sent to the Forest Service on November 15, 2006 as a means of consulting with the Federal landowner in accordance with the NHPA, and to share our survey findings.

VIII. CONCLUSION

Based on the conclusions regarding the effect to the resource conditions listed above, no extraordinary circumstances exist with the proposed project activities that may result in a significant direct, indirect, or cumulative effect on the quality of the human environment.

IX. OTHER RELEVANT RESOURCES AND CONDITIONS CONSIDERED

Noxious Weeds: Although there are no noxious weeds known to exist within the project area, this project is considered a very low risk to help spread weeds. Although ground disturbing equipment will be used during construction, the localized, short-term work will be within a confined area (about 30 feet square), and in a highly developed electrical substation that contains several inches of small rock and gravel on the ground surface. The mitigation measure discussed above will be implemented to avoid introducing new populations of weeds.

X. PUBLIC INVOLVEMENT

A scoping letter was mailed to 46 individuals, organizations, and agencies on April 5, 2006. Also, a legal notice was published in The Bulletin on April 8, 2006. The scoping period was closed on May 11, 2006. The following tribal governments were contacted with letters: Confederated Tribes of the Warm Springs Reservation, Burns Paiute Tribe, and the Klamath Tribes.

Four (4) commenter's responded to scoping:

Comment 1: They need to put the tower in, it's mainly for communication and safety out in that part of the woods. I drive out there often and there are blind spots for communication. A clear line of communication is needed for safety and it is important to have that access.

Comment 2: I am for the installation of a 70 foot communications tower at BPA's LaPine Substation. This is out in the boon docks and we need the cell phone coverage in this area of Central Oregon.

Comment 3: I think it would be a great idea. Thank you for the opportunity to respond.

Comment 4: Comment 4 was from the Principal Planner for Deschutes County listing the county regulations.

XI. FINDINGS REQUIRED BY OTHER LAWS

This project is consistent with the Deschutes National Forest Land and Resource Management Plan (Forest Plan) as required by the National Forest Management Act. The Plan is amended by Inland Native Fish Strategy, which provides standards and guidelines for protection of watersheds and riparian habitat conservation areas. There are no riparian habitat conservation areas within the planning area. The project is designed in conformance with Forest Plan standards and incorporates appropriate guidelines for the 'General Forest' Management Allocation.

XII. APPEAL INFORMATION

This decision is not subject to appeal pursuant to 36 CFR 215.8 (a) (4).

/s/ Phil Cruz
PHIL CRUZ
District Ranger

June 25, 2007
Date