Categorical Exclusion Determination

Bonneville Power Administration
Department of Energy

Proposed Action: Northwest Montana VHF Radio Station System Upgrades

Project No.: P01237

Project Manager: Ben Younce, TEPF-CSB-2

Location: Flathead and Lincoln Counties, Montana

Categorical Exclusion Applied (from Subpart D, 10 C.F.R. Part 1021): B1.19 Microwave, meteorological, and radio towers; B1.3 Routine Maintenance

Description of the Proposed Action: BPA is upgrading its Very High Frequency (VHF) radio system over its entire territory and has determined there is a need to bolster VHF communications in the vicinity of Northwest Montana area of BPA's wider Spokane Radio Region. The VHF system is used extensively by BPA field personnel via two-way handheld radios during operations – including sensitive ones involving potentially dangerous conditions – and requiring reliable communications between workers and BPA control centers.

BPA has an existing VHF receiver/repeater at Blacktail Peak Radio Station (hereinafter, "Blacktail RS") in the Flathead National Forest, but personnel have reported field radio coverage inadequacy around BPA transmission lines in the Troy, Montana area, over 75 miles to the west. A planned King Mountain Radio Station (hereinafter, "King RS") near Troy in the Kootenai National Forest would fulfill the VHF coverage needed for an approximate 60-mile radius. King RS would also provide microwave transmission of voice data to the existing Troy Substation and then to data control centers for processing and routing to intended recipients – a key VHF system process known as *backhaul*. King RS would be built inside an existing communications site with multiple existing communication facilities.

Calx Mountain Radio Station (hereinafter, "Calx RS") in the Kootenai National Forest would be built at an existing US Forest Service (USFS) communications site in order to provide a node in the hopping of backhaul data either to King RS to the west or Blacktail RS to the east, while also increasing VHF system coverage for transmission lines in its vicinity.

Summaries of anticipated work at the Northwest Montana radio stations:

Blacktail RS

At Blacktail RS, BPA would need to clear brush and small trees to construct a new 80-foot-tall steel lattice radio tower. Similar vegetation near the existing communications building may need to be cleared for construction of a new 17-foot by 14-foot generator building for a potential total clearing area of 0.1 acre. Supporting facilities proposed are limited to a waveguide bridge (a steel frame outdoor cable support) to support cables aerially running from the new tower to the communications building, and two new 30-foot-long, 4.5-foot-wide propane tanks for generator fuel. New holes would need to be drilled through the tower-facing wall to accommodate new cable routes, and some existing antennas would be moved to the new tower. New equipment racks would be installed in the communications building to support new VHF electronic components that would be connected via new cables to new and/or old antennas on the tower. Antennas on the new tower would include large (10-foot-diameter) microwave drum style and 20-foot-long, 3-inch-diameter VHF rod style units. At least one VHF rod antenna would extend past the tower height by ten or more feet. Outdoor equipment would require hand excavation through the gravel yard to bond groundwires to the buried station groundmat.

King RS

At the USFS King Mountain Communications Site, BPA would expand the existing developed footprint into a vegetated area adjacent to an existing radio station owned by the US Army Corps of Engineers (USACE). Approximately 0.2 acres of mixed herbaceous plants and variously aged conifer trees would be cleared, and about 35,000 cubic feet of fill would be imported to construct the station yard. One of the trees to be cleared is a mature open-grown conifer and the remaining are much smaller in stature and sporadically located. About 0.1 acres of the cleared area would be seeded with a native mix appropriate for the local area and approved by USFS and BPA.

BPA would build a full radio station that would include a combination communications and generator building (approximately 35-feet by 24-feet), a 120-foot-tall steel lattice radio tower with a base perimeter about 30-feet square. A waveguide bridge, propane tanks, antennas and internal electronics and associated racks that would be new and similar to those detailed above for Blacktail RS. It is anticipated that USACE would place existing or new antennas on the new BPA tower, and that BPA would install a waveguide bridge from the USACE building to the new BPA tower.

Road upgrades and repairs would be needed to construct King RS. The only excavation is expected within the existing road prism. The majority of the work would entail drainage improvements like installing crossing drain dips and digging fresh ditching, and application of a large quantity of aggregate surface rock along much of the road. Some fringing vegetation would be crushed or otherwise damaged, but it would be allowed to recover and grow into the maintained brushing edge of the road. The total length of road improvement would be about 8 miles.

Calx RS

A new BPA radio station would be built on Calx Mountain in the Calx Mountain Communications Site, owned and administered by the USFS. Similar in scope to the King RS development, the dimensions of the Calx RS communications/generator building, tower, and propane tank installations would be about 0.1 acre, with about 0.5 additional acres of temporary construction impact. The Calx RS tower would be up to 180-feet in height with a 40-foot-square foundation. Site preparation would include tree removal (about 20 trees with a maximum height of about 55 feet), brush clearing, and ground leveling.

Calx RS would also require the installation of an alternating current (AC) power line in a 16-mile-long alternate access route to the existing communications site. A bulldozer equipped with a trenching and conduit feeder swing arm would bury the AC line to an approximate 36-inch depth in the roadbed. Some fringing scrub and herbaceous vegetation could be damaged, but this is anticipated to be minor and determined by localized growth over the road edge. There would be approximately 31 splice vaults installed along the route off the road edge. At each vault, about 15 square-feet of vegetation would be cleared, excavations of approximately 42 cubic-feet would be needed, and the installed vaults would measure 39-inches by 28-inches by 18-inches above ground. Wherever possible, the excavated material would be used to backfill the vaults. The AC line would reach the communication site at a transformer that would be installed about seven feet off the road across from the radio station, requiring brush clearing.

There would be about three miles of improvements on the Calx RS access road like those at King RS, while one additional mile would be partially reconstructed, entailing regrading that could include material excavation and removal. There could also be a need for brush clearing and tree limbing for clearance purposes. At all sites, bare ground generated by construction activities (and outside the stations' yard limits) would be seeded with a USFS-approved grizzly-safe seed mix.

One or more of the sites may be required to have stormwater management settling basin adjacent to the building disturbance areas to capture and attenuate stormwater runoff.

Work is planned to begin in summer 2023 with the Calx powerline installation. Roadwork and one or more of the stations would be built in 2024 and the final radio station outfitting and energization would likely occur in 2025 to 2026.

Findings: In accordance with Section 1021.410(b) 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, Jul. 9, 1996; 61 FR 64608, Dec. 6, 1996, 76 FR 63764, Nov. 14, 2011), BPA has determined that the proposed action:

1) fits within a class of actions listed in Appendix B of 10 CFR 1021, Subpart D (see attached Environmental Checklist);
2) does not present any extraordinary circumstances that may affect the significance of the environmental effects of the proposal; and
3) has not been segmented to meet the definition of a categorical exclusion.

Based on these determinations, BPA finds that the proposed action is categorically excluded from further NEPA review.

/s/ Michael J. O'Connel
Michael J. O'Connell
Environmental Protection Specialist

Concur:

KATEY GRANGE
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Katey C. Grange
NEPA Compliance Officer

Attachment(s): Environmental Checklist

Categorical Exclusion Environmental Checklist

This checklist documents environmental considerations for the proposed project and explains why the project would not have the potential to cause significant impacts on environmentally sensitive resources and would meet other integral elements of the applied categorical exclusion.

Proposed Action: Northwest Montana VHF Radio Station System Upgrades

Project Site Description

Blacktail RS (6,700-foot elevation) is adjacent to a ski recreation area in the Flathead National Forest and has a well-maintained access road shared with skiers and with other mountaintop communications facilities. Calx RS (6,500-foot elevation) is surrounded by forested rough terrain in various stages of regrowth while King RS is at 5,760-foot elevation on a ridgetop with a noticeably less dense forest cover on the southern facing side, and thicker multi-aged, forested cover on the north facing side. The roads at Calx and King RS sites are in need of minor repairs. There are no known open waterbodies at these RS sites, but the Calx and King road and power alignments cross perennial streams in several locations though work is not anticipated over the waterbodies.

Evaluation of Potential Impacts to Environmental Resources

1. Historic and Cultural Resources

Potential for Significance: No with Conditions

Explanation: The Calx RS portion of the project was initiated with the Confederated Salish and Kootenai Tribes, the Kootenai Tribe of Idaho, the State of Montana Department of Transportation, the USFS KNF, and the Montana State Historic Preservation Office (SHPO) on June 23, 2020. Two previously recorded cultural resources (24LN0306 – Calx Mountain Fire Lookout, determined not eligible for listing in the National Register of Historic Places; 24LN1737 – Great Northern Railroad, determined eligible for NRHP listing) were identified. BPA determined that the project would result in no adverse effect to historic properties under the stipulation that all work near 24LN1737 must remain within the previously disturbed road prism. The final determination letter was sent to the consulting parties on December 17, 2020. No comments were received from the consulting parties.

The King RS elements of the project were initiated with the Confederated Salish and Kootenai Tribes, the Kalispel Tribe of Indians, the Kootenai Tribe of Idaho, the Montana Department of Natural Resources and Conservation (DNRC), USFS KNF, and the Montana SHPO on June 26, 2020. The Montana DNRC responded on June 26, 2020, and the USFS KNF responded on June 29, 2020. Two historic isolates and one historic road (24LN2372) were identified during the 2022 survey. All described resources were recommended as not eligible for listing on the NRHP, and BPA determined that the project would result in no historic properties affected. BPA's determination letter went out on March 15, 2023. The Montana DNRC responded on March 15, 2023. Montana SHPO responded on April 5, 2023, and noted that they could not provide comment until 24LN2372 was formally recorded. BPA addressed this comment and sent updated consultation documentation on April 21, 2023. No comments were received from this most recent consultation.

The Blacktail RS, comprised of the historic contributing radio station building and tower, is eligible for inclusion in the National Register of Historic Places as a historic district (24FH1559). BPA determined the removal of the radio tower would result in an adverse effect to historic properties. A determination letter was sent to the Montana SHPO, the Blackfeet Nation, the Confederated Salish and Kootenai Tribes on April 17, 2023. No responses were received from consulting parties. To mitigate for the adverse effects, BPA and the Montana SHPO developed a Memorandum of Agreement (MOA) in which BPA would fund a contract to prepare and submit a nomination of Montana Fish, Wildlife & Parks' Flathead Lake Salmon Hatchery for listing in the National Register of Historic Places. The MOA was signed on June 30, 2023.

Notes:

- Implement inadvertent discovery protocols in the unlikely event that cultural material is encountered during the implementation of this project. In the event any archaeological material is encountered during project activities, the contractor would stop work in the vicinity and immediately notify the BPA environmental lead, archaeologist, and project manager, and the individual consulted parties for each site. The contractor would implement reasonable measures to protect the discovery site, including any appropriate stabilization or covering and would take reasonable steps to ensure the confidentiality of the discovery site, including restricting access.

2. Geology and Soils

Potential for Significance: No

Explanation: Soils would be cut and would be used to level new yard area along with imported fill material at the King Mountain site. At Calx Mountain, it is anticipated that fill importation, if needed, would be minor. At these two sites, vegetation is established in the planned footprints, but the soils are assumed comprised of partial fill from immediately adjacent communication site and roads development and are otherwise not uniquely productive. Bedrock is near the surface at both sites and geotechnical reconnaissance performed recommended no special considerations per geological conditions. As with the other sites, Blacktail Peak's bedrock is near the surface and is thoroughly evident at the yard perimeter. Excavation for the new tower would remove little topsoil along with the short stature vegetation in the footprint area which appears to be leveled from the original site development. There would be little effect to soils or geology at the sites.

3. Plants (including Federal/state special-status species and habitats)

Potential for Significance: No with Conditions

Explanation: All sites would require removal of vegetation established inside USFS communications site boundaries, and immediately adjacent to currently developed station yards. Calx Mountain and King Mountain roadwork would temporarily clear some road edge vegetation during road upgrades and repairs, and 31 discrete powerline splice box locations along Calx Mountain access roads Forest Service (FS) 2346 and FS-2348. No Montana State special status species are recorded nearby to the three work areas in the Montana Natural Heritage Program (MTNHP) online database.

Spalding's catchfly is a US Endangered Species Act (ESA)-listed threatened flowering plant that has the potential to be in the project area. The MTNHP database does not return occurrences of the species in the full project area. USFS staff note that the Calx and King Mountains sites are unlikely to harbor the plant as the preferred habitats of open woodland savanna and prairies are represented in the project areas only in patches and are outside

all known populations. At Calx Mountain where there are patches of semi-open woodland savanna along the powerline route there could be minor clearing of the herbaceous layer for splice boxes in these roadside patches of woodland. Vegetation removal would not total more than one-to-two hundred square feet over the 13 or so lower elevation semi-open woodland locations. A pre-vegetation clearance survey would be performed, and splice box locations moved in the unlikely case that Spalding's catchfly is encountered. There would, therefore, be no effect on Spalding's catchfly.

Whitebark pine is a recently listed-threatened species under ESA and could be present at higher elevations at any of the sites. US Fish and Wildlife (USFWS) staff have provided informal consultation and agreement on the following plan: all work locations would be surveyed for presence of the species prior to construction; if design cannot be modified to avoid a 30-foot radius around individual whitebark pine trees, consultation would need to enter a formal phase, halting construction until resolution.

No USFS Special Status plants are occurring in the work area footprints according to Montana Natural Heritage Program records.

Notes:

- Along the Calx power line route, move splice box locations away from any suspected Spalding's catchfly and outside a 30-foot radius around individual whitebark pine
- At all work locations, survey for whitebark pine presence and assess project impacts in consultation with USFWS before other work elements are implemented (any work beyond the Calx powerline install)
- Wash vehicles with high pressure including undercarriages before arriving to work locations, and returning to work locations from vegetated offsite locations to reduce the potential for noxious plant spread
- Seed areas that have had vegetation removed with a USFS-approved seed mix

4. Wildlife (including Federal/state special-status species and habitats)

Potential for Significance: No with Conditions

Explanation: The Project would not have lasting effects on wildlife in or near the work areas. Limited vegetation removal would be guided to avoid effects on breeding birds, and BMPs would limit extended loss of wildlife habitat by re-seeding exposed areas, for example. All sites would be in or adjacent to currently operating communications sites, which would limit effects (e.g., noise avoidance behaviors) to animals acclimated to noise and human activity. BPA and USFS have informally consulted with the USFWS with a joint assessment of project impacts to federally protected species under ESA Section 7. The three locations have similar potential for ESA listed or proposed species for listing: grizzly bear, Canada lynx, and North American wolverine. All are likely to occur in the project's surrounding areas. BPA and USFS have determined the USFS Region 1 Programmatic Biological Assessment applies to the project as a Special Uses-Other type that would be Not Likely to Adversely Affect grizzly bear, Canada lynx, and Canada lynx Critical Habitat. There would be minimal habitat effects by the project, no breeding disruption, and construction personnel would be required to implement bear safety protocols. On May 18, 2023, BPA and USFS received concurrence from USFWS-Montana Ecological Field Services Office on a Not Likely to Adversely Affect determination (grizzly, Canada lynx, Canada lynx Critical Habitat) for the Project.

Also in informal consultation with the USFWS, it has been determined that the project is Not Likely to Jeopardize the continued existence of the North American wolverine (proposed for listing as threatened under the ESA). USFWS concurred with the determination on May 18, 2023. There would be no disruption to denning activities

because work would take place outside of high snowpack season, after general snowmelt for the sites.

State species of concern, sheathed slug, may be present in the King Mountain project area's roadwork zones. The work could have potential to affect small numbers of the slug but would not affect population integrity. Humid or moist areas near the road edge would be limited to draws and stream crossings, because the road edge would generally be dryer than interior forest due to exposure via the road corridor.

A USFS Sensitive species occurring near the sites that may be affected by construction is the fisher, a mammal of the weasel family. All effects would be temporary and minor, like avoiding typical forage areas due to construction activity.

Notes:

- For installation of the power line at Calx, clear vegetation for splice boxes within 5 days after inspection and clearance for any breeding bird activity, moving locations as needed
- Require implementation of all applicable Forest-specific grizzly bear safety protocols, including food storage rules

5. Water Bodies, Floodplains, and Fish (including Federal/state special-status species, ESUs, and habitats)

Potential for Significance: No with Conditions

Explanation: There are several stream crossings by road and powerline alignments at Calx and King Mountains, however, no in-water work is proposed. The stream crossings may have in-prism road upgrades or repairs not requiring disturbance of established roadside vegetation and soil. No streams containing ESA-listed species would be crossed, but one stream potentially containing ESA-listed species would be located within 300 feet of some roadwork at King Mountain. Finally, stormwater management and green infrastructure/low impact development, or a combination thereof, would be installed at sites where required to restore site hydrology.

Notes:

- Implement all applicable BPA best management practices (BMPs) to prevent sedimentation of waterbodies with special attention to ESA streams
- Seed areas that have had vegetation removed with a USFS-approved seed mix and ensure successful establishment, re-seeding as necessary

6. Wetlands

Potential for Significance: No

Explanation: No wetland areas are in the project work zones; the work would not create large amounts of exposed soil, and BMPs would stabilize exposed soils so adjacent wetlands would not be affected

7. Groundwater and Aquifers

Potential for Significance: No

Explanation: It is unlikely there would be perched water tables on these ridge-side and mountain top work locations. If groundwater is found, all appropriate BMPs would be implemented to limit effects on quantity and quality of water. There are no aquifers in excavation limits of the project boundaries.

8. Land Use and Specially Designated Areas

Potential for Significance: No

Explanation: All radio stations are within existing USFS Communications Site boundaries, and all access roads to be repaired or upgraded are currently used by Communications Sites tenants. There would be no change in land uses of the project area. If recreational visitors to USFS lands are using open roads during construction, they would be temporarily limited to using other routes or areas of road not being constructed. No other disruptions on recreational activities would be expected except for temporary noise (see below).

9. Visual Quality

Potential for Significance: No

Explanation: While the Calx Mountain tower would be 180-feet-tall, a preliminary viewshed analysis over a 6-mile radius shows that no populated areas would have the tower in view. At nearly 6 miles distance from the tower, the valley bottom at the edge of Lost Trail National Wildlife Refuge may have the tower visible in the far background on very clear days. It would be anticipated the tower would not be especially noticeable at such a distance. King Mountain's 120-foot-tall tower may be visible in the background to sections of Troy, Montana, over 4 miles away. Blacktail Peak's new 80-foot-tall tower is unlikely to be noticed in the surrounding area due to the presence of multiple towers at the site, and the developed nature of the ski area on the Communications Site's boundary. The casual observer would not find the towers more obtrusive than existing ones; in summary, there would be no substantial change to the visual landscape.

10. Air Quality

Potential for Significance: No

Explanation: Increased vehicle and equipment exhaust levels would be apparent in project work areas at construction times. This would be localized and temporary and limited to the un-populated areas of the project locations. Air quality would return to normal shortly after work is completed.

11. Noise

Potential for Significance: No

Explanation: Construction would create loud noise in these densely forested locations. Being industrial forests, and the sites hosting communication facilities that undergo maintenance, the noise would be in line with other types of work occurring in working forests. While the intensity would be increased over maintenance levels of communications facilities and other uses, it would end with completion of the project.

12. Human Health and Safety

Potential for Significance: No

Explanation: Health and safety would not be impacted from the work that would be localized to high elevation radio station grounds, and unpaved USFS access roads. Health and safety of construction personnel would not be adversely impacted because OSHA or BPA safety guidelines would be followed. BPA employee safety during subsequent regional field operations should benefit from the project through better coverage and reliability of the two-way radio communication network.

Evaluation of Other Integral Elements

The proposed project would also meet conditions that are integral elements of the categorical exclusion. The project would not:

Threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders.

Explanation: N/A

Require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators) that are not otherwise categorically excluded.

Explanation: N/A

Disturb hazardous substances, pollutants, contaminants, or CERCLA excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases.

Explanation: N/A

Involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those of the Department of Agriculture, the Environmental Protection Agency, and the National Institutes of Health.

Explanation: N/A

Landowner Notification, Involvement, or Coordination

Description: USFS biologists and realty specialists provided project input and are fully aware of project scope. USFWS joint agency permits and USFS Special Use permits are going to be in hand as needed at the time of construction. Coordination has occurred and will continue with USACE for potential co-location in the new BPA King Mountain Radio Station.

Based on the foregoing, this proposed project does not have the potential to cause significant impacts to any environmentally sensitive resource.

Signed: */s/ Michael J. O'Connell* *July 6, 2023*
Michael J. O'Connell Date
Environmental Protection Specialist