



United States Department of the Interior



BUREAU OF LAND MANAGEMENT
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ENVIRONMENTAL ASSESSMENT

NUMBER: DOI-BLM-CO-N040-2010-0086-EA

CASEFILE NUMBER: COC-070157

PROJECT NAME: 14kV Single Phase Line for Dry Lake Parcel

LEGAL DESCRIPTION: T.4 S., R.85 W., sections 19, 29 – 30 and 32, 6th Principal Meridian, Eagle County, Colorado.

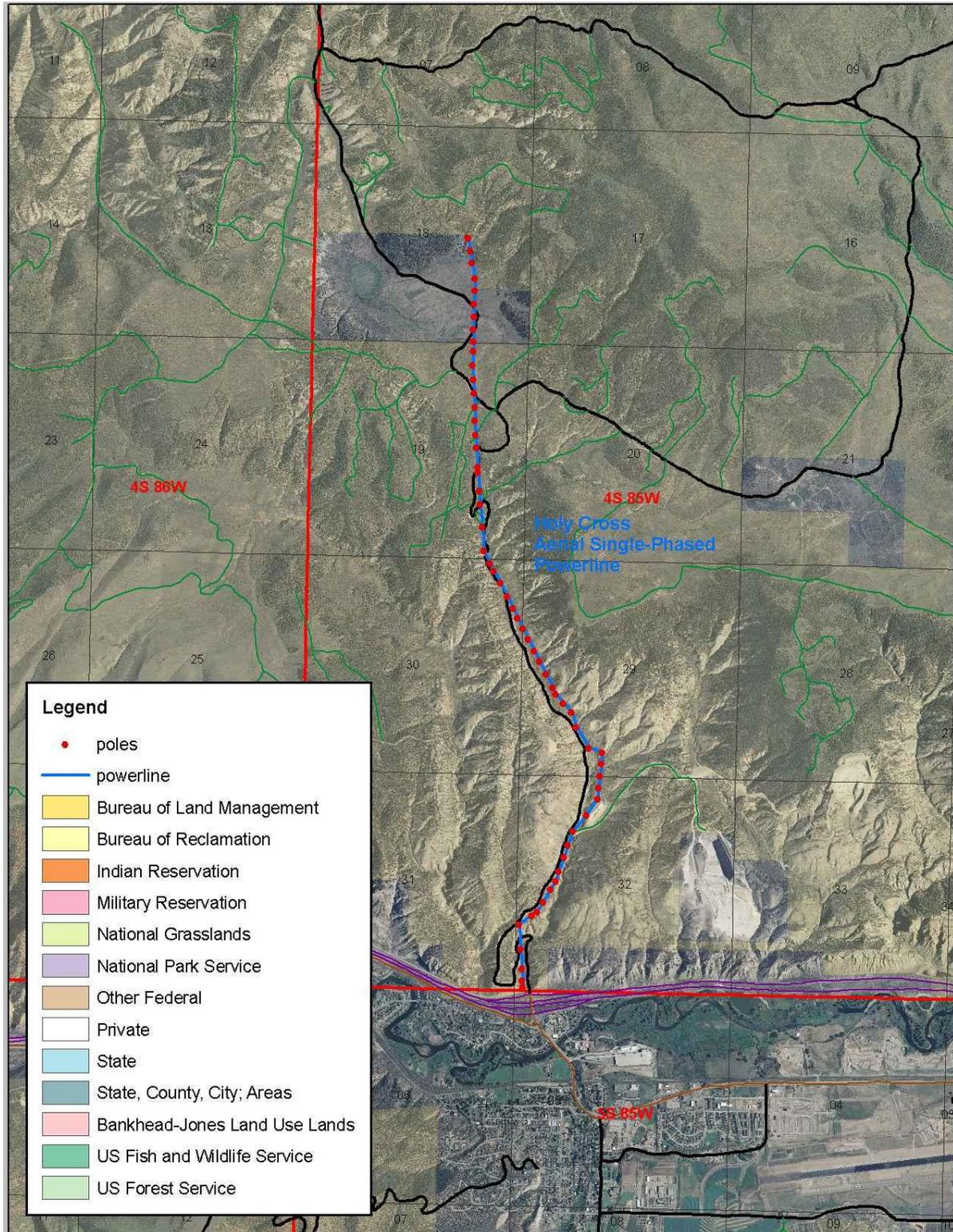
APPLICANT: Holy Cross Energy

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

Proposed Action: The applicant has been contacted by Isom & Associates to provide electric service to Dry Lake Parcels Subdivision located in Section 18, Township 4 South, range 85 West in Eagle County, Colorado. The overhead single phase 14.4kV power line would be approximately 3.29 miles long.

Approximately 3.29miles (17,371feet) of overhead single phase electrical lines would be installed by Holy Cross Energy to connect the Dry Lake Parcel to existing buried powerlines at the Gypsum Interstate-70 off ramp. The new route would roughly follow Trail Gulch Road (County Road 51), along a historic telephone wire line. Sixty wooden 35 foot-tall power poles, of which 51 would be on public lands (see Exhibit A) would be erected. Poles 1 -7, 15 – 33, 36, 37, 39, 41, 42, and 48 – 51 would be hand dug. After placement of poles into the hand-dug holes, approximately 25 to 20 feet of the pole would be above ground. The other poles would be installed by machine. Poles hand dug would be placed by helicopters, while the remaining poles set by trucks. The helicopter would string all the wire for the poles. A single phase wire and neutral wire would be mounted on the poles. Some pinyon pine and juniper may need to be pruned back for construction, and each power pole hole would disturb approximately 9 square feet of vegetation through excavation of the power pole hole, and setting of the power poles. Any vegetation within the 9 square feet of the poles would be removed; trees would be pruned (this is required for any vegetation that poses a fire hazard with the power line). Approximately 2,100 feet of the power line passes through pinyon-juniper woodlands, which would require more extensive clearing of trees. Other vegetation impacts would include temporary trampling of vegetation from the Holy Cross service trucks and crew. Erection of the powerline would

follow “Suggested Practices for Avian Protection on Powerlines: State of the Art, 2006”. The right-of-way would be 30 feet wide and 17,371 in length (approximately 11.96 acres).



No Action Alternative: Electrical services would not be provided to the Dry Lake Parcels Subdivision if the proposed action is not approved; there is no other reasonable alternative due to topography.

NEED FOR THE ACTION:

The purpose of the action is to provide the applicant the opportunity to cross public lands to construct, operate and maintain a 14.4kV overhead power line. This proposed power line would provide electrical power from a substation off I-70 to the Dry Lake Parcels.

The need is compliance with Title III, Section 302 of The Federal Land Policy and Management Act of 1976 (FLPMA), which states that the Secretary shall manage the public lands under principles of multiple use and sustained yield, in accordance with the land use plan. Title V of FLPMA Section 501(4) further authorizes the Secretary to grant rights-of-way for systems for generation, transmission, and distribution of electric energy, except that the applicant shall also comply with all applicable requirements of the *Federal Energy Regulatory Commission under the Federal Power Act, including part I thereof* (41 Stat. 1063, 16 U.S.C. 791a-825r) [P.L. 102-486, 1992]; The proposed action does not fall within the parameters of Federal Energy Regulatory Commission under the Federal Power Act, due the short length of the transmission line and its relatively low voltage.

PLAN CONFORMANCE REVIEW: The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: Glenwood Springs Resource Management Plan.

Date Approved: Jan. 1984, revised 1988, amended in November 1991 - Oil and Gas Leasing and Development - Final Supplemental Environmental Impact Statement; amended Nov. 1996 - Colorado Standards and Guidelines; amended in August 1997 - Castle Peak Travel Management Plan; amended in March 1999 - Oil and Gas Leasing & Development Final Supplemental Environmental Impact Statement; amended in November 1999 - Red Hill Plan Amendment; and amended in September 2002 – Fire Management Plan for Wildland Fire Management and Prescriptive Vegetation Treatment Guidance; amended in August 2006 - Roan Plateau Planning Area Including Naval Oil Shale Reserves Numbers 1 & 3 Resource Management Plan Amendment & Environmental Impact Statement.

Decision Number/Page: Page 41, Utility and Communication Facility Management.

Decision Language: To respond, in a timely manner, to requests for utility and communication facility authorizations on public land while considering environmental, social, economic, and interagency concerns.

Standards for Public Land Health: In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. The five standards cover upland soils, riparian systems, plant and animal communities, threatened and

endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands.

The proposed action lies within the Blowout allotment of the North Eagle Landscape Unit which was the subject of a formal land health assessment during the summer of 2003. The Determination Document, signed on April 9, 2004, found that the allotment was meeting all of the Standards for Public Land Health except Standard 4 for sage grouse habitat and populations. Habitat fragmentation resulting from roads, residential and commercial development, off-highway vehicle (OHV) use, powerlines, pipelines, and livestock and wild ungulate grazing have all reduced habitat quality and quantity and populations of sage grouse have declined dramatically. In addition, lack of fire has allowed pinyon-juniper trees to invade sagebrush communities, further reducing habitat quality.

The impact analysis must address whether the proposed action or any alternatives being analyzed would result in impacts that would maintain, improve, or deteriorate land health conditions for each of the five standards. These analyses are located in specific elements listed below:

AFFECTED ENVIRONMENT /ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:

CRITICAL ELEMENTS

This section provides a description of the human and natural environmental resources that could be affected by the proposed action and no action alternative. In addition, the section presents comparative analyses of the direct and indirect consequences on the affected environment stemming from the implementation of the various actions.

A variety of laws, regulations, and policy directives mandate the evaluation of the effects of a proposed action and alternative(s) on certain critical environmental elements. Not all of the critical elements that require inclusion in this EA are present, or if they are present, may not be affected by the proposed action and alternative (Table 2). Only those mandatory critical elements that are present and affected are described in the following narrative.

In addition to the mandatory critical elements, there are additional resources that would be impacted by the proposed action and alternative. These are presented under Other Affected Resources.

Table 1 - Critical Elements of the Human Environment									
<i>Critical Element</i>	<i>Present</i>		<i>Affected</i>		<i>Critical Element</i>	<i>Present</i>		<i>Affected</i>	
	Yes	No	Yes	No		Yes	No	Yes	No
Air Quality	X			X	Prime or Unique Farmlands		X		X
ACECs		X		X	Threatened or Endangered Species	X		X	
Cultural Resources	X			X	Wastes, Hazardous or Solid	X		X	

Environmental Justice	X			X	Water Quality, Drinking and Ground	X			X
Floodplains		X		X	Wetlands and Riparian Zones		X		X
Invasive, Non-native Species	X		X		Wild and Scenic Rivers	X			X
Native American Religious Concerns		X		X	Wilderness/WSAs		X		X
Migratory Birds	X		X						

AIR QUALITY:

Affected Environment: Air quality in the project area is typical of undeveloped regions in the western United States. The closest Class I airsheds are the Flat Tops Wilderness Area located approximately 13 miles to the North and Holy Cross Wilderness located approximately 20 miles to the south.

The primary sources of air pollutants in the region are fugitive dust from the desert to the west of the planning area, unpaved roads and streets, seasonal sanding for winter travel, motor vehicles, and wood-burning stove emissions. Seasonal wildfires throughout the western U. S. may also contribute to air pollutants and regional haze. The ambient pollutant levels are usually near or below measurable limits, except for high short-term increases in PM₁₀ levels (primarily wind-blown dust), ozone, and carbon monoxide. Within the Rocky Mountain region, occasional peak ozone levels are relatively high, but are of unknown origin. Elevated concentrations may be the result of long-range transport from urban areas, subsidence of stratospheric ozone or photochemical reactions with natural hydrocarbons. Occasional peak concentrations of CO and SO₂ may be found in the immediate vicinity of combustion equipment. Locations vulnerable to decreasing air quality include the immediate areas around mining and farm tilling, local population centers, and distant areas affected by long-range transportation of pollutants. Representative monitoring of air quality in the general area indicates that the existing air quality is well within acceptable standards.

The EPA General Conformity regulations require that an analysis (as well as a possible formal conformity determination) be performed for federally sponsored or funded actions in non-attainment areas and in designated maintenance areas when the total direct and indirect net air pollutant emissions (or their precursors) exceed specified levels. Since the CRVFO is not within a non-attainment or a maintenance area, the Clean Air Act conformity regulations do not apply.

Environmental Consequences/Mitigation: Fugitive dust (PM₁₀) production may be elevated temporarily during construction activities due to surface disturbance, increased vehicle traffic, and helicopter use in the area. However, PM₁₀ levels would return to preconstruction levels within hours of completion of surface disturbing actions. Therefore, the proposed action is not anticipated to have any lasting impact to air quality locally or regionally. To minimize fugitive dust production, a BLM approved dust suppressant should be utilized along the access road during construction activities.

CULTURAL RESOURCES

Affected Environment: Two Class III cultural resource inventories (GSFO# 5411-4 and 5411-11) were conducted specifically for the Dry Lake Power Line project. The two inventories and pre-field file searches of the Colorado SHPO database and BLM Colorado River Valley Field Office cultural records identified nine cultural resources within or in the immediate vicinity of the power line Right Of Way (ROW). One of the cultural resources was determined eligible for the National Register of Historic Places (NRHP) and a second was identified as a “Need Data” site. “Need Data” sites are treated as potentially eligible. Therefore, two “historic properties” were identified as being within the area of the Proposed Action. “Historic properties” are cultural resources that are eligible or potentially eligible for inclusion on the NRHP.

Environmental Consequences/Mitigation: The implementation of the Proposed Action would have no direct impacts to known “historic properties”, as the project alignment has been designed or rerouted to avoid the two known “historic properties”.

Therefore, the BLM made a determination of “**No Historic Properties Affected.**” This determination was made in accordance with the 2001 revised regulations [36CFR 800.4(d)(1)] for Section 106 of the National Historic Preservation Act (16U.S.C 470f), the BLM/State Historic Preservation Officer (SHPO) Programmatic Agreement (1997) and Colorado Protocol (1998)]. As the BLM has determined that the Proposed Action would have no direct impacts to known “historic properties,” no formal consultation was initiated with the SHPO.

Although the power line alignment has been rerouted to avoid all known eligible sites, several power poles (poles #49 and #50) will be placed outside the site boundary for 5EA2840, but within the standard 100 foot buffer zone the BLM CRVFO usually requires around eligible or potentially eligible sites. Therefore, archaeological monitoring will be required during installation of power poles #49 and #50 in Section 19, T. 4 S., R. 85 W to determine if there are subsurface components of this site which extend beyond the current site boundary. Monitoring will be conducted by an archaeological firm qualified and permitted to do such archaeological work within the Colorado River Valley Field Office Area.

No ground disturbing construction activities (drilling, digging, etc.) will begin prior to the archaeologist’s arrival. The proponent is responsible for notifying the archaeological firm at least 72 hours in advance any ground disturbance in the specified areas. The proponent is responsible for all construction delays and or damage to cultural manifestations due to insufficient notification of the Archaeological Contractor, noncompliance with the following procedures, or damage to cultural manifestations.

Archaeological monitoring will involve on the ground visual inspection of all construction for the power line within the above specified area. If a cultural feature(s) is identified, all ground disturbing activities in the vicinity of identified feature(s) will be halted and a buffer area at least 100 ft from the identified feature(s) will be protected from any additional disturbance until which time as the feature(s) are mitigated via data recovery. Appropriate samples for analyses to determine cultural/temporal affiliation, subsistence, will be taken as appropriate, including at least one stratigraphic profile for each feature identified.

Once all ground disturbing activity is complete the archaeological contractor will produce and submit one draft written report. Upon acceptance of the report, two reports will be submitted, one for the BLM and one for the SHPO. This report must be in a contextual framework that is compatible with known archaeological knowledge of the area and the Northern Colorado River Basin Context.

A standard Education/Discovery COA for cultural resource protection would also be attached to the Surface Use Conditions of Approval. The importance of this COA should be stressed to the operator and its contractors, including informing them of their responsibilities to protect and report any cultural resources encountered during construction operations.

Indirect, long-term cumulative impacts from increased access and the presence of project personnel could result in a range of impacts to known and undiscovered cultural resources in the vicinity of the project location. These impacts could range from accidental damage or vandalism to illegal collection and excavation.

ENVIRONMENTAL JUSTICE

Affected Environment: Review of 2004 data from US Census Bureau indicates the median annual income of Garfield County averages \$50,119 and is neither an impoverished or wealthy county. Median annual income of Eagle County averages \$59,037 and is not impoverished but is considered a wealthy county. U.S. Census Bureau data from 2006 shows the minority population of Garfield and Eagle County comprises less than 0.6 % of the total population of Colorado¹.

Garfield County	Eagle County
Median Household Income (2004)	Median Household Income (2004)
Estimate	Estimate
\$50,119	\$59,037

Environmental Consequences/Mitigation:

Proposed Action:

The proposed action and alternatives are not expected to create a disproportionately high and adverse human health impact or environmental effect on minority or low-income populations within the area.

No Action:

Under the No Action alternative no impacts to minority or low-income populations would occur.

FLOODPLAINS

¹ Source U.S. Census Bureau: State and County QuickFacts. Data derived from Population Estimates, Census of Population and Housing, Small Area Income and Poverty Estimates, State and County Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits, Consolidated Federal Funds Report
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Affected Environment: The proposed project would not occur within the 100-year floodplain of the Colorado River, as mapped by FEMA and USACE.

Environmental Consequences/Mitigation: The proposed action will not alter floodplain function or condition. No further mitigation is required.

WATER QUALITY, SURFACE AND GROUND (includes an analysis on Standard 5)

Affected Environment: The proposed project area is located within the Trail Gulch watershed which is an ephemeral tributary to the Eagle River near Gypsum, Colorado. The Eagle River is a major tributary to the Colorado River near Dotsero, Colorado. Trail Gulch is situated within water quality stream segment 10a of the Eagle River Basin. Stream Segment 10a of the Eagle River Basin is defined as “All tributaries to the Eagle River, including all wetlands, from a point immediately below the confluence with Lake Creek to the confluence with the Colorado River, except for specific listings in segments 10b, 11, 12, and those waters included in Segment 1” (CDPHE–WQCC. 2010a).

Table 1 identifies stream classifications and water quality standards for Eagle River Basin stream segment 10a as outlined in CDPHE, Regulation No. 33.

Table 1:		Numeric Standards					
Stream Segment	Classifications	Physical and Biological	Inorganic (mg/l)		Metals (µg/l)		
COUCEA10a	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-DoC D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100m	NH3(ac/ch)=TVS Cl2(ac)=0.019 Cl2(ch)=0.011 CN=0.005	S=0.002 B=0.75 NO2=0.05 NO3=10 Cl=250 SO4=WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ch)=WS Mn(ac/ch)=TVS Hg(ch)=0.01(tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS

Table data from CDPHE–WQCC. 2010a

The CDPHE —Integrated Water Quality Monitoring and Assessment Report-2010 update to the 2008 305(b) Report (CDPHE-WQCC. 2010c) was reviewed to determine the current status of assessment and determination of water quality within the project area. The Colorado Integrated Reporting Category (IR) value assigned to this assessment unit in the —Status of Water Quality in Colorado – 2010 document was IR=2. Stream segment 10a is described as fully supporting agricultural, water supply and primary contact recreation. However, this assessment is not supporting aquatic life cold due to selenium from unknown sources. In Colorado, the majority of the assessed surface water bodies fall into IR Categories 1, 2, and 3. Category 1 indicates waters attaining water quality standards. Colorado has elected to place segments where not all uses have been assessed in IR Category 2. In some cases, a complete assessment of all uses cannot be completed do to the lack of data, but the data that is available indicates that at least some of the uses that were assessed are fully supporting. IR Category 3 indicates that insufficient data is available to determine whether or not the classified uses are being attained. Category 4 indicates waters which are not supporting a standard for 1 or more classified uses, but a TMDL is not needed. IR Category 5 indicates that available data and/or information indicate that at least one classified use is not being supported or is threatened, and a TMDL is needed. Segments must be

placed in Category 5 when, based on existing and readily available data and/or information, technology-based effluent limitations required by the Clean Water Act (CWA), more stringent effluent limitations, and other pollution control requirements are not sufficient to implement an applicable water quality standard and a TMDL is needed. This category constitutes the Section 303(d) list of waters impaired by a pollutant (CDPHE-WQCC. 20010c).

The 2010 CDPHE-WQCC Regulation No. 93 Section 303d List of Impaired Waters and Monitoring and Evaluation List, was reviewed to determine if Eagle River stream segments 10a was listed. While stream segment 10a was not on the 303(d) List, it was identified on the Monitoring and Evaluation list for potential selenium impairments (CDPHE-WQCC. 2010b).

Groundwater:

A review of the USGS Groundwater Atlas of the Colorado indicated the proposed action will be situated within the boundaries of the Colorado River Alluvial Aquifer System. Furthermore, review of the CDSS-Map Viewer (CDSS 2010) verified the presence of alluvial deposits adjacent to the Eagle River near the proposed action.

One BLM well (use type = domestic) is located near the mouth of Trail Canyon, is completed in alluvial deposits, has a total depth is 34 feet (below ground surface) and a static water level is 5 feet below ground surface. Static water levels in alluvial deposits are related to the adjacent river or creek stage. Generally, the alluvial water levels will be high in the spring and early summer due to snowmelt and increased runoff, dropping through the summer and fall, and will remain low throughout the winter.

Published water quality data for the Colorado River alluvial aquifers include concentrations of total dissolved solids (TDS), hardness, and measurements of radioactivity. In the Eagle River valley where alluvium overlies the Eagle Valley evaporite sequence, the water can be high in sulfates, producing high concentrations of TDS. Flows associated with hot springs also have typically high dissolved solids concentrations. As a result of these discharges, the alluvium downstream from Glenwood Springs has elevated TDS, sulfate, sodium, magnesium, manganese, calcium, and chloride levels. The hot springs at Glenwood Springs annually add 475,000 to 534,000 tons of dissolved solids to the Colorado River. In addition, irrigation-return flows are another source for increasing the concentrations of dissolved solids, especially in the Grand Valley. **Table 2** summarizes the alluvial water-quality data reported by Apodaca and Bails (2000) for five stream valleys tributary to the Colorado River.

Table 2 Water Quality Data for the Alluvial Aquifers in the Colorado River basin.

River Valley Alluvium	TDS, mg/L (AVERAGE)	Hardness, mg/L (AVERAGE)	Radon-222, pCi/L (AVERAGE)
North Fork Colorado River	110 to 125 (118)	45 to 66 (56)	751 to 1,441 (1,096)
Fraser River	122 to 247 (185)	73 to 180 (127)	305 to 1,462 (884)
Blue River	169 to 513 (320)	100 to 330 (228)	709 to 2,054 (1,207)
Eagle River	77 to 2,716 (616)	51 to 1,700 (398)	685 to 1,239 (908)

Roaring Fork River	42 to 524 (217)	20 to 370 (156)	852 to 4,030 (2,159)
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Table data from Topper et. al., 2003

Environmental Consequences/Mitigation: During construction, spills of fuels and/or lubricants if left unmitigated may infiltrate alluvial deposits contaminating near-stream alluvial groundwater and eventually surface water in the Eagle River and alluvial groundwater. Furthermore, temporary elevated sediment loading resulting from surface disturbance and removal/trampling of vegetation may occur under the proposed action. Indirect impacts may include elevated sediment production from the ROW if unauthorized use of the ROW occurs (e.g. OHV use). To mitigate potential contamination of surface and groundwater resources, the operator should not store, re-fuel, or repair equipment within 200 feet of Trail Gulch. Likewise, to minimize surface impacts, construction activities should not occur when soils are saturated to a depth of three inches or greater. Furthermore, unauthorized use of the ROW should be discouraged either by signage or barricades. With suggested mitigation, potential water quality impacts resulting from stormwater sources will be sufficiently avoided.

Finding on the Public Land Health Standard for water quality: Water quality in stream segment 10a is not identified on the State’s List of Impaired Waters (303d List) thus it currently meets standard 5. Standard 5 will continue to be meeting until future data determines otherwise. Implementation of the proposed action will not alter this finding.

INVASIVE, NON-NATIVE SPECIES

Affected Environment: Russian knapweed and plumeless thistle are known to occur at the in this area.

Environmental Consequences/Mitigation: Surface-disturbing activities, such as the Proposed Action, create a niche for the invasion or expansion of noxious weeds, particularly in areas where noxious weeds are already present in the vicinity.

The contractor is to ensure equipment involved in land disturbing actions be clean of noxious weed seeds or propagative parts prior to entry on site. When working in areas with noxious weeds, equipment should be cleaned prior to moving off site.

MIGRATORY BIRDS

Affected Environment: BLM Instruction Memorandum No. 2008-050 provides guidance toward meeting the Bureau of Land Management’s (BLM) responsibilities under the Migratory Bird Treaty Act (MBTA) and the Executive Order (EO) 13186. The guidance directs Field Offices to promote the maintenance and improvement of habitat quantity and quality. To avoid, reduce or mitigate adverse impacts on the habitats of migratory bird species of conservation concern to the extent feasible, and in a manner consistent with regional or statewide bird conservation priorities.

The 1988 amendment to the Fish and Wildlife Conservation Act mandates the U.S. Fish and Wildlife Service (USFWS) to “identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act (ESA) of 1973.” The “*BIRDS OF CONSERVATION*

CONCERN 2008” (U.S. Fish and Wildlife Service 2008) is the most recent effort to carry out this mandate.

The MBTA prohibits the “take” of a protected species. Under the Act, the term “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The USFWS interprets “harm” and “kill” to include loss of eggs or nestlings due to abandonment or reduced attentiveness by one or both adults as a result of disturbance by human activity, as well as physical destruction of an occupied nest.

The conservation concerns are the result of population declines - naturally or human-caused, small ranges or population sizes, threats to habitat, or other factors. Although there are general patterns that can be inferred, there is no single reason why any species is on the list. Habitat loss is believed to be the major reason for the declines of many species. When considering potential impacts to migratory birds the impact on habitat, including: 1) the degree of fragmentation/connectivity expected from the proposed project relative to before the proposed project; and 2) the fragmentation/connectivity within and between habitat types (e.g., within nesting habitat or between nesting and feeding habitats. Continued private land development, surface disturbing actions in key habitats (e.g. riparian areas) and the proliferation of roads, pipelines, powerlines and trails are local factors that reduce habitat quality and quantity for many species.

The Colorado River Valley Field Office (CRVFO) is within the Southern Rockies/Colorado Plateau Bird Conservation Region (BCR). The 2008 list of Birds of Conservation Concern include the following:

Species	Habitat Description	Potential Occurrences in Project Area
Gunnison Sage-Grouse (<i>Centrocercus minimus</i>)	Sagebrush communities for hiding and thermal cover, food, and nesting; open areas with sagebrush stands for leks; sagebrush-grass-forb mix for nesting; wet meadows for rearing chicks. Year-round resident, breeding	Not Present
American Bittern (<i>Botaurus lentiginosus</i>)	Marshes and wetlands; ground nester. Summer resident.	Not Present
Bald Eagle (<i>Haliaeetus leucocephalus</i>)	Nests in forested rivers and lakes; winters in upland areas, often with rivers or lakes nearby. Generally winter resident, occasional breeding.	Present
Ferruginous Hawk (<i>Buteo regalis</i>)	Open, rolling and/or rugged terrain in grasslands and shrubsteppe communities; also grasslands and cultivated fields; nests on cliffs and rocky outcrops. Fall/ winter resident, non-breeding.	Unlikely
Golden Eagle (<i>Aquila chrysaetos</i>)	Open country, grasslands, woodlands, and barren areas in hilly or mountainous terrain; nests on rocky outcrops or large trees. Year-	Present

	round resident, breeding.	
Peregrine Falcon (<i>Falco peregrines</i>)	Open country near cliff habitat, often near water such as rivers, lakes, and marshes; nests on ledges or holes on cliff faces and crags. Spring/summer resident, breeding.	Possibly Present
Prairie Falcon (<i>Falco mexicanus</i>)	Open country in mountains, steppe, or prairie; winters in cultivated fields; nests in holes or on ledges on rocky cliffs or embankments . Spring/summer resident, breeding	Unlikely
Snowy Plover (<i>Charadrius alexandrinus nivosus/tenuirostris</i>)	Sparsely vegetated sand flats associated with pickleweed, greasewood, and saltgrass. Spring migrant, non-breeding. Spring migrant, non-	Not Present
Mountain Plover (<i>Charadrius montanus</i>)	High plain, cultivated fields, desert scrublands, and sagebrush habitats, often in association with heavy grazing, sometimes in association with prairie dog colonies ; short vegetation.	Not Present
Long-billed Curlew (<i>Numenius americanus</i>)	Lakes and wetlands and adjacent grassland and shrub communities. Spring/ fall migrant, non-breeding.	Not Present
Yellow-billed Cuckoo (<i>Coccyzus americanus</i>)	Riparian, deciduous woodlands with dense undergrowth; nests in tall cottonwood , mature willow riparian, moist thickets, orchards, abandoned pastures. Summer resident, breeding.	Not Present
Burrowing Owl (<i>Athene cunicularia</i>)	Open grasslands and low shrublands often in association with prairie dog colonies; nests in abandoned burrows created by mammals; short	Not Present
Lewis's Woodpecker (<i>Melanerpes lewis</i>)	Open woodland, often logged or burned, including oak, coniferous forest (often ponderosa), riparian woodland, and orchards, less often in pinyon-juniper.	Possibly Present
Willow Flycatcher (<i>Empidonax traillii</i>)	Riparian and moist, shrubby areas; winters in shrubby openings with short vegetation. Summer resident, breeding.	Not Present
Gray Vireo (<i>Vireo vicinior</i>)	Open pinyon-juniper woodlands. Uncommon summer resident, breeding.	Unlikely
Pinyon Jay (<i>Gymnorhinus cyanocephalus</i>)	Pinyon-juniper woodland. Year-round resident, breeding.	Present
Juniper Titmouse (<i>Baeolophus ridgwayi</i>)	Pinyon-juniper woodlands, especially juniper; nests in tree cavities. Year-round resident, breeding.	Present
Veery (<i>Catharus fuscescens</i>)	Dense riparian thickets and hillside brush near streams. Uncommon spring/fall migrant in	Not Present

	Eastern Colorado.	
Bendire's Thrasher (<i>Toxostoma bendirei</i>)	Desert, especially areas of tall vegetation, cholla cactus, creosote bush and yucca, and in juniper woodland Possible summer resident.	Present in Summer
Grace's Warbler (<i>Dendroica graciae</i>)	Breeds in ponderosa pine forests. Uncommon summer resident in southwest Colorado.	Not Present
Brewer's Sparrow (<i>Spizella breweri</i>)	Summer resident that primarily breeds in sagebrush-grass stands and shrublands. Migrant at low elevations.	Present in Summer
Grasshopper Sparrow (<i>Ammodramus savannarum</i>)	Open grasslands and cultivated fields. Spring migrant, non-breeding .	Not Present
Chestnut-collared Longspur (<i>Calcarius ornatus</i>)	Open grasslands and cultivated fields. Spring migrant, non-breeding.	Not Present
Black Rosy-Finch (<i>Leucosticte atrata</i>)	Open country including mountain meadows, high deserts, valleys, and plains; breeds/ nests in alpine areas near rock piles and cliffs. Winter resident, non-breeding.	Not Present
Brown-capped Rosy-Finch (<i>Leucosticte australis</i>)	Alpine meadows, cliffs, and talus and high-elevation parks and valleys. Summer residents, breeding.	Not Present
Cassin's Finch (<i>Carpodacus cassinii</i>).	Open montane coniferous forests; breeds/ nests in coniferous forests. Year-round resident, breeding.	Possibly Present

The CRVFO planning area provides both foraging and nesting habitat for a variety of migratory birds that summer, breed, winter, or migrate through the area. The habitat diversity provided by the broad expanses of sagebrush, mixed mountain shrub, oakbrush, aspen, pinyon-juniper woodlands, other types of coniferous forests and riparian and wetland areas support many bird species. Species such as the Pinyon Jay, Juniper Titmouse, and Lewis's Woodpecker are characteristically found in pinyon/juniper woodlands.

Bald eagle (*Haliaeetus leucocephalus*). Bald eagles are increasing in numbers throughout their range and were removed from the federal threatened and endangered species list in 2007 however bald eagles are still protected under the Migratory Bird Treaty Act. Bald eagles are known to winter along portions of the Colorado, Eagle and Roaring Fork Rivers and its major tributaries. Wintering bald eagles are generally present from mid-November to mid-April. Large mature cottonwood trees along the rivers and their major tributaries are used as roosting and perching sites, and these waterways provide the main food sources of fish and waterfowl. Upland habitats adjacent to these waterways are used as scavenging areas primarily for winter killed animals. Major threats include habitat loss, human disturbance and illegal shooting.

Golden eagles likely forage throughout the project area. Raptor surveys have not been conducted in the area for the project however no nest sites are known to occur in such small

trees. Many other species of raptors (red-tailed hawks, Cooper's hawks, kestrels and owls) not on the Fish & Wildlife Service's Birds of Conservation Concern list also can be seen in the area.

Environmental Consequences/Mitigation:

Proposed Action:

The construction of the powerline would impact pinyon-juniper woodland habitat for migratory birds. During the construction of the line birds that are present would be disturbed likely move to other adjacent woodlands to forage and roost. The overall impact on habitat availability would be negligible.

Direct mortality of adults due to construction is unlikely. Clearing and construction activities are proposed to occur outside the breeding season for migratory birds thus nesting and fledging of young would be finished.

Direct impacts to raptors include mortality due to electrocutions, collisions and nest construction. Following "Suggested Practices for Avian Protection on Powerlines: State of the Art, 2006" (APLIC 2006) would reduce the likelihood of impacts from the powerline itself. Construction activities would disturb little acreage; therefore, reductions in prey species abundance would be minimal and are not anticipated to adversely affect raptor populations.

No Action Alternative:

The No Action alternative would have no bearing on the ability of the area to meet the habitat requirements for migratory birds because no use activities would take place.

NATIVE AMERICAN RELIGIOUS CONCERNS

Affected Environment: The Proposed Action is located within an area identified by the Ute Tribes as part of their ancestral homeland. A number of Class III cultural resource inventories (see section on Cultural Resources) were conducted for a variety of projects in the Proposed Action's vicinity to determine if any areas were known to be culturally sensitive to Native Americans. No sensitive areas were identified or are currently known in the proposed project area.

Environmental Consequences:

Proposed Action

At present, no Native American concerns are known within the project area and none was identified during the inventories. The Ute Tribe of the Uintah and Ouray Bands, the primary Native American tribe in this area of the CRVFO, have indicated that they do not wish to be consulted for small projects or projects where no Native American areas of concern have been identified either through survey or past consultations. Therefore, formal consultation was not undertaken. If new data are disclosed, new terms and conditions may have to be negotiated to accommodate their concerns.

Although the Proposed Action would have no direct impacts, increased access and personnel in the vicinity of the proposed project could indirectly impact unknown Native American resources ranging from illegal collection to vandalism.

The National Historic Preservation Act (NHPA) requires that if newly discovered cultural resources are identified during project implementation, work in that area must stop and the agency Authorized Officer notified immediately (36 CFR 800.13). The Native American Graves Protection and Repatriation Act (NAGPRA), requires that if inadvertent discovery of Native American Remains or Objects occurs, activity must cease in the area of discovery, a reasonable effort made to protect the item(s) discovered, and immediate notice made to the agency Authorized Officer, as well as the appropriate Native American group(s) (IV.C.2). Notice may be followed by a 30-day delay (NAGPRA Section 3(d)). Further actions also require compliance under the provisions of NHPA and the Archaeological Resource Protection Act. Holy Cross Energy will notify its staff and contractors of the requirement under the NHPA, that work must cease if cultural resources are found during project operations. A standard Education/Discovery COA for the protection of Native American values would be attached to the APDs (Appendix A). The importance of these COAs should be stressed to the operator and its contractors, including informing them of their responsibilities to protect and report any cultural resources encountered. The proponent and contractors should also be aware of requirements under the NAGPRA.

THREATENED, ENDANGERED, AND SENSITIVE SPECIES – Plants (includes a finding on Standard 4)

Affected Environment:

Federally Listed, Proposed, or Candidate Plant Species

According to the latest species list from the U.S. Fish and Wildlife Service (2010), the only federally listed, proposed, or candidate threatened or endangered plant species that may occur within or be impacted by actions occurring in Eagle County is the Ute ladies'-tresses (*Spiranthes diluvialis*).

Ute Ladies'tresses (*Spiranthes diluvialis*). The Ute ladies'-tresses is listed as a threatened plant species under the Endangered Species Act. Habitat for this rare orchid includes seasonally flooded river terraces, subirrigated or spring-fed abandoned stream channels, and lakeshores. In addition, some populations have been discovered along irrigation canals, berms, levees, irrigated meadows, excavated gravel pits, reservoirs, and other human modified wetlands. This orchid is known to occur in isolated populations in Colorado, Idaho, Montana, Nebraska, Nevada, Utah, Washington and Wyoming. Populations in Colorado have all been found below 6,500 feet in elevation. The proposed powerline route is adjacent to Trail Gulch which is an ephemeral drainage with no subirrigated or spring-fed wetlands. The project area does not contain any potential habitat for this plant species.

BLM Sensitive Plant Species

According to the latest Colorado BLM State Director's Sensitive Species List (Animals and Plants), November, 2009, the only BLM Sensitive plant species which may occur within or be impacted by actions occurring within Eagle County is Harrington's penstemon (*Penstemon harringtonii*).

Harrington's penstemon (*Penstemon harringtonii*). Harrington's penstemon is a narrowly endemic plant found in the Colorado River drainage of northwestern Colorado. The species is found primarily in open sagebrush habitat on rocky loam or rocky clay loam soils between the

elevations of 6,200 and 10,000 feet. The species has been documented in portions of Eagle, Garfield, Grand, Pitkin, Routt and Summit Counties, with Eagle County representing the core habitat for this species. The Colorado Natural Heritage Program identified several threats to the persistence of Harrington's penstemon including residential and agricultural development, off-road vehicle use, exotic plant species invasion, over-grazing by domestic and wild ungulates, oil and gas development, and climate change (Panjabi and Anderson 2006).

A scattered, but extensive, population of Harrington's penstemon is known to occur in the sagebrush parks at the northern end of the proposed power line. Power poles 45-51 pass through this occurrence. A biological survey conducted on June 22, 2010 before the power poles were staked found Harrington's penstemon plants approximately 20 feet from the proposed ROW alignment.

Environmental Consequences/Mitigation:

Proposed Action:

Federally Listed, Proposed or Candidate plant species

Due to the absence of any potential habitat for any federally listed, proposed, or candidate plant species, the proposed action would have "No Effect" on these species.

BLM Sensitive Plant Species

Poles 48-51 would be hand-dug. Poles 45-47 would be accessed by truck and installed by machine. Poles hand dug would be placed by helicopters, while the remaining poles would be set by trucks. Digging of the holes could lead to direct loss of individual Harrington's penstemon plants and access to the holes, especially via truck, could lead to crushing of Harrington penstemon plants and temporary soil compaction within suitable habitats. The proposed action would likely result in the direct loss of less than 100 plants. This would represent a minor impact relative to the overall size and extent of the local penstemon population in the vicinity of the power line.

Invasion of newly disturbed areas by noxious weeds also poses a threat to Harrington's penstemon. Noxious weeds can outcompete rare plants and reduce habitat suitability for the species. With appropriate control of noxious weeds, long-term use of the power line should not result in any additional impacts to individuals or populations of Harrington's penstemon.

The proposed action would not likely result in a reduction in the long-term viability of the species either rangewide or within the project area and would not likely cause a trend toward listing of the species.

No Action:

Under the No Action alternative, the proposed right-of-way would not be authorized and the power line would not be constructed. No new surface disturbance would occur and there would be no impacts to special status plants.

Finding on the Public Land Health Standard for Threatened & Endangered Species:

The proposed action falls within the Blowout allotment within the North Eagle Landscape, which was the subject of a formal land health assessment in 2003. Habitat conditions for Harrington’s penstemon appeared suitable for sustaining viable populations of the species. The assessment determined that the Blowout allotment was meeting Standard 4 for threatened, endangered and other special status plant species at the time of the assessment. The proposed action would have little impact on the ability of the allotment and landscape to continue to meet this standard.

THREATENED, ENDANGERED, AND SENSITIVE SPECIES - Terrestrial Wildlife (includes a finding on Standard 4)

Affected Environment:

Federally Listed, Proposed or Candidate - Terrestrial Wildlife Species

According to the latest species list from the U. S. Fish and Wildlife Service (U.S. Fish and Wildlife Service. 2008), the following Federally listed, proposed, or candidate terrestrial wildlife species may occur within or be impacted by actions occurring within the GSFO (Table 3):

Table 3.

Terrestrial Wildlife Species	Habitat/Range	Eagle County	Garfield County	Mesa County	Pitkin County	Routt County
Black-footed Ferret <i>(Mustela nigripes)</i>	In Colorado habitat includes the eastern plains, the mountain parks and the western valleys. Specifically grasslands or shrublands that supported some species of prairie dog, the ferret’s primary prey.	x				
Canada lynx <i>(Lynx Canadensis)</i>	Mesic forests of lodgepole pine, subalpine fir, Engelmann spruce, and quaking aspen in the upper montane and subalpine zones, generally between 8,000 and 12,000 feet in elevation.	x	x	x	x	x
Mexican spotted owl <i>(Strix occidentalis lucida)</i>	Mature montane forests, shady canyons, and steep canyons. The key components in montane forests are common to old-growth forests: uneven-age stands with high canopy closure and tree density, fallen logs and snags.	x	x		x	
Greater sage grouse <i>(Centrocercus urophasianus)</i>	Resident of relatively large, open sagebrush flats or rolling sagebrush hills. Uncommon and unlikely in this part of the GSFO or associated habitats	x				x

Terrestrial Wildlife Species	Habitat/Range	Eagle County	Garfield County	Mesa County	Pitkin County	Routt County
Yellow-billed cuckoo (<i>Coccyzus americanus</i>)	Mature riparian forests of cottonwoods and other large deciduous trees with a well-developed understory of tall riparian shrubs. Uncommon summer resident of Colorado.	x	x	x	x	x
Uncompahgre fritillary butterfly (<i>Boloria acrocne</i>)	Patches of snow willow (<i>Salix spp.</i>) at high elevations.	x			x	

These species: their status, their distributions, habitat associations, and as appropriate their association to the project area is summarized below.

Black-footed Ferret (*Mustela nigripes*). Federally listed as endangered. Black-footed ferrets have ranged statewide but never have been abundant in Colorado. Their habitat included the eastern plains, the mountain parks and the western valleys – grasslands or shrub lands that supported some species of prairie dog, the ferret’s primary prey. Little is known about their natural history. They mate in early spring and give birth to a litter of three or four mouse-sized pups after a seven-week gestation period. Black-footed ferrets are reported to be killed. They are susceptible to distemper, predators like owls and coyotes, and vehicles. It is assumed that plowing for agriculture and programs to eradicate prairie dogs have driven the black-footed ferret to the verge of extinction. State and federal biologists have established two major black-footed ferret colonies: one at Coyote Basin (Colorado-Utah border west of Rangely) and another at the BLM's Wolf Creek Management Area southeast of Dinosaur National Monument (CDOW 2009). Because no known occurrences have been documented and the occurrence of the species in this area is unlikely due to range and habitat conditions, this species is not considered further.

Canada Lynx (*Lynx canadensis*). Federally listed as threatened. Canada lynx (*Lynx canadensis*) was listed as a federally threatened species, effective April 24, 2000 (Federal Register Volume 65, No. 58). Canada lynx occupy high-latitude or high-elevation coniferous forests characterized by cold, snowy winters and an adequate prey base (Ruggiero et al. 1999). The preferred prey of Canada lynx throughout their range is the snowshoe hare (*Lepus americanus*). In the western United States, lynx are associated with mesic forests of lodgepole pine, subalpine fir, Engelmann spruce, and quaking aspen in the upper montane and subalpine zones, generally between 8,000 and 12,000 feet in elevation. Although snowshoe hares are the preferred prey in Colorado, lynx in also feed on other species such as the mountain cottontail (*Sylvilagus nuttallii*), pine squirrel (*Tamiasciurus hudsonicus*), and blue grouse (*Dendragapus obscurus*).

The U.S. Forest Service (USFS) has mapped suitable denning, winter, and other habitat for lynx within the White River National Forest (WRNF). The mapped suitable habitat in the WRNF

comprises several areas known as Lynx Analysis Units (LAUs). Lynx analysis units (LAUs) are management areas that contain suitable lynx habitat and approximate the size of a female home range. Several LAUs border BLM lands however no areas large enough to be considered LAUs occur within the GSFO. BLM lands within the GSFO area generally support the movement of lynx dispersing to a new area or, potentially, moving to lower elevations during severe winter weather in search of prey. Because no known occurrences have been documented and the occurrence of the species in this area is unlikely due to range and habitat conditions, this species is not considered further.

Greater sage grouse (*Centrocercus urophasianus*). The U.S. Fish and Wildlife Service announced on Friday, March 5, 2010 that the greater sage-grouse (*Centrocercus urophasianus*) would be added to the Endangered Species Act “Candidate” list. The USFWS determined that proposing the species for protection is precluded by the need to take action on other species facing more immediate and severe extinction threats. As a result, the greater sage-grouse was placed on the list of species that are candidates for Endangered Species Act Protection. Evidence suggests that habitat fragmentation and destruction across much of the species’ range has contributed to significant population declines over the past century. If current trends persist, many local populations may disappear in the next several decades, with the remaining fragmented population vulnerable to extinction.

Sage grouse, as the name implies, are found only in areas where sagebrush is abundant, providing both food and cover. Although these birds are found at altitudes of 6000-8500 feet, they are not forest grouse and prefer relatively open sagebrush flats or rolling sagebrush hills. In winter, sagebrush accounts for 100% of the diet for these birds. In addition, it provides important escape cover and protection from the elements. In late winter, males begin to concentrate on traditional strutting grounds or leks. Females arrive at the leks 1-2 weeks later. Leks can occur on a variety of land types or formations (windswept ridges, knolls, areas of flat sagebrush, flat bare openings in the sagebrush. Breeding occurs on the leks and in the adjacent sagebrush, typically from March through May. Females and their chicks remain largely dependent on forbs and insects for food well into early fall. Cultivated herbaceous broad-leaved plants (alfalfa, clover) are important early fall food sources when available (CDOW 2009a).

The Northern Eagle/Southern Routt population, while small (<200 birds), probably has, or had, a relationship with the larger population in Moffat, Rio Blanco and western Routt counties, and probably with the Middle Park population to the east. The northern part of the project area does overlap with an isolated parcel of mapped sage grouse habitat. The GIS layer, derived from field personnel input, encompasses all mapped seasonal activity areas within the observed range of a population of sage grouse. The details of that information are not recorded. Recent surveys and site visits have documented no evidence of sage grouse use in this isolated mapped parcel.

Mexican Spotted Owl (*Strix occidentalis*). Federally listed as endangered. This owl nests, roosts, and hunts in mature coniferous forests in canyons and foothills. The only extant populations in Colorado are in the Pikes Peak and Wet Mountain areas of south-central Colorado and the Mesa Verde area of southwestern Colorado. Because no known occurrences have been documented and the occurrence of the species in this area is unlikely due to range and habitat conditions, this species is not considered further.

Western Yellow-billed Cuckoo (*Coccyzus americanus occidentalis*). Candidate for Federal listing. This secretive species occurs in mature riparian forests of cottonwoods and other large deciduous trees with a well-developed understory of tall riparian shrubs. Western cuckoos breed in large blocks of riparian habitats, particularly woodlands with cottonwoods (*Populus fremontii*) and willows (*Salix* sp.). A few sightings of yellow-billed cuckoo have occurred in western Colorado along the Colorado River near Grand Junction (USFWS 2009b). Riparian areas in the project area do not provide suitable habitat for this species due to the patchy nature of the stands and the general lack of a tall-shrub understory. Because no known occurrences have been documented and the occurrence of the species in this area is unlikely due to range and habitat conditions, this species is not considered further.

Uncompahgre fritillary butterfly (*Boloria acrocne*). Federally listed as endangered. The butterfly has been verified at only two areas in the San Juan Mountains in Colorado. There is anecdotal evidence of other colonies in the San Juans and southern Sawatch ranges in Colorado. The butterfly exists above treeline in patches of its larval host plant, snow willow. The butterfly is most often found on north and east facing slopes, which provide a moist, cool, microclimate. The greatest known controllable threat is butterfly collecting. Climatological patterns, disease, parasitism, predation, and trampling of larvae by humans and livestock might pose additional threats. Because no known occurrences have been documented and the occurrence of the species in this area is unlikely due to range, elevation and habitat conditions, this species is not considered further.

BLM Sensitive - Terrestrial Wildlife Species

According to the latest *Colorado BLM State Director's Sensitive Species List (Animals and Plants) June, 2000*, the following terrestrial wildlife species may occur within or be impacted by actions occurring within the GSFO (Table - BLM Sensitive - Terrestrial Wildlife Species):

Table 4 - BLM Sensitive - Terrestrial Wildlife Species

Name	Habitat/Range	Habitat Potential Present / Absent
Townsend's big-eared bat (<i>Corynorhinus townsendii</i>) and Fringed myotis (<i>Myotis thysanodes</i>)	Occur as scattered populations at moderate elevations on the Western Slope, along the foothills of the Front Range and the mesas of southeastern Colorado. Maximum elevation is 7,500 feet. Breeds and roosts in caves, trees, mines, and buildings; hunts over pinyon-juniper, montane conifer, and semi-desert shrubland habitats. Known occurrences - Potential in caves, mines or trees	Possibly Present

Table 4 - BLM Sensitive - Terrestrial Wildlife Species

Name	Habitat/Range	Habitat Potential Present / Absent
Northern goshawk (<i>Accipiter gentilis</i>)	Resident in foothills and mountains and occasional in migration and winter at lower elevations. Predominantly uses mature stands of aspen, and pines (ponderosa and lodgepole). Uncommon – seasonal visitor.	Absent
Goldeneye, Barrow's (<i>Bucephala islandica</i>)	Rare winter resident and spring/fall migrant in lowlands and mountains; a few breed in the northern mountains. Uncommon - seasonal	Absent
Ibis, white-faced (<i>Plegadis chihi</i>)	Inhabits wet meadows, marsh edges and reservoir shorelines. Very rare, non-breeding, summer migrant to western Colorado valleys and mountain lakes. Main breeding area is in the San Luis valley.	Absent

The following paragraphs address species with a habitat potential to be present in the project area.

Fringed Myotis (*Myotis thysanodes*) and Townsend’s Big-eared Bat (*Plecotus townsendii*).

Occur as scattered populations at moderate elevations on the Western Slope of Colorado. Habitat associations are not well defined. Both of these bats will forage over water and along the edge of vegetation (pinyon-juniper woodlands, montane conifer woodlands, semi-desert shrublands) for aerial insects. Although they commonly roost in caves, rock crevices, mines, or buildings, they also may roost in tree cavities. Both species are widely distributed and usually occur in small groups. The animals roost in rock crevices, caves, mines, buildings and trees. Townsend’s big-eared bat is not very abundant anywhere in its range and this is attributed to patchy distribution and limited availability of suitable roosting habitat (Gruver, J.C. and D.A. Keinath 2006).

Northern Goshawk (*Accipiter gentilis*). The Northern Goshawk is the largest North American accipiter. The goshawk is a forest habitat generalist that uses a variety of forest type, forest ages, structural conditions and successional stages. Goshawks prey on small-medium sized birds and mammals. It breeds in coniferous deciduous and mixed forests. The nest is typically located on a northerly aspect in a drainage or canyon and is often near a stream. Nest areas contain one or more stands of large, old trees with a dense canopy cover. A goshawk pair occupies its nest area from March until late September. The nest area is the center of all movements and behaviors associated with breeding from courtship through fledging. Because no known occurrences have been documented and the occurrence of the species in this area is unlikely due to range and habitat conditions, this species is not considered further.

Goldeneye, Barrow's (*Bucephala islandica*). This bird is a rare and local breeder in Flat Tops Wilderness Area in Garfield and adjacent counties. First confirmed record this century of fledged young or broods on 3 shallow lakes in Flat Tops Wilderness in 1990; also found in 1991 and 1994 (CLO 2009). Goldeneye's prefer alkaline-freshwater lakes in parkland areas and to a lesser extent subalpine/alpine lakes/beaver ponds for breeding. Because no known occurrences have been documented and the occurrence of the species in this area is unlikely due to range and habitat conditions, this species is not considered further.

Ibis, white-faced (*Plegadis chihi*). The species inhabits primarily freshwater wetlands, especially cattail (*Typha* spp.) and bulrush (*Scirpus* spp.) marshes. This species feeds in flooded hay meadows, agricultural fields, and estuarine wetlands. This species breeds in isolated colonies in mainly shallow marshes with "islands" of emergent vegetation. This species is more commonly found on the eastern slope of Colorado. Sparse historical records indicate that this species is uncommon within the CRVFO. Because no known occurrences have been documented and the occurrence of the species in this area is unlikely due to range and habitat conditions, this species is not considered further.

Environmental Consequences/Mitigation:

No U.S. Fish & Wildlife Service designated critical habitat for any of the above terrestrial wildlife species is found within the GSFO. No occupied habitat is present within the vicinity that could be directly or indirectly impacted by the proposed action. Due to the absence of any known occurrences, suitable habitat or landscape linkage for any listed, proposed or candidate terrestrial wildlife species, the proposed action should have "No Effect" on these species.

Greater sage grouse (*Centrocercus urophasianus*). Field review by FO biologist (Brian Hopkins) determined that the bulk of the CDOW mapped habitat is actually pinyon-juniper woodland. Only the northern most 1800 feet of the proposed power line actually crosses sagebrush habitat that could be considered as potential habitat meeting the habitat requirements of sage grouse. In that portion of the power line the sagebrush shrublands are heavily roaded by county (CR 51) and many BLM roads. Five poles are proposed to be located on BLM in this portion of the power line.

It is possible individual sage grouse could be found in the project area since the interspersed sagebrush stands do meet the basic habitat requirements for the species and a small population exists to the northeast in the State Bridge area. The power poles would then create additional perch sites to the existing pinyon-juniper woodlands for raptors that prey on sage grouse on the eastern extent of the mapped habitat parcel. Lammers and Collopy (2007) noted that if land managers determine that perching or hunting by avian predators on overhead utility structures represents a threat to a sensitive prey species, they recommended the use of perch-deterrents on overhead utility structures where the objective is to reduce perching time for large-sized avian predators such as golden eagles and hawks.

Recognizing the low likely hood of sage grouse being in the project area and the few additional perch sites created by the proposed project, it is difficult to conclude that an adverse effect would occur to the local population of greater sage grouse or their habitat. The proposed action with

the proposed mitigation would not likely result in a reduction in the long-term viability of the species either range-wide or locally. The project proposal would not individually contribute to the likelihood and need for the species to be listed pursuant to the ESA.

Mitigation: To reduce the potential threat to individual birds that could disperse from the State Bridge area, perch deterrents (e.g. <http://www.missionenviro.co.za/default.asp?id=11>) should be installed on the five power poles in section 19 and on the southern power pole on the adjacent private lands in section 18 to deter perching raptors.

Fringed Myotis (*Myotis thysanodes*) and Townsend’s Big-eared Bat (*Plecotus townsendii*). These bats migrate and forage over habitats found within the project area. The proposed project would have insignificant impacts to the bats ability to forage or migrate since the bat’s echolocation ability can sense obstacles such as wires and poles. The proposed project would also not impact the habitat’s ability to provide insect prey species.

Finding on the Public Land Health Standard for Threatened & Endangered Species – Terrestrial Wildlife: Neither the proposed action nor the no action alternative would positively or negatively affect the standard from being achieved for special status terrestrial wildlife species.

THREATENED, ENDANGERED, AND SENSITIVE SPECIES – Aquatic Wildlife (includes a finding on Standard 4)

Affected Environment:

Federally Listed, Proposed or Candidate Aquatic Wildlife Species

According to the latest species list from the U. S. Fish and Wildlife Service (U.S. Fish and Wildlife Service. 2008), the following Federally listed, proposed, or candidate aquatic wildlife species may occur within or be impacted by actions occurring within the GSFO (Table 5 - Special Status Species – Aquatic Wildlife):

Table 5 - Special Status Species – Aquatic Wildlife

Aquatic Wildlife Species	Habitat/Range	Eagle County	Garfield County	Mesa County	Pitkin County	Routt County
Greenback cutthroat trout (<i>Oncorhynchus clarkii stomias</i>)	Cold, clear, gravelly headwater streams and mountain lakes. Originally found in the mountain and foothill areas of the Arkansas and South Platte river systems in Colorado and part of Wyoming.	x	x	x	x	x
Bonytail (<i>Gila elegans</i>)	Large, fast-flowing waterways of the Colorado River system.	x	x	x	x	x
Colorado pikeminnow (<i>Ptychocheilus</i>)	Swift flowing muddy rivers with quiet, warm backwaters of the Green, Yampa, White, Colorado,	x	x	x	x	x

Aquatic Wildlife Species	Habitat/Range	Eagle County	Garfield County	Mesa County	Pitkin County	Routt County
<i>lucius</i>)	Gunnison, San Juan, and Dolores rivers.					
Humpback chub (<i>Gila cypha</i>)	Deep, fast-moving, turbid waters often associated with large boulders and steep cliffs such as canyon-bound portions of the Colorado River system such as Black Rocks and Westwater canyons.	x	x	x		x
Razorback sucker (<i>Xyrauchen texanus</i>)	Deep, clear to turbid waters of large rivers and reservoirs over mud, sand or gravel. Currently low numbers in the Yampa, Colorado and Gunnison rivers. Reproducing populations remain only in the Colorado River near Grand Junction.	x	x	x	x	x

These species: their status, their distributions, habitat associations, and as appropriate their association to the project area is summarized below.

Greenback Cutthroat Trout (*Oncorhynchus clarki stomias*). Federally listed as threatened. The greenback cutthroat trout was not identified on the USFWS list for Garfield County; however, recent surveys have identified a population in Cache Creek, located several drainages east of the project area. The greenback is the subspecies of cutthroat trout native to the Platte River drainage on the Eastern Slope of Colorado, while the Colorado River cutthroat trout is the subspecies native to Garfield County and throughout the Western Slope of Colorado. Although the occurrence of greenbacks in Cache Creek and potentially elsewhere in the GSFO and WRNF areas is apparently the result of human intervention (e.g., sanctioned or *ad hoc* transplanted of fish from the Eastern Slope), its status as threatened applies to Western Slope populations.

These four species of Federally listed big-river fishes occur within the Colorado River drainage basin downstream from the project area.

Bonytail (*G. elegans*). Federally listed as endangered. This large chub is a member of the minnow family. Their current distribution and habitat status are largely unknown due to its rapid decline prior to research into its natural history. Historically, bonytails were present in the Colorado River system, which includes the Yampa, Green, Colorado and Gunnison rivers. The bonytail is extremely rare in Colorado and no self-sustaining population exist throughout the Colorado River basin. Only one has been captured in the state since 1980. Restoration stocking of bonytail in the wild to develop adult populations is the priority recovery action in Colorado.

Colorado Pikeminnow (*Ptychocheilus lucius*). Federally listed as endangered. The Colorado pikeminnow (formerly Colorado squawfish) Colorado pikeminnow were once abundant in the main stem of the Colorado River and most of its major tributaries in Colorado, Wyoming, Utah, New Mexico, Arizona, Nevada, California and Mexico. Now, they exist primarily in the Green River below the confluence with the Yampa River, the lower Duchesne River in Utah, the Yampa River below Craig, Colo., the White River from Taylor Draw Dam near Rangely downstream to the confluence with the Green River, the Gunnison River in Colorado, and the Colorado River from Palisade, Colo., downstream to Lake Powell. Biologists believe Colorado pikeminnow populations in the upper Colorado River basin are now relatively stable and in some areas may even be growing. Designated Critical Habitat for the Colorado pikeminnow includes the Colorado River and its 100-year floodplain west (downstream) from the town of Rifle.

Humpback Chub (*Gila cypha*). Federally listed as endangered. The nearest known habitat for the humpback chub and bonytail is within the Colorado River approximately 70 miles downstream from the project area. Only one population of humpback chub, at Black Rocks west of Grand Junction, is known to exist in Colorado.

Razorback Sucker (*Xyrauchen texanus*). Federally listed as endangered. The razorback sucker was once widespread throughout most of the Colorado River Basin from Wyoming to Mexico. In the upper Colorado River Basin, they are now found only in the upper Green River in Utah, the lower Yampa River in Colorado and occasionally in the Colorado River near Grand Junction. Because so few of these fish remain in the wild, biologists have been actively raising them in hatcheries in Utah and Colorado and stocking them in the Colorado River. Designated Critical Habitat for the razorback sucker includes the Colorado River and its 100-year floodplain west (downstream) from the town of Rifle.

BLM Sensitive Aquatic Wildlife Species

According to the latest *Colorado BLM State Director's Sensitive Species List (Animals and Plants) June, 2000*, the following aquatic wildlife species may occur within or be impacted by actions occurring within the GSFO (Table 6 - Colorado BLM Sensitive Species - Aquatic):

Table 6 - Colorado BLM Sensitive Species - Aquatic

Name	Habitat	Habitat Potential Present / Absent
Northern leopard frog <i>(Rana pipiens)</i>	Wet meadows and the banks and shallows of marshes, ponds, glacial kettle ponds, beaver ponds, lakes, reservoirs, streams, and irrigation ditches.	Absent
Flannelmouth sucker <i>(Catostomas latipinnis)</i>	Generally restricted to rivers and major tributaries.	Absent
Roundtail chub <i>(Gila robusta)</i>	Generally restricted to rivers and major tributaries.	Absent

Name	Habitat	Habitat Potential Present / Absent
Colorado River cutthroat trout <i>(Oncorhynchus clarki pleuriticus)</i>	Occurs in clear, cool headwaters streams with coarse substrates, well-distributed pools, stable streambanks, and abundant stream cover.	Absent

Environmental Consequences/Mitigation:

Proposed Action:

Federally Listed, Proposed or Candidate Aquatic Wildlife Species. Neither the greenback cutthroat trout nor the four species of Federally listed big-river fishes are found within the area impacted by the proposed action. Thus the proposed action would have “no effect” to these fishes or their habitat.

BLM Sensitive Aquatic Wildlife Species. The Bluehead sucker, Flannelmouth sucker, and Roundtail chub are endemic to the Colorado River basin and reside within the mainstem Colorado River and its major tributary rivers/streams. Thus the proposed action would not affect these fishes or their habitat.

No Action Alternative:

The No Action alternative would have no bearing on the ability of the area to meet the public land health standard 4 for special status aquatic wildlife species because no use activities would take place.

Analysis on the Public Land Health Standard 4 for Aquatic Wildlife Special Status Species:

(partial, see also Plants and Terrestrial Wildlife): Neither the proposed action nor the no action alternative would positively or negatively affect the standard from being achieved for special status aquatic wildlife species.

WASTES, HAZARDOUS OR SOLID

Affected Environment:

Fuels and lubricants would be used for the operation of all vehicles and equipment during project implementation. In the event of a spill, there is the potential for contaminants to be transported to soils or surface water, which could negatively impact those resources.

Environmental Consequences/Mitigation:

Fuels and lubricants would be stored in appropriate containers and refueling would occur in designated areas at a minimum of 100 feet from any stream channels.

WILD AND SCENIC RIVER

Affected Environment: The proposed action falls within the .5 mile corridor of the Eagle River, which was found to be eligible for Wild and Scenic River status in the Final Wild and Scenic River Eligibility Report, BLM Kremmling and Glenwood Springs Field Offices, Colorado, March 2007. This segment, which is from the BLM land at Wolcott Recreation Area through Red Canyon to the confluence with the Colorado River near Dotsero, was found eligible because of the Recreational (floatboating) Outstandingly Remarkable Value.

Environmental Consequences/Mitigation: Neither the proposed action nor the no action alternative would affect the Recreational Outstandingly Remarkable Value of the Eagle River.

NON-CRITICAL ELEMENTS

The following elements **must** be addressed due to the involvement of Standards for Public Land Health:

SOILS (includes a finding on Standard 1)

Affected Environment: A review of the level III soil survey for the Aspen-Gypsum Area, Colorado, Parts of Eagle, Garfield, and Pitkin Counties was done to identify soils in the proposed project area. Table 7 identifies important soil properties as well as the estimated length of disturbance through the affected soil type.

Table 7

Soil Unit #	Name	Affected length (mi)	Drainage Class	Parent Material	Hazard of Water Erosion
43	Forelle-Brwnsto Complex	0.5	well drained	mixed alluvium derived dominantly from sedimentary rocks	generally moderate
55	Gypsum land-Gypsorthids Complex	1.3	well drained	exposed parent material-gypsum	slight-v. severe (as slope increases)
91	Mussel loam	0.56	well drained	alluvium	moderate
104	Torriorthe nts-Camborthids-Rock outcrop complex	0.54	well drained	residium and colluvium derived dominantly from sedimentary rock	high
106	Tridell-Brownsto Stony sandy loams	0.34	well drained	alluvium and colluvium derived from sandstone and basalt	moderate

Environmental Consequences/Mitigation: Erosion potential from the project area may be elevated during construction activities as soils in portions of the project area will be striped of stabilizing vegetation, woody debris, and large rock. Likewise, access to and from pole locations requiring vehicles may result in trampling of vegetation and soil compaction which could result in elevated runoff and erosion potential. Decreased soil stabilization in upland watersheds increases potential erosion and sedimentation downstream altering natural flow patterns, promoting stream channel instability and further erosion. However, impacts to soil resources will be sufficiently mitigate as total surface disturbance would be minimal and clearing of vegetation would be primarily limited to above ground canopy leaving root structures in place to stabilize soils. The use of the ROW by unauthorized use should be discouraged to allow vegetation to recover and minimize indirect and cumulative impacts to soil resources.

Finding on the Public Land Health Standard for upland soils: The proposed action lies within the Blowout allotment of the North Eagle Landscape Unit which was the subject of a formal land health assessment during the summer of 2003. The Determination Document, signed on April 9, 2004, found that the allotment was meeting all of the Standards for Public Land Health except Standard 4 for sage grouse habitat and populations. Implementation of the proposed action will not alter this finding.

VEGETATION (includes a finding on Standard 3)

Affected Environment: The proposed power line route begins in basin big sagebrush and salt desert shrub vegetation along the flanks of Road Gulch, then ascends a ridge covered in pinyon pine and Utah juniper and terminates in a Wyoming big sagebrush park at the head of Road Gulch. The southern two-thirds of the route are dominated by steeply sloping, highly erosive soils from the Eagle River Evaporite formation. On some of the southern slopes, the soils limit plant establishment. Plants in the area are dominated by basin big sagebrush (*Artemisia tridentata ssp. tridentata*), rubber rabbitbrush (*Chrysothamnus nauseosus*), four-winged saltbush (*Atriplex canescens*), and greasewood (*Sarcobatus vermiculatus*). On flatter sites, pinyon pine (*Pinus edulis*) and Utah juniper (*Juniperus osteosperma*) are more common.

Further north along the route, the proposed power line ROW crosses sagebrush-dominated alluvial benches derived from coarse-textured, calcareous sandstone and basalt. Plant species in these areas are dominated by basin big sagebrush, Wyoming big sagebrush (*Artemisia tridentata ssp. wyomingensis*), prickly pear cactus (*Opuntia polyacantha*) and winterfat (*Krascheninnikovia lanata*).

Environmental Consequences/Mitigation:

Proposed Action:

Approximately 51 wooden power poles would be erected on public land. Poles 1 -7, 15 – 33, 36, 37, 39, 41, 42, and 48 – 51 would be erected by digging the holes by hand then setting the poles using a helicopter. The remaining pole locations would be accessed by Holy Cross' service trucks. These poles would be dug and erected by machine. The wires would be strung by helicopter. Each power pole hole would remove approximately 9 square feet of vegetation through excavation of the hole and setting of the power pole. Approximately 2,100 feet of the

power line would pass through pinyon pine and Utah juniper woodlands, which would require extensive pruning or removal of some trees if they interfere with the power line or would create a fire hazard.

Other vegetation impacts would include temporary trampling of grasses, forbs and sagebrush due to Holy Cross truck traffic and crews. Given the limited amount of surface disturbance associated with each individual power pole, construction of the proposed power line would result in the loss of less than 0.2 acres of vegetation.

Mitigation: All surface disturbances would be seeded with a mixture of native grasses adapted to the site to help prevent the invasion of noxious weeds and to reestablish native, perennial vegetation on the site. Any noxious weeds that become established in the project area would also be controlled by the applicant. The seed mix will be as follows:

<u>Species of Seed</u>	<u>Variety</u>	<u>Application Rate (PLS lbs/ac)</u>
Bluebunch wheatgrass	Anatone, Goldar, Secar	5.7
Bottlebrush squirreltail	VNS	4.2
Western wheatgrass	Arriba, Rosanna	7.0
Slender wheatgrass	Revenue, Pryor	4.0
Sandberg bluegrass	CO Plateau, if avail	<u>0.9</u>
Total		21.8 PLS lbs/ac

The seed mix will be certified free of noxious weed seeds, i.e. the seed shall contain no noxious, prohibited, or restricted weed seeds and shall contain no more than 0.5 percent by weight of other weed seeds. Seed should be broadcast on disturbed areas after September 15th and before April 15th to provide optimal soil moisture for seed germination and establishment. Application of weed-seed free straw mulch may improve germination of grass seed and help prevent invasion of noxious weeds.

No Action:

Under the No Action alternative, the proposed right-of-way would not be authorized and the power line would not be constructed. No new surface disturbance would occur and there would be no impacts to vegetation.

Finding on the Public Land Health Standard for Plant & Animal Communities:

The proposed action falls within the Blowout allotment within the North Eagle Landscape, which was the subject of a formal land health assessment in 2003. The assessment determined that the Blowout allotment was meeting Standard 3 for plant and animal communities overall, however, certain concerns were noted related to the condition of the sagebrush communities. The main problems observed were the encroachment of pinyon and juniper trees, lack of forb diversity and cover, and more dead and decadent sagebrush than expected. The proposed action would have little impact on the ability of the allotment and landscape to continue to meet this standard.

WILDLIFE, AQUATIC (includes a finding on Standard 3)

Affected Environment:

Fish. No fish are known to inhabit the affected area of the proposed action.

Amphibians. Several amphibians of interest are found within the GSFO, the Boreal Toad (*Bufo boreas boreas*) and the Great Basin spadefoot toad (*Spea intermontana*). The distribution of the boreal toad is restricted to areas with suitable breeding habitat in spruce-fir forests and alpine meadows generally between 7,500 and 12,000 feet elevation. Breeding habitat includes lakes, marshes, ponds, and bogs with sunny exposures and quiet shallow water. Great Basin spadefoot toads occupy arid grasslands and high sagebrush, desert shrub, and pinion-juniper woodlands. Great Basin spadefoot toad has been documented in the western third of the field office from the town of Rifle west to the boundary with the Grand Junction Field Office. This represents the eastern extent (fringe) of the species overall range and populations are believed to be small and sporadic.

Environmental Consequences/Mitigation:

Proposed Action:

The proposed action would not impact wetlands, creeks, streams or rivers. Thus the proposed action would not affect fish or amphibians or their habitat.

No Action Alternative:

The No Action alternative would have no bearing on the ability of the area to meet the public land health standard 3 for aquatic wildlife species because no use activities would take place.

Finding on the Public Land Health Standard 3 for Plant and Animal Communities (partial, see also Vegetation and Wildlife, Terrestrial): BLM utilizes *standards* (conditions needed to sustain public land health) and *guidelines* (management tools, methods, strategies, and techniques designed to maintain or achieve healthy public lands as defined by the standards) to assess and manage livestock grazing (BLM 1997). Neither the proposed action nor the no action alternative would positively or negatively affect the standard from being achieved for aquatic wildlife species.

WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

Affected Environment:

The CRVFO supports a wide variety of terrestrial wildlife species that summer, winter, or migrate through the area. The habitat diversity provided by the broad expanses of sagebrush, mixed mountain shrub, aspen, pinyon-juniper woodlands, other types of coniferous forests, and riparian/wetland areas support many species. The current condition of wildlife habitats varies across the landscape. Some habitat is altered by power lines, pipelines, fences, public recreation use, residential and commercial development, vegetative treatments, livestock and wild ungulate grazing, oil and gas development, and roads/trails. These factors have contributed to some degradation/fragmentation of habitat as well as causing disturbance to some species.

Reptiles. Reptile species most likely to occur include the western fence lizard (*Sceloporus undulatus*) and gopher snake (bullsnake) (*Pituophis catenifer*) in xeric shrublands or grassy clearings and the western terrestrial garter snake (*Thamnophis elegans*) along creeks. Other reptiles potentially present along creeks, although more commonly found at lower elevations

than the site, are the milk snake (*Lampropeltis triangulum*) and smooth green snake (*Opheodrys vernalis*).

Birds. Passerine (perching) birds commonly found in the area include the: American robin (*Turdus migratorius*), Pinyon jay (*Gymnorhinus cyanocephalus*) western scrub-jay (*Aphelocoma californica*), and black-billed magpie (*Pica pica*). Two gallinaceous species, the wild turkey (*Meleagris gallopavo*) and the Dusty grouse (*Dendragapus obscores*), are found here.

Birds of prey (eagles, falcons, hawks, and owls) may migrate through the area or nest in cottonwoods, conifers, or very tall oaks, while the numerous songbirds and small mammal populations provide the primary prey base. Common raptor species in the area include the: red-tailed hawk (*Buteo jamaicensis*), golden eagle (*Aquila chrysaetos*) American kestrel (*Falco sparverius*), great horned owl (*Bubo virginianus*), Cooper's hawk (*Accipiter cooperii*), and sharp-shinned hawk (*A. striatus*).

Numerous streams, rivers, reservoirs, ponds, and associated riparian vegetation provide habitat for a wide variety of waterfowl and shorebirds. Common species include: great blue herons (*Ardea Herodias*), Canada geese (*Branta canadensis*), mallards (*Anas platyrhynchos*), pintails (*A. acuta*), gadwalls (*A. strepera*), and American wigeon (*A. americana*) are common.

Mammals. Numerous small mammals reside within the planning area, including ground squirrels (*Spermophilus* spp.), chipmunks (*Neotamias* spp.), rabbits (*Sylvilagus* spp.), skunks (*Mephitis mephitis*), and raccoons (*Procyon lotor*). Many of these small mammals provide the main prey for raptors and larger carnivores. These species are most likely to occur along the drainages, near the margins of dense oakbrush, in pinyon-juniper woodland, or in the small area of aspen and spruce/fir. Larger carnivores expected to occur include the bobcat (*Lynx rufus*) and the coyote (*Canis latrans*). Black bears (*Ursus americanus*) make use of oaks and the associated chokecherries and serviceberries for cover and food, while mountain lions (*Felis concolor*) are likely to occur during seasons when mule deer (*Odocoileus hemionus*) are present.

Big Game. The mule deer (*Odocoileus hemionus*) is a recreationally important species that are common throughout suitable habitats in the region. Another recreationally important big game ungulate (hoofed animal), the Rocky Mountain elk (*Cervus elaphus nelsonii*), is also present. Mule deer and elk usually occupy higher elevations, forested habitat, during the summer and then migrate to sagebrush-dominant ridges and south-facing slopes at lower elevation in the winter.

BLM lands provide a large portion of the undeveloped winter range available to deer and elk. The CRVFO's Resource Management Plan (RMP) allocated existing forage proportionately to livestock and big game, the criterion being active preference for livestock and 5-year average demand for big game. The RMP allocated all available forage on allotments in big game winter range -unavailable to livestock because of stocking rate limitations or slope restrictions - to big game. Summer range was not limiting to big game; therefore, allocating forage beyond CDOW population goals in summer range was deemed to be unnecessary since winter range is what limits herd size. In addition, the RMP allocated additional forage produced through vegetation

manipulation on wildlife winter range first to big game and then to livestock up to active preference. On summer range, additional forage was allocated to livestock first.

Environmental Consequences/Mitigation:

Proposed Action

Impacts to reptiles, birds and mammals due to the proposed action would include direct mortality during construction activities, especially to those that may take refuge in burrows that would be destroyed by project-related activities, and a potential increase in mortality from vehicle/animal collisions. The relatively small amount of wildlife habitat impacted by the proposed action would result in limited impacts to wildlife species. Measurable impacts to these species would likely be masked by natural variations in populations due to weather, disease, and other natural factors.

Big Game. The proposed action is entirely located within CDOW mapped big game winter ranges. One half mile of the power line crosses CDOW mapped mule deer severe winter range defined as that part of the overall range where 90% of the individuals are located when the annual snowpack is at its maximum and/or temperatures are at a minimum in the two worst winters out of ten. However a timing limitation on big game winter habitat would be applied that would restrict construction from December 1 – April 30 in Section 32 in CDOW mapped mule deer severe winter range.

During the construction period, there could be an indirect impact of the temporary displacement of big game that would normally occupy the immediate project area. However this impact is considered negligible in combination with other land use activities such as: 1) the use of the road, 2) the Gypsum mine traffic, 3) hunting activities and 4) other land uses.

Mitigation: TL-1 - Big game winter habitat timing limitation (TL) would be applied that would restrict construction from December 1 – April 30 in Section 32.

No Action Alternative:

The No Action alternative would have no bearing on the ability of the area to meet the public land health standard 3 for terrestrial wildlife species because no use activities would take place.

Finding on the Public Land Health Standard 3 for Plant and Animal Communities (partial, see also Vegetation and Wildlife, Aquatic): BLM utilizes *standards* (conditions needed to sustain public land health) and *guidelines* (management tools, methods, strategies, and techniques designed to maintain or achieve healthy public lands as defined by the standards) to assess and manage livestock grazing (BLM 1997). Neither the proposed action nor the no action alternative would positively or negatively affect the standard from being achieved for aquatic wildlife species.

OTHER NON-CRITICAL ELEMENTS: For the following elements, those brought forward for analysis will be formatted as shown above.

Table 2. Other Resources Considered in the Analysis.			
<i>Resource</i>	<i>NA or Not Present</i>	<i>Present and Not Affected</i>	<i>Present and Affected</i>

Access and Transportation			X
Cadastral Survey	X		
Fire/Fuels Management	X		
Forest Management	X		
Geology and Minerals	X		
Law Enforcement	X		
Paleontology	X		
Noise		X	
Range Management	X		
Realty Authorizations		X	
Recreation		X	
Socio-Economics	X		
Visual Resources			X
Water Rights	X		

ACCESS AND TRANSPORTATION:

Affected Environment: The proposed project area is located in Castle Peak Travel Management Area, where travel is limited to designated routes.

Environmental Consequences/Mitigation of the Proposed Action: The majority of the proposed power line would not be accessible from the current network of designated routes. Therefore it is likely that new routes would be created during the installation and maintenance of the power lines. The new routes would be parallel to County Road 51. The following design feature would be required to mitigate the creation of new routes:

Any routes created to install or maintain the power line that are not a part of the designated route system in the Castle Peak Travel Management Plan shall be blocked to prevent public access. The routes would need to be blocked using gates, boulders or other approved structures.

Environmental Consequences of the “No Action” Alternative: The no action would have no impact on the Castle Peak Travel Management plan.

VISUAL RESOURCE MANAGEMENT:

Affected Environment: The proposed project area is located in an area classified as VRM Class II, III and IV in the GSRA 1984 Resource Management Plan. The objective of this class II is to retain the existing character of the landscape. The level of change to the landscape should be low. Management activities may be seen but should not attract the attention of the casual observer. Any changes to the landscape must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape. The objective of Class III’s is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the

predominant natural features of the characteristic landscape. The objective of Class IV is to provide for management activities that require major modifications to the existing character of the landscape. The level of change to the landscape can be high. The management activities may dominate the view and may be the major focus of viewer attention. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repetition of the basic visual elements of form, line, color, and texture.

Environmental Consequences/Mitigation of the Proposed Action: The proposed action would create linear corridors and straight lines in the landscape. The following design features would mitigate the linear corridors and straight lines and would maintain a natural appearing landscape and the proposed action would meet VRM Class II, II, and IV objectives:

When vegetation is pruned to reduce fire hazards associated with the power lines, thinning and feathering of the adjacent vegetation should also be incorporated to mimic the natural edge of existing vegetation.

The mitigation outlined for Access and Transportation will mitigate the creation of new routes causing linear features under the power lines.

Environmental Consequences of the “No Action” Alternative: The no action would maintain the existing landscape character and would meet all three VRM Class objectives.

CUMULATIVE IMPACTS SUMMARY:

Terrestrial and Aquatic Wildlife Species (including migratory birds and special status species). Generally, cumulative impacts on wildlife result from surface disturbances and disruptive land uses and vary by species. Habitat type-conversion, degradation, fragmentation, and loss have significant adverse effects on wildlife but sometimes take years to manifest as population reductions. Quantified data on the existing and future extent of land uses are not available. However, where these land use activities occur, their contribution would result in some increased level of cumulative impact greater than the impacts of activities proposed or authorized by the BLM on BLM lands. While the approval of the power line would have negligible impacts on wildlife species, the proposal would incrementally add to other impacts (both on public lands and private lands) which are impacting wildlife habitat and species in the Gypsum area.

Soil and Water. Cumulative impacts to soil and water resources can occur from existing roads, trails, and rights-of-ways throughout the watershed, which contribute to increased surface runoff and accelerated erosion, especially where proper drainage is lacking. Other impacts such as vegetation treatments or weed treatments may also change water infiltration or runoff rates and affect soil and water resources. Based on limited land management activities occurring across the watershed, it is assumed that cumulative effects to soil and water from the proposed action are minor.

INTERDISCIPLINARY REVIEW:

Name	Title	Responsibility
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John Brogan	Archaeologist	Cultural and Native American Concerns
Michael Kinser	Rangeland Management Specialist	Range Management, Wetlands & Riparian Zones
Brian Hopkins	Wildlife Biologist	Migratory Birds, Terrestrial Wildlife, T/E/S Wildlife
Carla DeYoung	Ecologist	ACEC, T/E/S Plants, Vegetation
Kimberly Miller	Outdoor Recreation Planner	VRM, WSR, Wilderness
Ody Anderson	Fuels Management Specialist	Fire/Fuels Management
Greg Wolfgang	Outdoor Recreation Planner	Travel Management, VRM
Nate Dieterich and Pauline Adams	Hydrologists	Soil, Air, Water, Geology
Monte Senior	Rangeland Management Specialist	Invasive, Non-native Species
Carole Huey	Realty Specialist	IDT Leader

CITATIONS:

Avian Power Line Interaction Committee (APLIC). 2006. *Suggested Practices for Avian Protection on Powerlines: The State of the Art in 2006*. APLIC and the California Energy Commission. Washington D.C. and Sacramento, CA.

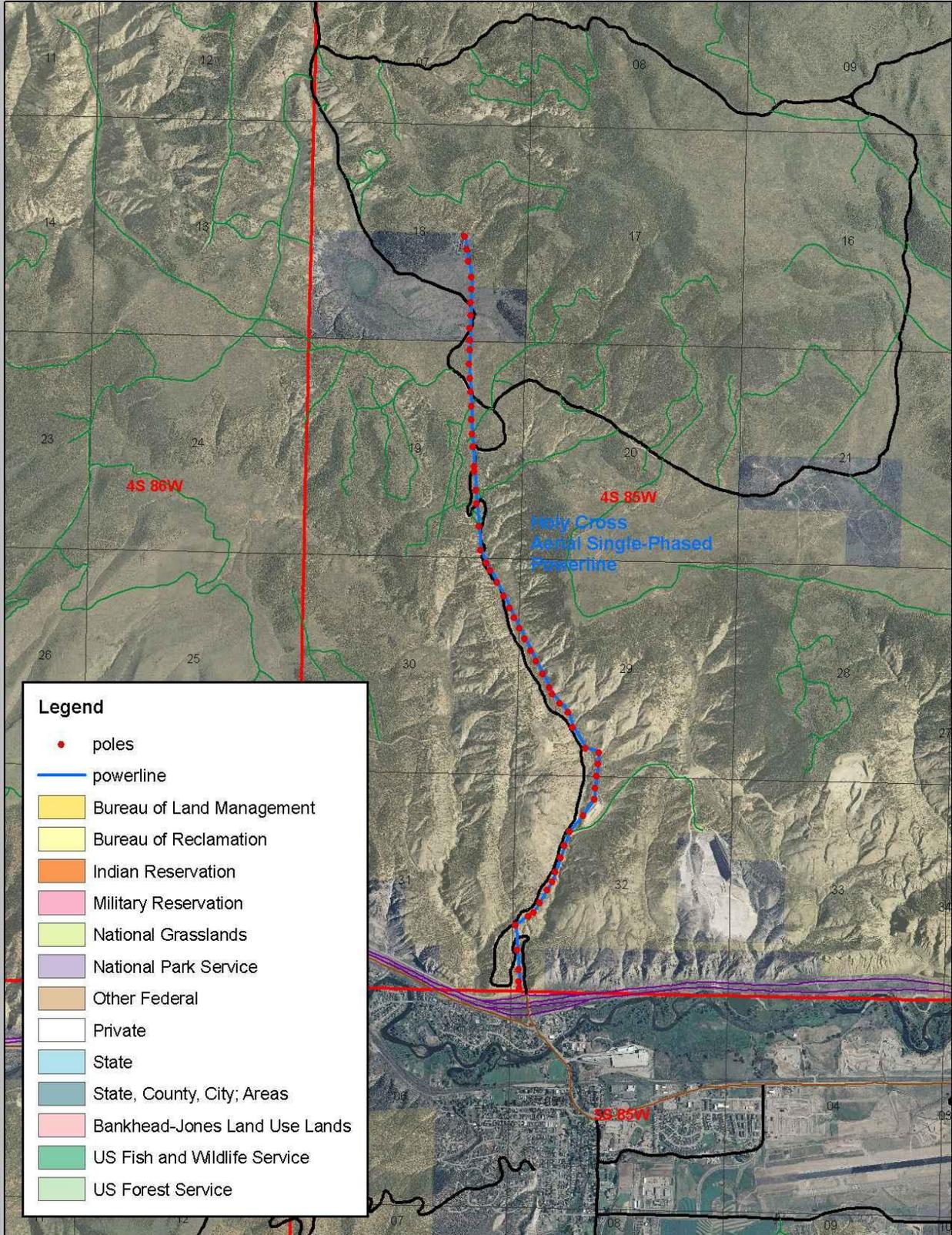
Bureau of Land Management (BLM). 1997. Rangeland standards and guidelines for livestock grazing. www.co.blm.gov/standguide.htm.

Panjabi, S.S. and D.G. Anderson, 2006. *Penstemon harringtonii* Penland (Harrington's beardtongue): a Technical Conservation Assessment. Prepared for the USDA Forest Service Rocky Mountain Region.

Lammers W. M., Collopy M.W. 2007. Effectiveness of Avian Predator Perch Deterrents on Electric Transmission Lines *The Journal of Wildlife Management*. Vol. 71, No. 8 (Nov., 2007), pp. 2752-2758. URL: <http://www.jstor.org/stable/4496399>.

Final Wild and Scenic River Eligibility Report. BLM Kremmling and Glenwood Springs Field Offices, Colorado. March 2007

APPENDICES: Location map, drawings and specifications



Access Roads:

KOMDS.





Section 18 Township 4 South Range 85 West of the 6th P.M. EAGLE County
 Job Name: GYPSUM DRY LAKE W/O #: 21156

Holy Cross Energy Glenwood Springs, Colorado	NOT TO SCALE FACILITY LOCATIONS APPROXIMATE	Date 8-16-10	EXHIBIT A
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Section 18 Township 4 South Range 85 West of the 6th P.M. EAGLE County
 Job Name: GYPSUM DRY LAKE W/O #: 21156

Holy Cross Energy Glenwood Springs, Colorado	NOT TO SCALE FACILITY LOCATIONS APPROXIMATE	Date 8-16-10	EXHIBIT A
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Diagrams:



3799 HIGHWAY 82 • P.O. BOX 2150
GLENWOOD SPRINGS, COLORADO 81602
(970) 945-5491 • FAX (970) 945-4081

September 9, 2010

Ms. Carole Huey
Realty Specialist, BLM
Colorado River Valley Field Office
2300 River Frontage Road
Silt, CO 81652

Re: Dry Lake Application

Dear Carole:

This letter is in response to your e-mail dated September 8, 2010 regarding Greg Wolfgang's questions on the Dry Lake power line. Listed below are the questions and Holy Cross's response:

- Q. The EA says that 20 wooden power poles would be installed. There are 52 poles surveyed on the ground (51 on BLM). Is the 52 amount correct?
- A. No, the correct amount is 51. Poles 52 through 60 will be on private property (see the attached map). When the biological evaluation was done only the centerline was in place. Eric said he did not need the line staked, that he could follow the centerline markers and the road.
- Q. The EA says that the poles would be hand dug disturbing approximately nine square feet. Is this still accurate?
- A. Yes, nine square is correct.
- Poles 1 through 7, 15 through 33, poles 36, 37, 39, 41, 42 and 48 through 51 will be hand dug. Poles 8 through 14, 34, 35, 40, 43, 44 through 47 will be dug by machine.
- Q. The EA says that some of the poles would be placed by helicopter and some by service trucks. Which poles would be placed by helicopter and which by truck? How will the trucks access the holes?
- A. Poles that will be hand dug will be placed by helicopter (see pole numbers above). The remaining poles will be set by trucks.
- The trucks and backhoe will be able to access the proposed pole sites by driving on existing roads (see enclosed map).
- Q. The EA says the wire will be strung by helicopter and that there would be temporary trampling of vegetation. This leads me to believe that there would not be a permanent maintenance road under the power lines. How much of the lines would have a maintenance road under them?
- A. The helicopter will string all the wire for the power line so a permanent maintenance road will not be needed at this time.
- Q. The EA says that some pinyon pine and junipers may need to be pruned back for construction. How much of the vegetation will be pruned? Are the trees just going to be pruned or are they going to be cut down? Would the entire width of the right-of-way with trees be pruned?
- A. Any vegetation within the nine square feet of the poles will be pruned. If re-seeding is required, BLM guidelines will be followed.

Carole Huey
September 9, 2010
Page Two

Mostly pruning will be done and a few trees will need to be cut down.

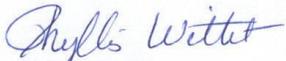
Not the entire width of right-of-way, just vegetation that proposes a fire hazard with the power line.

- Q. Some of the pole locations that were surveyed show multiple anchor points. How many poles need anchors? Could you have Holy Cross send specs of the anchors?
- A. Pole two will require two guys and anchors, pole four will require two guys and anchors, pole six will require one guy and anchor, pole eight will require one guy and anchor, pole 12 will require one guy and anchor, pole 14 will require two guys and anchors, pole 18 will require two guys and anchors, pole 25 will require one guy and anchor, pole 38 will require one guy and anchor, pole 44 will require one guy and anchor, poles 44 and 45 will require one guy and anchor each. See enclosed map and specs.
- Q. Could you have Holy Cross send a picture or specs of the poles that will be used?
- A. See enclosed specs.

Please let me know if you have any further questions or requests.

Thank you.

Sincerely,
HOLY CROSS ENERGY



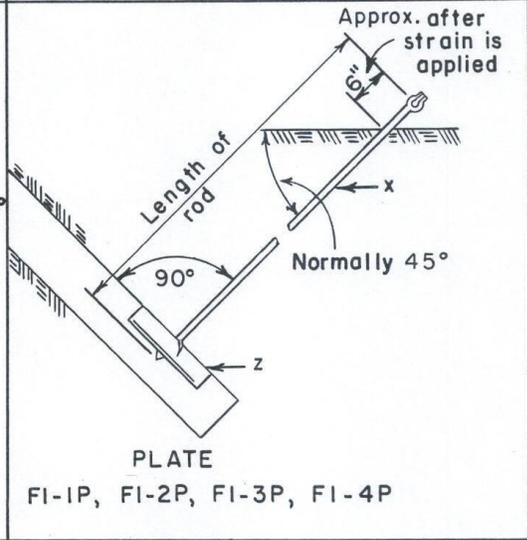
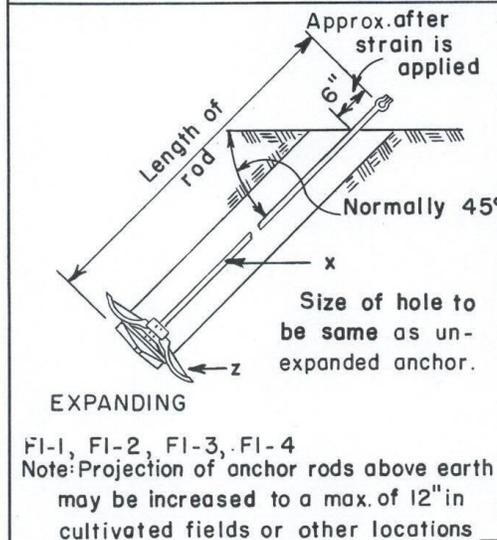
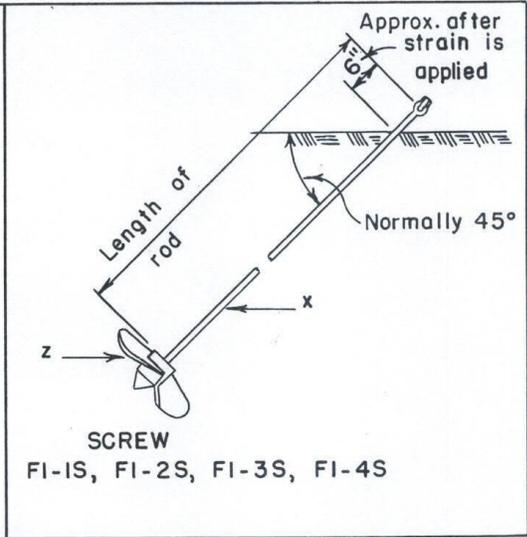
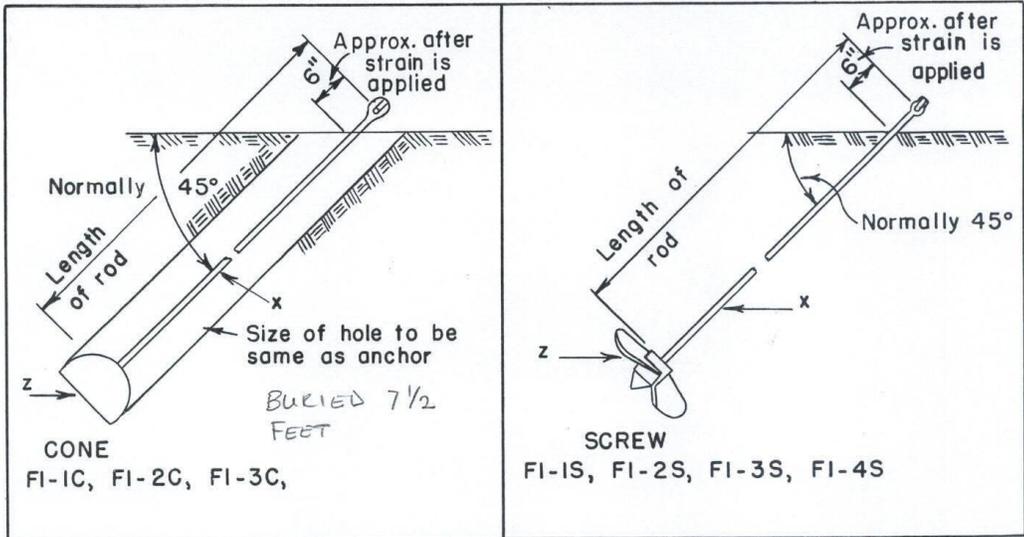
Phyllis Wittet,
Engineering Department

pwittet@holycross.com
(970)947-5469

PW:vw
Enclosures

W/O#10-21156:38-18:Gypsum Dry Lake

10-21156 Huey

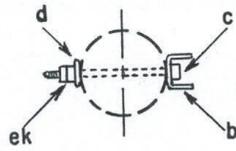


Note: Projection of anchor rods above earth may be increased to a max. of 12" in cultivated fields or other locations where necessary to prevent burying of the rod eye.

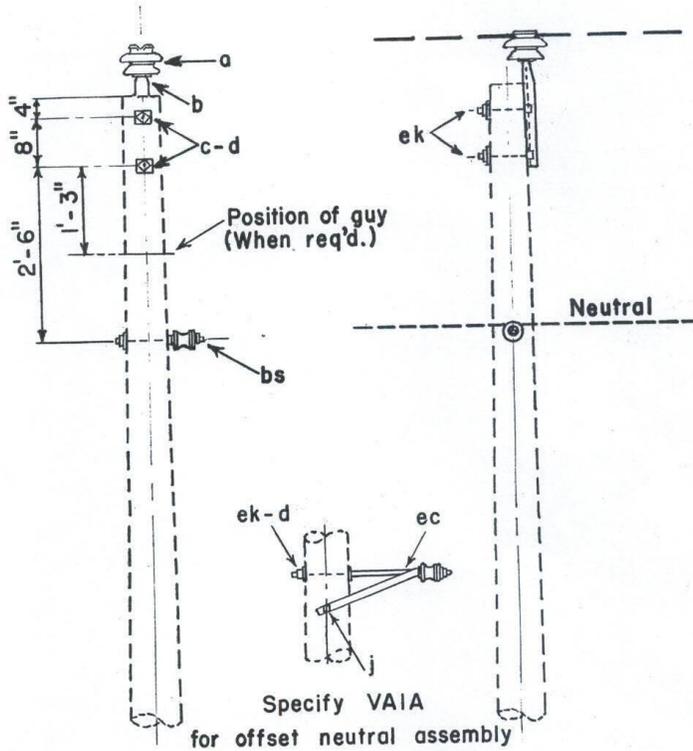
		ASSEMBLY UNIT			
		FI-1	FI-2	FI-3	FI-4
Holding Power in Ordinary Soil (pounds)		6000	8000	10,000	12,000
ITEM	MATERIAL	NO.	NO.	NO.	NO.
x	Rod, anchor, thimble eye	1	5/8" x 7'-0"	1	5/8" x 7'-0"
x	Rod, anchor, twin eye			1	3/4" x 8'-0"
z	Anchor ----- type	1	1	1	1

LINE ANCHOR ASSEMBLIES

Jan 1, 1962 **FI-1 TO 4**

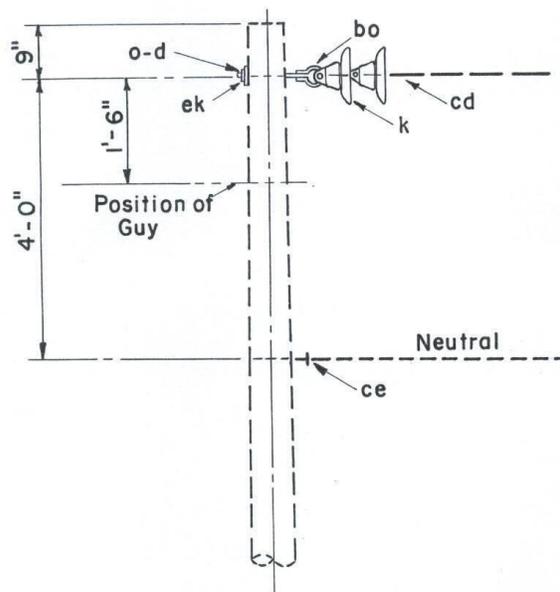
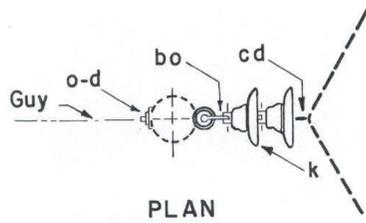


POLE TOP PIN ASSEMBLY



Specify VAIA
for offset neutral assembly

ITEM NO.	MATERIAL	ITEM NO.	MATERIAL
a	1 Insulator, pin type	d	3 Washer, square, 2 1/4"
b	1 Pin, pole top, 20"	bs	1 Bolt, single upset, insulated, (VAI only)
c	2 Bolt, machine, 5/8" x req'd. length	ek	Locknuts
j	2 Screw, lag, 1/2" x 4", (VAIA only)	14.4/24.9 KV PRIMARY 1- PHASE, 0° TO 5° ANGLE, SINGLE PRIMARY SUPPORT	
ec	1 Bracket, offset, insulated, (VAIA only)		
		VAI, VAIA	
		Jan. 1, 1963	

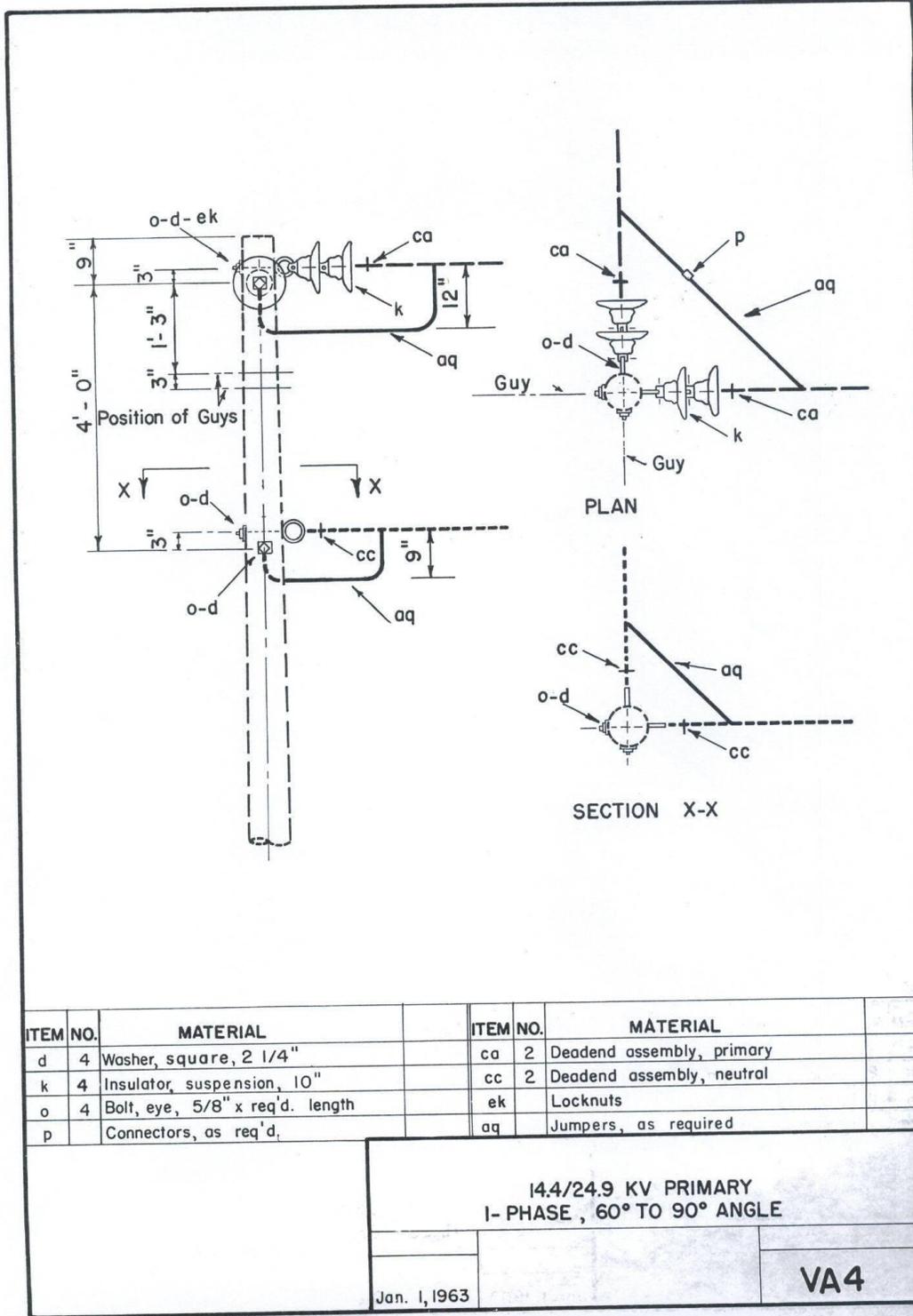


ITEM NO.	MATERIAL	ITEM NO.	MATERIAL
d	1 Washer, square 2 1/4"	cd	1 Angle assembly, primary
k	2 Insulator, suspension, 10"	ce	1 Angle assembly, neutral
o	1 Bolt, eye, 5/8" x req'd length	ek	Locknuts
bo	1 Shackle, anchor		

14.4/24.9 KV. PRIMARY, I-PHASE
30° TO 60° ANGLE

Jan. 1, 1963

VA3

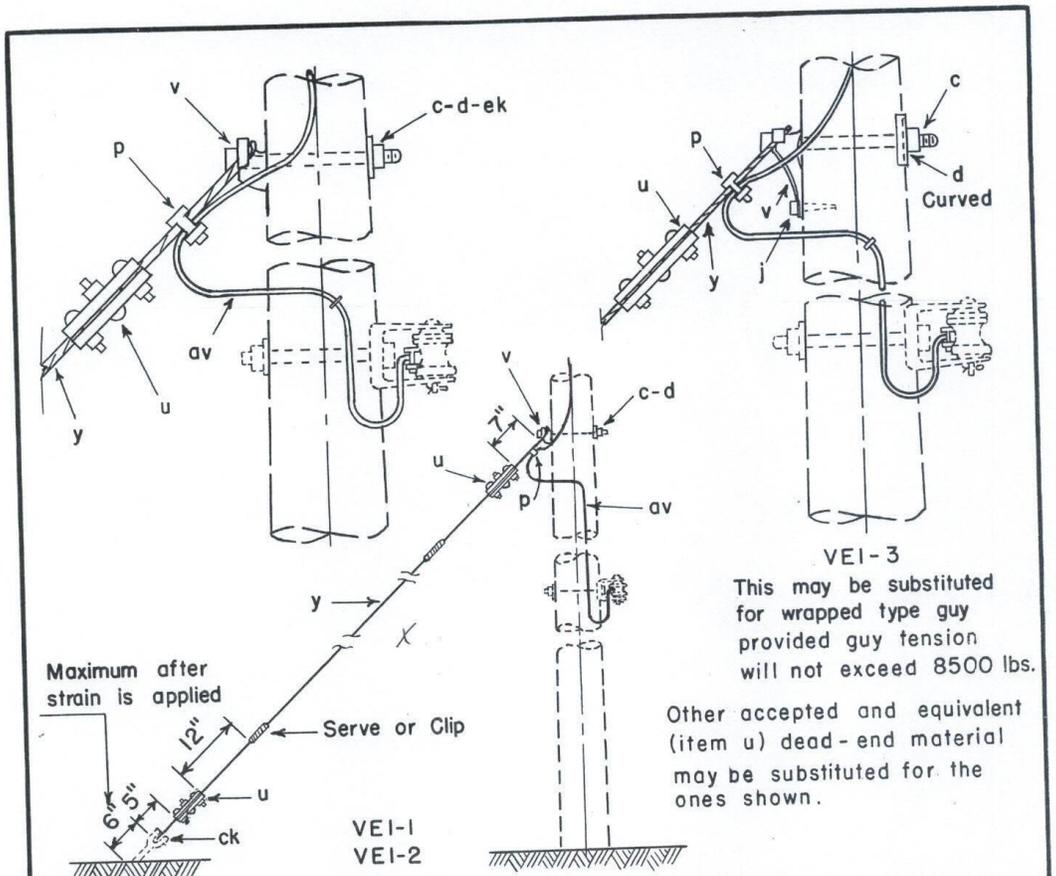


ITEM NO.	MATERIAL	ITEM NO.	MATERIAL
d	4 Washer, square, 2 1/4"	ca	2 Deadend assembly, primary
k	4 Insulator, suspension, 10"	cc	2 Deadend assembly, neutral
o	4 Bolt, eye, 5/8" x req'd. length	ek	Locknuts
p	Connectors, as req'd.	aq	Jumpers, as required

14.4/24.9 KV PRIMARY
I-PHASE, 60° TO 90° ANGLE

Jan. 1, 1963

VA4



ITEM	MATERIAL	ASSEMBLY UNIT		
		VEI-1 1/4" Guy Wire	VEI-2 3/8" Guy Wire	VEI-3 7/16" Guy Wire
		N ^o . REQ'D.	N ^o . REQ'D.	N ^o . REQ'D.
c	Bolt, machine, 5/8" x required length			
d	Washer, square, 2 1/4"			
d	Washer, curved, 3" x 3"			
j	Screw, lag, 1/2" x 4"			
p	Connectors, as required			
u	Deadend for guy strand	2- Light Duty	2- Heavy Duty	2- Heavy Duty
v	Guy attachment			1- Heavy Duty
y	Guy wire, S.M., 7 Strand	req'd. length	req'd. length	req'd. length
ck	Clamp, anchor rod bonding			
av	Jumper, No.4 stranded Al. alloy or equiv.			
ek	Locknuts			

14.4/24.9 KV.
SINGLE DOWN GUY, THROUGH BOLT TYPE

July 12, 1968 **VEI-1, VEI-2, VEI-3**



United States Department of the Interior



BUREAU OF LAND MANAGEMENT
Colorado River Valley Field Office
2300 River Frontage Road
Silt, Colorado 81652
www.co.blm.gov

FINDING OF NO SIGNIFICANT IMPACT DOI-BLM-CO-N040-2010-0086-EA

The environmental assessment and analyzing the environmental effects of the proposed action have been reviewed. The proposed action with any approved mitigation measures result in a Finding of No Significant Impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

DECISION RECORD

DECISION: It is my decision to authorize the construction of the Dry Lake Parcels overhead single-phase electric line project with the proposed mitigation measures as identified below.

RATIONALE: The proposed project is consistent with the current land use plan. The following mitigation measures are included in my decision to eliminate or reduce environmental impacts that have been identified in this EA.

MITIGATION MEASURES:

Fugitive dust (PM₁₀) production may be elevated temporarily during construction activities due to surface disturbance, increased vehicle traffic, and helicopter use in the area. However, PM₁₀ levels would return to preconstruction levels within hours of completion of surface disturbing actions. Therefore, the proposed action is not anticipated to have any lasting impact to air quality locally or regionally. To minimize fugitive dust production, a BLM approved dust suppressant should be utilized along the access road during construction activities.

Fuels and lubricants would be stored in appropriate containers and refueling would occur in designated areas at a minimum of 100 feet from any stream channels.

To mitigate potential contamination of surface and groundwater resources, the operator should not store, re-fuel, or repair equipment within 200 feet of Trail Gulch. Likewise, to minimize surface impacts, construction activities should not occur when soils are saturated to a depth of three inches or greater. Furthermore, unauthorized use of the ROW should be discouraged either by signage or barricades. With suggested mitigation, potential water quality impacts resulting from stormwater sources will be sufficiently avoided.

Surface-disturbing activities, such as the Proposed Action, create a niche for the invasion or expansion of noxious weeds, particularly in areas where noxious weeds are already present in the vicinity.

The contractor is to ensure equipment involved in land disturbing actions be clean of noxious weed seeds or propagative parts prior to entry on site. When working in areas with noxious weeds, equipment should be cleaned prior to moving off site.

All surface disturbances would be seeded with a mixture of native grasses adapted to the site to help prevent the invasion of noxious weeds and to reestablish native, perennial vegetation on the site. Any noxious weeds that become established in the project area would also be controlled by the applicant. The seed mix will be as follows:

<u>Species of Seed</u>	<u>Variety</u>	<u>Application Rate (PLS lbs/ac)</u>
Bluebunch wheatgrass	Anatone, Goldar, Secar	5.7
Bottlebrush squirreltail	VNS	4.2
Western wheatgrass	Arriba, Rosanna	7.0
Slender wheatgrass	Revenue, Pryor	4.0
Sandberg bluegrass	CO Plateau, if avail	0.9
Total		21.8 PLS lbs/ac

The seed mix will be certified free of noxious weed seeds, i.e. the seed shall contain no noxious, prohibited, or restricted weed seeds and shall contain no more than 0.5 percent by weight of other weed seeds. Seed should be broadcast on disturbed areas after September 15th and before April 15th to provide optimal soil moisture for seed germination and establishment. Application of weed-seed free straw mulch may improve germination of grass seed and help prevent invasion of noxious weeds.

Direct impacts to raptors include mortality due to electrocutions, collisions and nest construction. Following “Suggested Practices for Avian Protection on Powerlines: State of the Art, 2006” (APLIC 2006) would reduce the likelihood of impacts from the powerline itself.

The National Historic Preservation Act (NHPA) requires that if newly discovered cultural resources are identified during project implementation, work in that area must stop and the agency Authorized Officer notified immediately (36 CFR 800.13). The Native American Graves Protection and Repatriation Act (NAGPRA), requires that if inadvertent discovery of Native American Remains or Objects occurs, activity must cease in the area of discovery, a reasonable effort made to protect the item(s) discovered, and immediate notice made to the agency Authorized Officer, as well as the appropriate Native American group(s) (IV.C.2). Notice may be followed by a 30-day delay (NAGPRA Section 3(d)). Further actions also require compliance under the provisions of NHPA and the Archaeological Resource Protection Act. Holy Cross Energy will notify its staff and contractors of the requirement under the NHPA, that work must cease if cultural resources are found during project operations. A standard Education/Discovery COA for the protection of Native American values would be attached to the APDs (Appendix A). The importance of these COAs should be stressed to the operator and its contractors, including informing them of their responsibilities to protect and report any cultural resources

encountered. The proponent and contractors should also be aware of requirements under the NAGPRA.

Poles 48-51 would be hand-dug. Poles 45-47 would be accessed by truck and installed by machine. Poles hand dug would be placed by helicopters, while the remaining poles would be set by trucks.

Approximately 51 wooden power poles would be erected on public land. Poles 1 -7, 15 – 33, 36, 37, 39, 41, 42, and 48 – 51 would be erected by digging the holes by hand then setting the poles using a helicopter. The remaining pole locations would be accessed by Holy Cross' service trucks. These poles would be dug and erected by machine. The wires would be strung by helicopter. Each power pole hole would remove approximately 9 square feet of vegetation through excavation of the hole and setting of the power pole. Approximately 2,100 feet of the power line would pass through pinyon pine and Utah juniper woodlands, which would require extensive pruning or removal of some trees if they interfere with the power line or would create a fire hazard.

To reduce the potential threat to individual birds that could disperse from the State Bridge area, perch deterrents (e.g. <http://www.missionenviro.co.za/default.asp?id=11>) should be installed on the five power poles in section 19 and on the southern power pole on the adjacent private lands in section 18 to deter perching raptors.

TL-1 - Big game winter habitat timing limitation (TL) would be applied that would restrict construction from December 1 – April 30 in Section 32.

Any routes created to install or maintain the power line that are not a part of the designated route system in the Castle Peak Travel Management Plan shall be blocked to prevent public access. The routes would need to be blocked using gates, boulders or other approved structures.

When vegetation is pruned to reduce fire hazards associated with the power lines, thinning and feathering of the adjacent vegetation should also be incorporated to mimic the natural edge of existing vegetation.

The mitigation outlined for Access and Transportation will mitigate the creation of new routes causing linear features under the power lines.

COMPLIANCE/MONITORING:

Although the power line alignment has been rerouted to avoid all known eligible sites, several power poles (poles #49 and #50) will be placed outside the site boundary for 5EA2840, but within the standard 100 foot buffer zone the BLM CRVFO usually requires around eligible or potentially eligible sites. Therefore, archaeological monitoring will be required during installation of power poles #49 and #50 in Section 19, T. 4 S., R. 85 W to determine if there are subsurface components of this site which extend beyond the current site boundary. Monitoring will be conducted by an archaeological firm qualified and permitted to do such archaeological work within the Colorado River Valley Field Office Area.

No ground disturbing construction activities (drilling, digging, etc.) will begin prior to the archaeologist's arrival. The proponent is responsible for notifying the archaeological firm at least 72 hours in advance any ground disturbance in the specified areas. The proponent is responsible for all construction delays and or damage to cultural manifestations due to insufficient notification of the Archaeological Contractor, noncompliance with the following procedures, or damage to cultural manifestations.

Archaeological monitoring will involve on the ground visual inspection of all construction for the power line within the above specified area. If a cultural feature(s) is identified, all ground disturbing activities in the vicinity of identified feature(s) will be halted and a buffer area at least 100 ft from the identified feature(s) will be protected from any additional disturbance until which time as the feature(s) are mitigated via data recovery. Appropriate samples for analyses to determine cultural/temporal affiliation, subsistence, will be taken as appropriate, including at least one stratigraphic profile for each feature identified.

Once all ground disturbing activity is complete the archaeological contractor will produce and submit one draft written report. Upon acceptance of the report, two reports will be submitted, one for the BLM and one for the SHPO. This report must be in a contextual framework that is compatible with known archaeological knowledge of the area and the Northern Colorado River Basin Context.

NAME OF PREPARER: Carole Huey, Realty Specialist

SIGNATURE OF AUTHORIZED OFFICIAL:


Karl R. Mendonca, Associate Field Manager

6-15-11
Date

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RIGHT-OF-WAY GRANT

SERIAL NUMBER COC-070157
14.4kV Distribution line serving Dry Lake Parcels Subdivision

1. A right-of-way is hereby granted pursuant to Title V of the Federal land Policy and Management Act of October 21, 1976 (90 Stat. 2776; 43 U.S.C. 1761).

2. Nature of Interest:

a. By this instrument, the holder:

Holy Cross Energy
3799 Highway 82
P.O. Box 2150
Glenwood Springs, Colorado 81602

receives a right to construct, operate, maintain, and terminate a 14.4 kV, single phase overhead power line to serve the Dry Lake Parcel as shown on public lands described as follows:

T.4 S., R.85 W., sections 19, 29 – 30 and 32,
6th Principal Meridian, Eagle County, Colorado.

b. The right-of-way area granted here is 30 feet wide and 17,371 in length and contains 11.96 acres, more or less.

c. The right of ingress and egress is granted on existing roads.

d. This instrument shall terminate on December 31, 2040, unless, prior thereto, it is renewed, relinquished, abandoned, terminated, or modified pursuant to the terms and conditions of this instrument or of any applicable Federal law or regulation.

- e. This instrument may be renewed. If renewed, the right-of-way shall be subject to the regulations existing at the time of renewal and any other terms and conditions that the authorized officer deems necessary to protect the public interest.
- f. Notwithstanding the expiration of this instrument or any renewal thereof, early relinquishment, abandonment, or termination, the provisions of this instrument, to the extent applicable, shall continue in effect and shall be binding on the holder, its successors, or assigns, until they have fully satisfied the obligations and/or liabilities accruing herein before or on account of the expiration, or prior termination, of the grant.

3. Rental:

For and in consideration of the rights granted, the holder agrees to pay the Bureau of Land Management fair market value rental as determined by the authorized officer unless specifically exempted from such payment by regulation. Provided, however, that the rental may be adjusted by the authorized officer, whenever necessary, to reflect changes in the fair market rental value as determined by the application of sound business management principles, and so far as practicable and feasible, in accordance with comparable commercial practices.

4. Terms and Conditions:

- a. This grant issued subject to the holder's compliance with all applicable regulations contained in Title 43 Code of Federal Regulations part 2800, and all other applicable federal, state, and local laws, regulations, and standards.
- b. Upon grant termination by the authorized officer, all improvements shall be removed from the public lands within 90 days, or otherwise disposed of as provided in paragraph (4)(d) or as directed by the authorized officer.
- c. Each grant issued for a term of 20 years or more shall, at a minimum, be reviewed by the authorized officer at the end of the 20th year and at regular intervals thereafter not to exceed 10 years. Provided, however, that a right-of-way or permit granted herein may be reviewed at any time deemed necessary by the authorized officer.
- d. The plans, maps, or designs set forth in the Application, and Special Stipulations and Conditions (Exhibits A and B attached hereto) are incorporated into and made a part of this grant instrument as fully and effectively as if they were set forth herein in their entirety.
- e. Failure of the holder to comply with applicable law or any provision of this right-of-way grant or permit shall constitute grounds for suspension or termination thereof.

- f. The holder shall perform all operations in a good and workmanlike manner so as to ensure protection of the environment and the health and safety of the public.

SPECIAL STIPULATIONS AND CONDITIONS

1. The holder shall notify the Colorado River Valley Field Manager (Authorized Officer) at least ten (10) days prior to the start of construction or any surface disturbing activities. The authorized officer may require and schedule a preconstruction conference with the holder prior to the holder's commencing construction or surface disturbing activities.
2. The plans, maps, and designs set forth in the application are incorporated into and made a part of this Grant instrument as fully and effectively as if they were set forth herein in their entirety.
3. All design, material, and construction, operation, maintenance, and termination practices shall be in accordance with safe and proven engineering practices. The holder shall perform all operations in a good and workmanlike manner so as to ensure protection of the environment and the health and safety of the public.
4. The holder shall disturb and remove only the minimum amount of soils and vegetation necessary for the construction and relocation of the power line and facilities authorized herein. Riparian vegetation shall not be removed.
5. No construction or maintenance activities shall be allowed during periods when the soil is too wet to adequately support construction equipment or motorized vehicles. If such use creates ruts in excess of three inches deep, the soil shall be deemed too wet to adequately support construction vehicles or equipment.
6. Trash shall be confined in a covered container while construction is in progress. Upon completion, all trash, flagging, laths, etc., shall be removed and hauled to an authorized disposal site.
7. The holder shall comply with all county, state, and federal regulations and permit requirements.
8. Fugitive dust (PM₁₀) production may be elevated temporarily during construction activities due to surface disturbance, increased vehicle traffic, and helicopter use in the area. However, PM₁₀ levels would return to preconstruction levels within hours of completion of surface disturbing actions. Therefore, the proposed action is not anticipated to have any lasting impact to air quality locally or regionally. To minimize fugitive dust production, a BLM approved dust suppressant should be utilized along the access road during construction activities.
9. Fuels and lubricants would be stored in appropriate containers and refueling would occur in designated areas at a minimum of 100 feet from any stream channels.
10. To mitigate potential contamination of surface and groundwater resources, the operator should not store, re-fuel, or repair equipment within 200 feet of Trail Gulch. Likewise, to minimize surface impacts, construction activities should not occur when soils are saturated to a depth of three inches or greater. Furthermore, unauthorized use of the ROW should be discouraged either by signage or barricades. With suggested mitigation, potential water quality impacts resulting from stormwater sources will be sufficiently avoided.

11. Surface-disturbing activities, such as the Proposed Action, create a niche for the invasion or expansion of noxious weeds, particularly in areas where noxious weeds are already present in the vicinity.

12. The contractor is to ensure equipment involved in land disturbing actions be clean of noxious weed seeds or propagative parts prior to entry on site. When working in areas with noxious weeds, equipment should be cleaned prior to moving off site.

13. All surface disturbances would be seeded with a mixture of native grasses adapted to the site to help prevent the invasion of noxious weeds and to reestablish native, perennial vegetation on the site. Any noxious weeds that become established in the project area would also be controlled by the applicant. The seed mix will be as follows:

<u>Species of Seed</u>	<u>Variety</u>	<u>Application Rate (PLS lbs/ac)</u>
Bluebunch wheatgrass	Anatone, Goldar, Secar	5.7
Bottlebrush squirreltail	VNS	4.2
Western wheatgrass	Arriba, Rosanna	7.0
Slender wheatgrass	Revenue, Pryor	4.0
Sandberg bluegrass	CO Plateau, if avail	<u>0.9</u>
Total		21.8 PLS lbs/ac

The seed mix will be certified free of noxious weed seeds, i.e. the seed shall contain no noxious, prohibited, or restricted weed seeds and shall contain no more than 0.5 percent by weight of other weed seeds. Seed should be broadcast on disturbed areas after September 15th and before April 15th to provide optimal soil moisture for seed germination and establishment. Application of weed-seed free straw mulch may improve germination of grass seed and help prevent invasion of noxious weeds.

13. To prevent impacts to raptors and migratory bird species, the power line shall comply with the APLIC’s *Suggested Practices for Raptor Protection on Power Lines* publication, and the National Electric Safety Code

14. The National Historic Preservation Act (NHPA) requires that if newly discovered cultural resources are identified during project implementation, work in that area must stop and the agency Authorized Officer notified immediately (36 CFR 800.13). The Native American Graves Protection and Repatriation Act (NAGPRA), requires that if inadvertent discovery of Native American Remains or Objects occurs, activity must cease in the area of discovery, a reasonable effort made to protect the item(s) discovered, and immediate notice made to the agency Authorized Officer, as well as the appropriate Native American group(s) (IV.C.2). Notice may be followed by a 30-day delay (NAGPRA Section 3(d)). Further actions also require compliance under the provisions of NHPA and the Archaeological Resource Protection Act. Holy Cross Energy will notify its staff and contractors of the requirement under the NHPA, that work must cease if cultural resources are found during project operations. A standard Education/Discovery COA for the protection of Native American values would be attached to the APDs (Appendix A). The importance of these COAs should be stressed to the operator and its contractors, including informing them of their responsibilities to protect and report any cultural resources

encountered. The proponent and contractors should also be aware of requirements under the NAGPRA.

15. Poles 48-51 would be hand-dug. Poles 45-47 would be accessed by truck and installed by machine. Poles hand dug would be placed by helicopters, while the remaining poles would be set by trucks.

16. Approximately 51 wooden power poles would be erected on public land. Poles 1 -7, 15 – 33, 36, 37, 39, 41, 42, and 48 – 51 would be erected by digging the holes by hand then setting the poles using a helicopter. The remaining pole locations would be accessed by Holy Cross' service trucks. These poles would be dug and erected by machine. The wires would be strung by helicopter. Each power pole hole would remove approximately 9 square feet of vegetation through excavation of the hole and setting of the power pole. Approximately 2,100 feet of the power line would pass through pinyon pine and Utah juniper woodlands, which would require extensive pruning or removal of some trees if they interfere with the power line or would create a fire hazard.

17. To reduce the potential threat to individual birds that could disperse from the State Bridge area, perch deterrents (e.g. <http://www.missionenviro.co.za/default.asp?id=11>) should be installed on the five power poles in section 19 and on the southern power pole on the adjacent private lands in section 18 to deter perching raptors.

18. TL-1 - Big game winter habitat timing limitation (TL) would be applied that would restrict construction from December 1 – April 30 in Section 32.

19. Any routes created to install or maintain the power line that are not a part of the designated route system in the Castle Peak Travel Management Plan shall be blocked to prevent public access. The routes would need to be blocked using gates, boulders or other approved structures.

20. When vegetation is pruned to reduce fire hazards associated with the power lines, thinning and feathering of the adjacent vegetation should also be incorporated to mimic the natural edge of existing vegetation.

21. Fugitive dust (PM₁₀) production may be elevated temporarily during construction activities due to surface disturbance, increased vehicle traffic, and helicopter use in the area. However, PM₁₀ levels would return to preconstruction levels within hours of completion of surface disturbing actions. Therefore, the proposed action is not anticipated to have any lasting impact to air quality locally or regionally. To minimize fugitive dust production, a BLM approved dust suppressant should be utilized along the access road during construction activities.

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be followed by a 30-day delay (NAGPRA Section 3(d)). Further actions also require compliance under the provisions of NHPA and the Archaeological Resource Protection Act. Further actions also require compliance under the provisions of NHPA and the Archaeological Resource Protection Act.

23. Pursuant to 43 CFR 10.4(g) the holder of this authorization or its contractor must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), the holder must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the AO.

24. The operator or its contractor is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activity, the operator must stop work in the area of the discovery that might further disturb such materials, and immediately contact the AO. Within five working days the AO will inform the operator as to the mitigation measures the operator will likely have to undertake before the site can be used (assuming in place preservation is not necessary).

25. This Grant shall not be assignable without written permission of the authorized officer.

26. This Grant may be renewed. If renewed, the Grant shall be subject to the regulations existing at the time of renewal and any other terms and conditions that the authorized officer deems necessary to protect the public interest.

27. COMPLIANCE/MONITORING:

Although the power line alignment has been rerouted to avoid all known eligible sites, several power poles (poles #49 and #50) will be placed outside the site boundary for 5EA2840, but within the standard 100 foot buffer zone the BLM CRVFO usually requires around eligible or potentially eligible sites. Therefore, archaeological monitoring will be required during installation of power poles #49 and #50 in Section 19, T. 4 S., R. 85 W to determine if there are subsurface components of this site which extend beyond the current site boundary. Monitoring will be conducted by an archaeological firm qualified and permitted to do such archaeological work within the Colorado River Valley Field Office Area.

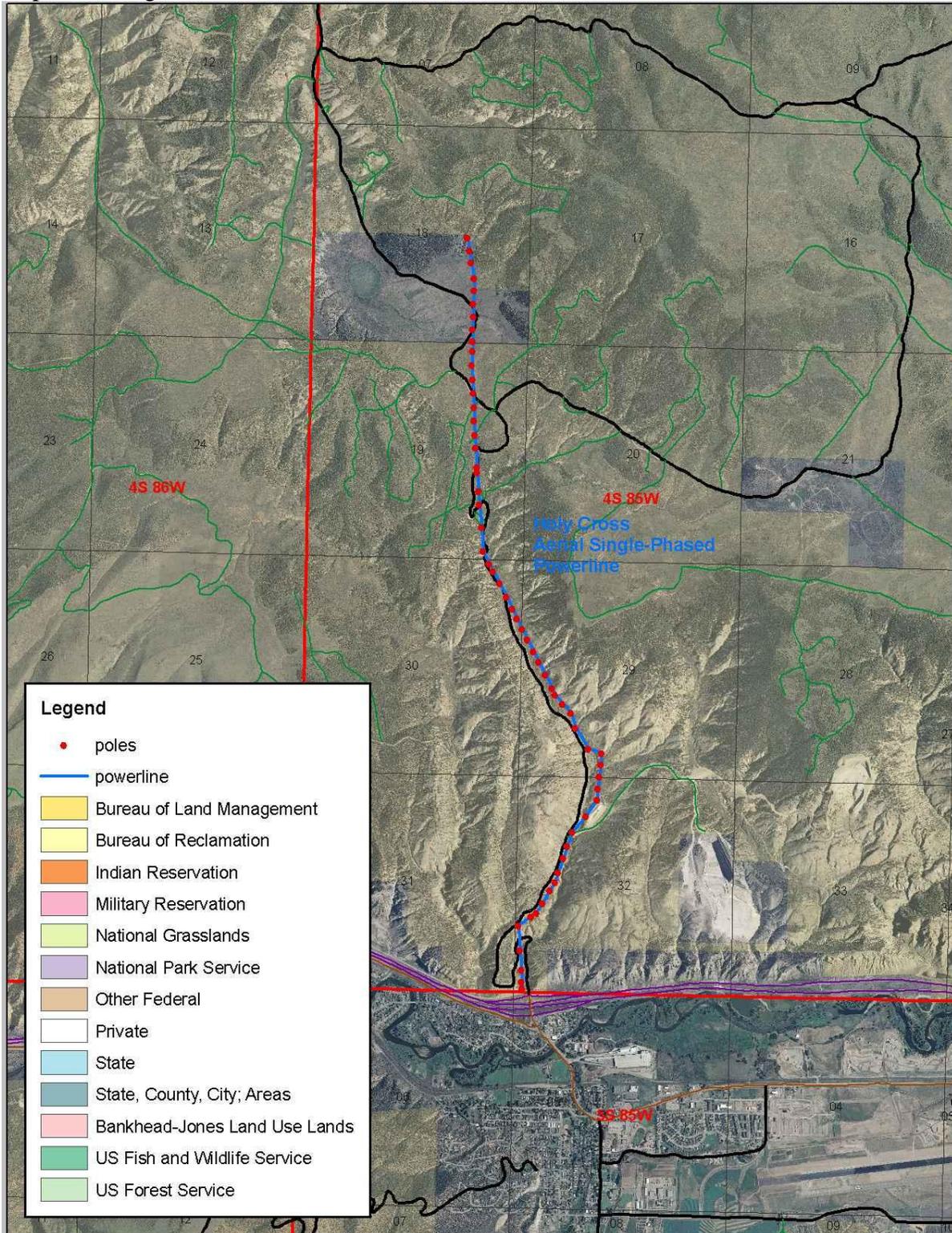
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disturbing activities in the vicinity of identified feature(s) will be halted and a buffer area at least 100 ft from the identified feature(s) will be protected from any additional disturbance until which time as the feature(s) are mitigated via data recovery. Appropriate samples for analyses to determine cultural/temporal affiliation, subsistence, will be taken as appropriate, including at least one stratigraphic profile for each feature identified.

Once all ground disturbing activity is complete the archaeological contractor will produce and submit one draft written report. Upon acceptance of the report, two reports will be submitted, one for the BLM and one for the SHPO. This report must be in a contextual framework that is compatible with known archaeological knowledge of the area and the Northern Colorado River Basin Context.

Maps, Drawings



KOMDS.





Section 18 Township 4 South Range 85 West of the 6th P.M.		EAGLE County	
Job Name: GYPSUM DRY LAKE		W/O #: 21156	
Holy Cross Energy Glenwood Springs, Colorado	NOT TO SCALE FACILITY LOCATIONS APPROXIMATE	Date 8-16-10	EXHIBIT A



Section 18 Township 4 South Range 85 West of the 6th P.M.		EAGLE County	
Job Name: GYPSUM DRY LAKE		W/O #: 21156	
Holy Cross Energy Glenwood Springs, Colorado	NOT TO SCALE FACILITY LOCATIONS APPROXIMATE	Date 8-16-10	EXHIBIT A



Section 18 Township 4 South Range 85 West of the 6th P.M. EAGLE County
 Job Name: GYPSUM DRY LAKE W/O #: 21156

Holy Cross Energy Glenwood Springs, Colorado	NOT TO SCALE FACILITY LOCATIONS APPROXIMATE	Date 8-16-10	EXHIBIT A
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3799 HIGHWAY 82 • P.O. BOX 2150
GLENWOOD SPRINGS, COLORADO 81602
(970) 945-5491 • FAX (970) 945-4081

September 9, 2010

Ms. Carole Huey
Realty Specialist, BLM
Colorado River Valley Field Office
2300 River Frontage Road
Silt, CO 81652

Re: Dry Lake Application

Dear Carole:

This letter is in response to your e-mail dated September 8, 2010 regarding Greg Wolfgang's questions on the Dry Lake power line. Listed below are the questions and Holy Cross's response:

- Q. The EA says that 20 wooden power poles would be installed. There are 52 poles surveyed on the ground (51 on BLM). Is the 52 amount correct?
- A. No, the correct amount is 51. Poles 52 through 60 will be on private property (see the attached map). When the biological evaluation was done only the centerline was in place. Eric said he did not need the line staked, that he could follow the centerline markers and the road.
- Q. The EA says that the poles would be hand dug disturbing approximately nine square feet. Is this still accurate?
- A. Yes, nine square is correct.
- Poles 1 through 7, 15 through 33, poles 36, 37, 39, 41, 42 and 48 through 51 will be hand dug. Poles 8 through 14, 34, 35, 40, 43, 44 through 47 will be dug by machine.
- Q. The EA says that some of the poles would be placed by helicopter and some by service trucks. Which poles would be placed by helicopter and which by truck? How will the trucks access the holes?
- A. Poles that will be hand dug will be placed by helicopter (see pole numbers above). The remaining poles will be set by trucks.
- The trucks and backhoe will be able to access the proposed pole sites by driving on existing roads (see enclosed map).
- Q. The EA says the wire will be strung by helicopter and that there would be temporary trampling of vegetation. This leads me to believe that there would not be a permanent maintenance road under the power lines. How much of the lines would have a maintenance road under them?
- A. The helicopter will string all the wire for the power line so a permanent maintenance road will not be needed at this time.
- Q. The EA says that some pinyon pine and junipers may need to be pruned back for construction. How much of the vegetation will be pruned? Are the trees just going to be pruned or are they going to be cut down? Would the entire width of the right-of-way with trees be pruned?
- A. Any vegetation within the nine square feet of the poles will be pruned. If re-seeding is required, BLM guidelines will be followed.

Carole Huey
September 9, 2010
Page Two

Mostly pruning will be done and a few trees will need to be cut down.

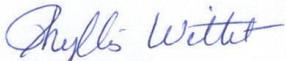
Not the entire width of right-of-way, just vegetation that proposes a fire hazard with the power line.

- Q. Some of the pole locations that were surveyed show multiple anchor points. How many poles need anchors? Could you have Holy Cross send specs of the anchors?
- A. Pole two will require two guys and anchors, pole four will require two guys and anchors, pole six will require one guy and anchor, pole eight will require one guy and anchor, pole 12 will require one guy and anchor, pole 14 will require two guys and anchors, pole 18 will require two guys and anchors, pole 25 will require one guy and anchor, pole 38 will require one guy and anchor, pole 44 will require one guy and anchor, poles 44 and 45 will require one guy and anchor each. See enclosed map and specs.
- Q. Could you have Holy Cross send a picture or specs of the poles that will be used?
- A. See enclosed specs.

Please let me know if you have any further questions or requests.

Thank you.

Sincerely,
HOLY CROSS ENERGY



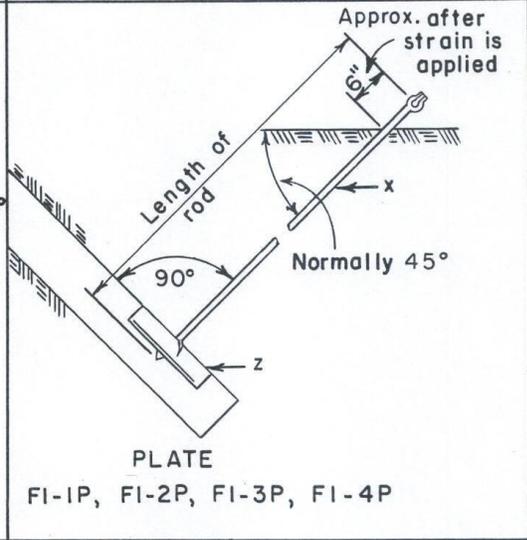
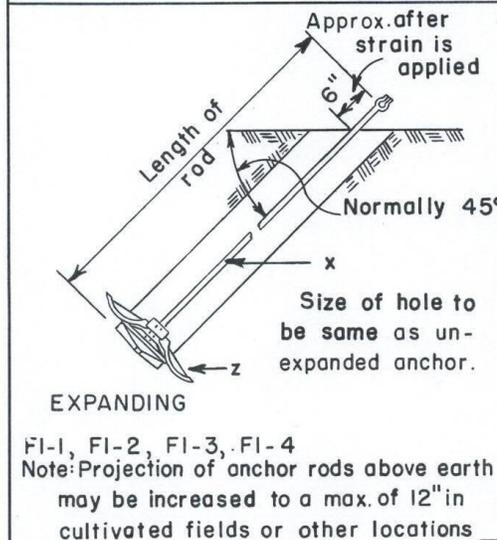
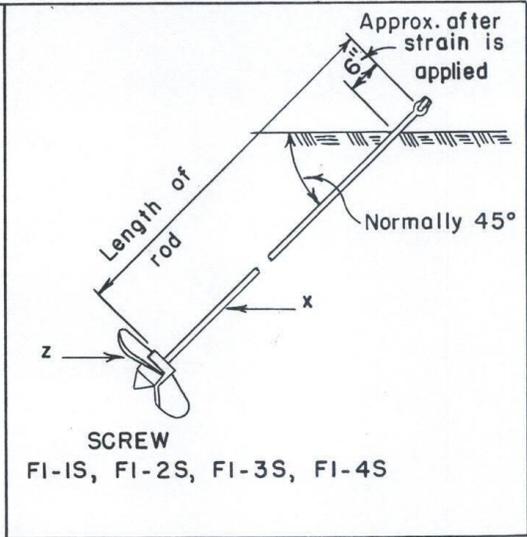
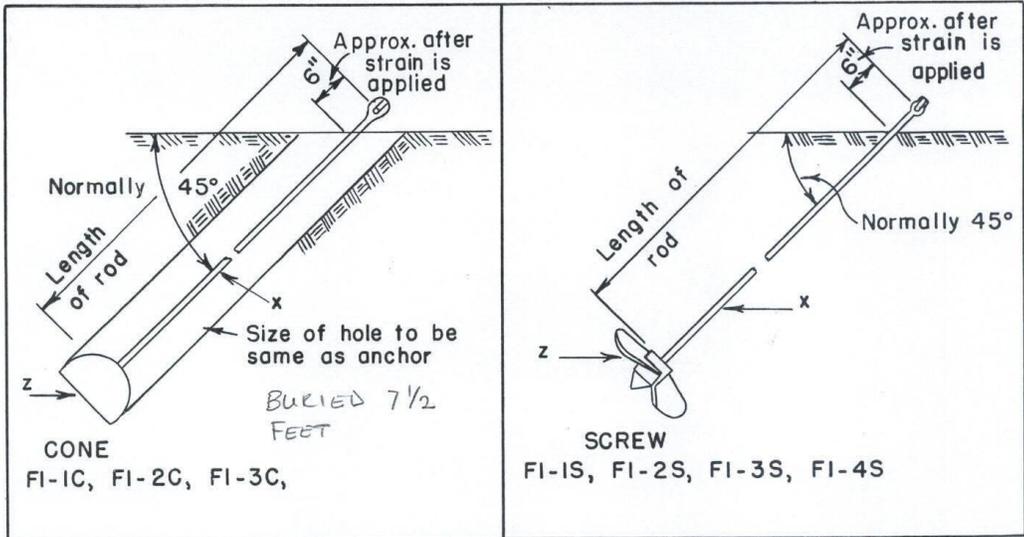
Phyllis Wittet,
Engineering Department

pwittet@holycross.com
(970)947-5469

PW:vw
Enclosures

W/O#10-21156:38-18:Gypsum Dry Lake

10-21156 Huey

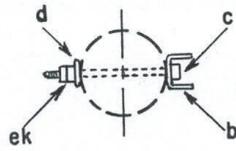


Note: Projection of anchor rods above earth may be increased to a max. of 12" in cultivated fields or other locations where necessary to prevent burying of the rod eye.

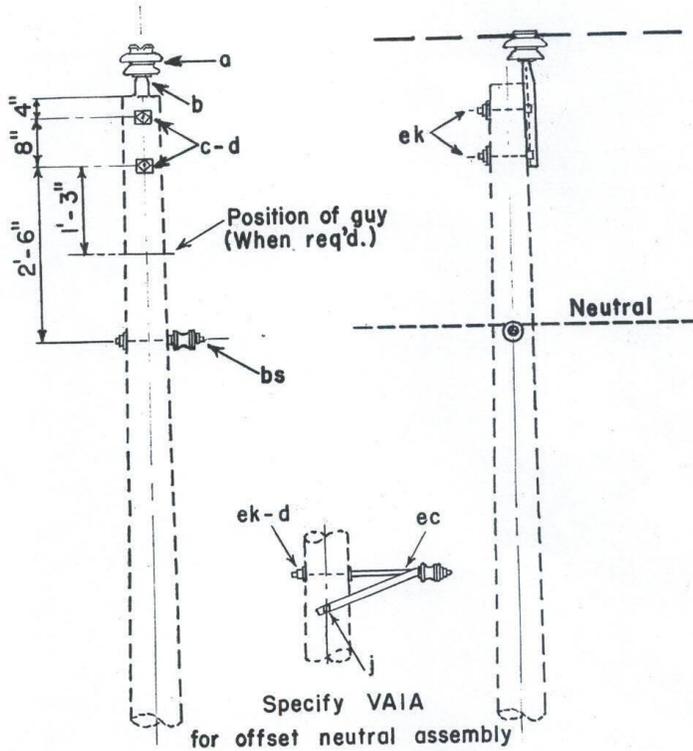
ASSEMBLY UNIT				
	FI-1	FI-2	FI-3	FI-4
Holding Power in Ordinary Soil (pounds)	6000	8000	10,000	12,000
ITEM	MATERIAL		NO.	NO.
x	Rod, anchor, thimble eye	5/8" x 7'-0"	1	1
x	Rod, anchor, twin eye			1
z	Anchor ----- type		1	1

LINE ANCHOR ASSEMBLIES

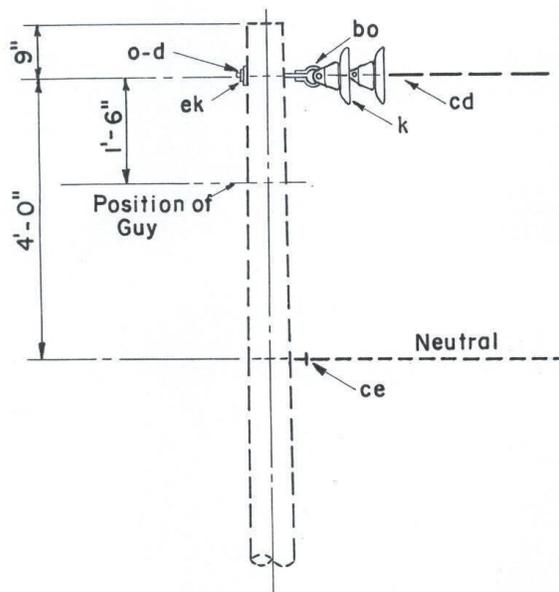
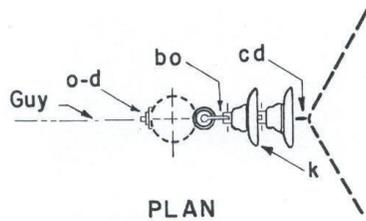
Jan 1, 1962 **FI-1 TO 4**



POLE TOP PIN ASSEMBLY



ITEM NO.	MATERIAL	ITEM NO.	MATERIAL
a	1 Insulator, pin type	d	3 Washer, square, 2 1/4"
b	1 Pin, pole top, 20"	bs	1 Bolt, single upset, insulated, (VAI only)
c	2 Bolt, machine, 5/8" x req'd. length	ek	Locknuts
j	2 Screw, lag, 1/2" x 4", (VAIA only)	14.4/24.9 KV PRIMARY 1-PHASE, 0° TO 5° ANGLE, SINGLE PRIMARY SUPPORT	
ec	1 Bracket, offset, insulated, (VAIA only)		
		Jan. 1, 1963	VAI, VAIA

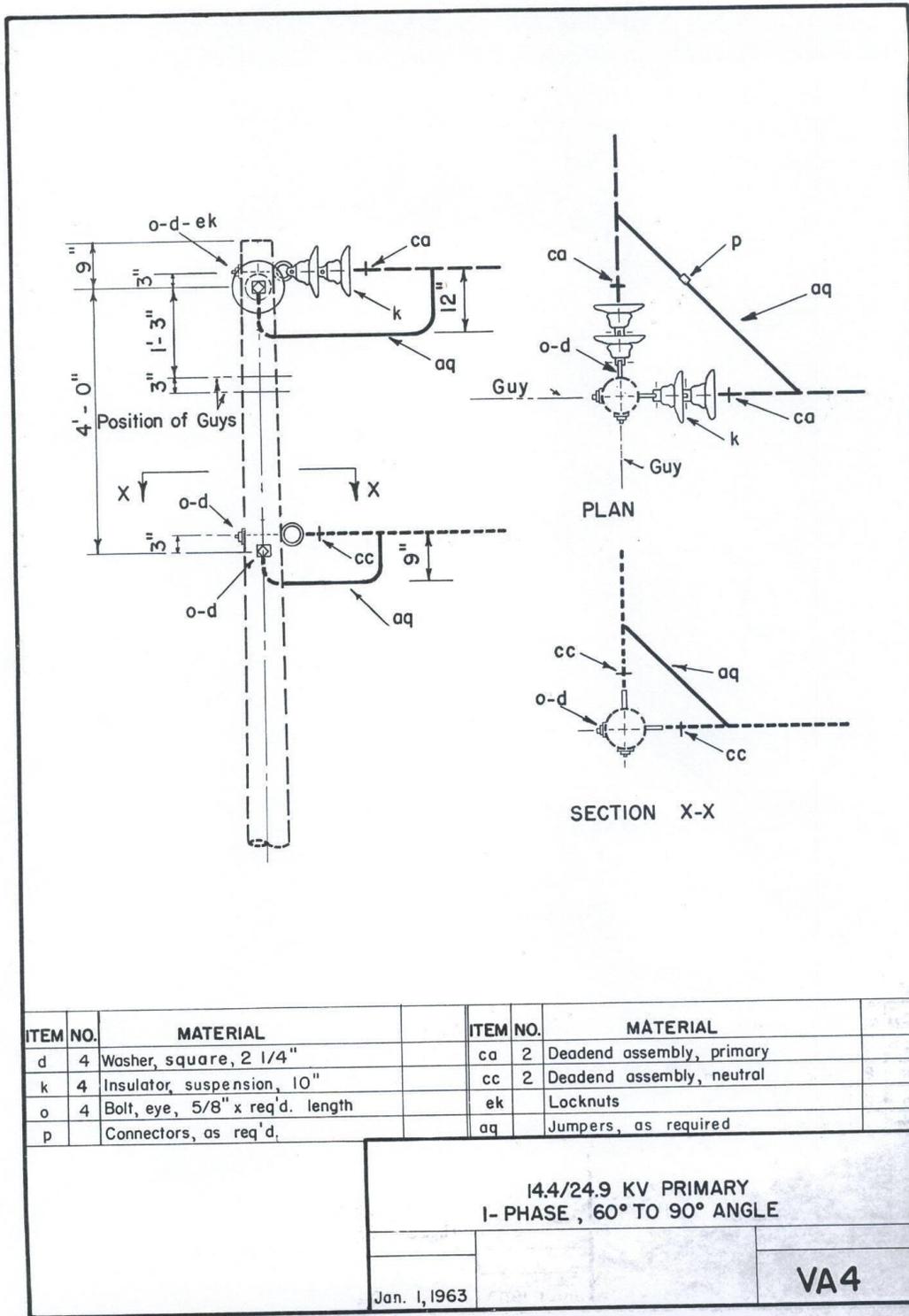


ITEM NO.	MATERIAL	ITEM NO.	MATERIAL
d	1 Washer, square 2 1/4"	cd	1 Angle assembly, primary
k	2 Insulator, suspension, 10"	ce	1 Angle assembly, neutral
o	1 Bolt, eye, 5/8" x req'd length	ek	Locknuts
bo	1 Shackle, anchor		

14.4/24.9 KV. PRIMARY, I-PHASE
30° TO 60° ANGLE

Jan. 1, 1963

VA3

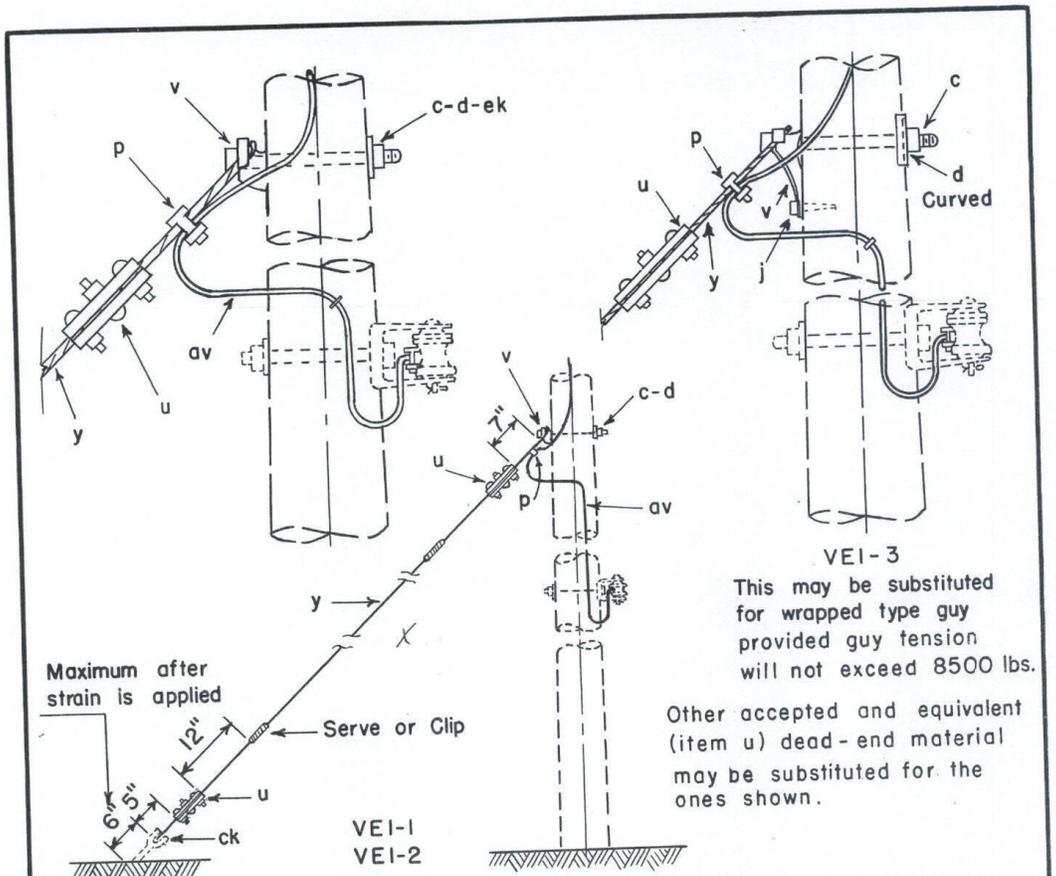


ITEM NO.	MATERIAL	ITEM NO.	MATERIAL
d	4 Washer, square, 2 1/4"	ca	2 Deadend assembly, primary
k	4 Insulator, suspension, 10"	cc	2 Deadend assembly, neutral
o	4 Bolt, eye, 5/8" x req'd. length	ek	Locknuts
p	Connectors, as req'd.	aq	Jumpers, as required

14.4/24.9 KV PRIMARY
I-PHASE, 60° TO 90° ANGLE

Jan. 1, 1963

VA4



ITEM	MATERIAL	ASSEMBLY UNIT		
		VEI-1 1/4" Guy Wire	VEI-2 3/8" Guy Wire	VEI-3 7/16" Guy Wire
		N ^o . REQ'D.	N ^o . REQ'D.	N ^o . REQ'D.
c	Bolt, machine, 5/8" x required length			
d	Washer, square, 2 1/4"			
d	Washer, curved, 3" x 3"			
j	Screw, lag, 1/2" x 4"			
p	Connectors, as required			
u	Deadend for guy strand	2- Light Duty	2- Heavy Duty	2- Heavy Duty
v	Guy attachment			1- Heavy Duty
y	Guy wire, S.M., 7 Strand	req'd. length	req'd. length	req'd. length
ck	Clamp, anchor rod bonding			
av	Jumper, No.4 stranded Al. alloy or equiv.			
ek	Locknuts			

14.4/24.9 KV.
SINGLE DOWN GUY, THROUGH BOLT TYPE

July 12, 1968 **VEI-1, VEI-2, VEI-3**

IN WITNESS WHEREOF, The undersigned agrees to the terms and conditions of this right-of-way grant.

Signature of Holder

Signature of Authorized Officer

Title

Associate Field Manager

(Date)

(Effective date of Grant)