United States Department of the Interior
Bureau of Land Management

Environmental Assessment
DOI-BLM-OR-V050-2015-29-EA

ORE-05129 Duke – Halfway 69 Kilovolt
Transmission Line Rebuild
September, 2015

Vale District
Baker Field Office
3100 H Street
Baker City, OR 97814

BLM
Vale District Office

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Abbreviations and Acronyms

AIRFA	American Indian Religious Freedom Act of 1979
BLM	U.S. Bureau of Land Management
CEQ	Council of Environmental Quality
CFR	Code of Federal Regulations
CWA	Clean Water Act
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPM	environmental protection measure
ESA	Endangered Species Act
FLPMA	Federal Land Policy and Management Act
IM	Instruction Memorandum
IPC	Idaho Power Company
kV	kilovolt
LUP	land use plan
MBTA	Migratory Bird Treaty Act
NEPA	National Environmental Policy Act
NRCS	Natural Resources Conservation Service
NHPA	National Historic Preservation Act
ODFW	Oregon Department of Fish and Wildlife
O&M	operation and maintenance
PGH	preliminary general habitat
POD	Plan of Development
PUC	Public Utility Commission
PPH	preliminary priority habitat
RMA	Recreation Management Area
RMP	Resource Management Plan
ROW	right-of-way
SRMA	Special Recreation Management Area
SSP	special status plant
SSW	special status wildlife
USFWS	U.S. Fish and Wildlife Service
VRM	Visual Resource Management

1.0 PURPOSE & NEED

1.1 Introduction & Background

Idaho Power Company (IPC) has submitted an application to the Bureau of Land Management (BLM), Vale District, Baker Field Office, to amend its existing right-of-way (ORE-05129). The amendment is necessary to facilitate a proposed rebuild of the Duke – Halfway 69 kilovolt (kV) electric transmission power line (Line 216), authorize the existing and proposed road network that provides access into and along the transmission line right-of-way (ROW), and allow IPC to continue to operate and maintain the power line.

IPC needs to rebuild this line to maintain reliability standards and to ensure adequate power supply to the towns of Halfway and Richland. IPC has been conducting maintenance on this line for the past several years in an attempt to meet the needs of customers in the area and to comply with federal mandatory reliability requirements as defined by the North American Electric Reliability Corporation (NERC). However, the line continues to experience outages and the area continues to experience low electrical reliability. Continuing to implement routine maintenance activities will not address reliability and power supply issues. These local power outages adversely affect residents and businesses that rely on a steady source of power. As a regulated utility, IPC needs to meet current and future power needs in a fiscally responsible manner. The proposed action addresses current deficiencies by considering reliability issues while minimizing environmental impacts and costs to IPC's rate payers.

Line 216 is located in eastern Oregon and extends from IPC's Brownlee Dam generating facility to its Halfway Substation near Pine, Oregon. The line extends across public lands under the jurisdiction of the BLM and private lands (Figure 1). ORE-05129 authorizes an 80-foot-wide ROW covering 5.57 miles across public lands described as follows:

Willamette Meridian in Baker County, Oregon

T. 8 S., R. 46 E.
Sec. 24, SE1/4NE1/4

T. 8 S., R. 47 E.
Sec. 19, lots 2 and 3, SW1/4SE1/4, E1/2 SW1/4
Sec. 25, lots 1-4 and 8
Sec. 27, N1/2 N1/2
Sec. 28, N1/2 N1/2
Sec. 29, NE1/4NE1/4, N1/2NW1/4
Sec. 30, N1/2 NE1/4

T. 8 S., R. 48E.
Sec. 30, lot 2

1.2 Description of the Proposed Action

The Proposed Action is to amend IPC's existing grant (ORE-05129). The amendment is necessary to facilitate a proposed rebuild and reroute of Line 216, authorize approximately 7.4

miles of existing and proposed service roads used to access the transmission line facility, and allow IPC to continue to operate and maintain the transmission line and road network.

The majority of the proposed rebuild would continue to occupy the existing 80-foot-wide ROW; it is anticipated that the new alignment would be offset approximately 20 feet south of the existing line. Offsetting the line to the south would take advantage of the existing road network and minimize the need to construct new roads. Approximately two miles of the line west of Round Mountain could not be designed with a 20-foot offset. This area would require a 40 foot structure (existing) to structure (proposed) offset. The existing structure width in this existing section of transmission line is larger so this drives us to an additional width to accommodate a new offset structure. The topography in this section of line drives the existing structure locations to produce many long spans (hill top to hill top). Long spans require additional horizontal conductor separation due to conductor movement produced by wind and/or ice. This conductor movement anomaly is called Galloping. Galloping is a design criteria that IPC uses to measure the required conductor separation during a wind and ice loading condition. A horizontal separation of 13.5 feet from each conductor has been established for this existing section of line. A typical dead end structure with a phase to phase dimension of 13.5 feet has an overall structure width of 28 feet. Half of this structure width is 14 feet. Two of these structures side by side require 14 feet (half a structure) plus 14 feet (half a structure) plus 12 feet (construction separation) resulting in an overall width of 40 feet from center of structure to center of structure.

Additionally, IPC is also proposing to reroute approximately 6,500 linear feet of the eastern extent of the line coming off of Round Mountain toward Brownlee Dam (Figure 2). Based on preliminary design specifications, the proposed reroute would follow Sheep Mountain Road and the Pine Telephone System buried underground fiber optic cable (ROW OR-56727) to IPC's Brownlee-Quartz 230kV Transmission Line (Line 903). The proposed reroute would then parallel the Line 903 ROW (OR-60931) down slope to structure 298. From structure 298 the proposed reroute would tie back into the existing ROW for Line 216. To facilitate this proposed reroute IPC is requesting an 80-foot-wide ROW along Sheep Mountain Road, a 100-foot-wide ROW adjacent to Line 903, a 100-foot-wide ROW tying back into the existing ROW for Line 216, and a ROW with a radius of 100 feet around the three angle structures. The proposed reroute also includes abandoning approximately 3,660 linear feet of the existing line, removing 11 H-frame wood structures including associated hardware, and reseeding the existing ROW once the proposed realignment is completed. Additionally, approximately 2,900 linear feet of existing service roads would be abandoned and restored as necessary.

IPC is proposing to reroute this portion of Line 216 from its original location because of the steep terrain and limited accessibility. Moreover, because of the steep terrain, there is a risk, especially during inclement weather, to safely access these structures. The proposed reroute would also improve the visual quality of the area by reducing the number of structures coming down the hillside toward Brownlee Reservoir and eliminating the need to build new service roads and level work pads at the base of the structures; ultimately reducing long term physical scarring on the hillside.

Construction is planned to begin in October, 2015.

IPC currently uses existing roads and overland travel routes that occur within and outside of the existing ROW and proposes to continue using these routes, and to improve and/or construct additional travel ways to ensure continued access for the rebuild and long-term maintenance needs. In most cases the routes proposed for use by IPC currently exist; however, IPC also proposes to improve approximately 1.0 miles (1.68 acres) of existing service road, construct approximately 1.04 miles (1.76 acres) of new service road, and designate approximately 2.35 miles (3.99 acres) overland travel routes. Any roads that would occur outside of the proposed 80-foot-wide ROW would be authorized as part of the service road network under the amended grant.

This Environmental Assessment (EA) has been prepared to disclose and analyze the direct, indirect, and cumulative environmental impacts of the Proposed Action and the No Action Alternative. Direct effects are those effects which are caused by the action and occur at the same time and place. Indirect effects are caused by the action and occur later in time or are removed in distance, but are still reasonably foreseeable. Cumulative effects are the incremental additive effects of past, present, and reasonably foreseeable future actions.

1.3 Purpose of and Need for the Proposed Action

BLM is processing IPC's application under the Federal Land Policy and Management Act (FLPMA), Title V. BLM is responsible for ensuring that use of public lands occurs in a manner consistent with FLPMA, the Energy Policy Act of 2005 (Public Law 109-58), and the applicable Resource Management Plan (RMP). The FLPMA authorizes the use of public land for the public interest, and the Energy Policy Act encourages energy efficiency and conservation, promotes alternative and renewable energy sources, reduces dependence on foreign sources of energy, and increases domestic production. The BLM's purpose is to consider IPC's application to amend their existing ROW grant. The BLM's need is established by the BLM's responsibility under FLPMA to respond to a request for a ROW grant.

The BLM may choose to accept the Proposed Action with or without modification, develop and authorize a reasonable alternative or a combination of alternatives, or deny the application. The BLM may also determine if the Proposed Action is a "major federal action" requiring the development of an Environmental Impact Statement (EIS) by assessing the significance of the Proposed Action based on context and intensity (40 CFR 1508.27). Issuing the ROW amendment would allow IPC to implement the Proposed Action.

The BLM determined that an Environmental Assessment (EA) would be required to identify potential resource impacts of the proposed project pursuant to the National Environmental Policy Act (NEPA) of 1969 and the Council of Environmental Quality (CEQ) regulations implementing NEPA.

1.4 Decision to be Made

The BLM will make the decision to grant, deny, or grant with modifications, IPC's request to amend ORE-05129 to facilitate a proposed rebuild of Line 216, authorize existing and proposed

roads used to access the transmission line facility, and allow IPC to continue to operate and maintain the transmission line and road network.

1.5 Conformance to BLM Land Use Plan

The Proposed Action would occur in the Vale District. The public lands in the Vale District, Baker Resource Area are managed in accordance with the Baker Resource Area, Resource Management Plan (RMP 1989), FLPMA, and other applicable environmental laws and policies (USDI 1988). The RMP states that rights-of-way and utility corridors should use areas adjoining or adjacent to previously disturbed areas whenever possible, rather than traverse undisturbed communities. The Proposed Action would continue to occupy the existing 80-foot-wide ROW and would follow Sheep Mountain Road and the Pine Telephone System buried underground fiberoptic cable (ROW OR-56727) to IPC's Brownlee-Quartz 230kV Transmission Line (Line 903). The Proposed Action would then parallel the Line 903 ROW (OR-60931) down slope to structure 298 and then tie back into the existing ROW for Line 216. The Proposed Action is consistent with the RMP and is considered to be in conformance with this plan.

1.6 Relationship to Statutes, Regulations or other Plans

The BLM is directed to manage public land resources and the issuance of the proposed right-of-way amendment in accordance with all applicable statutes, regulations, instruction memorandums, and plans, including all of the following identified below.

1.6.1 Federal Policies, Plans, and Programs

This EA was prepared in accordance with NEPA as amended (42 U.S.C. §§ 4321–4370e (2012)) and in compliance with all applicable regulations and laws passed subsequently, including CEQ regulations 40 CFR §§ 1500–1508. This document was also prepared in conformance with the policy guidance provided in BLM's NEPA Handbook H-1790-1 (BLM 2008); Department of the Interior National Environmental Policy Act Procedures (Department Manual 516, Environmental Quality 516 DM 1–7) (USDOI 2005); BLM Guidelines for Assessing and Documenting Cumulative Impacts [BLM 1994a], and Considering Cumulative Effects under NEPA [CEQ 1997].

The proposed project is also subject to the requirements of the Endangered Species Act (ESA), the National Historic Preservation Act (NHPA), and the Clean Water Act (CWA). The BLM is responsible for analyses and documents that conform to NEPA, CEQ, and other pertinent federal laws and regulations. Table 1-1 provides a summary of potentially applicable statutes, regulations, and other requirements.

Table 1-1: Potentially Applicable Statutes, Regulations, and Other Requirements

Permit/Approval	Accepting Authority/ Approving Agency	Description	Statutory Reference
ROW grant	Bureau of Land Management (BLM)	A ROW grant would be necessary before construction can proceed on lands administered by the BLM.	Federal Land Policy and Management Act 1976 (Pub. Law No. 94-579), 43 U.S.C.1761–1771 (2012), and 43 CFR § 2800
Endangered Species Act compliance	BLM as lead NEPA agency and U.S. Fish and Wildlife Service (USFWS)	The purpose of this act is to provide for the conservation of federally listed fish, wildlife, plants, and their habitats.	Endangered Species Act Sec. 7 consultation, 16 U.S.C. § 1536 (2012)
National Historic Preservation Act compliance with Sec. 106	BLM, as lead NEPA agency, and State Historic Preservation Office	Section 106 of NHPA requires federal agencies to consider the effects of their activities and programs on historic properties. Historic properties are significant cultural resources that are included in or eligible for inclusion in the National Register of Historic Places.	National Historic Preservation Act 1966, 16 U.S.C. 470 *et seq*. (2012), 36 CFR § 800
Environmental Justice	BLM, as lead NEPA agency	Executive Order 12989 directs federal agencies to identify and address, as appropriate, any disproportionately high and adverse human health or environmental effects on minority populations and low-income populations.	Exec. Order 12,989
Tribal Consultation	BLM, as lead NEPA agency	This order established a requirement for regular and meaningful consultation and collaboration between federal agencies and tribal governments. The BLM is consulting with the Confederated Tribes of the Umatilla Indian Reservation (CTUIR), the Confederated Tribes of the Colville Reservation, and the Nez Perce.	Exec. Order 13,175 on Consultation and Coordination with Indian Tribal Governments

Permit/Approval	Accepting Authority/ Approving Agency	Description	Statutory Reference
Native American Graves Protection and Repatriation Act	BLM, as lead NEPA agency	Provides a process for museums and Federal agencies to return certain native American cultural items to lineal descendants and culturally affiliated Indian tribes. Includes provisions for unclaimed and culturally unidentifiable native American cultural items, intentional and inadvertent discovery of native American cultural items found on Federal and tribal lands, only and penalties for noncompliance.	Native American Graves Protection and Repatriation Act, 25 U.S.C. 3001 et seq. (Nov. 16, 1990).
The Bald and Golden Eagle Protection Act	BLM, as lead NEPA agency and with USFWS	This act prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" bald or golden eagles, including their parts, nests, or eggs; possession; and commerce of such birds.	The Bald and Golden Eagle Protection Act, as amended, 16 U.S.C 668-668c (2012)
Migratory Bird Treaty Act, Executive Order 13186	BLM, as lead NEPA agency and with USFWS	This act and subsequent executive order and memorandum of understanding between the USDI, USFWS, and USDA Forest Service provide for the protection of migratory birds.	Migratory Bird Treaty Act of 1918, as amended, 16 U.S.C. 703–711 (2012) and Exec. Order No. 13,186
National Environmental Policy Act (NEPA)	BLM	NEPA establishes the format and content requirements of environmental analysis and documentation.	NEPA, 42 U.S.C. 4321 *et seq.* (2012), Council on Environmental Quality 40 CFR §§ 1500 *et seq.*
Clean Water Act (CWA) section 404 and Rivers and Harbor Act Section 10	Army Corps of Engineers (ACOE)	Regulates the discharge of dredged or fill material into waters of the U.S. through a nationwide or individual permit.	Clean Water Act section 404, 33 U.S.C. 1344 (2012)

Permit/Approval	Accepting Authority/ Approving Agency	Description	Statutory Reference
CWA section 401 Water Quality Certification	Oregon Department of Environmental Quality (DEQ) and EPA	In-stream construction of any kind requires an NPDES permit. Section 401 of the Clean Water Act gives states the authority to certify that NPDES permits meet state water quality standards. Oregon DEQ is the state agency responsible for issuing NPDES permits and implementing the 401 certification process. Clean Water Act Section 401 certification is required for any permit or license issued by a federal agency for any activity that may result in a discharge into waters of the state to ensure that the proposed project would not violate state water quality standards. §401 certification also ensures that the project would comply with water quality improvement plans (TMDLs) developed for affected water bodies and that the project would not adversely impact §303(d) listed streams (streams that already do not meet water quality standards).	Clean Water Act sections 401 and 303(d), 33 U.S.C. 1313 and 1341 (2012)
Clean Water Act – Construction Storm Water	EPA	EPA's general construction storm water permit requires the implementation of a comprehensive program to avoid the discharge of construction-related pollutants. Limited to sites with 1 acre or more of ground disturbance.	National Pollutant Discharge Elimination System General Permit for Discharges from Large and Small Construction Activities, 33 U.S.C. 1251 (2012)

Cultural Resource Laws and Executive Orders

BLM is required to consult with Native American tribes to "help assure (1) that federally recognized tribal governments and Native American individuals, whose traditional uses of public land might be affected by a proposed action, will have sufficient opportunity to contribute to the decision, and (2) that the decision maker will give tribal concerns proper consideration" (USDOI, BLM Manual Handbook H-8120-1). Tribal coordination and consultation responsibilities are implemented under laws and executive orders that are specific to cultural resources and are referred to as "cultural resource authorities," and under regulations that are not specific, which are termed "general authorities." Cultural resource authorities include: the National Historic Preservation Act; the Archaeological Resources Protection Act of 1979, as

amended; and the Native American Graves Protection and Repatriation Act of 1990, as amended. General authorities include: the American Indian Religious Freedom Act of 1979 (AIRFA); NEPA; FLPMA; and Executive Order 13007-Indian Sacred Sites. The proposed action is in compliance with the aforementioned authorities.

Archaeological evidence indicates that northeast Oregon was inhabited by Native American people for millennia; with indications of occupation in Oregon dating back as early as 14,500 cal BP (Aikens et al. 2011). Sites that date from the earliest occupation of the region include base camps for seasonal hunting and gathering, lithic procurement, and plant gathering and processing.

The Nez Perce were one of the aboriginal inhabitants that had tribal lands in northeast Oregon and they retain aboriginal rights and/or interests in the area. The current project area is within lands ceded to the United States in an 1855 treaty with the Nez Perce. Article 3 of this treaty allowed:

The exclusive right of taking fish in all the streams where running through or bordering said reservation is further secured to said Indians: as also the right of taking fish at all usual and accustomed places in common with citizens of the territory, and of erecting temporary buildings for curing, together with the privilege of hunting, gathering roots and berries, and pasturing their horses and cattle upon open and unclaimed land.

BLM considers off-reservation treaty-reserved fishing, hunting, gathering, and similar rights of access and resource use on the public lands it administers for all tribes that may be affected by a proposed action.

Archeological and Historical Resources

The BLM is responsible for identifying, protecting, managing, and enhancing archaeological, historic, architectural, and traditional lifeway values located on public lands managed by the BLM, as well as those that might be affected by BLM undertakings on non-federal lands. Some of the legislation and implementing regulations governing cultural resource management include the following: the NHPA of 1966, as amended; the Archaeological Resources Protection Act of 1979 (ARPA), as amended; AIRFA; and the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA). The Federal Land Policy and Management Act states that public lands are to be managed in a manner "that would protect the quality of...historical...and archaeological values." NEPA and NHPA provide the objective to coordinate plans and functional programs and resources so as to preserve and protect important cultural resources early in the project planning process. Traditional lifeway values are usually identified through consultation with tribal officials. AIRFA and NHPA envision the potential for access, use, and protection of traditional cultural properties, religious sites, and sacred objects.

The BLM has a national programmatic agreement with the Advisory Council on Historic Preservation and the National Conference of State Historic Preservation Officers. In addition, the Oregon BLM has a state protocol agreement with the Oregon State Historic Preservation Office (SHPO) that provides further guidance on BLM's responsibilities for implementation of NHPA and Section 106. Under Section 106, federal agencies are required to consider the effects of their undertakings on historic properties and afford the Oregon SHPO, Native American

Tribes, and other potentially affected parties, a reasonable opportunity to comment. The historic preservation review process mandated by Section 106 is outlined in regulations issued by the Advisory Council on Historic Preservation. These regulations, "Protection of Historic Properties" (36 CFR 800), became effective June 17, 1999.

The state of Oregon also has laws protecting cultural resources. The law (ORS 358.905 through 358.961 [http://www.leg.state.or.us/ ors/358.html]) protects sites on, or eligible for listing on, the National Register of Historic Places (NRHP) or which have been determined significant in writing by an Indian tribe on state and private land. The law states that a person cannot knowingly "excavate, injure, destroy or alter an archaeological site or object or remove an archaeological object located on public or private lands in Oregon unless that activity is authorized by a permit issued under ORS 390.235." ORS 390.235 states that permits will be issued by the State Parks and Recreation Department, and only to persons gathering information for the benefit of a recognized scientific or educational institution with a view to promoting the knowledge of archaeology or anthropology, or to a qualified archaeologist. Violation of the law is a Class B misdemeanor. Consultation with the appropriate tribe, determined through consultation with the Oregon Commission of Indian Affairs, is also required for excavation of prehistoric or historic Native American sites.

There is an additional law protecting graves. Oregon Revised Statutes (ORS) (97.740-97.760 [http://www.leg. state.or.us/ors/097.html]) prevents the willful destruction of a grave or any associated artifacts and human remains except in authorized ways. The law further states that any discovered remains suspected to be Native Indian shall be reported to the state police, the State Historic Preservation Officer, and the appropriate Indian tribe as determined by the Commission on Indian Services. Any person who disturbs native Indian remains or a funerary object is solely responsible for the cost of reinterment, and it must be done under the supervision of an Indian tribe. Violations of the law are usually handled in civil court.

1.6.2 State Requirements

IPC is a regulated public utility under the laws of the State of Oregon and operates under the oversight and regulatory control of the Oregon Public Utility Commission (OR PUC).

Under Division 21 of the Oregon Administrative Rules (OAR) 860, IPC "shall make all reasonable efforts to prevent interruptions of service. When such interruptions occur, the energy or large telecommunications utility shall endeavor to reestablish service with the shortest possible delay consistent with the safety of its customers and the general public."

Under Division 23 of OAR 860, IPC "must use reasonable means in design, operation, and maintenance to ensure reliable service to each customer. Such means include, but are not limited to, programs to minimize service interruptions."

Under Division 24 of OAR 860, IPC "shall construct, operate, and maintain electrical supply and communication lines in compliance with the standards prescribed by the 2012 Edition of the National Electrical Safety Code approved June 3, 2011, by the American National Standards Institute."

1.6.3 County Requirements

Communications with the Baker County Planning Department documented that the Proposed Action could be completed with a zoning clearance application and will not require a Conditional Use Permit.

1.7 Scoping and Identification of Issues

Internal and external scoping was performed for the Proposed Action. Internal scoping included interdisciplinary team discussions and meetings with IPC and BLM staff through the duration of the EA process. These discussions/meetings helped define the Proposed Action's purpose and need and identified the significant issues. Additionally, field-related resource information (i.e., Baker RMP), district resource specialist's knowledge, and field surveys of the project area, helped the BLM develop a list of relevant environmental issues to address and determine the extent of analysis. Additionally, the BLM conducted government to government consultation with the Confederated Tribes of the Umatilla Indian Reservation (CTUIR), Confederated Tribes of the Colville Reservation and the Nez Perce Tribe on September 22, 2014, and based on response, additional consultation occurred with the Nez Perce Tribe on December 12, 2014, February 18, 2015 and June 11, 2015. Consultation with the Oregon SHPO occurred on September 22, 2014, March 24, 2015 and June 11, 2015.

External scoping involved meetings with IPC and the Mayor of Halfway (Shelia Farwell) on December 10, 2013, January 6, and February 25, 2014, to discuss reoccurring outages, electrical reliability, community concerns, and the Proposed Action. Additionally, IPC sent "Request of Entry" (ROE) letters to all property owners whose property would be crossed by the Proposed Action in March 2014. The letters included a description of the project as well as a request to enter the property to perform cultural surveys. A contact phone number was included in the letters to answer questions.

These critical elements, their status in the Project Area, and their potential to be affected by the Proposed Action are identified below and were determined to be potentially significant and within the scope of the project decision. The potential effects to these critical elements are discussed in more detail in Chapter 3 – Affected Environment and Chapter 4 – Environmental Consequences. Elements that do not exist in the proposed analysis area and/or that will not be significantly impacted by the Proposed Action will not be carried forward for analysis in the EA and are not discussed further.

The following section is a summary of issues relevant to this analysis.

1.7.1 Identification of Issues

Access

IPC describes roads necessary for the operation and maintenance (O&M) of power lines as either access roads or service roads. The sole purpose of service roads is to provide maintenance crews access to the power line. These roads would not exist if the power line did not exist. In contrast, access roads serve a broader purpose, such as contributing to the BLM, County, or State road

systems. Access roads provide direct or indirect access to the power line, but that access is not their primary purpose.

Pine Town Road and Sheep Mountain Road are the primary access roads that provide ingress/egress to the public lands proximate to the Proposed Action. Additionally, there are several unnamed roads that provide public recreational use of these lands. IPC proposes to use these access roads along with existing service roads, which consist of a mix of narrow, unimproved roads and two-track roads, many of which are overgrown with low-growing vegetation, as well as overland travel routes to access the line. While the existing road network associated with the transmission line would be used to the maximum extent possible, IPC will need to access each structure location by vehicle during construction and O&M activities. Roads will need to be repaired, maintained, or created. IPC crews inventoried the existing roads and identified areas where roads would be used as-is, need repair or maintenance, need to be created, or where overland travel is possible (Table 1-2).

Table 1.2: General Road Activities

Activity (Road Category)	Description	Disturbance
No work proposed (A)	Use existing road or travel way and no repair or maintenance necessary.	14,523.94 feet (2.75 miles) 4.66 acres
Remove rocks/Cut Vegetation (B)	A backhoe will be used to move large rocks and vegetation will be cut that can interfere with safe equipment operation.	1,472.61 feet (0.28 miles) 0.47 acres
Regrade/repair - includes ground disturbing activities (C)	Grading to repair and / or restore still visible road prism; this can include repair of sloughs, widening narrow areas, and reduce slopes where necessary.	5,230.46 feet (0.99 miles) 1.68 acres
Grade new road (D)	Create road where no road prism is evident.	5,494.40 feet (1.04 miles) 1.76 acres
Overland travel (E)	Multiple vehicle trips will create a two-track that is visible in vegetated areas. Vegetation will be crushed, but will not be cut or removed.	12,413.40 feet (2.35 miles) 3.99 acres

Note: Area is based on a 14-foot-wide road surface to accommodate construction and maintenance equipment.

In most cases, the roads would be left as close to an undeveloped nature (i.e., two-track road) as possible without creating environmental degradation (e.g., erosion or rutting from poor water drainage). Equipment to perform the required road maintenance would include hand tools (e.g., chainsaws, etc.), track driven machines (bulldozers and graders) and crew-haul vehicles (e.g., 4-wheel drive pickup and/or ATV and UTVs). Roads would be opened/cleared for use by trucks transporting materials, excavators, drill rigs, bucket trucks, pickup trucks, and crew-haul vehicles.

The EA will analyze the following:

- What are the potential effects of the Proposed Action on existing vegetation?
- What are the potential effects of the Proposed Action on existing wildlife?

- What are the potential effects of the Proposed Action on soils?
- What are the potential effects of the Proposed Action on OHV use?

Archaeological and Historical Resources

Federal agencies are required to consider the effects of the proposed undertaking on historic properties, which include archaeological and historical sites. Historic and precontact cultural resources occur in the project area. Removal of existing lines and structures, construction in the existing and wider ROW, and continued O&M of the line—particularly those activities involving ground disturbance—could potentially impact the integrity of cultural resources. In addition, traditional cultural properties, if identified by Native American tribes, could be at risk.

The EA will analyze the following:

- What are the potential effects of the Proposed Action on existing cultural resources?

Vegetation

Vegetation community assessments were conducted and assessed for the proposed project area (IPC 2014). The vegetation observed along Line 216 was substantially different than was indicated by the Gap Analysis Program (GAP) vegetation cover-type spatial data (USGS 2010). All of the expected big sagebrush shrubland, as indicated by GAP data, in the survey area was found to be occupied by graminoids, primarily cheat grass (*Bromus tectorum*), medusa head rye (*Taeniatherum caput-medusae*), and bulbous bluegrass (*Poa bulbousa*). There are portions of the survey area that are dominated by bluebunch wheatgrass (*Pseudoroegneria spicata*) and Sandberg's bluegrass (*Poa secunda*). No section of the existing line or proposed reroute is characterized by a shrub community.

The EA will analyze the following:

- What are the potential effects of the Proposed Action and the No Action Alternative on existing vegetation communities?

Special Status Plants

It is BLM policy (6840_08 Special Status Species Management Manual) to manage for the conservation of Special Status Plants (SSPs) and their associated habitats and to ensure that actions authorized, funded, or carried out do not contribute to the need to list any Sensitive species as Threatened or Endangered. Additionally, the Baker RMP states that the BLM would manage rangeland vegetation to achieve greater amounts of mid or late seral conditions, dependent of Geographic Unit direction.

There were no SSP species observed during the survey. There was little to no potential habitat for the majority of the SSPs shown in Table 1 of the *"Duke-Halfway 69 kV Transmission (Line 216) ROW ORE-05129 Special-Status Plant and Wildlife Survey Report"*. Based on preferred habitat, Snake River goldenweed is the most likely SSP to occur; however, survey time coincided with phenology and this species was not found. Additionally, any potential SSP habitat or soil type associated with this area is also found in a much greater extent outside of the ROW.

The EA will analyze the following:

- What are the potential effects of the Proposed Action and the No Action Alternative on SSP species?

Invasive, Non-Native Species

Noxious weeds are plant species that make significant modifications to the landscape. Oregon State listed noxious weeds are designated under Oregon Department of Agriculture (ODA) Noxious Weed Control Program. Noxious weed species that are present in, or adjacent to, the Proposed Action include; rush skeletonweed (*Chondrilla juncea*), field bindweed (*Convolvulus arvensis*), houndstongue (*Cynoglossum officinale*), common St. Johnswort (*Hypericum perforatum),* diffuse knapweed (*Centaurea diffusa),* and Scotch thistle (*Onopordum acanthium).* Cheat grass, chicory (*Cichorium intybus),* medusahead rye, moth mullein (*Verbascum blattaria),* and common mullein *(Verbascum thapsus),* invasive plant species, are also known to occur throughout the project area (IPC 2014).

The EA will analyze the following:

- What are the potential effects of the Proposed Action and the No Action Alternative on existing invasive, non-native plant species and noxious weeds?
- What is the potential the project would cause or contribute to the spread of known invasive, non-native plant species and noxious weeds?

Threatened or Endangered Terrestrial Animal and Aquatic Species

A review of the U.S. Fish and Wildlife Service, Oregon Fish and Wildlife Office, Information, Planning, and Conservation (IPaC) website (http://ecos.fws.gov/ipac/) shows that there is only one federally threatened species, bull trout *(Salvelinus confluentus),*that may be affected by the Proposed Action. The Proposed Action is not located within bull trout critical habitat. However, the Proposed Action is proximate to and crosses streams (e.g., Deer Creek, Four Mile Creek, and numerous unnamed tributaries) that provide fish habitat and discharge into bull trout critical habitat (e.g., Pine Creek, Clear Creek, and Snake River). The anticipated activities associated with construction of roads for the transport of materials both on and off the project area, removal and installation of transmission structures, preparation of transmission line tensioning sites, and maintenance and use of project related access roads through the functional life of the project could result in direct or indirect impacts to fish habitat.

The EA will analyze the following:

- What are the potential effects of the Proposed Action and the No Action Alternative on threatened or endangered terrestrial animal and aquatic species?

Special Status Wildlife

The BLM must manage public lands to protect, conserve, and/or restore/enhance populations and habitats of Special Status Wildlife (SSW) (6840_08 Special Status Species Management Manual) and maintain and improve wildlife security where feasible and consistent with other resources and resource uses (Baker RMP). A special status species is an animal or plant species identified by the BLM for which species viability is a concern either 1) because these species are predicted to have a downward trend in population numbers or density or 2) because of current or predicted downward trends in habitat capability that would reduce a species' existing

distribution. There are five SSW species, (golden eagle (*Aquila chrysaetos)*, bald eagle (*Haliaeetus leucocephalus)*, grasshopper sparrow *(Ammodramus savannarum)*, greater sage-grouse *(Centrocercus urophasianus)*, and gray wolf *(Canis lupus)*) known to breed on public land, uses public land for part of their life history requirements, or has potential habitat located within the project area.

The EA will analyze the following:

- What are the potential effects of the Proposed Action and the No Action Alternative on SSW species?

Species of Local Importance (Big Game – Mule Deer, Pronghorn antelope, Elk, Rocky Mountain bighorn)

The proposed project area is located in critical winter range for Rocky Mountain elk (*Cervus elaphus nelson)* and mule deer (*Odocileus hemionus).* Rocky Mountain bighorn sheep (*Ovis canadensis canadensis)* also inhabit the area. These big game species of local importance are species that typically have no federal designation for conservation, but are important to tribes and other public interests within this project area.

The EA will analyze the following:

- What are the potential effects of the Proposed Action and the No Action Alternative on big game habitat?

Migratory and Neotropical Landbirds

A review of the U.S. Fish and Wildlife Service, Oregon Fish and Wildlife Office, Information, Planning, and Conservation (IPaC) website (http://ecos.fws.gov/ipac/) shows that there are 19 bird species of conservation concern likely to occur in or proximate to the ROW and that may be affected by the Proposed Action. These species include: bald eagle, Brewers sparrow (*Spizella breweri)*, calliope hummingbird *(Stellula calliope)*, Cassin's finch *(Carpodacus cassinii)*, *f*ox sparrow *(Passerella liaca)*, Lewis's woodpecker (*Melanerpes lewis), l*oggerhead shrike (*Lanius ludovicianus)*, long-billed curlew (*Numenius americanus*), olive-sided flycatcher (*Contopus cooperi*), peregrine falcon (*Falco peregrinus), r*ufous hummingbird *(Selasphorus rufus)*, sage thrasher (*Oreoscoptes montanus*), short-eared owl (*Asio flammeus)*, Swainson's hawk (*Buteo swainsoni), u*pland sandpiper (*Bartramia longicauda), w*hite-headed woodpecker (*Picoides albolarvatus)*, Williamson's sapsucker *(Sphyrapicus thyroideus)*, and willow flycatcher (*Empidonax traillii adastus)*.

The EA will analyze the following:

- What are the potential effects of the Proposed Action and the No Action Alternative on bird species of conservation concern?

Wildlife

Grassland habitat is dominant throughout the proposed project area and surrounding environs (IPC 2014). Based on the observed habitat and the results of the 2014 survey of the proposed project area, the following wildlife species may utilize the proposed project area: Chukar (*Alectoris chukar)*, red-tailed hawk (*Buteo jamaicensis)*, lark sparrow (*Chondestes grammacus)*,

horned lark (*Eremophila alpestris),* Brewer's blackbird (*Euphagus cyanocephalus),* American kestrel (*Falco sparverius),* cliff swallow (*Petrochelidon pyrrhonota),* spotted towhee (*Pipilo maculatus),* rock wren (*Salpinctes obsoletus),* western meadowlark (*Sturnella neglecta),* western kingbird (*Tyrannus verticalis),* and pronghorn antelope (*Antilocapra americana).*

The EA will analyze the following:

- What are the potential effects of the Proposed Action and the No Action Alternative on wildlife species?

Soil Resources

The initial installation of the new structures and the maintenance and construction of roads would result in soil disturbance.

The EA will analyze the following:

- What are the potential effects of the Proposed Action and the No Action Alternative on soil resources?

Visual Resources

The BLM initiated the visual resource management (VRM) process to manage the quality of landscapes on public land and to evaluate the potential impacts to visual resources resulting from development activities. VRM class designations are determined by assessing the scenic value of the landscape, viewer sensitivity to the scenery, and the distance of the viewer to the landscape. These management classes identify various permissible levels of landscape alteration, while protecting the overall visual quality of the region. They are divided into four levels; Classes I, II, III, and IV. Class I is the most restrictive and Class IV is the least restrictive.

The Proposed Action and No Action Alternative are within a Visual Resource Management (VRM) Class II visual resource area. The objective of this class is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

The EA will analyze the following:

- What are the potential effects of the Proposed Action and No Action Alternative on visual resource inventory classes?

1.8 Critical Elements not addressed in this EA

Resources and issues potentially affected by the Proposed Action have been reviewed. Resources/issues that may be affected are addressed in Chapter 3 and 4. The following elements and issues are not present or would not be affected by the proposed action:

- Air Quality – present not impacted
- Areas of Critical Environmental Concern (ACEC's) – not present

- Economic and Social Values – present not impacted
- Environmental Justice – not present
- Existing and Potential Land Use – present not impacted
- Fisheries – present not impacted
- Floodplains – present not impacted
- Forest Resources – not present
- Mineral Resources – not present
- Paleontological Resources – not present
- Prime and Unique Farmlands – not present
- Threatened, Endangered, and Sensitive Plants – not present
- Threatened, Endangered, and Sensitive Fish – present not impacted
- Range Resources – present not impacted
- Recreational Use – present not impacted
- Tribal Treaty Rights and Interests – present not impacted
- Wastes, Hazardous and Solid – present not impacted
- Water Quality (Surface and Ground) – present not impacted
- Wetland and Riparian Zones – not present
- Wild and Scenic Rivers – not present
- Wilderness and WSAs – not present

2.0 DESCRIPTION OF THE PROPOSED ACTION AND THE NO ACTION ALTERNATIVE

This chapter describes the Proposed Action and the No Action Alternative. Figure 1 shows the location of the proposed action. This chapter also compares the Proposed Action and the No Action Alternative to the project purposes, as well as the potential environmental effects of each of these two alternatives.

2.1 Introduction

Line 216 was constructed in 1957 to provide adequate power supply to the towns of Halfway and Richland and IPC has been conducting O&M activities on this line to ensure this. The existing access and service roads associated with Line 216 were originally engineered and constructed to access this facility and have been regularly used for routine patrols, inspections, and O&M activities for decades.

The Proposed Action and the No-Action Alternative were the only alternatives considered because utilizing existing ROWs and existing roads would limit the need for additional clearing and road construction, minimize noxious weed encroachment, result in less impact to undisturbed and recreational land, and would be more consistent with BLM land management guidelines (i.e., Baker RMP).

IPC has developed the Proposed Action to meet the project need. The Proposed Action and the No-Action Alternative are discussed below.

2.2 Proposed Action

The Proposed Action is to amend IPC's existing grant (ORE-05129). The amendment is necessary to facilitate a proposed rebuild and reroute of Line 216, authorize approximately 7.4 miles of existing and proposed service roads used to access the transmission line facility, and allow IPC to continue to operate and maintain the transmission line and road network.

The Proposed Action is described in detail in Section 1.2 of this EA and in IPC's *Plan of Development* (POD) (Appendix A) and in the following sections.

2.2.1 Proposed Facilities

The design, construction, operation, and maintenance of the Project would meet or exceed the requirements of the National Electrical Safety Code (NESC), U.S. Department of Labor, Occupational Safety and Health Standards, and IPC's requirements for safety and protection of landowners and their property.

Structure Types

IPC has proposed five structure types: wood single-pole structures, wood H-Frame structures, wood 3-pole structures, weathering steel 3-pole structures, and one weathering steel single-pole structure on a foundation.

The majority of structures used would be wood single-pole and wood H-frames. The wood 3-pole structures would be typically used at angles (i.e. where the line changes direction), or other areas where the necessary line separation cannot be maintained by an H-frame structure The weathering steel structures would be on the proposed reroute on the eastern extent of the line coming off of Round Mountain toward Brownlee Dam. Proposed structures are shown in Figure 3 of the POD (Appendix A).

Minor Additional Hardware

In addition to the conductors, insulators, and lightening arrestors, other associated hardware would be installed on the structures as part of the insulator assembly to support the conductors. This includes clamps, shackles, links, plates, and various other pieces. A grounding system that would consist of copper or galvanized ground rods may be embedded into the ground at the base of each structure and connected to the structure by a buried copper lead. Other hardware that is not associated with the transmission of electricity may be installed as part of the Project. This hardware may include aerial marker spheres at crossings and / or aerial markers on the structures denoting the structure number.

2.2.2 Construction of the Facilities

Line Construction

The proposed rebuild would likely follow the sequence of: 1) survey efforts; 2) access and service roads maintenance/construction; 3) work area preparation; 4) structure hole excavation; 5) structure erection and installation; 6) conductor installation ; 7) removal of old structures, hardware, and old line; and 8) site clean-up and reclamation. Various phases of construction would occur at different locations throughout the construction process. This would likely require several crews operating at the same time at different locations. Line materials would be stockpiled at a designated staging area at Dead Cow Gravel Pit and within the existing transmission line ROW corridor. Structures and associated hardware would be transported to each structure work area by truck.

Replacement structures would be very similar to the existing structures and would be directly embedded in the ground. However, the height of the structures would increase from 5-feet to 15-feet depending on terrain and sag requirements. The new structures would be built to raptor-safe standards specified in the Avian Power Line Interactive Committee (APLIC), 2006 Suggested Practices for Avian Protection on Power Lines and in accordance with IPC's Avian Protection Policy.

Work areas around the structure locations may be graded, depending on terrain, to allow for safe setup of equipment and construction of the transmission line. This would only occur to the extent necessary to facilitate construction activities. The area needed at each structure would vary depending on contours and construction equipment. Generally, an area approximately 40 feet by 40 feet would be needed at each structure location. Dead-end structures would require an area approximately 80 feet by 80 feet. 16 work pads are proposed on BLM managed lands and would result in approximately 0.66 acres of disturbance. Within these work areas, the permanent disturbance associated with each pole foundation would be approximately six-feet in diameter. Equipment to clear the work areas would include a small dozer, backhoe, and excavator, depending on the specific location. New structures would be assembled at the proposed structure location.

Excavations for the structures would be done with either a back hoe or power auger equipment. The structure holes would be approximately 8 to 12 feet deep depending on soil, structure height and loading. Where the soil permits, a vehicle-mounted power auger would be used. Soil removed from holes would be stockpiled in the work area and used to backfill holes. Structure holes that would be left open or unguarded overnight or for more than a day would be covered and/or fenced where practical to protect the public, livestock, and wildlife. All remaining soil not needed for backfilling would be spread in the work area. If native soil is not suitable for backfill, clean, noxious weed free soil would be imported to backfill holes.

If rocky areas are encountered during hole excavation, blasting may be required. If blasting is necessary, appropriate safety guidelines would be followed, as required by state and federal regulations relating to blasting operations. Blasting would be used only after other reasonable means of excavation have been used and are unsuccessful in achieving the required results. It is not known in advance of construction if or how often blasting would have to be used. The most

important factors that determine whether blasting is necessary are the geology of the area and the hardness of the rock. If blasting is required for any portion of this project, IPC shall employ controlled blasting procedures in order to maintain airblast, overpressure, and peak particle velocity (PPV) of ground vibrations, and to minimize stressing and fracturing of the rock beyond the limits of excavation. Implementing controlled blasting limits the physical breaking or cracking of the rock to a localized area around each blast hole and is not expected to extend PPV beyond the site boundary (blast location). This disturbance usually only occurs within a few meters of the blast hole. Holes are drilled in the rock with pneumatic drills to allow insertion of an explosive charge. Holes are drilled in a pre-determined pattern in order to control the blast and fly-rock as appropriate. Explosive charges are then "decked" within a bore hole. In this procedure, multiple charges are included in one hole separated by a non-explosive material. A longer delay is used for the lower charge than for the upper charge, causing the upper charge to detonate first, followed by the lower charges. In effect, decking produces results similar to time delays. As a result, overpressure levels are lower than if both charges were combined as a single shot.

When controlled blasting methods are used to excavate structure locations, the drilling and blasting work is much more technical than imagined by casual observers. The blasts are barely audible “whumps” to audible “booms”. Moreover, the scale of blasting and size of charges are much smaller than those typically used in production mining. Tests on charges and drill patterns determine the appropriate combination of explosive charge and drill pattern for a particular geologic area that will provide adequate fracturing of the rock, and appropriate control of air blast, vibrations, and fly-rock. It is estimated that the charge would be no smaller than .25 pound delay and no larger than one pound per delay with a time between delays no faster than 25 milliseconds (ms), and as slow as 300 ms.

Another consideration of the shock wave generated during a controlled blast is the direction of the explosive's detonation. When the first (upper) explosive detonates within the borehole it causes the rock in the immediate vicinity to crack or distort thus allowing for the shockwave and pressure of the next detonation to be released upward. As the series of detonations continue down the boring, the pressure continues to propagate up the explosive column toward the surface. Less shock energy is transmitted radially and only a small percentage of shock disturbance emanates opposite the detonation direction. However, as with any blasting technique, there is always some energy left over and this is converted into vibration that travels away from the blast area through both the ground and air. Outside the immediate vicinity of the blast site permanent deformation does not occur. As the vibration travels away from the blast area the level rapidly reduces. Controlled blasting typically does not generate ground vibrations that are perceptible beyond, at most, a few meters from the blast location.

Once the structures are erected, the conductor would be strung using powered pulling equipment at one end and powered braking or tensioning equipment at the other end. Conductor splicing would be required at the end of a conductor spool or if a conductor is damaged during stringing. The work would occur in the same work areas used for the poles or pulling/tensioning sites. Pulling/tensioning sites would be approximately 100 feet by 300 feet and may be cleared of vegetation and graded to allow for safe operation of the pulling and tensioning equipment. This would result in approximately 0.89 acres of disturbance on BLM managed lands. Equipment to clear the areas would include a small dozer, backhoe, and excavator, depending on the specific

location. After construction, the areas would be reseeded in accordance with Section 5 of the POD (Appendix A).

Site Access and Road Maintenance

In addition to the line work detailed above, the existing service road network used to access these structures may require maintenance/improvements to allow construction equipment safe access into the power line corridor. While the existing road network proximate to the transmission line ROW would be used to the maximum extent possible, new service roads (roads used solely by IPC to access our facilities) would need to be created to reach structure locations without current access. Additionally, overland service routes would be required from the existing access road to reach structure locations without current access. These overland service routes would not require blade work (i.e., recontouring).

In order to accommodate the line work, road maintenance would need to begin a few weeks before the proposed line work. Maintenance requirements would vary depending on the type of road, level of use, and condition of the road. However, maintenance generally would consist of clearing vegetation and rocks, as well as repairing cut and fill slope failures, as necessary, to allow for a 12- to 14-foot-wide road surface. In most cases, the roads would be left as close to an undeveloped nature (i.e., two-track road) as possible without creating environmental degradation (e.g., erosion or rutting from poor water drainage). Equipment to perform the required road maintenance would include hand tools (e.g., chainsaws, etc.), track driven machines (bulldozers and graders) and crew-haul vehicles (e.g., 4-wheel drive pickup and/or ATV and UTVs). Roads would be opened/cleared for use by trucks transporting materials, excavators, drill rigs, bucket trucks, pickup trucks, and crew-haul vehicles. Specific actions, such as installing water bars and dips to control erosion and storm water, would be implemented to reduce construction impacts and would follow standard designs. If project activities disturb one or more acres, IPC would comply with Oregon Department of Environmental Quality (DEQ) construction stormwater regulations.

Removal of Old Line

The existing line would be removed in segments following construction of the new line. All existing conductor and associated hardware would be removed and existing wood poles would be cut off near ground level. Old poles are not typically pulled from the ground because this would cause more ground disturbance than cutting them. All materials would be salvaged or removed to a State-approved landfill.

Traffic Control and Road Restrictions

Due to the remoteness of the Project, most areas of the line would not require traffic control or road restrictions. There may be times when a recreationist or land owner may be traveling along Sheep Mountain Road. On such occasions, safety measures such as barriers, flagmen, or other traffic control (e.g., limited road closures) would be used. The closures would only be for the amount of time needed to perform the construction tasks requiring the road restrictions. The road restrictions would be managed according to the Manual of Uniform Traffic Control Devices.

Construction Waste Disposal and Cleanup

Work areas would be kept in an orderly condition throughout the construction period. Refuse and trash would be removed from the sites and disposed in an approved manner. Oils and fuels would not be dumped along the line onto the ground or into streams. Oils or chemicals would be containerized and disposed in an approved and licensed facility for disposal. Construction practices shall comply with all applicable federal, state, and local laws and regulations concerning the use, storage, transportation and disposal of hazardous materials. No open burning of construction trash would occur.

2.2.3 Stabilization and Rehabilitation

To minimize possible impacts to natural resources, reduce erosion and sedimentation, and minimize noxious weeds, IPC and/or its contractor will reseed all disturbed areas resulting from construction and O&M activities. General methods are presented in Section 5 of the POD (Appendix A). Any measurable damage would be repaired as soon as weather, ground, and scheduling conditions permit. In some cases, reclamation methods may not be necessary, given the limited amount of soil compaction, vegetation destruction, and surrounding site conditions.

2.2.4 Operation and Maintenance Activities

IPC performs O&M activities to keep the transmission line operational and in good repair. These activities are either planned (such as those for routine patrols, inspections, and scheduled maintenance) or unplanned (such as those for emergency maintenance in cases where public safety and property are threatened). The activities presented below are considered routine O&M activities. The methods described below, represent the typical way in which these activities are carried out. Maintenance on any particular structure may vary depending upon a number of factors and these activities may be carried out by IPC or its contractor as necessary.

Patrols and Inspections

Routine air patrols to inspect for structural and conductor defects, conductor clearance problems, and hazardous trees. These are typically conducted from a helicopter and personnel include a pilot and line patrolmen. Inspections may be conducted in the spring and fall. The helicopter typically flies over the line and is in proximity of a given structure for less than a minute; more time may be spent circling a structure if a problem is noted and photographs are necessary.

Routine ground patrols to inspect structural and conductor components. Patrols may rely on direct line-of-sight and/or binoculars. Patrols are typically conducted in the spring and fall. Follow-up maintenance would be scheduled depending on the severity of the problem, either as soon as possible or as part of routine scheduled maintenance. A vast majority of such inspections require either a utility-terrain vehicle (UTV) or a pickup truck traveling on established roads and travel ways. Personnel rarely leave the road unless there is no other option to access and inspect a structure. Follow-up maintenance would be scheduled depending on the severity of the problem, either as soon as possible or as part of routine scheduled maintenance. Maintenance activities may also be scheduled based on other regulations. For example, some

transmission lines are regulated by NERC and depending on the identified problem, there may be regulatory timeframes that IPC needs to fix the problem. Maintenance work is also scheduled depending on whether the work can be conducted on an energized line and when the line can be taken out of service.

Climbing structures to inspect hardware or make repairs. Personnel access these structures by UTV or pickup truck traveling on established access and service roads, two-tracks, or UTV trails. If the structure cannot be accessed via a road, two-track or UTV trail, IPC personnel would walk to the structure. Crews use bucket trucks to inspect hardware and / or make repairs. The bucket truck may be located on or off a road and parallel or perpendicular to the structure. Trucks are stabilized using outriggers so little to no grading of the existing work pad is necessary to create a safe work area. The need for grading depends on the condition of the existing pad and topography. The use of a bucket truck requires a passable road or travelway to the structure.

Structure and Road Maintenance

Structure or conductor maintenance from a maintenance vehicle. The maintenance vehicle would be located on a road, trail or maintenance route or may be parked perpendicular to the ROW. Maintenance vehicles are stabilized using outriggers so little to no grading of the existing structure pad is necessary to create a safe work area. The potential need for grading would depend on the condition of the existing structure pad and existing topography. Structure maintenance may include replacement of crossarms, insulators, or other hardware and crews typically spend less than a day at the structure. Conductor maintenance may be conducted while the line is energized or de-energized (depends on the voltage, required maintenance, and crew safety), and may be done while the line is on the structure or the line may be lowered to the ground. Conductor maintenance may include the use of pulling and tensioning equipment; this would likely occur if the conductor were replaced.

Routine inspection and maintenance of authorized service and access roads following line rebuild. Roads are inspected and repairs are made as necessary throughout the life of the transmission line. Typically, a three-man crew uses hand tools to cut mature brush and; remove rocks and debris; and repair and replace signs on access and service roads. Mechanical means may also be used to clear vegetation. Crews also prepare an inventory of road damage that would require ground disturbance (e.g., repair of a failed bank); repair work scheduled accordingly (typically the following year). Inspections and maintenance are typically conducted from spring through summer, when roads are clear of snow. When conducting road maintenance activities, where length, width, and alignment of road remains the same as the existing road prism, maintenance activities could include blading the road to maintain the surface condition and drainage, removing minor physical barriers (i.e. rocks and debris), replacing culverts, rock crossings, or other erosion control structures, and rehabilitating after major disturbances (i.e., repairing slumping or erosion damage). Equipment to maintain roads would vary depending on the type of work necessary. Typical equipment includes a bulldozer to move rocks or for grading. Trees and brush are cut off at grade to minimize damage to vehicles; chain saws, weed whips, and/or Slashbuster may be used. Slash, deadfall, and boulders would be placed at the edge of the road or down slope of the road bed, depending on site topography, to serve as a filtering windrow to minimize erosion and sedimentation. Smaller vegetation (e.g., grasses) would be left in the road bed unless it is too tall and hinders access. Work may take less than a day or several

days depending on the severity of the problem. Crews would install waterbars as necessary. Other best management practices to address potential erosion and sedimentation would be addressed on a case-by-case basis, but could include the use of filtering wind rows made from previously impacted vegetation, straw mulch, tackifier, and reseeding.

Installation of bird protection devices, bird perch discouragers, and relocation or removal of bird nests. Under the authority of the Migratory Bird Treaty Act (MBTA), the Bald and Golden Eagle Protection Act or Oregon Code, the appropriate permits shall be acquired from U.S. Fish and Wildlife and/or Oregon Department of Fish and Game, prior to relocation or removal of nests. As a courtesy, IPC will provide the Authorized Officer with a copy of the required permit from the USFWS prior to commencing the activity. The equipment and crews used to install bird protection devices are similar to those used for structure maintenance work. Installation of bird protection devices would typically take less than half a day at a structure or on a span.

In-kind structure replacement (e.g., replacing a cross-arm, replacing an insulator, replacing a single wood pole with a single wood or steel pole). Maintenance vehicles may be located on or off a road. Trucks are stabilized using outriggers, so little to no grading of an existing structure pad is necessary to create a safe work area. As it is not usually possible for the replacement pole to go into the same hole as the old pole, especially when the replacement has to be done with the line energized, pole replacements are placed adjacent to the old hole but still within the existing structure pad. Equipment may include a truck-mounted auger, bulldozer, crane, bucket truck, and crew haul vehicles. Old poles are typically cut off close to grade and old structures are removed from the site. If rock is encountered, a rock drill may be used, but frequently, controlled blasting is used to create a hole. Work is typically scheduled when the line is de-energized as this is the safest method for the crews.

Vegetation Management

IPC manages vegetation within its ROWs and on access and service roads to minimize interference with the flow of electricity, to address safety issues, and to facilitate O&M activities. The vegetative community within and immediately adjacent to the project area primarily consists of low growing herbaceous plants and shrubs. There is no forested vegetation in the project area. However, if vegetation management is required, IPC will generally schedule it according to maintenance cycles.

IPC's vegetation management complies with NESC and NERC requirements[a]; these dictate minimum clearance standards. IPC maintains vegetation within the full ROW and access and service roads widths. For the purposes of vegetation management, the ROW has been divided into the wire zone and the border zone as defined below:

- Wire Zone – The ROW portion directly under the wires and 10 feet beyond the outside phases.

[a] NERC's mission is to ensure the reliability of the North American bulk power system. NERC is the electric reliability organization certified by the Federal Energy Regulatory Commission to establish and enforce reliability standards for the bulk-power system. NERC FAC-003-3 identifies vegetation management requirements.

- Border Zone – The outside edge of the wire zone to the edge of the ROW.

Within the wire zone, there must be at least 20 feet of clearance from the lowest sag point of the conductor to the top of existing vegetation, including tree growth until the next management cycle. Side clearances are measured from the wind blow-out position of the conductor at mid-span, and clearance requirements are dependent upon site-specific conditions (e.g., topography, existing vegetation, span length). Where possible, low-growing vegetation and small trees within the border zone that will not grow into the minimum required clearance distance will be left in place; trees may be removed on a subsequent maintenance cycle as they increase in size.

General vegetation management in the ROW is scheduled on a periodic basis; periodicity is dependent on the type of vegetation present and how quickly it may grow between management cycles. In some cases, vegetation management may not be necessary for operation of a line (e.g., areas of low-growing vegetation that would not interfere with required clearances).

The scheduled maintenance program accomplishes the following:

1. Trimming of trees and tall shrubs to the extent that the clearance lasts for the duration of the cycle.
2. Removal of vegetation as necessary to provide clearance and improve access to facilities.
3. Removal of tall-growing vegetation within tower structures.
4. Facilitation of a low-growing plant community that stabilizes the site, inhibits the growth of tall-growing shrubs and trees, and provides habitat for wildlife.
5. Identification and removal of hazardous trees[b] that could fall and contact facilities.

Vegetation maintenance on access and service roads is typically scheduled at the same time as vegetation maintenance within the ROW. However, in cases where vegetation grows quickly, removal may occur more frequently. Removal is conducted by hand crews using chain saws or by mechanical means. Plants that would not interfere with the safe operation of vehicles and equipment would be left in place.

IPC would consult with the BLM prior to slash disposal, and a mutually agreeable fuel bed depth and slash treatment would be developed. Acceptable slash treatments include lop and scatter, hand piling and burning, chipping, and mechanical treatment. If burning is proposed, IPC would consult with the BLM prior to conducting the burning.

[b] A hazard tree may occur within or adjacent to the ROW. These are normally tall trees that have one or more drastic defect that could cause the tree to fail and fall in or onto the line and cause an outage. A hazard tree could also be vegetation that is good condition but that has grown so close to the line that it could be brought into contact with the line through a combination of conductor sag and/or wind-induced movement in the conductor or the vegetation.

In most cases, vegetation is cleared primarily through manual cutting of targeted trees and tall shrubs or with the use of mechanical means (e.g., Slashbuster). However, when appropriate and allowed, tree-growth regulators and spot herbicide treatments can be applied as effective techniques for reducing re-growth of sprouting deciduous shrubs and trees and extending maintenance cycles. Federal and State agencies must approve all herbicide applications in advance of these treatments. The applications must also comply with the most current or applicable Federal, State, and NEPA documents addressing herbicide use. Slash is to be lopped and scattered evenly and as close to the ground as possible throughout the surrounding terrain. Stumps resulting from vegetation treatments are not to be over one foot tall.

IPC also conducts vegetation management around wood structures to protect them in the case of wild fires. IPC and/or a contractor will clear vegetation within a 20-foot radius around a structure using hand tools (e.g., chain saw, weed whip) or mechanical means (e.g., Slashbuster) and then apply a herbicide to minimize vegetating regrowth. Vegetation removal is done as close to grade as possible and with no to minimal ground disturbance. Herbicide application is conducted in accordance with label requirements and all applicable federal, state, and local requirements and the BLM's Pesticide Use Proposal (PUP). IPC would obtain approval from the Authorized Officer prior to using herbicides on BLM-managed lands.

2.2.5 Emergency Actions

Emergency situations are those conditions that may result in imminent or direct threats to public safety or threaten or impair IPC's ability to provide power to its customers or the Western grid. The following examples include, but are not limited to, real and potential emergency situations:

- Failure of conductor hardware.
- Lightning strike or wildfire, resulting in the burning of, and damage to, structures.
- Damage to structures from high winds, ice, or other weather-related conditions.
- Line or system outages or fire hazards caused by trees falling into conductors.
- Breaking or imminent failure of cross-arms, insulators, or other structural elements which could, or does, cause line failures. The line may still be operational but failure could happen if repairs are not completed.
- Vandalism to structures or conductors from shooting or other destructive activities.
- Phases or shield wires coming into contact and creating the potential for fires and/or outages.

Activities to address emergency situations are the same as those implemented for O&M activities; however, adherence to all environmental protection measures (EPM) may not be feasible. If any emergency repair activity results in disturbance outside the existing ROW boundary, IPC will notify the BLM office within 3 working days of the event of the occurrence.

2.2.6 Applicant Committed Environmental Protection Measures

The EPMs specified in Section 4 of the POD (Appendix A) are intended to protect resources within and adjacent to the ROW during project activities and will be implemented by IPC, and

its contractors, throughout the term of the ROW in order to minimize potential adverse impacts to the environment. Most of the impacts are short-term and generally occur during the initial rebuild period. Project design and implementation of site-specific EPMs would minimize the effect of the project where the potential for adverse impacts may occur.

2.3 No Action Alternative

Under the No Action Alternative, the BLM would not approve IPC's SF299 (Application for Transportation and Utility Systems and Facilities on Federal lands) as submitted on June 12, 2014, no modifications would be made to BLM ROW Grant ORE-05129, and IPC would not rebuild the transmission line. The existing line would remain in place in its current location, and the proposed realignment options would not be implemented. However, reliability concerns that prompted the Proposed Action would continue to be of concern. Moreover, leaving the situation as is, IPC may not be able to maintain federal mandatory reliability requirements as defined by NERC.

Because of the reliability concerns and the age of the line (originally constructed in 1957), IPC would continue current O&M activities to the transmission line under the existing BLM ROW grant which is good through December 31, 2037. It might be possible to plan some of this maintenance, but it is also expected that repairs would occur on an emergency basis as various parts of the line continue to deteriorate. This could result in impacts to vegetation, wildlife, soils, and water quality from emergency repair activities, and any downed lines resulting from structure failures would have a high potential for causing fires in the vicinity of the downed line. In addition, it is reasonable to expect that as the structures and conductor fittings continue to fail on an intermittent basis, IPC would not be able to provide generally reliable electric service to customers in Halfway and Richland under this alternative.

IPC would use existing access and service roads for ongoing O&M activities; however, similar to the Proposed Action, new roads/routes would need to be built to provide access to structures without current access. IPC would need to apply for and receive approval from the BLM if any road work was necessary to conduct maintenance activities.

Environmental Protection Measures (EPM) would be the same as those for O&M of the Proposed Action.

3.0 AFFECTED ENVIRONMENT

This chapter describes the existing environment of the proposed project area and the elements which exist and may be affected by implementation of the Proposed Action or the No Action Alternative. The affected environment is described in terms of the "project area". For the purpose of this document, project area includes the requested ROW (including the transmission line, pulling/tensioning sites, and associated service roads) and immediate vicinity. A combination of existing data and resource-specific surveys were used in preparing this chapter. Biological resource surveys were conducted in 2014 on BLM-managed lands and surveys for

cultural resource were conducted in 2010 and 2014 on BLM-managed lands and private lands (where permission was granted) for the Proposed Action.

The evaluation of potential effects of the Proposed Action and the No-Action Alternative are discussed in Chapter 4 – Environmental Consequences.

3.1 Access

Pine Town Road and Sheep Mountain Road are the primary access roads that provide ingress/egress to the public lands proximate to the Proposed Action. Additionally, there are several unnamed roads, primitive roads, and trails that provide public recreational access to these lands. IPC proposes to use these access roads along with existing service roads/overland routes (roads used solely by IPC to access its facilities). While the existing road network proximate to the transmission line ROW would be used to the maximum extent possible, approximately 0.69 miles of new service roads would need to be created to reach structure locations without current access. IPC currently uses these existing roads and overland travel routes that occur within and outside of the existing ROW and proposes to continue using these routes.

3.2 Air Quality

Under the Clean Air Act of 1970, as amended in 1990, the U.S. Environmental Protection Agency (EPA) is authorized to establish air quality standards for six "criteria" air pollutants: ozone, carbon monoxide (CO), lead, nitrogen dioxide, particulate matter (PM-2.5, PM-10), and sulfur dioxide. The EPA uses these six criteria pollutants as indicators of air quality. For each of these pollutants, the EPA has determined a maximum concentration above which adverse effects on human health could occur. These threshold concentrations are called National Ambient Air Quality Standards (NAAQS); when an area exceeds these standards, it is designated as a non-attainment area. A non-attainment area can be listed for any one or more of the criteria pollutants. None of the project area is within a designated non-attainment area http://www.epa.gov/oaqps001/greenbk/ancl.html

While the project area is not within a designated non-attainment area, the Proposed Action would result in slightly elevated CO and PM levels during construction activities. The heavy equipment and vehicles used during the project activities would emit pollutants such as CO, carbon dioxide, sulfur oxides, particulates, oxides of nitrogen, and volatile organic hydrocarbons. Vehicle emissions would be short-term and localized, and thus would be expected to have a negligible impact on air quality. Vehicle and equipment emissions would be relatively small and would not exceed NAAQS. Fugitive dust could be created during project site preparation including road work, on-site travel, and soil disrupting operations. Activities could increase dust and particulate levels on a temporary basis in a localized area. Overall, the air quality impacts would be negligible and no violations of air quality standards would be expected.

The Proposed Action is not in a non-attainment area, will not exceed NAAQS thresholds, and will not cause health and safety impacts. As such, air quality will not be discussed further in this EA.

3.3 Archaeological and Historical Resources

Cultural resources are defined by the BLM (BLM Manual 8100) as: "a definite location of human activity, occupation, or use identifiable through field inventory (survey), historical documentation, or oral evidence. The term includes archaeological, historic, or architectural sites, structures, or places with important public and scientific uses, and may include definite locations (sites or places) of traditional cultural or religious importance to specified social and/or cultural groups. Cultural resources are concrete, material places and things that are located, classified, ranked, and managed through the system of identifying, protecting and utilizing for public benefit described in this Manual series. They may be, but are not necessarily, eligible for the National Register." Historic property is a term used to describe a cultural resource that meets specific eligibility criteria (36 CFR 60.4) for listing in the NRHP. Cultural resources are a fragile, non-renewable resource, subject to impacts and degradation from many sources, both natural and human caused. The National Historic Preservation Act outlines the methods by which Federal agencies are to determine cultural resource significance and preservation requirements.

Native Americans have been living in the region for at least 12,000 years and likely longer. The project area is in the uplands on a divide between the Snake River and Pine Creek and extends into Pine Valley. The area offers a variety of habitats and resources used by Native Americans. Based on the known archaeological record, these included tool stone sources and a variety of plant and animal. Several tribes of the southern Columbia Plateau utilized the area during the Pre-contact and early historic period, including the Cayuse, Nez Perce, Umatilla, and Walla Walla.

Euro-Americans entered the general area in the early 19th-century. A fur trading expedition led by Wilson Hunt attempted to travel by canoe down the Snake River in 1811. Although unsuccessful, this early foray was soon followed by other trapping expeditions. Starting in the 1840s, thousands of immigrants traveled the Oregon Trail and its alternates through southern Idaho and points farther west. Euro-Americans did not enter the Pine Valley region until after the discovery of gold and silver in the early 1860s. In 1862, an emigrant party attempting to reach the diggings in what is now Baker City is credited with being the first Euro-Americans to pass through the project area. Farmers and ranchers, attracted to the abundant water resources in Pine Valley, began settling there in the early 1870s. Farming and ranching continue to be the dominant economic activity in the valley.

A cultural resources inventory was conducted for a portion of the line in 2010, and the remaining segment of the line and the expanded ROW areas in the summer of 2014. BLM is also required by NHPA and BLM Manual 8100 to assure that its actions and authorizations are considered in terms of their effects on cultural resources located on non-Federal lands. The extent of BLM's responsibility for identifying and protecting non-Federal cultural resources is limited by the degree to which BLM decisions determine or control the location of activities on non-Federal lands which could have effect on cultural resources (See BLM Manual section 8140.06D.) Surveys were conducted within the area of potential effect on BLM administered lands and private lands where permission was granted. Lands where access was not granted were analyzed using available public records to determine the potential for cultural resources to occur.

Surveys resulted in the identification of two prehistoric resources, one eligible (35BA331) and one unevaluated (35BA1264), which are located along the line.

In addition, a reconnaissance survey of architectural resources was done for historic homes, farms, and ranches along the route in the summer of 2014, with seven of those properties tentatively recommended eligible to the National Register of Historic Places. Four of these sites are in the Town site of Pine, and the other three are along the transmission line to the east of Pine.

3.4 Economic and Social Values

The Proposed Action is located within Baker County, OR. Baker County is located on the eastern edge of Oregon between Union County on the north and Malheur County to the south, both of which used to be part of Baker County. As of the 2010 census, the population was 16,134.

The closest town to the Proposed Action is Halfway, OR, which is situated approximately 1.5 miles to the northwest of the western extent of the Proposed ROW. As of the census of 2010, there were 288 people. The town has always been primarily a farming and ranching community. In 2001, the three largest employers in Halfway were the Pine Eagle School District, IPC, and the U.S. Forest Service, which combined to employ over 125 people. The median income for a household was $17,212, and the median income for a family was $27,813.

The Proposed Action will be completed either by IPC crews or an IPC designated contractor. No long-term increase in the local population is expected to occur as a result of implementation of the Proposed Action. During re-construction of the line, crew members will stay in surrounding hotels/motels or RV park. Income earned by the project construction workers is not expected to affect the annual per capita income levels. Construction of the proposed project would, however, stimulate the area's economy over the short term. Purchases for lodging and food and other spending by construction workers would create positive economic impacts.

The Proposed Action will not result in long-term changes/impacts to the economic and social values of Halfway and will not be discussed further in this EA.

3.5 Existing and Potential Land Uses

The existing transmission line crosses both private lands (approximately 4.25 miles) and BLM-managed lands (approximately 5.57 miles) within Baker County, OR. Existing land uses on BLM managed lands consists of mix rangelands currently under a grazing allotment (#03001). Existing land use on private lands primarily includes agricultural lands and some rural residential. IPC has existing private easements and a BLM ROW authorizing the transmission line.

The Proposed Action would utilize existing road ROW, existing private easements and BLM ROWs, and/or be placed immediately adjacent to other existing facilities. The Proposed Action would continue to occupy the existing 80-foot-wide ROW and would follow Sheep Mountain

Road and the Pine Telephone System buried underground fiber optic cable (ROW OR-56727) to IPC's Brownlee-Quartz 230kV Transmission Line (Line 903). The Proposed Action would then parallel the Line 903 ROW (OR-60931) down slope to structure 298 and then tie back into the existing ROW for Line 216. BLM authorization would be acquired for the existing and proposed roads on BLM managed lands that provide ingress/egress to the line, but this would not change existing use of the roads.

There would be no permanent changes in land use from the proposed action, and O&M activities would continue to occur entirely within the existing rights-of-way and on existing access roads and will not be discussed further in this EA.

3.6 Fisheries

The Proposed Action is proximate to and crosses several intermittent and perennial streams (e.g., Deer Creek, Four Mile Creek, and numerous unnamed tributaries) that provide fish habitat and discharge into bull trout critical habitat (e.g., Pine Creek, Clear Creek, and Snake River). However, the Proposed Action does not cross any perennial waterways on BLM administered lands. The Baker RMP states that occupied fish habitat within the Decision Area includes mostly perennial streams and some intermittent streams. However, in many areas, nearly the entirety of fish-bearing streams can be reduced to almost no flow during summer months (June - August). This was confirmed during the June 2014 survey of the transmission line as the intermittent streams were dry at the time of the survey.

Since the intermittent streams will most likely be dry during the construction of the Proposed Action (proposed September 2015) there is little potential for sediment laden material to reach any perennial waterway. Also future routine O&M activities that may occur when there is flowing water in these intermittent streams would not involve any proposed in-stream work and land shapes and existing vegetation would provide adequate buffers to help minimize and/or prevent sediment from being transported to these surface waters. ***As such, fisheries will not be discussed further in this EA.***

3.7 Floodplains

The Federal Emergency Management Agency identifies areas adjacent to rivers and streams that have a 1 percent chance of being flooded in a given year as 100-year floodplains. Floodplains can be biologically productive and are important for absorbing excess water during floods.

A review of Oregon's floodplain mapping was completed using the Federal Emergency Management Agency's (FEMA) Map Service Center website (http://msc.fema.gov). As referenced on the FEMA Federal Insurance Rate Map (FIRM), Baker County, Oregon and incorporated Areas, Panel Number 41001C 0295C and 41001C 0325C, revised June 3, 1988, the majority of the project corridor is within Zone X. Zone X is designated as "Areas determined to be outside the 0.2 percent annual chance (500-year) floodplain". While the majority of the corridor is within Zone X, portions of the Proposed Action crosses mapped floodplains (designated as Zone A) associated with Pine Creek and McMullen Creek and is proximate to mapped floodplains associated with the Snake River. Zone A is a special flood hazard area

subject to inundation by the 0.1 percent annual chance flood event (100-year flood). Zone A is identified as having "No base flood elevation determination."

The Proposed Action spans the mapped floodplains of Pine Creek and McMullen Creek and no transmission line structures are in these floodplains. No access road work would occur in the 100-year floodplains.

The Proposed Action will not affect floodplains and will not be discussed further in this EA.

3.8 T&E Plants

No threatened or endangered plant species listed under the Endangered Species Act were observed during the survey and through a BLM record search using geographic biotic observations (GeoBOB). ***As such, TEPCS plant species will not be discussed further in this EA.***

3.9 Special Status Plants

Additionally, there were no SSP species observed during the survey. However, given ROW soil types, SSP growth habits, and known distributions of SSPs, Snake River goldenweed (*Pyrrocoma radiata*) and cordilleran sedge (*Carex cordillerana*) were determined to have higher potential to occur within the ROW. ***As no SSP species were observed during the 2014 survey, analysis will be limited to habitat conditions in the project area for only Snake River goldenweed and cordilleran sedge.***

3.10 Invasive, Non-Native Species

Invasive plants and noxious weeds were inventoried within the proposed project area during the 2014 survey. There were 46 occurrences of noxious weed species covering a maximum of approximately 1.5 acres within the approximately 80 acre project area. These occurrences covered less than 2 percent of the project area and ranged in size from a single plant to less than 0.5 acre, with the majority of the occurrences covering less than 0.01 acre. The occurrences included; rush skeletonweed (24 occurrences), field bindweed (13 occurrences), houndstongue (1 occurrence), diffuse knapweed (2 occurrences), and Scotch thistle (6 occurrences). Cheat grass, chicory, medusahead rye, moth mullein, and common mullein, invasive plant species, are also known to occur throughout the project area (IPC 2014).

3.11 Vegetation

On June 24-26, 2014, an IPC biologist conducted pedestrian surveys along the existing powerline ROW, the proposed reroute, and the associated service roads. The objective of the survey was to document any occurrences of SSP species and/or their habitat within the project area. All vegetative communities, habitat type and quality, were also recorded. The results of the investigation including a complete vegetation species list are detailed in the *"Duke-Halfway 69 kV Transmission (Line 216) ROW OR-05129 Special-Status Plant and Wildlife Survey Report"*.

As referenced in the survey report, the vegetation observed along Line 216 was substantially different than was indicated by the Gap Analysis Program (GAP) vegetation cover-type spatial data (USGS 2010). All of the expected big sagebrush shrubland, as indicated by GAP data, in the survey area was found to be occupied by graminoids, primarily cheat grass, medusahead rye, and bulbous bluegrass. This accounted for approximately 73 percent of the project area. Only the eastern extent of the project area (from Round Mountain toward Brownlee Dam), approximately 27 percent of the project area, is dominated by bluebunch wheatgrass, and Sandberg's bluegrass. No section of the existing line or proposed reroute is characterized by a shrub community.

3.12 T&E Wildlife

A review of the USFWS IPaC website (http://ecos.fws.gov/ipac/) shows that there is only one federally threatened species, bull trout, which may be affected by the Proposed Action. The Proposed Action is not located within bull trout critical habitat. However, the Proposed Action is proximate to and crosses several intermittent and perennial streams (e.g., Deer Creek, Four Mile Creek, and numerous unnamed tributaries) that provide fish habitat and discharge into bull trout critical habitat (e.g., Pine Creek, Clear Creek, and Snake River). The Proposed Action does not cross any perennial waterways on BLM administered lands. Since the streams that are located on BLM administered lands and are crossed by the Proposed Action do not flow year round and would most likely be dry during the construction of the Proposed Action (proposed September 2015) there is little potential for the Proposed Action to impact bull trout critical habitat. ***As such, TEPCS wildlife species will not be discussed further in this EA.***

3.13 Special Status Wildlife

The ORBIC and INHP show multiple occurrences of SSW species within several miles of the Proposed Action. Numerous golden eagle occurrences are proximate to the Proposed Action, the closest being two and a half miles to the southwest of Line 216. There are several bald eagle occurrences near the Proposed Action, the closest being approximately two and a half miles to the north of Line 216. The likelihood of bald eagles occurring near Line 216 is greatly increased by the proximity to the Snake River and the habitat quality and prey availability it provides. However, there are not known bald or golden eagle nest sites within the project area. There are no large trees and no cliff sites that would support nesting eagle pairs. Nesting habitat for eagles, while unlikely, would be limited to the existing/proposed transmission structures. The project area would primarily provide foraging habitat and structures would provide roosting and resting during foraging activities.

No occurrences of grasshopper sparrow are documented proximate to Line 216 and there are limited areas within the Baker Resource Area that would provide adequate habitat for this species (Baker RMP). However, there is a moderate possibility that this species could utilize portions of the low quality grasslands that are proximate to the Proposed Action.

The Proposed Action does not occur in occupied greater sage-grouse habitat and the nearest occupied lek is approximately thirteen miles to the southwest.

There have been recent wolves/new pack that have been documented by the Oregon Department of Fish and Wildlife (ODFW) in the project area.

3.14 Species of Local Importance (Big Game – Mule Deer, Pronghorn antelope, Elk, Rocky Mountain bighorn)

Mule deer, Pronghorn antelope, and Rocky Mountain elk were also observed during the 2014 survey and the proposed project area is located in critical winter range for these species. Mule deer, pronghorn antelope, and Rocky Mountain elk are widely distributed throughout much of Baker County and occur in a variety of habitats. Most winter concentration areas occur at lower elevations in milder, relatively snow-free locations. Another big game species that may inhabit the area are Rocky Mountain bighorn sheep. Requisite components of Bighorn Sheep habitat are visibility, escape terrain, and abundant continuous forage. Open areas on rocky slopes, ridges, rimrocks, cliffs, and canyon walls with adjacent grasslands or meadows, but few trees, provide those requisites and form the primary habitat of this species. Existing populations of bighorns in the Baker Resource Area are the result of relocations and currently occur within Burnt River canyon and along the Snake River. However, following a pneumonia outbreak in 1999, the bighorn sheep (Sheep Mountain herd, which once numbered over 80 individuals) that utilized lands proximate to the proposed project area has dwindled to fewer than 5 individuals. The ODFW removed the remaining members of the Sheep Mountain herd in 2014 in an effort to protect other bighorns (e.g., Lookout Mountain herd) from potential exposure to the bacterial pneumonia and as a prelude to re-establishing a new self-sustaining population. The ODFW plans to re-establish the Sheep Mountain herd by transplanting bighorn sheep from the adjacent Lookout Mountain herd. However, this has been delayed because domestic sheep graze private lands proximate to the proposed project area and can transmit diseases to bighorns thus limiting the success of re-establishment.

3.15 Migratory and Neotropical Land birds

Executive Order 13186, signed January 10, 2001, lists several responsibilities of Federal agencies with respect to conservation of migratory birds and their habitats. Based on review of the list of neotropical migratory bird species likely to occur in the Decision Area, the results of the IPaC data search (http://ecos.fws.gov/ipac/), the results of the 2014 survey, and species habitat requirements, the proposed project area likely provides suitable habitat for nesting, foraging, and resting for the following migratory and neotropical landbirds as they pass through on their yearly migrations. These species include: bald eagle, golden eagle, red-tailed hawk, Swainson's hawk, American kestrel, burrowing owl (*Athene cunicularia*), short-eared owl *(Asio flammeus)*, turkey vulture (*Cathartes aura*), killdeer (*Charadrius vociferus*), long-billed curlew, mourning dove (*Zenaida macroura*), western kingbird, loggerhead shrike, cliff swallow, sage thrasher, Brewer's sparrow, lark sparrow, grasshopper sparrow, Brewer's blackbird, and western meadowlark.

3.16 Wildlife

As referenced in the *"Duke-Halfway 69 kV Transmission (Line 216) ROW OR-05129 Special-Status Plant and Wildlife Survey Report"* grassland habitat is dominant throughout the proposed

project area and surrounding environs. Based on the observed habitat and the results of the 2014 survey of the proposed project area, the following wildlife species may utilize the proposed project area: chukar, red-tailed hawk, lark sparrow, horned lark, Brewer's blackbird, American kestrel, bald eagle, golden eagle, cliff swallow, grasshopper sparrow, spotted towhee, rock wren, western meadowlark, western kingbird. Additional wildlife species that may inhabit the project area (based on observed habitat conditions) are anticipated to be generalist species that are able to thrive in a wide variety of environmental conditions and make use of a variety of different resources, such as various rodents, and passerine avian species that are tolerant of frequent human activity.

3.17 Soil Resources

According to the U.S. Department of Agriculture (USDA), Soil Conservation Service (SCS) [now the Natural Resources Conservation Service (NRCS)] Soil Survey of Baker County area, Oregon, ten soil units were identified as occurring within the ROW. The soil units are mostly comprised of silt loam and clay loam with various amounts of substrate all above layers of weathered bedrock. The slope associated with soil types varies from 2-70% slope, with the majority being 2-12% slope (IPC 2014).

3.18 Range Resources

The project area is on land designation as mixed rangeland and is within the Pine Valley grazing allotment (#03001). This allotment encompasses 25,143 acres of BLM managed lands and 7,268 acres of other lands. This allotment is under the "Improve" management category (I). Category I allotments are allotments where current livestock grazing management or level of use on public land is, or is expected to be, a significant causal factor in the non-achievement of land health standards, or where a change in mandatory terms and conditions in the grazing authorization is or may be necessary (Baker RMP).

The existing transmission line ROW encompasses approximately 0.21 percent of the BLM managed allotment. Given the small percentage of the ROW within this allotment, the Proposed Action and the No-Action Alternative are not anticipated to further effect the overall land health standard. ***As such, it will not be discussed further in the EA.***

3.19 Recreational Use

The project falls within portions of the Snake River Breaks Special Recreation Management Area (SRMA). A SRMA is an area where recreation is one of the principal management objectives, where intensive recreation management is needed, and where more than minimal recreation-related investments are required. The Snake River Breaks SRMA consists of a river and upland recreation management zone (Baker RMA). In the River Zone, visitors engage in day or overnight river/reservoir based recreation opportunities such as fishing, boating, day-use, camping, hiking and driving for pleasure in a scenic river canyon environment. In the Upland Zone, visitors engage in dispersed day use and overnight camping, upland bird and big game hunting, hiking, mechanized biking, horseback riding, and seasonal Class I, II and III motorized use activities.

This proposal will not interfere with recreational opportunities present in the project area. Historically there have been no known use/user conflicts, visitor health and safety issues, or recreation related impacts associated with the transmission line. Therefore no long-term direct or indirect impacts to recreational use associated with the project are anticipated. ***As such, Recreational use will not be discussed further in this EA.***

3.20 Tribal Treaty Rights and Interests

The Nez Perce were one of the aboriginal inhabitants that had tribal lands in northeast Oregon and they retain aboriginal rights and/or interests in the area. The current project area is within lands ceded to the United States in an 1855 treaty with the Nez Perce. Article 3 of this treaty allowed:

The exclusive right of taking fish in all the streams where running through or bordering said reservation is further secured to said Indians: as also the right of taking fish at all usual and accustomed places in common with citizens of the territory, and of erecting temporary buildings for curing, together with the privilege of hunting, gathering roots and berries, and pasturing their horses and cattle upon open and unclaimed land.

BLM considers off-reservation treaty-reserved fishing, hunting, gathering, and similar rights of access and resource use on the public lands it administers for all tribes that may be affected by a proposed action.

The proposed project would have no effect on the tribes' access to use the area to exercise their treaty rights and would have no known effect on resources they use for traditional purposes. ***As such, it will not be discussed further in the EA.***

3.21 Visual Resources

The BLM has established the Visual Resource Management (VRM) system to protect the scenic value of public lands that are within its jurisdiction. The VRM system provides for management of visual resources to prevent undue degradation and that the visual value of the BLM lands will be considered whenever any physical actions are proposed. The degree of alteration to the normal landscape will be guided by the criteria established for the four VRM classes as outlined in BLM Manual 8400 and the VRM classes will be managed as defined in the RMP.

The project area is within a VRM Class II visual resource area. The objective of this class is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. The VRM II classification associated with the project area at the time of designation included the existing impacts such as, the presence of existing transmission lines, fences, spring developments, roads, primitive roads or trails (including access and service roads), and scattered development (e.g., Brownlee Dam, Duke Substation). These developments are small in scale on the landscape and do not attract attention of the casual observers. The landscape views, as well as the views of existing development within this area, are most apparent from intermittent locations along the Sheep Mountain Road.

3.22 Wastes, Hazardous and Solid

Small amounts of waste fuel may be generated by the proposed project. Typical construction wastes may include fuel (gasoline or diesel), and motor and lubricating oils. Surface contamination could occur, resulting from accidental spills of petroleum and other potentially hazardous materials used during the construction activities.

Rebuilding the existing transmission line would also create construction wastes that would require disposal. All solid wastes would be removed from the sites and disposed in an approved manner. All refueling of equipment would occur outside of RCAs. Oils and fuels would not be dumped along the line onto the ground or into streams. Oils or chemicals would be containerized and disposed in an approved and licensed facility for disposal. Construction practices would comply with all applicable federal, state, and local laws and regulations concerning the use, storage, transportation and disposal of hazardous materials. Therefore there should be no long-term direct or indirect impacts associated with the project. ***As such, hazardous waste will not be discussed further in this EA.***

3.23 Water Quality (Surface and Ground)

The CWA requires that states restore and maintain the chemical, physical, and biological integrity of the nation's waters. States must adopt water quality standards necessary to protect fish, shellfish, and wildlife, while providing for recreation in and on the waters whenever possible. The Oregon DEQ is responsible for regulating water quality in the State of Oregon. Water quality standards and beneficial uses have been designated by the DEQ and are employed to determine if specific water resources have been adversely impacted by pollutants.

Surface Water

Line 216 crosses several streams (e.g., Pine Creek, Sag Creek, Deer Creek, Four Mile Creek, and numerous unnamed tributaries) and is proximate to Brownlee Reservoir (Snake River). Pine Creek (LLID 1168539449735), Deer Creek (LLID 1170262448679), and Brownlee Reservoir (LLID 1190296461886) are included on Oregon's 303(d) List of Water Quality Limited Water bodies (i.e., 303(d) list). Sediment and temperature are the listed pollutants of concern that have the potential to be affected by the Proposed Action.

The Proposed Action would result in varying amounts of ground disturbance and has the potential to increase runoff, sediment transport, and water quality impacts over the short-term until the site has been stabilized or reclaimed. However, implementation of the environmental protection measure listed in the POD would minimize total disturbance, prevent excessive erosion, and control runoff over the long-term. The line spans these streams and the Proposed Action will not involve any in water work. Additionally, land shapes and existing vegetation provide adequate buffers to help minimize and/or prevent sediment from being transported to these surface waters. Moreover, there would be no decrease in the amount of shade provided to the stream or stream bank stability, so stream temperatures would not increase over current conditions. ***Since the Proposed Action would have little potential to adversely affect the quality of surface waters in the project area it will not be discussed further in the EA.***

Ground Water
The project area is located in the Brownlee Reservoir watershed (17050201). The watershed encompasses approximately 828,843 acres. Impacts on groundwater from project activities are expected to be negligible. The proposed project could affect groundwater quality through soil compaction, increasing surface runoff to streams, and possibly reducing infiltration capacity. However, the ratio of the potential impact area to the area available for groundwater recharge is extremely small. Any impacts would be localized, short-term, and likely would not exceed state or Federal water quality criteria. ***Therefore, ground water quality will not be discussed further in this EA.***

4.0 ENVIRONMENTAL CONSEQUENCES

This chapter identifies and evaluates the potential impacts of the Proposed Action and the No Action Alternative on access, cultural resource, vegetation, SSP species, invasive/non-native species, wildlife, big game species, SSW species, migratory and neotropical land birds, soils, and visual resources. The EPMs specified in Section 4 of the POD (Appendix A) have been developed to avoid or reduce impacts of the Proposed Action, where possible, and to compensate for impacts where necessary. Potential effects of the No Action Alternative also are discussed for each resource.

In order to describe the potential impact on resources, the following thresholds were used to describe the degree, level, or magnitude of the effect:

- **No effect**: No discernible effect.
- **Negligible**: The impact is barely detectable and/or would result in no measureable or perceptible change to the resource of interest.
- **Minor**: The impact is slight but detectable and/or would result in small but measurable changes to the resource.
- **Moderate**: The impact is apparent and/or would be detectable by casual observers. Potential changes or effects on the resource generally would be localized and short-term.
- **Major**: The effect is readily apparent and would result in potentially substantial changes to the character of the resource. Impacts generally would be long-term and/or extend over a wide area.

The potential impact, or effect, is influenced by the duration the effect would last. For the purposes of this EA, short term (temporary) impacts are defined as those that would last for three or fewer years (generally during the construction and rehabilitation period). Long term impacts are those that would last for more than three years.

4.1 Access

Proposed Action
The approximately 11 miles of existing access roads (primarily Sheep Mountain Road) and the approximately 7.4 miles of existing/proposed service roads consist of a mix of narrow,

unimproved roads and two-track roads. IPC currently uses existing roads and overland travel routes that occur within and outside of the existing ROW and proposes to continue using these routes, and to improve and/or construct additional travel ways to ensure continued access for the rebuild and long-term maintenance needs. In most cases, the routes proposed for use by IPC currently exist; however, IPC also proposes to improve approximately 1.0 miles (1.68 acres) of existing service road, construct approximately 1.04 miles (1.76 acres) of new service road, and designate approximately 2.35 miles (3.99 acres) overland travel routes. Any roads that would occur outside of the proposed 80-foot-wide ROW would be authorized as part of the service road network under the amended grant.

In most cases, the roads would be left as close to an undeveloped nature (i.e., primitive road or trail) as possible without creating environmental degradation (e.g., erosion or rutting from poor water drainage). Equipment to perform the required road maintenance would include hand tools (e.g., chainsaws, etc.), track driven machines (bulldozers and graders) and crew-haul vehicles (e.g., 4-wheel drive pickup and/or ATV and UTVs). Roads would be opened/cleared for use by trucks transporting materials, excavators, drill rigs, bucket trucks, pickup trucks, and crew-haul vehicles.

Although the sole purpose of the service roads is to provide IPC access to operate and maintain Line 216, new/improved service roads and overland travel routes could provide public access to BLM administered lands that do not have road access under the existing route network. New or improved roads, primitive roads or trails would thereby increase the opportunities for public land recreation and use through these access routes. Adverse impacts from the improved or new access could occur in the form of dumping of trash and unauthorized off-road motorized travel in public lands surrounding new service roads. However, these impacts would be minor as the new roads would primarily be short in length and provide access solely to the Line 216 ROW and would not provide route connectivity to existing road networks. Additionally, access roads generally exist where new service roads would be constructed. The construction of approximately 1.04 miles of new service road, and designation of approximately 2.35 miles of overland travel routes under the Proposed Action would not adversely impact access in the area, nor would the approximately 2,900 linear feet of existing service roads, on the eastern extent of the line, that would be abandoned and restored as necessary once the line is rerouted.

No Action Alternative

IPC would continue to use the existing access/service roads that provide ingress/egress to the transmission facility. However, since these roads are not part of the current authorization, IPC would not be authorized to maintain these roads. Therefore, current access networks of the area would continue and there would be no adverse additional impacts to the project area.

4.2 Archaeological and Historical Resources

Proposed Action

Only one cultural resource (35BA331) on BLM administered lands was recommended as eligible to the NRHP and is considered under section 106 of the NHPA of 1966. This site would be avoided during construction of the Proposed Action and the proposed rebuild would completely span site 35BA331. IPC would remove structure 64 (cut-off at ground level) which is

approximately 60 feet west of the delineated boundary of 35BA331. Project activities would be confined to the existing footprint at the base of structure 64 and are not anticipated to impact this site. Avoidance flagging and monitoring, by a qualified archaeologist, would occur at site 35BA331 to ensure the site is not damaged during the removal of structure 64 and the line rebuild. This would ensure that the project would have no adverse effect to this cultural resource.

An existing 2-track road travels through site 35BA331 and 35BA1264. IPC would continue to use this road to access the line during the proposed rebuild and O&M activities. Since this is an existing road, travel along the road should not pose an adverse effect to the cultural site. IPC would not maintain/improve the road and would avoid travel on the road during wet conditions that would create ruts greater than 3 inches in depth.

There is no potential for direct physical impact to any of the historic architectural resources. Line 216 and predecessor lines and distribution have been in place for roughly 97 years, so the rebuild of the line would not be considered an impact to the visual setting.

Overall, under the Proposed Action there would be no adverse impacts to cultural resources as long as the EMPs specified in Section 4.5 of the POD (Appendix A) are followed.

No Action Alternative

Under the No Action Alternative, there would be no construction and therefore no new disturbance to prehistoric or historic archaeological sites or above-ground historic resources. However, the No Action Alternative would have an effect on cultural resources due to disturbance from ongoing O&M activities that would include transmission structure and possibly conductor repairs and replacements, vegetation management activities, and associated vehicular and equipment use. This disturbance occurs under existing conditions and would continue with the no action alternative. O&M would likely increase to some degree as the transmission line ages and as emergency repairs are needed more frequently. IPC would use existing access and service roads for ongoing O&M activities; however, similar to the Proposed Action, improvements and new roads/routes would be needed to provide access to structures without adequate or current access. IPC would need to apply for and receive Agency approval if any road work was necessary to conduct maintenance activities. Cultural resources for the most part would continue to be avoided during maintenance activities. However, the inevitable need to replace Structure 64 would eventually lead to testing and possible mitigation at site 35BA331. Best management practices would be used to avoid significant impacts to the remaining eligible sites along the line.

4.3 Special Status Plants

Proposed Action

The Proposed Action would not displace any known sites of SSPs. There were no SSP species observed during the 2014 survey and through a BLM record search using geographic biotic observations (GeoBOB). However, given ROW soil types, SSP growth habits, and known distributions of SSPs, Snake River goldenweed and cordilleran sedge were determined to have higher potential to occur within the ROW.

Snake River goldenweed grows on rolling hills, slopes, and ridges in big sagebrush and bunchgrass plant communities at elevations ranging from 2,100 to 6,000 feet. Soils in these areas are somewhat calcareous and often overlay a layer of shale. Cordilleran sedge is often found on naturally disturbed, rocky slopes with organic layer and leaf litter in mesic mixed forests, or disturbed, open, grassy slopes at elevations ranging from 1,640 to 7,870 feet.

While grassland habitat is dominant throughout the entire ROW, no section of the existing line or proposed reroute is characterized by a shrub community. As the ROW corridor and surrounding environs do not exhibit the necessary habitat (e.g., big sagebrush) to sustain Snake River goldenweed, the Proposed Action would have no effect to Snake River goldenweed habitat.

Implementation of the Proposed Action would result in the disturbance of approximately 10.98 acres of grassland habitat. The amount of habitat disturbed would be a small percentage of the habitat available to cordilleran sedge within and immediately adjacent to the project corridor. As such, negative impacts from loss of habitat are expected to be negligible to minor and short-term and would not jeopardize the long-term survival of this species.

No Action Alternative

As O&M activities would continue, impacts are expected to be the same as the Proposed Action (no effect on Snake River goldenweed habitat; negligible to minor and short term for cordilleran sedge). While initial ground disturbance would be reduced upfront, as the line would not be rebuilt, ongoing maintenance would overtime impact the same overall area, with the exception of possibly the 0.89 acres needed for pulling/tensioning sites. Moreover, O&M would likely increase to some degree as the transmission line ages and as emergency repairs are needed more frequently. As the facility deteriorates and the need for maintenance becomes more frequent, the number of times maintenance crews would need to access the facility would increase and therefore the risk to SSP species or habitat would likely increase.

4.4 Invasive, Non-Native Species

Proposed Action

The Proposed Action would result in approximately 10.98 acres of disturbance to grassland habitat (mostly dominated by non-native species). Much of this disturbance (with the exception of a 20-foot-radius (1,256 square feet) at the structure base to protect the wood structures from wildfires) would be temporary and after construction, the areas would be reseeded in accordance with Section 5 of the POD (Appendix A). Project activities would likely increase the spread of noxious weeds and invasive species in the ROW and surrounding lands due to transport of seeds and increase of invasion potential following soil disturbance. Seeds of noxious weeds may be transported by being lodged directly in vehicles or in mud attached to vehicles. Soil disturbance and removal of vegetation increases the susceptibility of an area to colonization by invasive species (Hobbs and Huenneke 1992).

As previously referenced in Section 2.2.6 and as specified in Section 4.3.1 of the POD (Appendix A), IPC will include EPMs to control the spread of noxious weeds (e.g., clean all equipment, promptly reseed disturbed areas). With the implementation of the EPMs, risk of

noxious weed and invasive species spread would be negligible and long term on surrounding non-native vegetation communities

No Action Alternative
As O&M activities would continue, impacts are expected to be the same as the Proposed Action (negligible, long term). While initial ground disturbance would be reduced upfront, as the line would not be rebuilt, ongoing maintenance would overtime impact the same overall area, with the exception of possibly the 0.89 acres needed for pulling/tensioning sites. Moreover, O&M would likely increase to some degree as the transmission line ages and as emergency repairs are needed more frequently. As the facility deteriorates and the need for maintenance becomes more frequent, the number of times maintenance crews would need to access the facility would increase and therefore the risk of spread of invasive and non-native species would likely increase.

4.5 Vegetation

Proposed Action
Potential impacts to vegetation would occur from pole replacement activities, conductor installation, improvement of service roads, and O&M activities. Permanent ground disturbance for each structure would consist of a 20-foot-radius (1,256 square feet) area kept clear of vegetation to protect the wood structures from wildfires. Based on a total of 70 structures to be replaced on BLM managed lands, this would result in a total area of approximately 2.0 acres. Work pads would be created in areas where a flat landing is necessary for safe set-up and operation of construction equipment and would be approximately 30-feet by 60-feet (1,800 square feet). 16 work pads are proposed on BLM managed lands and would result in approximately 0.66 acres of disturbance. Pulling/tensioning sites would be created to pull the conductor tight. Pulling/tensioning sites may be cleared of vegetation and graded to allow for safe operation of the pulling and tensioning equipment. This would result in approximately 0.89 acres of disturbance on BLM managed lands. Work pads and pulling/tensioning sites would be temporary. Service road improvements would result in approximately 1.0 miles (1.68 acres) of ground disturbance. Construction of new service roads would result in approximately 1.04 miles (1.76 acres) of new ground disturbance. Designated overland travel routes would result in approximately 2.35 miles (3.99 acres) of disturbance.

The removal of approximately 10.98 acres of vegetation from the Proposed Action would have a long term negligible direct impact on vegetation. This determination is based on the relatively small area affected (approximately 13.7 %) compared to the approximately 80 acre project area. Less than 3 acres of native vegetation would be disturbed within the eastern extent of the project area (from Round Mountain toward Brownlee Dam), which accounts for approximately 27 percent of the entire project area and is the only portion of the project area dominated by native species. Much of the project area (approximately 73 %) is dominated primarily by non-native species.

No Action Alternative
Impacts are expected to be the same as the Proposed Action (negligible, long term), due to disturbance from ongoing O&M activities that would include transmission structure and possibly

conductor repairs and replacements, vegetation management activities, and associated vehicular and equipment use. This vegetation disturbance occurs under existing conditions and would continue with the no action alternative. While initial ground disturbance would be reduced upfront, as the line would not be rebuilt, ongoing maintenance would overtime impact the same overall area, with the exception of possibly the 0.89 acres needed for pulling/tensioning sites. Moreover, O&M would likely increase to some degree as the transmission line ages and as emergency repairs are needed more frequently. IPC would use existing access and service roads for ongoing O&M activities; however, similar to the Proposed Action, improvements and new roads/routes would be needed to provide access to structures without adequate or current access. As the facility deteriorates and the need for maintenance becomes more frequent, the number of times maintenance crews would need to access the facility would increase and therefore the risk of ongoing disturbance to existing/reestablished vegetation would likely increase.

4.6 Special Status Wildlife

Proposed Action

Loss of eagle foraging habitat from the Proposed Action would be approximately 10.98 acres. Much of this disturbance (with the exception of a 20-foot-radius (1,256 square feet) at the structure base to protect the wood structures from wildfires) would be temporary and after construction, the areas would be reseeded in accordance with Section 5 of the POD (Appendix A). The disturbance to available foraging habitat would be considered a negligible impact because this amount of habitat loss would represent a small fraction of the total habitat available for these species in the Baker Resource Area. Due to the limited amount of habitat being impacted, the potential population index is not expected to change as a result of the Proposed Action. Overall, the impact to bald eagle, and golden eagle foraging habitat would be considered minor.

Human presence and noise associated with construction activity may also temporarily reduce the attractiveness of this area as foraging habitat for bald eagle, and golden eagle. As construction activities in this area are expected to occur over a short duration and would be limited to those immediate areas where activities are occurring, impacts are anticipated to be negligible. Implementing the EPMs specified in Section 4 of the POD (Appendix A) and compliance with MBTA spatial and temporal restrictions would further minimize impacts during construction and O&M activities and help protect bald eagle, and golden eagle, as well as other migratory raptors.

No occurrences of grasshopper sparrow are documented proximate to Line 216 and there are limited areas within the Baker Resource Area that would provide adequate habitat for this species (Baker RMP). However, there is a moderate possibility that this species could utilize portions of the low quality grasslands within and proximate to the Proposed Action. As such, the approximately 10.98 acres of disturbance to grassland vegetation removes potential habitat of this inconspicuous grassland sparrow. While the Proposed Action could negligibly and temporarily alter habitat quality within portions of the project area, it would not render habitat unsuitable for this species or other sensitive grassland species with the potential to occur in the project area. If grasshopper sparrow would be present within or proximate to the project area during the Proposed Action, construction activity and noise are expected to cause temporary displacement of individuals. However, construction activities are temporary and therefore

impacts from displacement are expected to be negligible and short term and individuals would return once project activities have ceased.

The Proposed Action does not occur in occupied greater sage-grouse habitat and the nearest occupied lek is approximately thirteen miles to the southwest. Therefore, the Proposed Action would not result in impacts to this species or its habitat.

The ODFW has documented gray wolf activity in the project area. The gray wolf is most likely to utilize the project area during the late fall and winter when migrating populations of elk and mule deer are present. Human presence and noise associated with construction activity may temporarily reduce the attractiveness of this area as foraging habitat for gray wolf and some habitat utilized by the wolf may be disturbed; however, the wide-ranging nature of this species coupled with the habitat available for these species in the Baker Resource Area would reduce the severity of the impact. As such, impacts are anticipated to be negligible and short-term.

No Action Alternative

The No Action Alternative would have a short term negligible effect on SSW species due to disturbance from ongoing O&M activities that would include transmission structure and possibly conductor repairs and replacements, vegetation management activities, and associated vehicular and equipment use. This disturbance occurs under existing conditions and would continue with the no action alternative. O&M would likely increase to some degree as the transmission line ages and as emergency repairs are needed more frequently. IPC would use existing access and service roads for ongoing O&M activities; however, similar to the Proposed Action, improvements and new roads/routes would be needed to provide access to structures without adequate or current access. IPC would need to apply for and receive Agency approval if any road work was necessary to conduct maintenance activities. As the facility deteriorates and the need for maintenance becomes more frequent, the number of times maintenance crews would need to access the facility would increase and therefore the frequency of impacts likely would increase.

4.7 Species of Local Importance (Big Game – Mule Deer, Pronghorn antelope, Elk, Rocky Mountain bighorn)

Proposed Action

Impacts that could directly affect big game species known to occur in the project area are mortality due to construction vehicle traffic and/or construction activities, displacement due to human and construction presence, and degradation of habitat as a result of project disturbance.

Big game species typically evacuate suitable habitats to avoid human activity, depending on the duration and severity of the disturbance. Big game displacement from occupied habitats on and near the Proposed Action would be dependent on the time of year and duration of construction activities at that site. Duration of construction activities at any one site is anticipated to be temporary; however, this could be dependent upon site conditions. The effects of displacement would be negligible for these wide-ranging species, given the extent of undisturbed and similar habitat available in surrounding areas and it is anticipated that they would likely return when construction in that area has ceased.

The total acreage of habitat removed as a result of the Proposed Action would be negligible in relation to the amount of similar habitat available. Since vegetative loss from the proposed action is expected to be negligible and the majority of disturbed areas (with the exception of the 20-foot-radius at the base of the structures) will be reseeded, only a small amount of winter range for big game is expected to be impacted. As such, impacts to big game species habitat would be negligible and short-term.

No Action Alternative

Impacts would be the same as those for construction of the Proposed Action (negligible and short term), due to disturbance from ongoing O&M activities that would include transmission structure and possibly conductor repairs and replacements, vegetation management activities, and associated vehicular and equipment use. This disturbance occurs under existing conditions and would continue with the no action alternative. O&M would likely increase to some degree as the transmission line ages and as emergency repairs are needed more frequently. IPC would use existing access and service roads for ongoing O&M activities; however, similar to the Proposed Action, improvements and new roads/routes would be needed to provide access to structures without adequate or current access. IPC would need to apply for and receive Agency approval if any road work was necessary to conduct maintenance activities. As the facility deteriorates and the need for maintenance becomes more frequent, the number of times maintenance crews would need to access the facility would increase and therefore the frequency of impacts likely would increase.

4.8 Migratory and Neotropical Land birds

Proposed Action

The Proposed Action would result in approximately 10.98 acres of disturbance to grassland habitat. Much of this disturbance (with the exception of a 20-foot-radius (1,256 square feet) at the structure base to protect the wood structures from wildfires) would be temporary and after construction, the areas would be reseeded in accordance with Section 5 of the POD (Appendix A). Construction activities and removal of vegetation could disrupt breeding behavior or destroy occupied sites. In addition, construction activity and noise is expected to cause displacement of individuals from the proposed project area and immediately adjacent habitats. However, construction activities are temporary and therefore impacts from displacement of birds are expected to be negligible and short term.

The Proposed Action would only slightly increase the risk for line collision as the majority of the line would be rebuilt in the existing ROW with the same type of structures. However, the proposed reroute at the eastern extent of the project area and the slightly taller structures could increase and contribute to potential bird strikes along the line. Electrocution risk would not increase as the new structures would be built to raptor-safe standards specified in the APLIC, 2006 Suggested Practices for Avian Protection on Power Lines and in accordance with IPC's Avian Protection Policy.

Through the implementation of the EPMs specified in Section 4 of the POD (Appendix A), compliance with MBTA spatial and temporal restrictions, and the current distribution of raptors and their habitat, the risk of impacts on migratory and neotropical landbirds during construction and maintenance activities would be negligible.

No Action Alternative
Impacts would be the same as those for construction of the Proposed Action (negligible, short term), due to disturbance from ongoing O&M activities that would include transmission structure and possibly conductor repairs and replacements, vegetation management activities, and associated vehicular and equipment use. This disturbance occurs under existing conditions and would continue with the no action alternative. O&M would likely increase to some degree as the transmission line ages and as emergency repairs are needed more frequently. IPC would use existing access and service roads for ongoing O&M activities; however, similar to the Proposed Action, improvements and new roads/routes would be needed to provide access to structures without adequate or current access. IPC would need to apply for and receive Agency approval if any road work was necessary to conduct maintenance activities. As the facility deteriorates and the need for maintenance becomes more frequent, the number of times maintenance crews would need to access the facility would increase and therefore the frequency of impacts likely would increase.

4.9 Wildlife

Proposed Action
Implementation of the Proposed Action would result in the disturbance of approximately 10.98 acres of grassland habitat. Much of this disturbance (with the exception of a 20-foot-radius (1,256 square feet) at the structure base to protect the wood structures from wildfires) would be temporary and after construction, the areas would be reseeded in accordance with Section 5 of the POD (Appendix A). Impacts from loss of foraging and ground-nesting habitat around existing structures is expected to be minor and is unlikely to result in injury or death of wildlife. The amount of habitat disturbed would be approximately 13.7 percent of the habitat available to wildlife within the approximate 80 acre project area.

A temporary increase in noise during construction activities could result in moderate impacts on wildlife, if noise levels reduce the foraging effectiveness of adults or cause adults to disperse to other available habitat adjacent to the project area and abandon nest or den sites, thus leading to mortality of their young. However, construction activities would be temporary and it is anticipated that displaced species would likely return when construction in that area has ceased; therefore, impacts from displacement of wildlife would be short term.

Heavy equipment and vegetation removal activities could possibly kill or injure any less mobile species of wildlife that are in the area and unable to leave the area during these activities. However, given that these activities would typically be preceded by other human activities in the area, species that are inclined to leave the area such as birds and medium and large mammals, would probably do so. Species such as small mammals and reptiles that typically retreat to shallow burrows to escape danger would be most likely to suffer direct mortality. A minor increase in vehicle collisions could also result from construction-related traffic on existing roads. Overall, these impacts would be considered minor to moderate.

No Action Alternative

As O&M activities would continue, impacts are expected to be the same as the Proposed Action (minor to moderate and short term). While initial ground disturbance would be reduced upfront, as the line would not be rebuilt, ongoing maintenance would over time impact the same overall area, with the exception of possibly the 0.89 acres needed for pulling/tensioning sites. Moreover, O&M would likely increase to some degree as the transmission line ages and as emergency repairs are needed more frequently. As the facility deteriorates and the need for maintenance becomes more frequent, the number of times maintenance crews would need to access the facility would increase and therefore the risk of direct habitat loss and indirect impacts such as disturbance and displacement would likely increase. However, similar to the Proposed Action it is anticipated that displaced species would likely return when construction in that area has ceased.

4.10 Soil Resources

Proposed Action

Potential impacts to soils would occur from pole replacement activities, conductor installation, improvement of service roads, and O&M activities. Permanent ground disturbance for each structure would consist of a 20-foot-radius (1,256 square feet) area kept clear of vegetation to protect the wood structures from wildfires. Based on a total of 70 structures to be replaced on BLM managed lands, this would result in a total area of approximately 2.0 acres. Work pads would be created in areas where a flat landing is necessary for safe set-up and operation of construction equipment and would be approximately 30-feet by 60-feet (1,800 square feet). 16 work pads are proposed on BLM managed lands and would result in approximately 0.66 acres of disturbance. Pulling/tensioning sites would be created to pull the conductor tight. Pulling/tensioning sites may be cleared of vegetation and graded to allow for safe operation of the pulling and tensioning equipment. This would result in approximately 0.89 acres of disturbance on BLM managed lands. Work pads and pulling/tensioning sites would be temporary. After construction, the areas would be restored in accordance with Section 5 of the POD (Appendix A). Service road improvements would result in approximately 1.0 miles (1.68 acres) of ground disturbance. Construction of new service roads would result in approximately 1.04 miles (1.76 acres) of new ground disturbance. Designated overland travel routes would result in approximately 2.35 miles (3.99 acres) of disturbance. Maintenance of the project corridor would require incidental repairs to service roads and management of vegetation, which could cause localized soil disturbance. In most cases, operation and maintenance would have a minor direct impact on soils because the areas affected would be small, confined to the area of a particular maintenance action, and dispersed both in time and along the length of the corridor.

IPC would comply with Oregon DEQ construction stormwater regulations to minimize impacts from erosion and sediment migration. Additionally, disturbed areas (with the exception of a 20-foot-radius at the structure base to protect the wood structures from wildfires) would be restored in accordance with Section 5 of the POD (Appendix A). Therefore, the overall impact on soils from the Proposed Action is anticipated to be relatively minor with the greatest risk of erosion on steeper slopes. Because much of the Proposed Action crosses areas that have a low to moderate water erosion potential (Baker RMP) and land shapes and existing vegetation would provide

adequate buffers to help minimize and/or prevent sediment from being transported to surrounding surface waters, this risk should be minor in most areas.

No Action Alternative

Current levels of disturbance to soils associated with ongoing O&M activities for the existing transmission line would continue under the No Action Alternative. These maintenance activities would include transmission structure and possibly conductor repairs and replacements, vegetation management activities, and associated vehicular and equipment use. Under the No Action Alternative, these activities would continue to result in localized soil disturbance, soil compaction, erosion, and sedimentation transport to project vicinity streams.

Under the No Action Alternative, there would be a greater likelihood of failure of the existing transmission line due to its age and deteriorating condition. In the event of failures, emergency repairs would be required. Depending on the portion of the line requiring emergency repair, new impacts to soils could occur. New access routes may need to be utilized with little or no planning in their construction due to the emergency nature of the repairs. Because failures tend to occur during inclement weather when soils are more prone to erosion, emergency repair activities could increase the potential for erosion effects and sedimentation transport to project vicinity streams. It is expected that these impacts would be short term and would be reduced after repairs are completed.

4.11 Visual Resources

Proposed Action

Because this is a rebuild of an existing line, the level of change would be negligible to minor. Structure height would increase by 5-feet to 15-feet depending on terrain and sag requirements, but this is not expected to change the existing character of the area or to be readily apparent to the casual observer. Construction-related visual impacts would be caused by vegetation removal, new and improved access and service roads, earthwork and grading scars, staging areas, heavy equipment tracks, construction personnel and vehicles, and basic color changes as a result of new poles which are darker than current faded poles. Cut and fill sections of roads on slope landforms will result in long-term scars within the viewshed that may alter the natural landscape character in some areas. However, the locations of these visual impacts are not in key viewing locations and techniques would be employed to reduce the long-term visual impact of the roads to the level where the associated disturbance would be subordinate to the surrounding landscape and would not attract the attention of the casual observer. Primarily, the existing roads were constructed following the landform features where possible to minimize the size of cuts and fills and to reduce visual impacts from earthwork. New roads would be similarly designed and constructed to continue to meet the requirements of the Class II visual resource management objectives of the area. Additionally, the remote setting and the topographic relief of the area will obstruct long-distance views of the proposed project as well as providing a backdrop that assists in absorbing project features in the area further reducing visual impacts. Moreover, the use of naturally occurring vegetation to reseed project related disturbance would also help to minimize both short and long-term visual impact of the Proposed Action over time. The visual effects

resulting from the presence of construction equipment and activities would be temporary. Overall, the impacts from the Proposed Project would be negligible to minor.

No Action Alternative
Impacts to visual resources would be similar to those for O&M activities under the Proposed Action. Impacts may occur as sections or individual structures are replaced through maintenance activities over time, however, these impacts would be intermittent and short term. Overall, impacts to visual resources of the area would be negligible.

5.0 CUMULATIVE IMPACTS ANALYSIS

The CEQ regulations for implementing NEPA require an assessment of cumulative effects in the decision-making process for federal projects. Cumulative effects are defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions" (40 CFR 1508.7).

5.1 Cumulative Effects Analysis Area

The Cumulative Effects Analysis Area (CEAA) considers that this Proposed Action is a site specific action where impacts to a number of affected resources are confined to the acreage described within the proposed ROW and associated access/service road network. The effects to access, cultural resources, vegetation, SSP species, invasive/non-native species, SSW species, soil resources, and visual resources, all having been analyzed in this document, would not occur beyond that area disturbed by the Proposed Action. This disturbance would occur by the activities resulting from the BLM approval to rebuild Line 216, authorize the existing and proposed road network that provides access into and along the transmission line ROW, and allow IPC to continue to operate and maintain the powerline. Other resources that are part of the affected environment, and that may be affected beyond the above-defined geographic area, are wildlife, migratory and neotropical landbirds, and big game species.

5.1.1 Current Conditions and Reasonably Foreseeable Future Actions

Current Conditions in the Project Area – The existing transmission line and associated access/service roads have been used and maintained for more than 50 years. Moreover, use of the existing roads, human activities, recreation, fires, livestock grazing, and other multiple use activities, to different degrees, have already degraded portions of the proposed project area and surrounding private lands. These activities, as well as other development activities, have changed and will continue to change land use and habitat quality/suitability in the project vicinity regardless of the Proposed Action.

Reasonably foreseeable projects in Project Area – The area proximate to the project site is rural and relatively undeveloped and limited development/activity is expected to occur adjacent to the

project corridor. With the exception of continued operation and maintenance (which are expected to continue into the foreseeable future) to keep Line 216 operable, livestock grazing, and recreational use activities, IPC is not aware of any formal proposals or any projects engaged in some permitting process within the project vicinity.

5.2 Cumulative Impacts – Resources

5.2.1 Access

There are numerous roads that provide ingress/egress to the public lands proximate to the Proposed Action from past and present actions. The Proposed Action would improve/maintain existing roads and increase the miles of roads in publicly managed lands. However, these new roads would primarily be short in length and provide access solely to the Line 216 ROW and would not provide route connectivity to existing road networks. Additionally, access roads generally already exist where new service roads would be constructed. The Proposed Action in conjunction with other past, present and reasonably foreseeable future actions would not be expected to contribute to cumulative effects on access within these public lands.

5.2.2 Archaeological and Historical Resources

Past and present actions and natural processes that have had an effect on the existing condition of cultural resources include: livestock grazing, wildfires, energy development, ROWs, recreational uses, motorized use, wind and water erosion, decay, vandalism and unauthorized collecting or excavation. Present and reasonably foreseeable future actions that affect cultural resources would be similar to the actions that have affected cultural resources in the past.

Impacts to 35BA331 and 35BA1264 from recreational use, grazing practices, and erosive forces, all unrelated to the Proposed Action, would continue to degrade the resources. Use of the existing 2-track road through the sites during construction of the Proposed Action and future O&M activities to the transmission line may also contribute incrementally, though in a minor to negligible way, because of existing disturbances created by the use of the 2-track dating back at least fifty years.

5.2.3 Special Status Plants

Cumulative impacts from utility infrastructure, road-building activities, livestock grazing, wildland fire, and recreational activities has changed the composition of vegetation in the project area. This shift away from native vegetation communities has cumulatively decreased necessary habitat (e.g., big sagebrush) for Snake River goldenweed in and adjacent to the project area. As such, project activities would have no effect on this SSP species or its habitat.

By removing vegetation along the existing and already disturbed transmission line ROW, the Proposed Action would contribute incrementally, though in a relatively minor way, to cumulative impacts to Cordilleran sedge habitat. However, implementation of the EPMs specified in Section 4 of the POD (Appendix A) would be expected to generally maintain the existing level of cumulative effects on this SSP.

5.2.4 Invasive, Non-Native Species

Past and present activities in the project vicinity have led to the cumulative widespread establishment of invasive species such as tumble mustard and cheatgrass and occurrences of several noxious weed species. Reasonably foreseeable future actions, such as ongoing line maintenance activities, livestock grazing, and recreational activities (e.g., ATV use) would continue this trend.

The Proposed Action would result in approximately 10.98 acres of disturbance most of which will occur in areas dominated by non-native annual grass. Therefore, the Proposed Action has the potential to increase the spread of weeds within the project area and poses a negligible risk of invasion by noxious weeds.

5.2.5 Vegetation

All of the expected big sagebrush shrubland, as indicated by GAP data, in the Project area was found to be occupied by graminoids, primarily cheat grass, medusahead rye, and bulbous bluegrass and no section of the existing line or proposed reroute is characterized by a shrub community. Moreover, the area is not currently meeting rangeland health standards.

Past wildland fires and past and present grazing practices, as well as road building, infrastructure development, and recreational use have resulted in a cumulatively significant change in the composition of vegetation in the project area and a shift away from native vegetation communities has already occurred. Reasonably foreseeable future actions, such as O&M activities to the transmission line, continued grazing, and recreation use, would continue this trend. Removing approximately 10.98 acres of vegetation (approximately 13.7 %) within the approximately 80 acre project area, most of which has already been converted to non-native annual grass would result negligibly to these cumulative impacts.

5.2.6 Special Status Wildlife

Past and present activities, such as operation and maintenance to keep Line 216 operable, livestock grazing, and recreational activities (e.g., ATV use) has cumulatively decreased foraging habitat for bald eagle, golden eagle, gray wolf and grasshopper sparrow in the project area. Additionally, the proliferation of invasive annual exotic species have also altered the vegetative communities and degraded the habitat quality/suitability of the area.

The Proposed Action could contribute to cumulative impacts to bald eagle, golden eagle, gray wolf, and grasshopper sparrow by reducing foraging habitat, although only negligibly and for a short term during construction of the Proposed Action. Project activities could also result in frequent or prolonged human interaction and disturbance causing abandonment of territories and preventing foraging. However, implementation of the EPMs specified in Section 4 of the POD (Appendix A), and stipulations developed by the BLM would minimize potential project-specific impacts to bald eagle, golden eagle, gray wolf, and grasshopper sparrow should they be present in the project area during construction activities. Therefore, these cumulative impacts would not affect regional populations of these SSW species and negative impacts would be negligible in magnitude.

5.2.7 Species of Local Importance (Big Game – Mule Deer, Pronghorn antelope, Elk, Rocky Mountain bighorn)

Past and present activities have resulted in a cumulatively significant change in wildlife habitat. Currently much of the project area and surrounding environs do not exhibit necessary shrub communities to provide canopy cover for hiding, thermal, and birthing cover. This habitat loss and modification has resulted in the displacement of some big game species within and adjacent to the project area. The Proposed Action would negligibly impact big game habitat by removing additional vegetation along the existing and already disturbed transmission line ROW. Also, existing roads provide recreational/hunting opportunities to much of the land that the line crosses. Improvements to the existing road network and the construction of new roads could lead to more recreational use of the lands proximate to the line. This could result in additional use of project roads, as well as development of illegal user-created roads from these access roads. Additional human presence and additional roads would cause both direct habitat loss and indirect impacts such as disturbance and displacement of big game species. Further, since recreational uses could potentially increase throughout the area, wildlife mortality from hunting could also increase.

The Proposed Action would incrementally add to these cumulative impacts. However, project activities would result in negligible impacts to habitat and the short term disturbance/displacement of big game species in the project area, primarily during the project's construction period. Once construction has ceased, it is anticipated that that use of the area would resume.

5.2.8 Migratory and Neotropical land birds

Past and present activities and wildland fires coupled with clearing of vegetation associated with transmission line operation and maintenance has changed the composition of the vegetation in the project area. This grassland habitat, although somewhat degraded, provides a food source as well as some hiding and nesting cover. However, the conversion of native sagebrush stands into non-native annual grass has reduced the amount of hiding, nesting, and wintering cover cumulatively affecting habitat for these species.

The proposed project would contribute incrementally, though in a relatively negligible way, to the cumulative impact on migratory and neotropical landbirds as a result of construction disturbance and ongoing vegetation clearing at the base of the structures. This disturbance would be localized primarily during the project's construction period, would displace local bird individuals to areas remote from the construction activity, and thus would contribute negligibly and for a short time to cumulative impacts on to these species. However, implementation of the EPMs specified in Section 4 and rehabilitation measures specified in Section 5 of the POD (Appendix A) would be expected to generally maintain the existing level of cumulative effects on the existing habitat and it is anticipated that use of the area would resume once construction has ceased.

5.2.9 Wildlife

Cumulative impacts from utility infrastructure, road-building activities, livestock grazing, wildland fires, and recreational activities have resulted in the cumulative loss of wildlife habitat. This habitat loss and modification has resulted in the displacement of general wildlife species. Wildlife species also have been directly affected by hunting activities, as well as incidental harm and killing from other human activities in the area. These activities would be expected to continue to impact wildlife habitat and populations.

The proposed action would result in minor localized impacts to habitat and the temporary displacement of wildlife in the project area, primarily during the project's construction period. However, construction activities would be temporary and it is anticipated that displaced species would likely return when construction in that area has ceased. Therefore, impacts from displacement of wildlife would be short term. Moreover, implementation of the EPMs specified in Section 4 and restoration efforts specified in Section 5 of the POD (Appendix A) would be expected to generally maintain the existing level of cumulative effects on the existing wildlife habitat and it is anticipated that use of the area would resume once construction has ceased.

5.2.10 Soils Resources

The Proposed Action would contribute to cumulative effects to soil resources. The majority of the analysis area has already been impacted by past actions including: livestock grazing, wildland fire, recreation use, the original construction of the line, and ongoing O&M activities. Construction activities would temporarily add to existing erosion in the project area; however, this would subside as revegetation measures specified in Section 5 of the POD (Appendix A) are implemented. Since much of the project area has already experienced impacts to soils, the Proposed Action, in combination with associated rebuild and O&M activities, would have a negligible contribution to cumulative effects on soil resources.

5.2.11 Visual Resources

The area encompassing the Proposed Project is primarily undeveloped, remote, and rugged in characteristic. However, there are past and present developments and activities (e.g., roads, primitive roads, trails, range developments, and utility infrastructures) that have occurred over time that are noticeable manmade features which have minimally altered the natural characteristics within the immediate project vicinity. While activities associated with the Proposed Project, such as, road construction and/or road clearing have the potential to make routes more visible and open due to vegetation removal and soil exposure, over time, the reestablishment of vegetation following restoration measures specified in Section 5 of the POD (Appendix A) would help these areas blend in with the surrounding landscape. However, the existing transmission line corridor and associated road network has not significantly changed the landscape quality of the area and is not readily noticeable to the casual observer from key observation points. Therefore, the proposed action would not be expected to adversely contribute cumulatively to the current views of the area.

6.0 CONSULTATION AND COORDINATION

A ROW application was submitted to the BLM on June 12, 2014. Following submission of the application, the BLM determined that an EA was required to identify and assess potential resource impacts pursuant to the NEPA.

The scoping phase of the EA consisted of agency contact for purposes of gathering data, disseminating plan information and identifying and understanding issues identified during scoping. Additionally, previous environmental documentation and existing agency data (e.g., Baker Resource Area RMP) was reviewed and evaluated for applicability and adequacy for use during the preparation of this EA.

The Proposed Action was designed to comply with FLPMA and the regulations contained within 43 CFR 2800, the Baker Resource Area RMP, and other applicable environmental laws and policies. The Proposed Action was analyzed by the BLM and this EA was prepared for and under the direction of the BLM.

6.1 List of Preparers and Reviewers

Ron Piston	Biologist, Idaho Power Company, Boise, Idaho
David Valentine	Archaeologist, Idaho Power Company, Boise, Idaho
Zach Clayton	Biologist, Idaho Power Company, Boise, Idaho
Courtney Busse	Realty Specialist, BLM
Marc Pierce	Assistant Field Manager, BLM
Lori Wood	Baker Field Manager, BLM
Melissa Yzquierdo	Natural Resource Specialist for Wildlife and Botany, BLM
Katherine Coddington	Archaeologist, BLM
Kevin McCoy	Outdoor Recreation Planner, BLM
John Rademacher	Supervisory Natural Resource Specialist, BLM

6.2 List of Agencies, Organizations, and Individuals Consulted

Nez Perce Tribe
Oregon State Historic Preservation Office
Baker Resource Area Interested Publics List

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8.0 MAPS AND FIGURES

Figure 1. CADD Detail Map

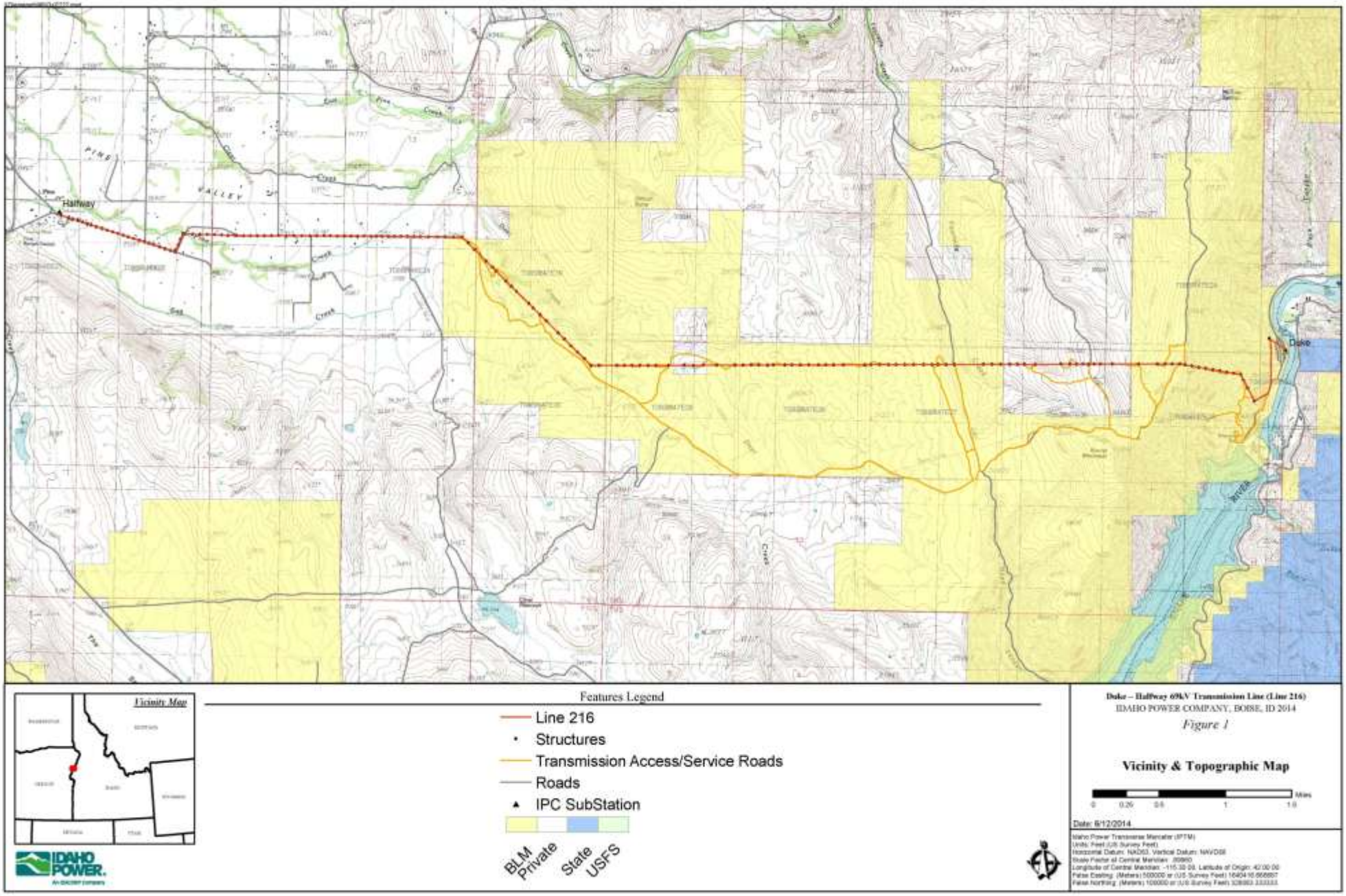
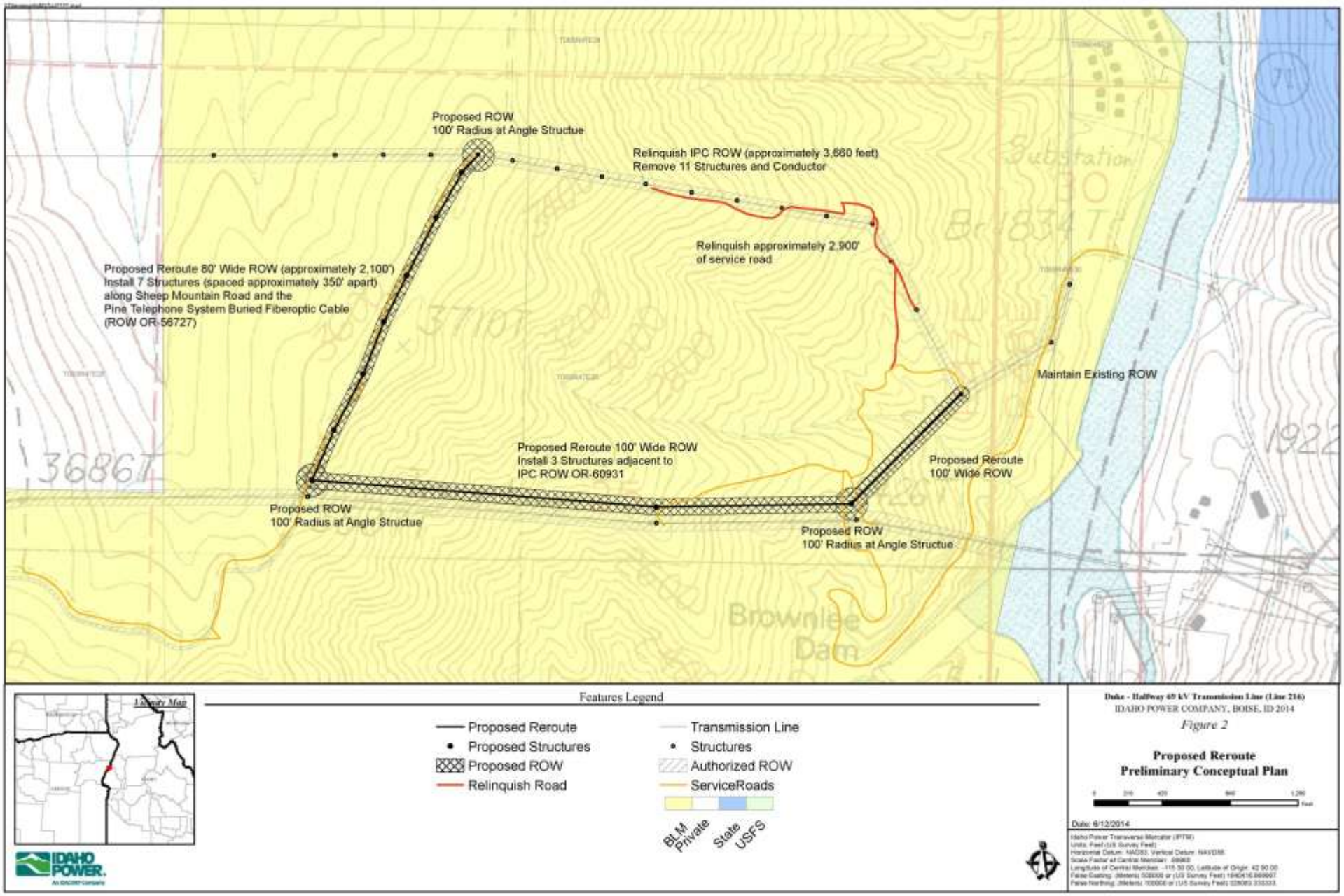


Figure 2. Proposed Reroute



9.0 APPENDICES

Duke – Halfway 69 Kilovolt Transmission Line (Line 216) Plan of Development (POD)

Duke – Halfway 69 Kilovolt Transmission Line (Line 216)
Bureau of Land Management Right-of-way Grant OR-05129

Ron Piston
Biologist

Plan of Development

Submitted to the
U.S. Department of the Interior
Bureau of Land Management
Vale District

September 2015

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1. INTRODUCTION

This Plan of Development (POD) has been prepared to provide the Bureau of Land Management (BLM), Vale District, information on the proposed re-construction, operation and maintenance of Idaho Power Company's (IPC) existing Duke – Halfway 69 kilovolt (kV) transmission line (Line 216) (Figure 1). The POD describes routine, corrective, and emergency operation and maintenance (O&M) activities performed by IPC or its contractors. This document has been prepared to support an application to amend and renew existing right of way (ROW) grant OR-05129 and replaces any previously prepared and submitted POD or O&M plans.

This is a Preliminary POD and this document may be revised as engineering specifications are further developed.

1.1. Purpose and Need for the Facility

Electrical utilities have a public responsibility to provide adequate supplies of reliable and economical electricity to all classes of customers. IPC has been conducting maintenance on this line for the past several years in an attempt to maintain reliability standards and to ensure adequate power supply to the Halfway and Richland areas. However, the line continues to experience outages and the area continues to experience low electrical reliability. Continuing to implement routine maintenance activities will not address reliability and power supply issues. These local power outages adversely affect residents and businesses that rely on a steady source of power. To resolve these issues and ensure electrical reliability, it is necessary for IPC to rebuild this line. It is also necessary to authorize the existing road network that provides access into and along the transmission line ROW. Access to the line is a key component of the authorization because IPC would need to access each structure location by vehicle during construction and future O&M activities.

1.2. ROW Location

Line 216 is located in Baker County, Oregon and crosses both private and BLM-managed lands. The portions of Line 216 on public lands are administered by the BLM— Vale District, Baker Field Office (FO). BLM granted IPC right-of-way (ROW) OR-05129 to operate and maintain this transmission line. OR-05129 authorizes an 80-foot-wide ROW covering 5.94 miles and 2.02 miles of service roads (14-feet-wide) outside of the transmission line ROW across public lands described as follows:

Willamette Meridian in Baker County, Oregon

T. 8 S., R. 46 E.
Sec. 24, SE1/4NE1/4

T. 8 S., R. 47 E.
Sec. 19, lots 2 and 3, SW1/4SE1/4, E1/2 SW1/4
Sec. 24, lot 14
Sec. 25, lots 3-12
Sec. 27, N1/2 N1/2

Sec. 28, N1/2 N1/2
Sec. 29, NE1/4NE1/4, N1/2NW1/4
Sec. 30, N1/2 NE1/4

1.3. Facility Design Factors

The majority of the proposed rebuild would continue to occupy the existing 80-foot-wide ROW; it is anticipated that the new alignment would be offset approximately 20 feet south of the existing line. Offsetting the line to the south would take advantage of the existing road network and minimize the need to construct new roads. Approximately two miles of the line west of Round Mountain could not be designed with a 20-foot offset. This area would require a 40 foot structure (existing) to structure (proposed) offset. The existing structure width in this existing section of transmission line is larger so this drives us to an additional width to accommodate a new offset structure. The topography in this section of line drives the existing structure locations to produce many long spans (hill top to hill top). Long spans require additional horizontal conductor separation due to conductor movement produced by wind and/or ice. This conductor movement anomaly is called Galloping. Galloping is a design criteria that IPC uses to measure the required conductor separation during a wind and ice loading condition. A horizontal separation of 13.5 feet from each conductor has been established for this existing section of line. A typical dead end structure with a phase to phase dimension of 13.5 feet has an overall structure width of 28 feet. Half of this structure width is 14 feet. Two of these structures side by side require 14 feet (half a structure) plus 14 feet (half a structure) plus 12 feet (construction separation) resulting in an overall width of 40 feet from center of structure to center of structure.

Additionally, IPC is also proposing to reroute approximately 6,500 linear feet of the eastern extent of the line coming off of Round Mountain toward Brownlee Dam (Figure 2). Based on preliminary design specifications, the proposed reroute would follow Sheep Mountain Road and the Pine Telephone System buried underground fiberoptic cable (ROW OR-56727) to IPC's Brownlee-Quartz 230kV Transmission Line (Line 903). The proposed reroute would then parallel the Line 903 ROW (OR-60931) down slope to structure 298. From structure 298 the proposed reroute would tie back into the existing ROW for Line 216. To facilitate this proposed reroute IPC is requesting an 80-foot-wide ROW along Sheep Mountain Road, a 100-foot-wide ROW adjacent to Line 903, a 100-foot-wide ROW tying back into the existing ROW for Line 216, and a ROW with a radius of 100 feet around the three angle structures. The proposed reroute also includes abandoning approximately 3,660 linear feet of the existing line, removing 11 H-frame wood structures including associated hardware, and reseeding the existing ROW once the proposed realignment is completed. Additionally, approximately 2,900 linear feet of existing service roads would be abandoned and restored as necessary.

IPC is proposing to reroute this portion of Line 216 from its original location because of the steep terrain and limited accessibility. Moreover, because of the steep terrain, there is a risk, especially during inclement weather, to safely access these structures. The proposed reroute would also improve the visual quality of the area by reducing the number of structures coming down the hillside toward Brownlee Reservoir and eliminating the need to build new service roads and level work pads at the base of the structures; ultimately reducing long term physical scarring on the hillside.

1.4. Construction of the Facilities

Line Construction

The proposed rebuild would likely follow the sequence of: 1) survey efforts; 2) access and service roads maintenance/construction; 3) work area preparation; 4) structure hole excavation; 5) structure erection and installation; 6) conductor installation ; 7) removal of old structures, hardware, and old line; and 8) site clean-up and reclamation. Various phases of construction would occur at different locations throughout the construction process. This would likely require several crews operating at the same time at different locations. Line materials would be stockpiled at a designated staging area at Dead Cow Gravel Pit and within the existing transmission line ROW corridor. Structures and associated hardware would be transported to each structure work area by truck.

Replacement structures would generally be very similar to the existing structures and would be directly embedded in the ground (with exception of one weathering steel single-pole structure on a foundation on the eastern end of the line). However, the height of the structures would increase from 5-feet to 15-feet depending on terrain and sag requirements. IPC has proposed five structure types: wood single-pole structures, wood H-Frame structures, wood 3-pole structures, weathering steel 3-pole structures, and one weathering steel single-pole structure on a foundation. The majority of structures used would be wood single-pole and wood H-frames. The wood 3-pole structures would be typically used at angles (i.e. where the line changes direction), or other areas where the necessary line separation cannot be maintained by an H-frame structure The weathering steel structures would be on the proposed reroute on the eastern extent of the line coming off of Round Mountain toward Brownlee Dam. Proposed structures are shown in Figure 3.

The new structures would be built to raptor-safe standards specified in the Avian Power Line Interactive Committee (APLIC), 2006 Suggested Practices for Avian Protection on Power Lines and in accordance with IPC's Avian Protection Policy.

Work areas around the structure locations may be graded, depending on terrain, to allow for safe setup of equipment and construction of the transmission line. This would only occur to the extent necessary to facilitate construction activities. The area needed at each structure would vary depending on contours and construction equipment. Generally, an area approximately 40 feet by 40 feet would be needed at each structure location. Dead-end structures would require an area approximately 80 feet by 80 feet. Within these work areas, the permanent disturbance associated with each pole excavation would be approximately six-feet in diameter. Equipment to clear the work areas would include a small dozer, backhoe, and excavator, depending on the specific location. New structures would be assembled at the proposed structure location. The existing structures would either be removed or cut off near ground level and associated hardware would be removed. All material would be salvaged or removed to a state approved landfill.

Excavations for the structures would be done with either a back hoe or power auger equipment. The structure holes would be approximately 8 to 12 feet deep depending on soil, structure height and loading. Where the soil permits, a vehicle-mounted power auger would be used. Soil removed from holes would be stockpiled in the work area and used to backfill holes. Structure

holes that would be left open or unguarded overnight or for more than a day would be covered and/or fenced where practical to protect the public, livestock, and wildlife. All remaining soil not needed for backfilling would be spread in the work area. If native soil is not suitable for backfill, clean, noxious weed free soil would be imported to backfill holes.

If rocky areas are encountered during hole excavation, blasting may be required. If blasting is necessary, appropriate safety guidelines would be followed, as required by state and federal regulations relating to blasting operations. Blasting would be used only after other reasonable means of excavation have been used and are unsuccessful in achieving the required results. It is not known in advance of construction if or how often blasting would have to be used. The most important factors that determine whether blasting is necessary are the geology of the area and the hardness of the rock. If blasting is required for any portion of this project, IPC shall employ controlled blasting procedures in order to maintain airblast, overpressure, and peak particle velocity (PPV) of ground vibrations, and to minimize stressing and fracturing of the rock beyond the limits of excavation. Implementing controlled blasting limits the physical breaking or cracking of the rock to a localized area around each blast hole and is not expected to extend PPV beyond the site boundary (blast location). This disturbance usually only occurs within a few meters of the blast hole. When controlled blasting methods are used to excavate structure locations, the drilling and blasting work is much more technical than imagined by casual observers. The blasts are barely audible "whumps" to audible "booms". Moreover, the scale of blasting and size of charges are much smaller than those typically used in production mining. It is estimated that the charge would be no smaller than .25 pound delay and no larger than 1 pound per delay with a time between delays no faster than 25 milliseconds (ms), and as slow as 300 ms.

Once the structures are erected, the conductor would be strung using powered pulling equipment at one end and powered braking or tensioning equipment at the other end. Conductor splicing would be required at the end of a conductor spool or if a conductor is damaged during stringing. The work would occur in the same work areas used for the poles or pulling/tensioning sites. Pulling/tensioning sites would be approximately 100 feet by 300 feet and may be cleared of vegetation and graded to allow for safe operation of the pulling and tensioning equipment. Equipment to clear the areas would include a small dozer, backhoe, and excavator, depending on the specific location. After construction, the areas would be restored using excess materials, vegetation, and topsoil stockpiled for that purpose.

Construction sites, material storage yard, and service roads would be kept in an orderly condition throughout the construction period. Refuse and trash would be removed from the sites and disposed in an approved manner. Oils and fuels would not be dumped along the line onto the ground or into streams. Oils or chemicals would be containerized and disposed in an approved and licensed facility for disposal. Construction practices would comply with all applicable federal, state, and local laws and regulations concerning the use, storage, transportation and disposal of hazardous materials. No open burning of construction trash would occur without BLM approval.

Site Access and Road Maintenance

In addition to the line work detailed above, the existing service road network used to access these structures may require maintenance/improvements to allow construction equipment safe access

into the power line corridor. While the existing road network proximate to the transmission line ROW would be used to the maximum extent possible, new service roads (roads used solely by IPC to access our facilities) would need to be created to reach structure locations without current access. Additionally, overland service routes would be required from the existing access road to reach structure locations without current access. These overland service routes would not require blade work (i.e., recontouring).

In order to accommodate the line work, road maintenance would need to begin a few weeks before the proposed line work. Maintenance requirements would vary depending on the type of road, level of use, and condition of the road. However, maintenance generally would consist of clearing vegetation and rocks, as well as repairing cut and fill slope failures, as necessary, to allow for a 12- to 14-foot-wide road surface. In most cases, the roads would be left as close to an undeveloped nature (i.e., two-track road) as possible without creating environmental degradation (e.g., erosion or rutting from poor water drainage). Equipment to perform the required road maintenance would include hand tools (e.g., chainsaws, etc.), track driven machines (bulldozers and graders) and crew-haul vehicles (e.g., 4-wheel drive pickup and/or ATV and UTVs). Roads would be opened/cleared for use by trucks transporting materials, excavators, drill rigs, bucket trucks, pickup trucks, and crew-haul vehicles. Specific actions, such as installing water bars and dips to control erosion and storm water, would be implemented to reduce construction impacts and would follow standard designs. If project activities disturb one or more acres, IPC would comply with Oregon Department of Environmental Quality (DEQ) construction stormwater regulations.

2. Operation and Maintenance

BLM and IPC acknowledge that routine O&M activities must occur to keep IPC's power lines and power facilities operational, safe, and in good repair. The principles regarding routine O&M and the defined routine O&M activities are provided below. O&M activities may occur on a regular or infrequent basis; may be completed in one day or span multiple days; and may damage vegetation and soil within previously disturbed areas (i.e. roads, work pads) within the ROW boundary.

IPC conducts periodic inspections of its transmission lines. Depending on the results of the inspection, maintenance work may be scheduled for immediate follow-up (e.g., in the case of imminent failure or safety issues) or follow-up in subsequent year(s) (e.g., issues that need to be repaired but do not cause an imminent problem). IPC cannot predict maintenance activities—frequency, location, or type.

Maintenance activities can be planned—such as those for routine patrols, inspections, scheduled maintenance, and scheduled emergency maintenance—or they can be unplanned, such as those for emergency maintenance in cases where public safety and property are threatened.

Any activity that would require construction or use outside the boundaries of the ROW area or any change from the authorized use, or modification of facilities such that they are inconsistent with the authorized use, is considered a substantial deviation. Substantial deviations require an amendment or modification of the ROW grant, likely triggering the National Environmental

Policy Act (NEPA) which may require analysis under Section 106 of the National Historic Preservation Act (NHPA), the Endangered Species Act (ESA), etc.

Notification of scheduled routine O&M activities by IPC, to the Authorized Officer is recommended, as the activity could possibly affect other programs; BLM could answer questions about activities from the public, and BLM could document these routine O&M activities in ROW records. Unless consultation is required by a specific term in a grant or in this POD, IPC may perform routine O&M activities within the ROW boundaries without consulting/notifying BLM.

If any unplanned activity (except for wild fire) falls outside of the defined O&M activities below, or results in disturbance outside the existing ROW boundary, IPC will notify the BLM within 3 working days of the occurrence. Such unplanned activities may be considered a substantial deviation and require a ROW grant amendment or modification.

2.1. Routine Maintenance

The activities presented below are considered routine O&M activities. Subject to specific terms, conditions and stipulations of the ROW grant and reporting requirements contained herein, these activities may be conducted by IPC as necessary and without prior notification to the BLM:

- Routine air patrols from a helicopter to inspect for structural and conductor defects, conductor clearance problems, and hazardous trees.
- Routine ground patrols to inspect structural and conductor components. A vast majority of such inspections will require either a utility-terrain vehicle (UTV) or a pickup truck. Patrols may rely on direct line-of-sight and/or binoculars. Personnel rarely leave the road unless there is no other option to access and inspect a structure; therefore, where feasible the use of a two-track or UTV trail is permissible. Patrols are typically conducted in the spring and fall. Follow-up maintenance will be scheduled depending on the severity of the problem, either as soon as possible or as part of routine scheduled maintenance
- Climbing surveys to inspect hardware or make repairs. Personnel access these structures by pickup, UTV, or on foot.
- Structure or conductor maintenance from a bucket truck. The bucket truck may be located on or off a road, and no-to-minimal grading is necessary to create a safe work area.
- Routine cyclical vegetation clearing to trim or remove tall shrubs and trees to prevent encroachment into the minimum vegetation clearance distance (MVCD). Vegetation clearing cycles vary from 3 to 6 years. Personnel access the area by pickup, UTV, or on foot; use chainsaws to clear the vegetation; and typically spend less than half a day in any one specific area. Mechanical means (e.g., Slashbuster) may also be used to clear vegetation. The Slashbuster is a rubber tired, Bobcat sized piece of equipment with a brush cutting head mounted on the front.
- During all vegetation clearing activities, IPC will ensure we do not disturb the soil surface whereby there would be an added risk of erosion, the promotion of the

establishment or expansion of invasive species (including noxious weeds), damage to cultural resources, sensitive species, or ESA listed species.

- Removal of hazard trees within, or adjacent to, the ROW that pose a risk of falling into conductors or structures and causing outages or fires. Personnel access hazard trees by UTV or by foot from an access or service road, and cut them with a chainsaw. Any felled trees or snags are left in place as sources of large woody debris. Felled green trees are limbed to reduce fire hazard.
- Wood pole inspection and treatment to retard rotting and structural degradation. Personnel access structures by pickup, UTV, or on foot; inspect and test (including the subsurface) the poles; and then treat them by injecting preservatives into the poles and/or applying external preservative treatment wraps to the butts of the poles. Wood pole inspections and treatments occur on a 10-year cycle.
- Routine inspection and maintenance of authorized service and access roads (length and width and alignment of road remains the same), such as blading the road to maintain the surface condition and drainage, removing minor physical barriers (i.e. rocks and debris), replacing culverts or rock crossing, and rehabilitating after major disturbances requiring heavy equipment (such as slumping). Heavy equipment will travel and maneuver on existing service and access roads.
- Vegetation removal on service roads to allow the necessary clearance for access and provide for worker safety. Hand crews access the service roads by pickup or UTV and use chainsaws and hand tools to clear the vegetation.
- Installation of bird protection devices, bird perch discouragers, and relocation or removal of bird nests. The equipment and crews used to install bird protection devices are similar to those used for structure maintenance work. Installation of bird protection devices would typically take less than half a day at a structure or on a span. Nothing herein shall excuse Idaho Power from complying with relevant federal and state laws, if any, regarding impacts to birds, nests, or both.
- Reduction of fuel loads around wood poles in fire-prone areas by 1) removal of vegetation within a 20-foot radius and/or treatment with herbicide from the approved BLM list by a certified applicator, and in accordance with the Pesticide Use Permit, or 2) application of fire retardant coating to the base of wood poles. If herbicide is used, IPC will report to BLM the amount used for BLM's herbicide application yearly report.
- In-kind structure replacement (e.g., replacing a cross-arm, replacing an insulator, replacing a single wood pole with a single wood or steel pole): A bucket truck and/or other rubber-tired vehicles may be located on or off a road. Trucks are stabilized using outriggers, so little to no grading of an existing pad is necessary to create a safe work area. As it is typically not possible for the replacement pole to go into the same hole as the old pole, pole replacements are placed adjacent the old hole but still on the existing work pad. Also, due to conductor creep where conductor sag increases over time, in an effort to provide adequate, safe ground clearance, replacement structures typically are 5' to 10' taller than the original structure.
- Non-cyclical vegetation clearing to remove saplings or larger trees in the ROW.

- Structure or conductor maintenance in which earth must be moved, such as for the creation of a landing pad for construction or maintenance equipment.
- Follow-up restoration activities, such as seeding, noxious-weed control, and erosion control. To minimize the potential for wildland fires to damage structures, reseeding activities will not occur within a 20-foot radius around structures.
- Conductor replacement, which requires the use of several types of trucks and equipment and grading to create a safe work area to hang and pull the conductor into place.

2.2. Emergency Situations

Emergency situations are those conditions that may result in imminent or direct threats to public safety or threaten or impair IPC's ability to provide power to its customers or the Western grid. The following examples include, but are not limited to, real and potential emergency situations:

- Failure of conductor hardware.
- Lightning strike or wildfire, resulting in the burning of, and damage to, structures.
- Damage to structures from high winds, ice, or other weather-related conditions.
- Line or system outages or fire hazards caused by trees falling into conductors.
- Breaking or imminent failure of cross-arms, insulators, or other structural elements which could, or does, cause line failures. The line may still be operational but failure could happen if repairs are not completed.
- Vandalism to structures or conductors from shooting or other destructive activities.
- Phases or shield wires coming into contact and creating the potential for fires and/or outages.

If an emergency situation arises, IPC may take immediate corrective action to fix the problem, safeguard human health, and prevent damage to the environment. Actions are frequently the same as those that occur during routine O&M activities (e.g., structure replacement, road repair), but are in response to a threatening situation. IPC will implement feasible and practicable measures to avoid and minimize impacts during emergency actions and will notify the BLM of emergency actions as soon as possible. Activities conducted in response to emergency situations may not adhere to all the environmental protection measures described in the following section of this POD. Follow-up actions and reporting requirements will be coordinated with the BLM on a project-specific basis.

If any emergency repair activity results in disturbance outside the existing ROW boundary, IPC will notify the BLM office within 3 working days of the event of the occurrence. Such unplanned activities may be considered a substantial deviation.

3. Resource Values and Environmental Concerns

To aid in the NEPA analysis, the BLM permitting process, and to document the sensitive resources that occur within the ROW, IPC conducted clearance studies (e.g., botanical, wildlife, and cultural) along the ROW, proposed reroute, and service roads. The purpose of the surveys was to identify biological and cultural resource occurrences, assess potential impacts, and make recommendations for protection of area resources that have the potential to be affected by the project.

3.1. Cultural Resources

Cultural resource inventories for Line 216 were completed in 2010 and 2014. The results of the inventories are presented in the following reports:

- Cultural Resources Survey for Pole Maintenance along the Brownlee to Halfway 69 kV Transmission Line (Line 216), Baker County, Oregon. Idaho Power Cultural Resources. Project Report 10-07.
- A Cultural Resources Survey for the Brownlee to Halfway 96kV Transmission Line (Line 216) Rebuild, Baker County, Oregon. Idaho Power Cultural Resources Project Report 14-12.

In addition to pedestrian inventory, the 2014 efforts also required a selective reconnaissance level survey (SLRS) of architectural features in Pine, OR. Although a draft of the report was submitted to the BLM on July 21, 2014, a last minute design change necessitated additional inventory. That inventory was completed on August 8, 2014. No additional sites or isolates were found. A final report was accepted by the BLM on June 1, 2015.

One prehistoric site, 35BA331, was previously recorded by the BLM, and one prehistoric site, 35BA1264, was recorded as a result of these inventories. In addition, Line 216, Pine Town Lane, 1107 Pine Town Lane, and 39486 Pine Town Lane were recorded as historic sites. Eight homes or farms were also identified during the SRLS (38470 Pine Town Lane, 38560 Pine Town Lane, 38580 Pine Town Lane, 38593 Pine Town Lane, 38613 and 38631 Pine Town Lane, 38626 Pine Town Lane, 38911 Pine Town Lane, and NW Corner Pine Town Lane and Crow Road). Site 35BA331 was found eligible for the National Register of Historic Places (NRHP). Line 216 was found ineligible to the NRHP. IPC is recommending 35BA1264, Pine Town Lane, and 41107 Pine Town Lane as not eligible to the NRHP, and recommending 39486 Pine Town Lane as eligible. All of the sites identified during the SLRS are essentially unevaluated because the owners denied IPC access for cultural resource work.

Site 35BA331 would be avoided during construction of the Proposed Action and the proposed rebuild would completely span the site. IPC would remove structure 64 (cut-off at ground level) which is approximately 60 feet west of the delineated boundary of 35BA331. Project activities would be confined to the existing footprint at the base of structure 64 and are not anticipated to impact this site. Avoidance flagging and monitoring, by a qualified archaeologist, would occur at site 35BA331 to ensure the site is not damaged during the remove of structure 64 and the line

rebuild. This would ensure that the project would have no adverse effect to this cultural resource.

An existing 2-track road travels through site 35BA331. IPC would continue to use this road to access the line during the proposed rebuild and O&M activities. Since this is an existing road, travel along the road should not pose an adverse effect to the cultural site. IPC would not maintain/improve the road and would avoid travel on the road during wet conditions that would create ruts greater than 3 inches in depth. Direct impacts to all of the remaining eligible and unevaluated sites will be avoided. Line 216 and predecessor lines and distribution have been in place for roughly 97 years, so the rebuild of the line is not considered an impact to the visual setting. IPC has recommended a finding of no adverse effect if the monitoring and avoidance flagging at the prehistoric sites is done.

3.2. Sensitive Plant and Wildlife Species

An IPC biologist, experienced in identification of special status plant (SSP) and special status wildlife (SSW) species, noxious weeds, and vegetation community classification, surveyed the ROW, proposed reroute, and service roads from June 24 to 26, 2014. Methods and results are described in more detail in the *Duke – Halfway 69 kV Transmission (Line 216) ROW OR-05129 Special Status Plant and Wildlife Survey Report* (IPC July 2014); and are summarized below.

No SSP species were observed during the survey. Furthermore, there was no habitat unique to any SSP species observed within the ROW, the proposed reroute, and/or the associated access/service roads.

Noxious weeds were present and abundant throughout the survey area. Six species of Oregon listed noxious weeds, rush skeletonweed (*Chondrilla juncea*), field bindweed (*Convolvulus arvensis*), houndstongue (*Cynoglossum officinale*), common St. Johnswort (*Hypericum perforatum*), diffuse knapweed (*Centaurea diffusa),* and Scotch thistle (*Onopordum acanthium*) were observed along both the ROW and service roads. Rush skeletonweed was the most common noxious weed found throughout the survey area; however, it was typically observed with a low abundance. Field bindweed was observed frequently in the ROW, but was more commonly in the access roads, where it was occasionally very dense. Houndstongue, common St. Johnswort, and diffuse knapweed were observed only at a single location each; however, the houndstongue was observed in greater abundance than the other two. Scotch thistle was observed at relatively low densities with the exception of the occurrence in the eastern section in the understory of the hackberry and hawthorn. The presence of noxious weeds is likely influenced by historical fires, public use of roads in or near the survey area, and past and present land use.

Two SSW species were observed during the survey; a bald eagle (*Haliaeetus leucocephalus)* and western meadowlark (*Sturnella neglecta*). The bald eagle was observed just below Brownlee Dam. No nests were observed in this area. Six individual western meadowlarks were observed at three separate locations during the survey. Four of the six individuals recorded were observed in the same general area in the central section of Line 216. Suitable habitat for this species is found throughout the ROW; however, habitat is present in a much larger scale outside of the ROW.

There were no greater sage-grouse (*Centrocercus urophasianus*) or suitable habitat observed within the existing ROW, within the boundaries of the proposed reroute, and/or along the service roads. The lack of shrubs and presence of low quality grasslands do not provide preferred habitat for this sagebrush obligate. The nearest active lek is approximately thirteen miles to the southwest; however, the lack of potential habitat proximate to the survey area decreases the potential for incidental observations of this species. The ROW is not located in any portion of greater sage-grouse occupied habitat.

Overall, the ROW and associated access/service roads were occupied by fair to poor quality habitat. The presence and abundance of invasive annuals contributes to a lack of forb diversity. The lack of shrubs and generally poor habitat quality will likely limit the utilization of the area by wildlife species.

4. Environmental Protection Measures

Project activities and future maintenance needs have been planned to minimize potential damage to the environment and to comply with the BLM's land management guidelines; NEPA; Title V of the Federal Land Policy and Management Act of 1976 (FLPMA); The Endangered Species Act of 1973 (ESA); the NHPA of 1966; and all applicable regulations in 43 CFR Part 2800. The following environmental protection measures will be implemented during project activities and, to the extent possible, during emergency situations by Idaho Power crews and its contractors.

4.1. Approved Work Area

All construction and future O&M activities will occur within IPC's ROW. Projects that extend outside the permitted ROW and are on BLM land are not regulated under this POD without the concurrence of the BLM.

Environmental protection measures include:

WA-1. In an effort to minimize the general environmental impacts of construction, structures will be placed to avoid know cultural sites and/or to allow conductors to clearly span the features, within limits of standard pole design.

WA-2. All waste products and food garbage will be disposed of properly.

WA-3. Ground disturbance is limited to that necessary to safely maintain the existing facility.

WA-4. Existing improvements will be repaired or replaced to their condition prior to disturbance if they are damaged or destroyed by O&M activities, as agreed to by the parties involved.

WA-5. Fences and gates will be installed, replaced, or repaired to their condition prior to disturbance if they are damaged or destroyed by construction activities, or as required by the Authorized Officer.

WA-6. Hazardous materials will not be drained onto the ground or into streams or drainage areas. Totally enclosed containment will be provided for all trash.

WA-7. If blasting is necessary, appropriate safety guidelines will be followed, as required by state and federal regulations relating to blasting operations.

WA-8. Fire protection measures will be followed, as required by state and federal regulations.

4.2. Site Access and Road Management

IPC describes roads necessary for the O&M of power lines as either service roads or access roads. The sole purpose of service roads is to provide IPC crews or contractors access to the company's facilities. These roads would not exist if the power lines did not exist. In contrast, access roads serve a broader purpose, such as contributing to the BLM, county, or state road systems. Access roads provide direct or indirect access to the power lines, but that access is not their primary purpose. Service and access roads are generally categorized as follows:

1. **Public roads, including state highways and county roads**—These roads are for public use, and the appropriate state or county agency maintains them. IPC considers these roads to be access roads. The BLM is responsible for maintenance.
2. **Open BLM roads**—The BLM and/or joint users maintain these roads, which are open to the public. These roads, including drainage features, cuts, and fill slopes, must be protected during IPC O&M activities. IPC considers these roads to be access roads. The BLM is responsible for maintenance.
3. **Closed BLM roads**—These roads are still needed for the BLM's long-term transportation planning purposes, but they currently are closed to the public because of the BLM's management policies to protect natural resources and eliminate maintenance costs. These roads—including drainage features, cuts, and fill slopes—must be protected during O&M activities by IPC. Parties wanting to use these roads for access must obtain BLM approval. Additionally, parties using these roads will be assigned some maintenance responsibility proportionate to their use of the closed road. Although these roads may serve a broader purpose, IPC maintains them as needed for O&M activities. IPC considers these roads to be access roads.
4. **Power line service roads**—These roads are necessary for access to, and maintenance of, power lines, but they are not part of the planned BLM network of roads. This includes roads located outside the ROW that have a long, established use associated with access to power lines. They are generally closed to the public. IPC maintains these roads and considers these roads to be service roads.

IPC typically performs two types of road maintenance activities: 1) vegetation and debris clearing to maintain safe access and 2) repairs using heavy equipment. Road maintenance is not conducted on a cyclical basis but is conducted as necessary. Frequency of maintenance and the type of maintenance activities are dependent on topography, road condition and potential future condition (e.g., the potential for additional damage if the road is not repaired), crew safety, and the ability to get the necessary equipment to maintenance locations.

Typically, a 3-man crew uses hand tools to cut small brush and trees (greater than 12-inches tall); remove dead fall and debris; and repair and replace signs on access and service roads.

Mechanical means may also be used to clear vegetation. Crews also prepare an inventory of road damage that will require ground disturbance (e.g., repair of a failed bank); repair work is scheduled accordingly (typically the following year). Inspections and maintenance are typically conducted from spring through fall, when roads are clear of snow. Road modifications—such as filling or widening of curves—outside previously disturbed areas are prohibited unless specifically approved in writing by the BLM before the activity is undertaken.

Generally, IPC crews and/or contractors will use the most direct, easily accessible access road to get to a desired structure or portion of the ROW. However, access road use will vary as road conditions change and as crews need to access different portions of the line. IPC also uses overland travel within the ROW to travel between structures.

IPC will implement the following environmental protection measures:

RD-1. IPC will comply with BLM road maintenance standards.

RD-2. Existing improvements (fences, gates, etc.) will be repaired or replaced (to pre-O&M condition) if they are damaged by O&M activities, as agreed to by the parties involved.

RD-3. In cases of restricted access, as identified by the BLM, IPC will physically close the road with a gate. Gates will be locked with both an IPC and a BLM lock. In areas where a gate will not effectively block access (e.g., flat areas where overland travel is possible), IPC may install signs that identify the road as closed.

RD-4 Access road maintenance will be coordinated with the BLM. IPC is not responsible for general maintenance of access roads, but is responsible for and will repair any damage that we may cause or contribute to. Access roads will be repaired to pre-disturbance conditions.

UTV use outside of designated corridors, existing access or service roads or trails, or the ROW is prohibited unless the use has been approved by the BLM.

4.3. Vegetation Management

IPC manages vegetation within its ROWs and on access and service roads to minimize interference with the flow of electricity, to address safety issues, and to facilitate O&M activities. The vegetative community within and immediately adjacent to the project area primarily consists of low growing herbaceous plants and shrubs. There is no forested vegetation in the project area. However, if vegetation management is required, IPC will generally schedule it according to maintenance cycles.

IPC's vegetation management complies with the National Electric Safety Code (NESC) and North American Electric Reliability Corporation's (NERC) requirements[1]; these dictate minimum clearance standards. IPC maintains vegetation within the full ROW and access and service roads widths. For the purposes of vegetation management, the ROW has been divided into the wire zone and the border zone as defined below:

- Wire Zone – The ROW portion directly under the wires and 10 feet beyond the outside phases.
- Border Zone – The outside edge of the wire zone to the edge of the ROW.

Within the wire zone, there must be at least 20 feet of clearance from the lowest sag point of the conductor to the top of existing vegetation, including tree growth until the next management cycle. Side clearances are measured from the wind blow-out position of the conductor at mid-span, and clearance requirements are dependent upon site-specific conditions (e.g., topography, existing vegetation, span length). Where possible, low-growing vegetation and small trees within the border zone that will not grow into the minimum required clearance distance will be left in place; trees may be removed on a subsequent maintenance cycle as they increase in size.

General vegetation management in the ROW is scheduled on a periodic basis; periodicity is dependent on the type of vegetation present and how quickly it may grow between management cycles. In some cases, vegetation management may not be necessary for operation of a line (e.g., areas of low-growing vegetation that would not interfere with required clearances).

The scheduled maintenance program accomplishes the following:

1. Trimming of trees and tall shrubs to the extent that the clearance lasts for the duration of the cycle.
2. Removal of vegetation as necessary to provide clearance and improve access to facilities.
3. Removal of tall-growing vegetation within tower structures.
4. Facilitation of a low-growing plant community that stabilizes the site, inhibits the growth of tall-growing shrubs and trees, and provides habitat for wildlife.
5. Identification and removal of hazardous trees[2] that could fall and contact facilities.

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[1] NERC's mission is to ensure the reliability of the North American bulk power system. NERC is the electric reliability organization certified by the Federal Energy Regulatory Commission to establish and enforce reliability standards for the bulk-power system. NERC FAC-003-3 identifies vegetation management requirements.

[2] A hazard tree may occur within or adjacent to the ROW. These are normally tall trees that have one or more drastic defect that could cause the tree to fail and fall in or onto the line and cause an outage. A hazard tree could also be vegetation that is good condition but that has grown so close to the line that it

Footnotes continued on the next page.

Vegetation maintenance on access and service roads is typically scheduled at the same time as vegetation maintenance within the ROW. However, in cases where vegetation grows quickly, removal may occur more frequently. Removal is conducted by hand crews using chain saws or by mechanical means. Plants that would not interfere with the safe operation of vehicles and equipment would be left in place.

IPC would consult with the BLM prior to slash disposal, and a mutually agreeable fuel bed depth and slash treatment would be developed. Acceptable slash treatments include lop and scatter, hand piling and burning, chipping, and mechanical treatment. If burning is proposed, IPC would consult with the BLM prior to conducting the burning.

In most cases, vegetation is cleared primarily through manual cutting of targeted trees and tall shrubs or with the use of mechanical means (e.g., Slashbuster). However, when appropriate and allowed, tree-growth regulators and spot herbicide treatments can be applied as effective techniques for reducing re-growth of sprouting deciduous shrubs and trees and extending maintenance cycles. Federal and State agencies must approve all herbicide applications in advance of these treatments. The applications must also comply with the most current or applicable Federal, State, and NEPA documents addressing herbicide use. Slash is to be lopped and scattered evenly and as close to the ground as possible throughout the surrounding terrain. Stumps resulting from vegetation treatments are not to be over one foot tall.

IPC also conducts vegetation management around wood structures to protect them in the case of wild fires. IPC and/or a contractor will clear vegetation within a 20-foot radius around a structure using hand tools (e.g., chain saw, weed whip) or mechanical means (e.g., Slashbuster) and then apply a herbicide to minimize vegetating regrowth. Vegetation removal is done as close to grade as possible and with no to minimal ground disturbance. Herbicide application is conducted in accordance with label requirements and all applicable federal, state, and local requirements and the BLM's Pesticide Use Proposal (PUP). IPC will obtain approval from the Authorized Officer prior to using herbicides on BLM-managed lands.

4.3.1. Noxious Weed Control

Maintenance vehicles, UTVs, and equipment have the potential to transport weeds and seeds from one area to another via dirt and debris that inadvertently collects on the equipment. Before beginning the proposed rebuild or future O&M activities on BLM-administered land, the responsible party will clean all equipment that will operate off-road or disturb the ground. Tracks, skid plates, and other parts that can trap soil and debris will be removed for cleaning when feasible, and the entire vehicle and equipment will be cleaned at an off-site location.

To help limit the spread and establishment of noxious weed species in disturbed areas, desired vegetation needs to be established promptly. IPC will reseed significantly disturbed areas as soon as possible after ground-disturbing activities and during the optimal period. Seed will be

could be brought into contact with the line through a combination of conductor sag and/or wind-induced movement in the conductor or the vegetation.

certified "noxious weed-free" and a mutually agreeable seed mix will be developed in consultation with the Authorized Officer. If mulch is used on seeded areas, it will be certified weed free straw or hay. IPC would not reseed areas within a 20-foot radius around structures in order to minimize potential damage from wildland fires.

If noxious-weed species occur within IPC's ROW or on service roads as a result of IPC's activities, IPC will coordinate treatment with the BLM. When determining whether treatment is necessary and whether it will produce the desired results, IPC and the BLM will consider surrounding site conditions and whether weed-control activities will be conducted by other parties. IPC is only responsible for controlling noxious weeds to pre-disturbance levels.

4.4. Protection Measures for Threatened, Endangered, and Sensitive Plant and Wildlife Species

When habitat or a species is present, measures will be taken to minimize impacts including avoidance of the area, following seasonal/timing restriction, monitoring by an IPC biologist and/or botanist, flagging, staking and/or fencing. As a courtesy, IPC will notify the Authorized Officer of measures to be taken to avoid impacts to the species or its habitat. Environmental protection measures to help minimize O&M effects could include:

SP-1. If sensitive wildlife species are discovered during the work, IPC will establish a spatial buffer zone and immediately contact the BLM. Unless IPC is informed otherwise, work outside the buffer area will continue. If IPC needs to work within the buffer area, it will work with the BLM to develop a mutually acceptable solution that allows the work to be completed within the scheduled outage window and/or in a timely manner. After the project is complete or no longer poses a threat to the species/habitat, the marking (stakes) will promptly be removed to protect the site's significance and location from unwanted attention.

SP-2. In the event any sensitive wildlife species require relocation, permission will be obtained from the BLM and other appropriate agencies as required.

SP-3. If sensitive wildlife species are killed or injured due to construction or O&M activities, the Authorized Officer will be notified.

SP-4. All O&M and/or construction activities will be conducted in a manner that would minimize disturbance to vegetation, drainage channels, and intermittent and perennial stream banks. Ground disturbance will be limited to that necessary to safely and efficiently maintain/install the facility.

SP-5. Nesting, roosting, and perching birds—especially osprey—can cause power outages if their feces or nesting materials interfere with conductors, insulators, or air gaps. IPC, in consultation with the USFWS, manages nesting on transmission line structures to reduce conflicts. Such management may include relocating nests, modifying structures, and providing nesting platforms. IPC will continue to consult with the USFWS and/or Oregon Department of Fish and Wildlife when a problem nest is located on BLM lands. As a courtesy, IPC

will provide the Authorized Officer with a copy of the required permit from the USFWS prior to commencing the activity.

4.5. Protection Measures for Cultural Resources

IPC is responsible to avoid any new impacts to cultural resources (including historic, prehistoric, and paleontological sites). When sites are present, measures will be taken to minimize impacts within work zones and insure avoidance of new impacts to cultural properties within the project area. Measures could include monitoring by an IPC archaeologist, flagging, staking and/or fencing to insure maintenance work occurs within previous impact areas and to avoid new impacts, or working from existing access routes and work platforms. As a courtesy IPC cultural staff will advise the Authorized Officer of measures to be taken to avoid known sites.

When ground disturbing activities are anticipated that deviate from existing ROW authorities and stipulations, are considered a substantial deviation, or may be considered an undertaking pursuant to 36 CFR §800.16(y), IPC archeologists will contact the BLM field office archeologist to coordinate and determine the level of evaluation required.

Any unanticipated discovery of cultural and/or paleontological resource (fossil[s] or historic or prehistoric site or object) on BLM lands shall be immediately reported to the BLM. If new, probable historic, cultural, or paleontological resources are discovered during construction, potentially destructive work within 300 feet of the find will be halted. Pursuant to 43 CFR 10.4(g), the holder of the authorization must notify the BLM, 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), activities in the vicinity of the discovery must be stopped until notified by the BLM to proceed. BLM will provide notification in a timely manner to allow IPC to meet outage windows. IPC will immediately implement the following measures:

1. Flagging will be erected to prohibit potentially destructive activities.
2. IPC's archaeologist will work with the BLM and through a coordinated effort make a determination if the discovery represents a potential new site or an undocumented feature of a documented site.
3. If the archaeologist determines that the discovery represents a potential new site or an undocumented feature of a documented site, the BLM will be notified, and processes identified by the BLM will be followed.
4. O&M activities will not resume in the identified area until cleared by the BLM. The BLM will work with IPC to provide clearance in a timely manner to meet outage window deadlines.

Environmental protection measures for known and unanticipated cultural resources include the following:

CR-1. Crews and vehicles will be constrained to existing service and access roads and not allowed to travel cross-country near known sites. Where a road intersects a site, the road sides will be posted to indicate that no off-road activity may occur.

Marking will be coordinated with the BLM and done by personnel appointed by IPC. Once the O&M activity is complete or no longer poses a threat to the cultural resources, the marking will promptly be removed to protect the site's significance and location from unwanted attention.

CR-2. Before any activity involving ground disturbance begins, IPC will generically mark the sites as an avoidance area. Marking will be coordinated with the BLM on a project basis. After the project is complete or no longer poses a threat to the cultural resources, the stakes will promptly be removed to protect the site's significance and location from unwanted attention.

All human interments will be treated with the respect accorded them by state and federal laws applying to human remains. If the discoveries are unanticipated, state law does not distinguish between historic or prehistoric burials as far as what steps are required for initial notification or disinterment. If human remains are discovered during O&M activities, IPC will stop all work in the immediate area to protect the integrity of the find and notify the county sheriff and BLM as soon as possible. In addition, the location of the find will be flagged or fenced off to protect it from further impacts. The BLM will determine what mitigation is necessary.

4.6. Protection Measures Against Fire

When performing project activities during the "closed" fire season, IPC personnel will be required to have the following equipment in their possession and be trained to use them, to aid in distinguishing a fire ignition before it gets out of control (taking action that a prudent person would take while still accounting for their own personal safety): a variety of fire suppression hand tools such as shovels, rakes, Pulaski's etc., a fire extinguisher (at least 5 lbs.), and 20-50 gallons of water with a way to effectively spray the water (i.e. backpack pumps, water sprayer, etc.).

When performing project activities, IPC will conduct inspections of the undercarriage of vehicles after driving over roads with high vegetation to make sure grass and brush have not accumulated near the vehicle's exhaust system.

Each internal combustion engine shall be equipped with a spark arrester that meets the federal land managing agency's standards.

During BLM's Stage II Fire Restrictions, IPC will obtain an appropriate waiver and take appropriate precautions when conducting project activities that involve an internal combustion engine, generate a flame, involve driving over or parking on dry grass, involve the possibility of dropping a line to the ground, or involve explosives by using a Fire Prevention Watch Person that will remain in the area for one hour following the cessation of that activity. Also, IPC personnel will not smoke unless within an enclosed vehicle, building or designated recreation site, or while stopped in an area at least three feet in diameter that is barren or cleared of all flammable materials. BLM will inform IPC staff listed on the IPC Notification list (Appendix 1), when BLM's Stage II Fire Restrictions are implemented.

IPC will notify the jurisdictional fire dispatch center immediately (see Appendix 1 for contact information) upon confirmation of a wildland fire, will move to a safe location and wait for fire

suppression resources to arrive, and will check-in with the BLM incident commander if one is on the scene.

If the BLM determines that it must use fire-suppression techniques that could affect operation of the lines, it will notify IPC as soon as possible.

4.7. Protection Measures for Visual Resources

The project area is within a Visual Resource Management (VRM) Class II visual resource area. The objective of this class is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. The area already has a visual character defined by the presence of existing transmission lines, associated access and service roads, and scattered development (e.g., Brownlee Dam, Duke Substation). Viewers are used to seeing the existing facilities.

The majority of the proposed rebuild would continue to occupy the existing 80-foot-wide ROW and changes to the visual character would be negligible and viewers are not expected to notice much difference in the line ROW. The portion of the project coming off of Round Mountain toward Brownlee Dam includes abandoning approximately 3,660 linear feet of the existing line, removing 11 H-frame wood structures including associated hardware, and reseeding the existing ROW once the proposed realignment is completed. Additionally, approximately 2,900 linear feet of existing service roads would be abandoned and restored as necessary. The proposed reroute would improve the visual quality of the area by reducing the number of structures coming down the hillside toward Brownlee Reservoir and eliminating the need to build new service roads and level work pads at the base of the structures; ultimately reducing long term physical scaring on the hillside.

During a site visit on April 29, 2014, The BLM determined that the re-construction of the line and the proposed reroute would retain the current visual resources of the area. To help protect the aesthetic resources, IPC will use nonspecular conductor to reduce visual contrasts. Also, all stakes, flagging, and construction trash/debris will be removed from the construction area and all disturbed areas resulting from construction will be reseeded as described in Section 5.

4.8. Protection Measures for Aquatic Resources

Streams or watercourses with definable streambeds or stream banks, regardless of whether there is flowing water, are important because they provide habitat for a variety of animal and plant species. If impacts to a federally-listed threatened or endangered aquatic species and/or critical habitat were unavoidable, IPC would consult with the BLM before commencing activities.

Woody vegetation management within 50 feet of streams will be conducted by hand crews. Herbaceous plants and low-growing shrubs will be left in place if they do not interfere with the safe O&M of transmission lines and equipment. IPC will use existing stream crossings and will not create new crossings without prior BLM approval and other necessary regulatory approvals (e.g., Section 404 of the Clean Water Act). Off road vehicle use in live water is limited to

designated crossings and work areas, to minimize the potential for impacts from crushing or introduction of sediments into waterways.

Herbicide use in riparian or upland areas that may influence riparian habitats would implement the following measures:

- Tank mixing of herbicides or fueling of motorized equipment would not occur in riparian areas.
- Use of the surfactant R-900 would be precluded in or adjacent to (within 50-feet) riparian habitats.

4.9. Emergency Notification Procedures

If IPC becomes aware of an emergency situation caused by a fire on or threatening BLM lands and that could damage the transmission line or their operation, they will notify the appropriate BLM contact (Appendix 1). Likewise, if the BLM becomes aware of an emergency situation that is caused by a fire on or threatening BLM lands and that could damage the transmission lines or their operation, it will notify IPC (Appendix 1).

4.10. Industrial Wastes and Toxic Substances

IPC does not anticipate the generation of industrial wastes or the use of toxic substances. In the event a toxic substance is used, IPC will follow all applicable federal, state, and local requirements.

4.11. Inspections

IPC and/or its contractor conduct periodic inspections of its transmission lines. Inspections are typically conducted from the ground and by a lineman using a pickup, ATV, or UTV. Follow-up inspections may be conducted and may involve the use of a bucket truck or other specialized equipment (e.g., snowmobile) to access a particular location or piece of equipment.

Periodic inspections are also conducted on wood structures to assess their integrity. This is typically done on a 10-year cycle.

5. Stabilization and Rehabilitation

To minimize possible impacts to natural resources, reduce erosion and sedimentation, and minimize noxious weeds, IPC and/or its contractor will reseed all disturbed areas resulting from construction and O&M activities. Any measurable damage would be repaired as soon as weather, ground, and scheduling conditions permit. In some cases, reclamation methods may not be necessary, given the limited amount of soil compaction, vegetation destruction, and surrounding site conditions. Revegetation of roads may also not be warranted; for example, a road that is used by the general public would not be reseeded.

IPC will work with the Authorized Officer to develop mutually agreeable specifications for site rehabilitation. General methods are presented below; these are subject to revision based on consultation with the BLM.

The seed mix used for any restoration project will be determined in consultation with the BLM, and seed will be provided by IPC. All seed used must meet all the requirements of the Federal Seed Act and applicable state laws regarding seeds and noxious weeds. Only seed certified as "noxious weed-free" will be used. If requested, IPC must provide the BLM with evidence of seed certification. Any seeding mixture should not contain aggressive, non-native species that might invade the site. If mulch is used on seeded areas, it will be certified weed free straw or hay.

The surface of the ground must be prepared prior to seeding; a process called seedbed preparation. Before seedbed preparation, an inspection of the road or site surface will determine the most appropriate method to use. Where practical and agreed to with the BLM, IPC will follow these guidelines for preparing the seedbed:

1. Disturbed areas will be cleared of foreign materials, such as garbage, paper, and other materials, but all rocks, limbs, or minor woody debris would be left in place. IPC will prepare the seedbed immediately prior to seeding.
2. Under the right soil-moisture conditions, a standard disk or spring bar harrow will be used to roughen the topsoil layer to create the desired surface texture before the seed is applied. Dirt clods and chiseled voids resulting from the roughening process increase the surface area for water collection and provide micro-sites for seed establishment. The soil should be disked or harrowed to no more than 2 inches deep at a time when soil moisture allows the surface to remain rough, with clods approximately 2 to 4 inches in diameter.
3. Disking or harrowing should be performed parallel to surface contours. In this way, downslope alignment of furrows can be avoided. In areas that already have the desired soil characteristics, the seedbed does not need to be prepared.

IPC will seed an area after earth disturbing activities are completed. However, some time periods are better for seed establishment than others. The best time to seed is in the fall (September–November). If seeding cannot be done then, spring seeding should take place as conditions dictate. After the seedbed has been prepared, IPC will broadcast the seed on the disturbed area, after which the seed will be lightly harrowed into the roadbed or raked into the ground. Stabilizing material may be added if necessary. IPC will not seed an area when wind velocities will prohibit the seed mix from being applied evenly.

6. Termination and Restoration

At the end of the useful life of the line, if the facility is no longer required, the line will be removed from service. Upon decommissioning conductors, insulators and hardware would be removed or abandoned in-place (cut off at ground level). Following abandonment and removal of the transmission-line structures and equipment from the ROW, any areas disturbed during decommissioning will be restored and rehabilitated as described in Section 5.

7. POD ACCEPTANCE

The following authorized representatives of IPC and the BLM Vale District have accepted this POD.

IPC:

Idaho Power Company

By: _____

Adam Richins

G.M., Customer Operations Engineering and Construction

Date: 9-4-15

BLM:

Bureau of Land Management

Vale District Office, Baker Field Office

By: _____

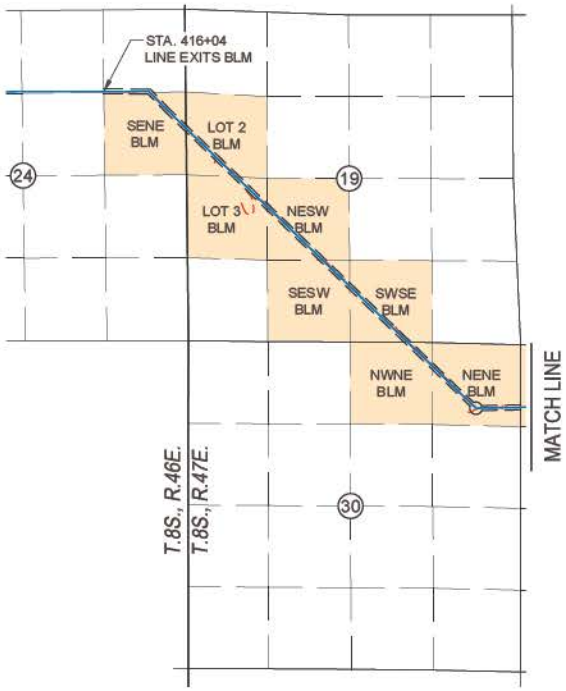
Lori Wood

Field Manager

Date: 9/9/15

8. REVISIONS

This section summarizes amendments made to the POD after the plan's acceptance. The amendment history includes the date on which changes were made, a brief description of those changes, and the signatures of authorized representatives of IPC and BLM accepting the changes.



LEGEND:

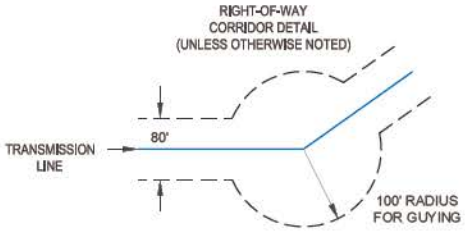
- TOWNSHIP
- SECTION
- SECTION 1/16
- SERVICE ROAD
- TRANSMISSION LINE
- RIGHT-OF-WAY

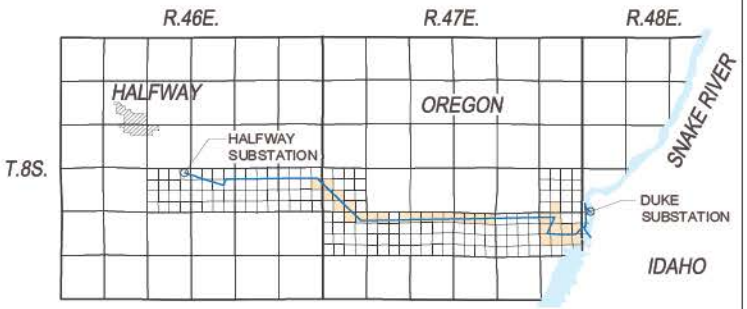
RIGHT-OF-WAY ON U.S. LAND

FEET OF LINE ON U.S. LANDS---------- 31,377
MILES OF LINE ON U.S. LANDS---------- 5.94
ACRES OF LINE ROW ON U.S. LANDS-------- 59.63

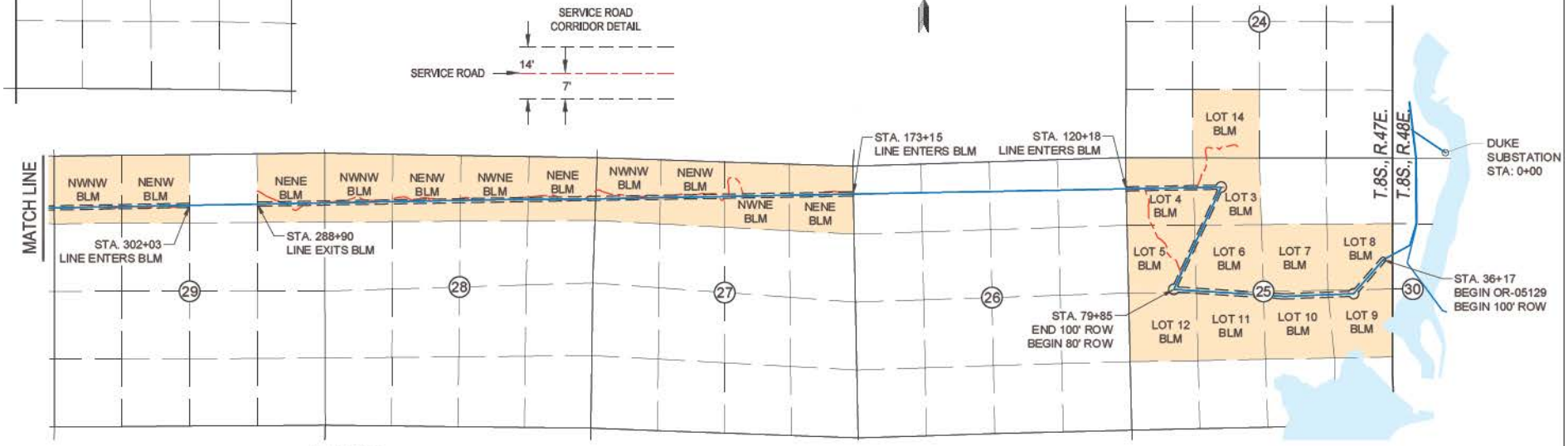
SERVICE ROAD RIGHT-OF-WAY ON U.S. LAND

FEET OF ROAD ON U.S. LANDS---------- 10,652
MILES OF ROAD ON U.S. LANDS---------- 2.02
ACRES OF ROAD ROW ON U.S. LANDS------- 3.42





VICINITY MAP
NTS



0 2000' 4000'

CONFIDENTIAL:
This document contains Confidential and Critical Energy Infrastructure Information. Idaho Power and the Bureau of Land Management (BLM) entered into a Nondisclosure and Confidentiality Agreement on October 1, 2007, and the BLM will treat this information in accordance with that agreement.

DISCLAIMER:
This drawing is not a formal survey and only provides geographic representation of Idaho Power Right of Way Grant in relation to Idaho Power lines, facilities and existing property boundaries. A professional survey is recommended for accurate and documented locations of all easements, lines, facilities and property boundaries depicted herein.

REV.	DESCRIPTION	DATE	DS.	DR.
1	Line re-aligned. Landbase from IPC GIS, BLM PLSS, and survey performed by Timberline Surveying.	08-06-15	HVO	JCU

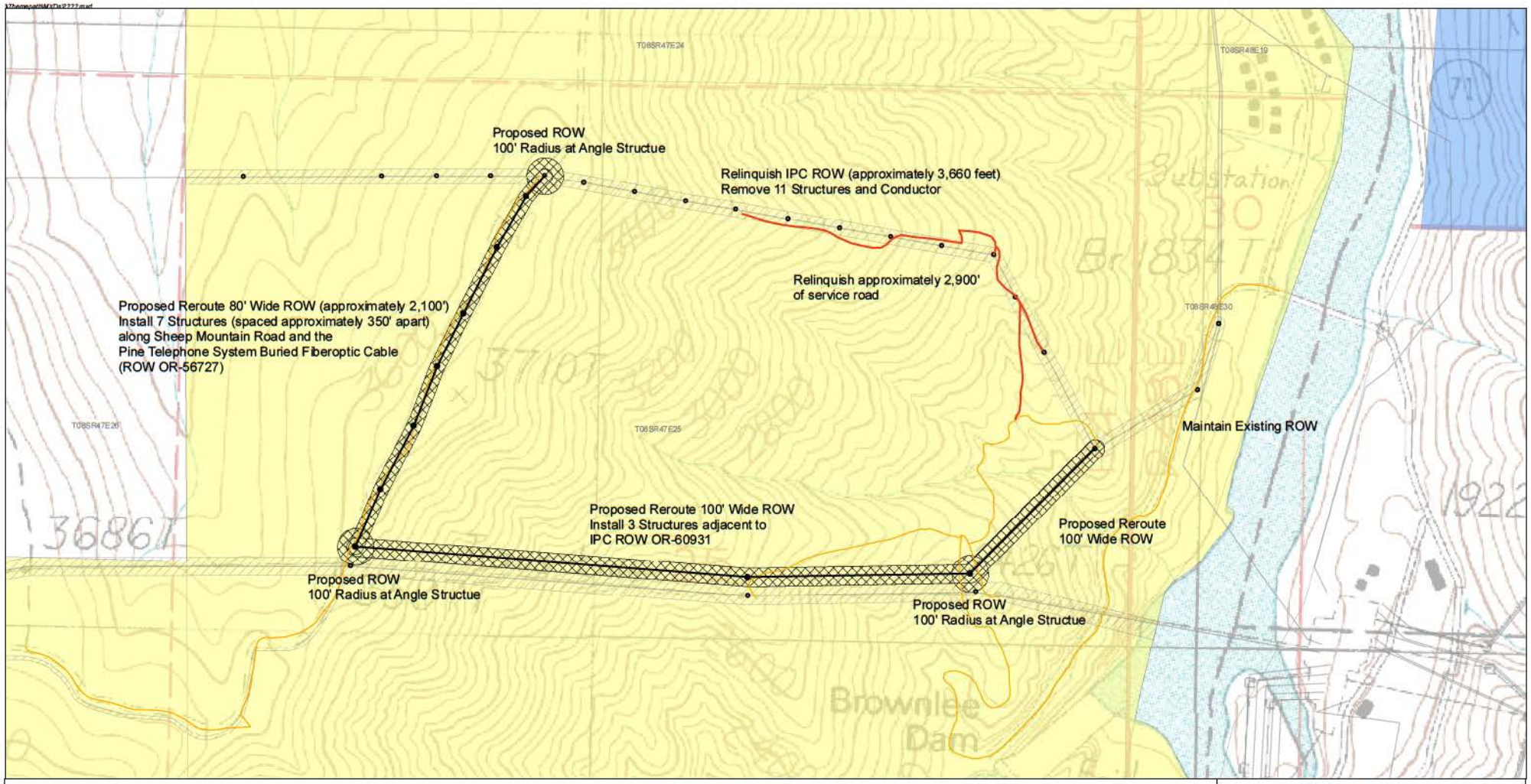
NOTES
1. The Right-of-Way shall also include guy anchors when present.
2. The service road corridor only applies to service roads that are on U.S. land and outside of the transmission line corridor.
3. The Right-of-Way is 100' wide from STA: 36+17 to STA: 79+85.

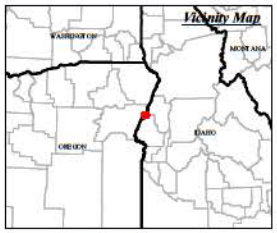
SIGNAGE		DATE
DS:	HVO	08-06-15
DR:	JCU	08-06-15
CH:	RFP	08-06-15
SCALE:	1"= 2000'	HORZ.
	N/A	VERT.

PROJECT INFORMATION
DETAIL MAP TO ACCOMPANY
APPLICATION FOR RIGHT OF WAY GRANT
DUKE - HALFWAY, LINE No. 216 - 69kV
BAKER COUNTY, OREGON

CORPORATE REAL-ESTATE
PERMIT No. OR-05129
VAULT No. 06B-13422
WO No. 27403838
SHEET: 1/1 SUBCD 04

IDAHO POWER. An IDACORP Company





IDAHO POWER.
An IDACORP Company

Features Legend

- Proposed Reroute
- Proposed Structures
- Proposed ROW
- Relinquish Road
- Transmission Line
- Structures
- Authorized ROW
- ServiceRoads

BLM Private State USFS

Duke - Halfway 69 kV Transmission Line (Line 216)
IDAHO POWER COMPANY, BOISE, ID 2014

Figure 2

Proposed Reroute
Preliminary Conceptual Plan

0 210 420 840 1,260 Feet

Date: 6/12/2014

Idaho Power Transverse Mercator (IPTM)
Units: Feet (US Survey Feet)
Horizontal Datum: NAD83, Vertical Datum: NAVD88
Scale Factor at Central Meridian: .99960
Longitude of Central Meridian: -115 30 00, Latitude of Origin: 42 00 00
False Easting: (Meters) 500000 or (US Survey Feet) 1640416.666667
False Northing: (Meters) 100000 or (US Survey Feet) 328083.333333.

Idaho Power Company, Project: "line 216_duke-halfway rebuild_ii.xyz"
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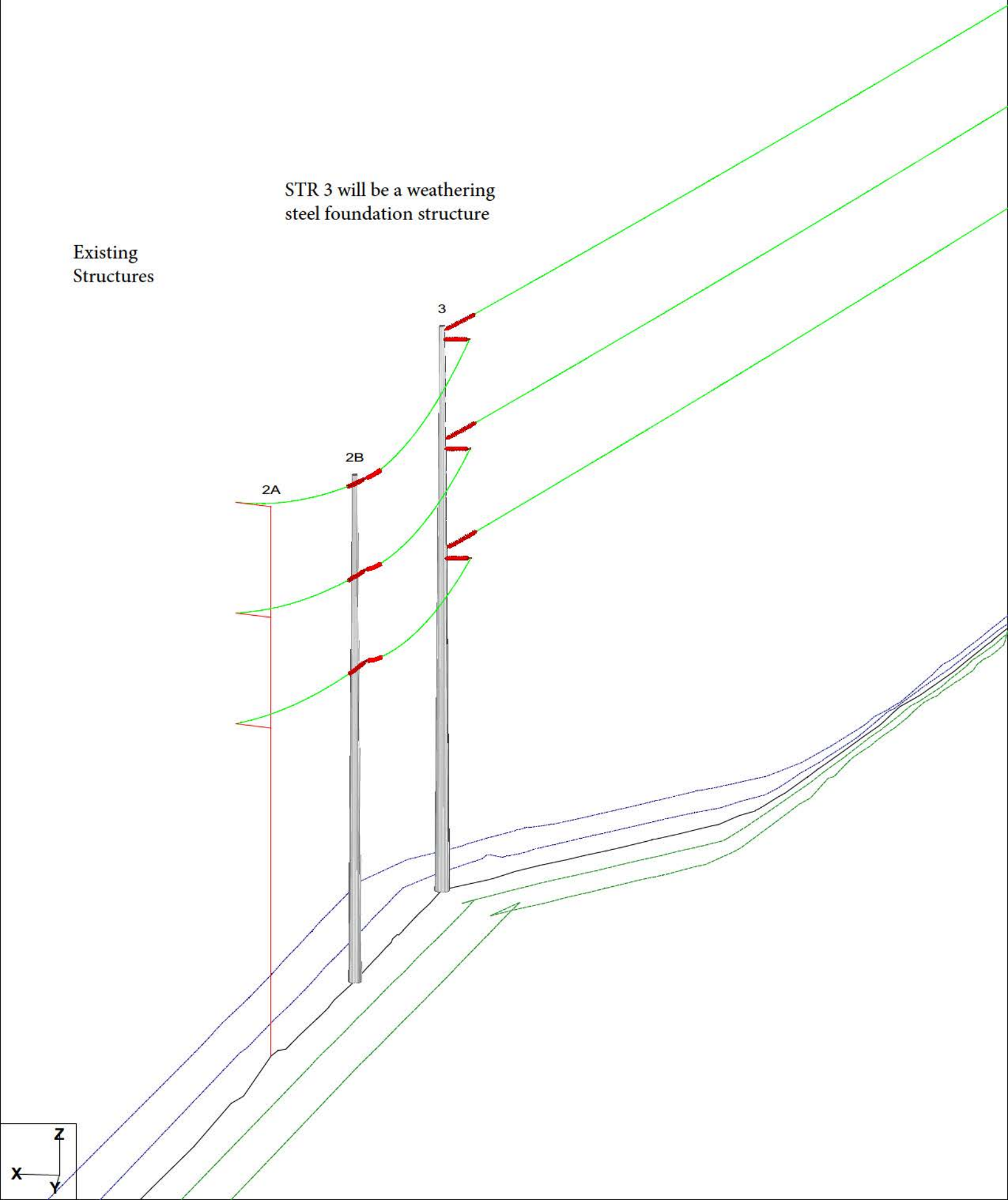
Line Title: 'Line 216 Phase II'



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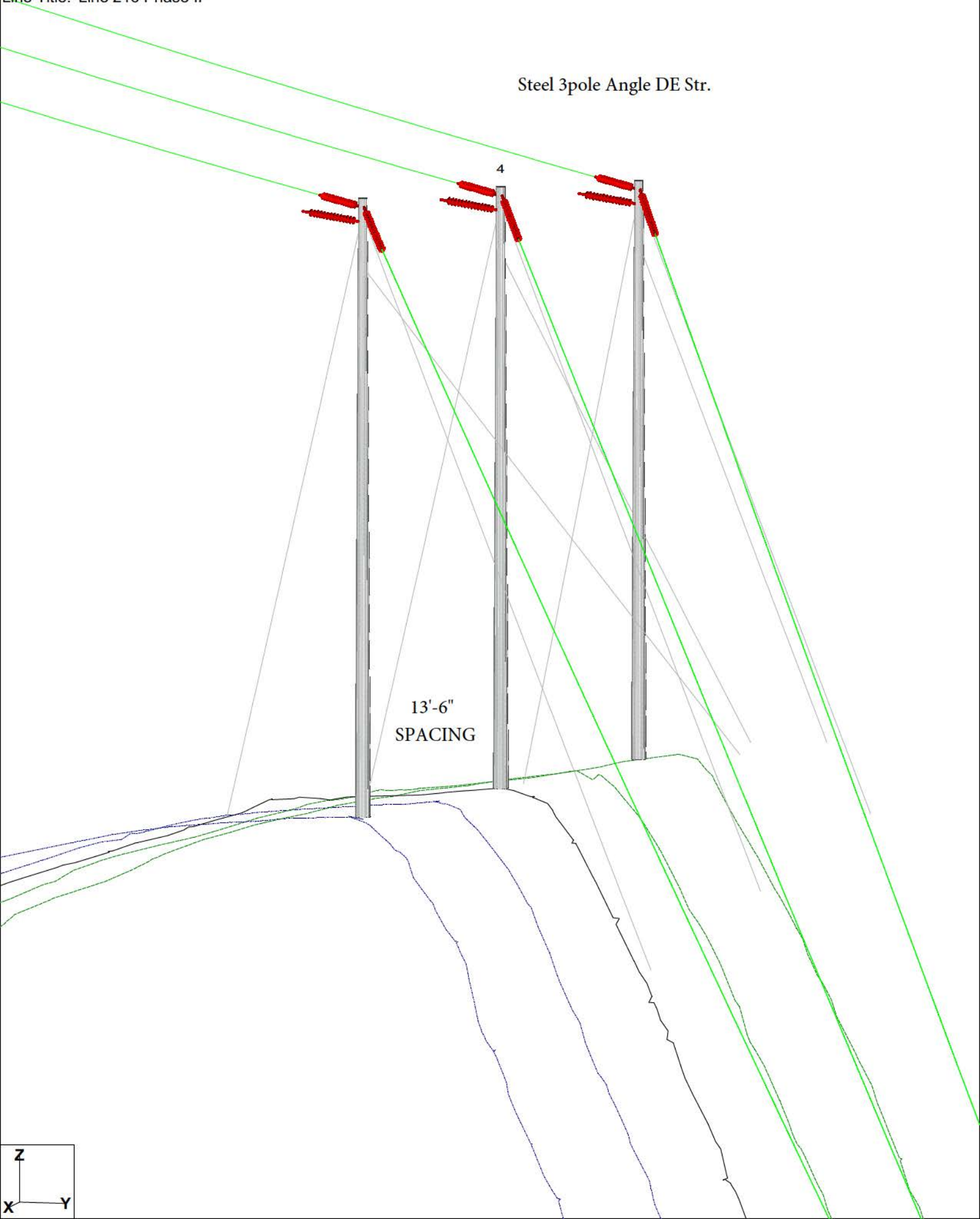

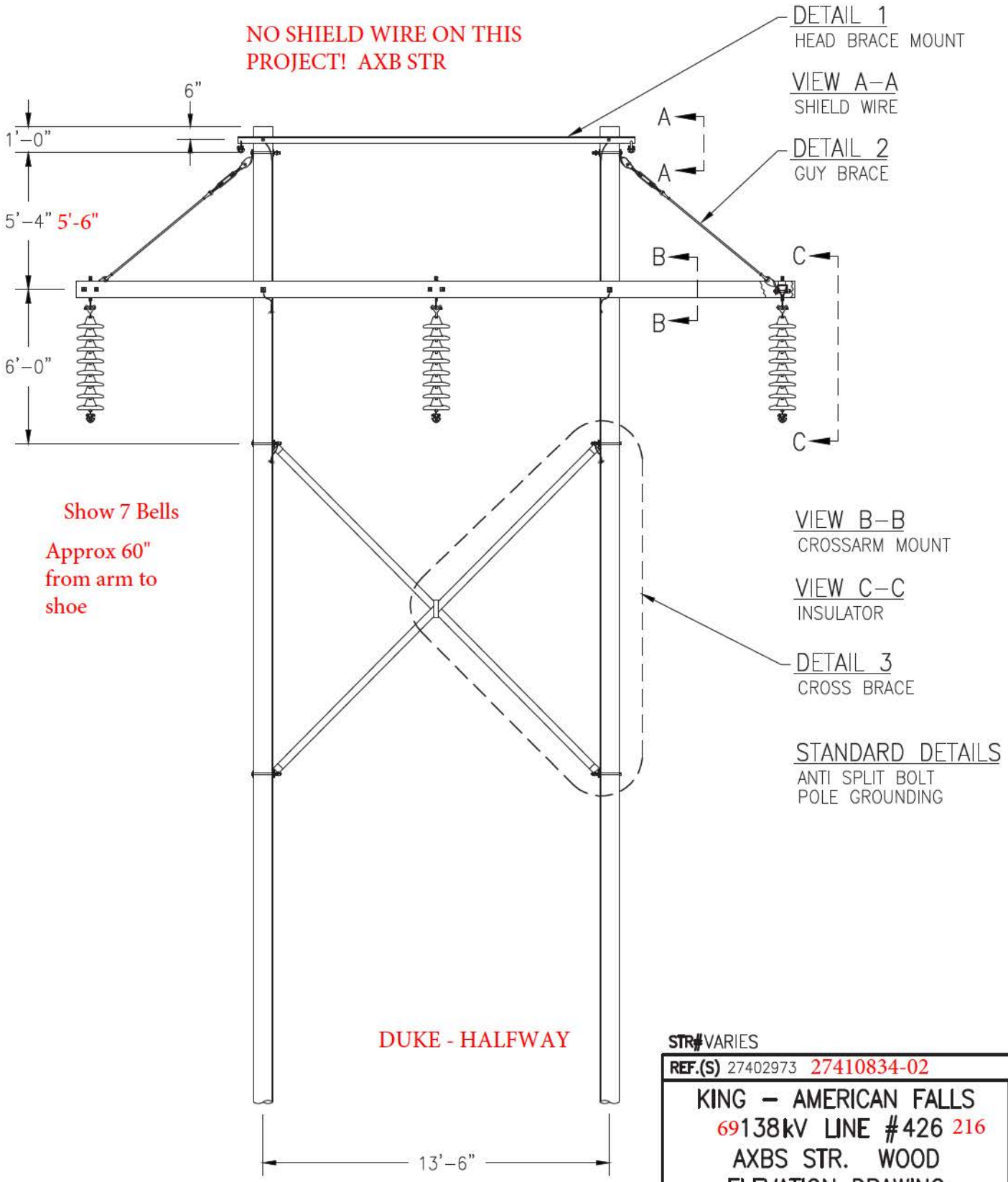

AXBS STRUCTURE
ELEVATION

STR# VARIES

REF.(S) 27402973 27410834-02

KING – AMERICAN FALLS
69 138kV LINE #426 216
AXBS STR. WOOD
ELEVATION DRAWING

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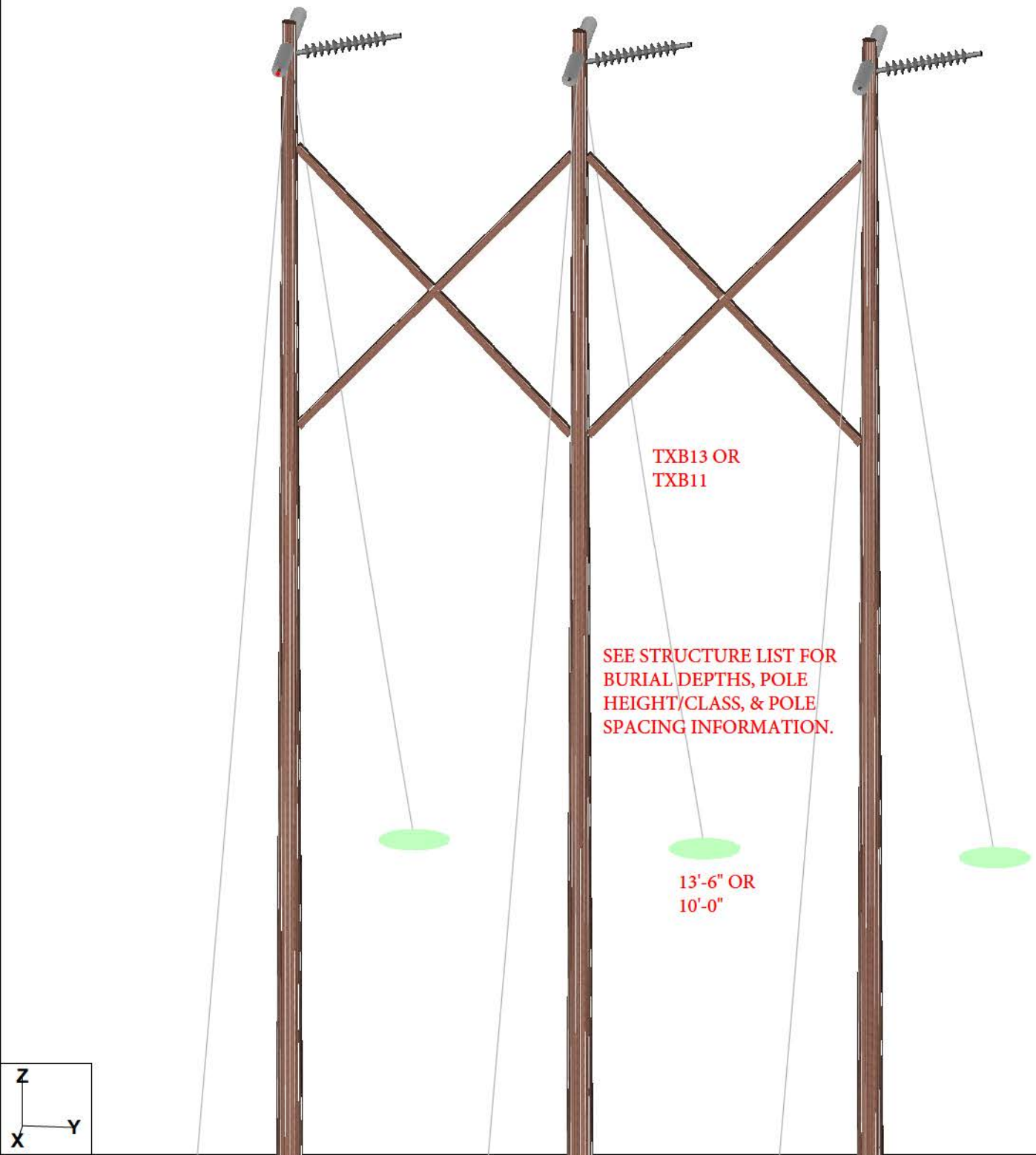
SCALE: 3/16"=1'		DATE: 4/2/2014	
DS. MWO DR. BKB	SHT. 1A	23 A–68156	06

VAULT# 23A– 68156001A

Idaho Power Company, Project: "3polede_13-6-065.2"
PLS-POLE Version 13.20, 2:20:41 PM Thursday, March 19, 2015
Undeformed geometry displayed

3PDE & 3PADE WOOD STRUCTURES

STRS: (VARIES) SEE STRUCTURE LIST



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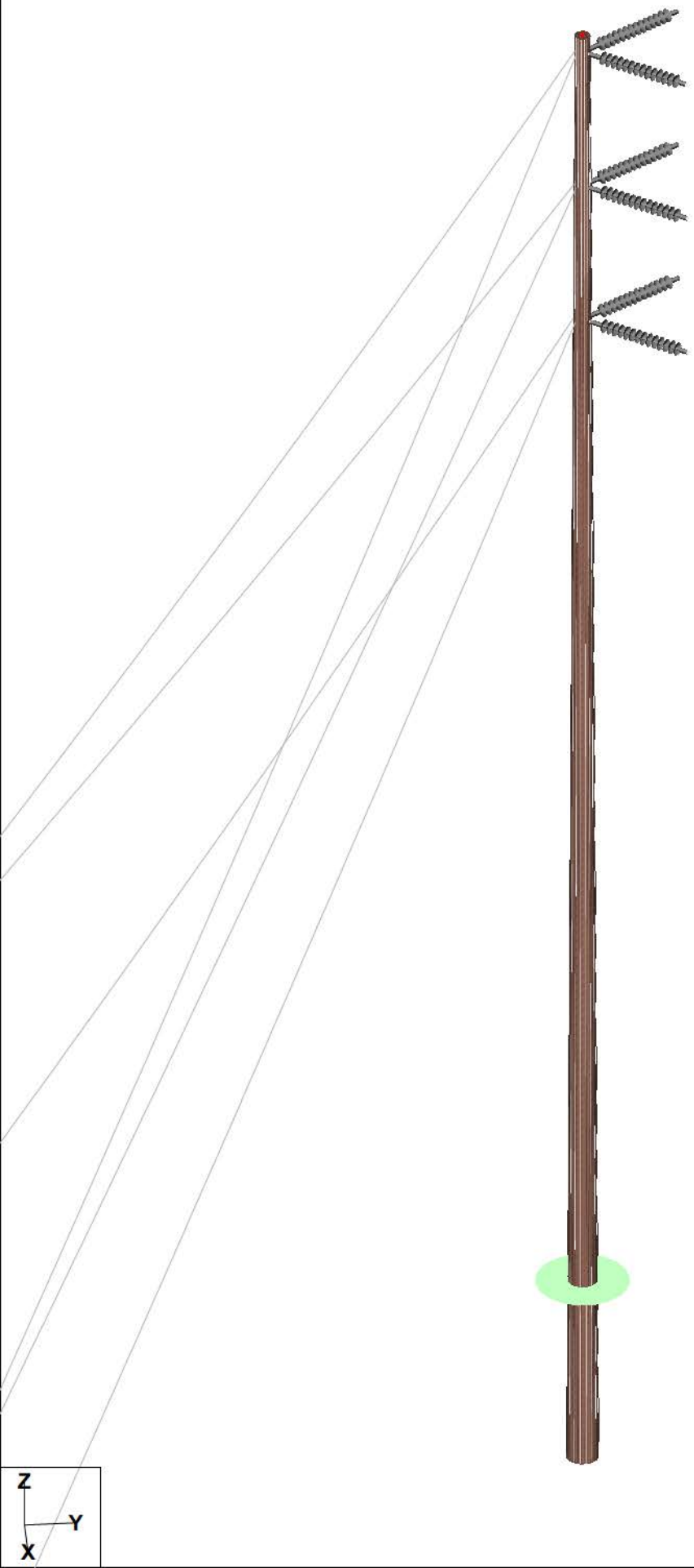
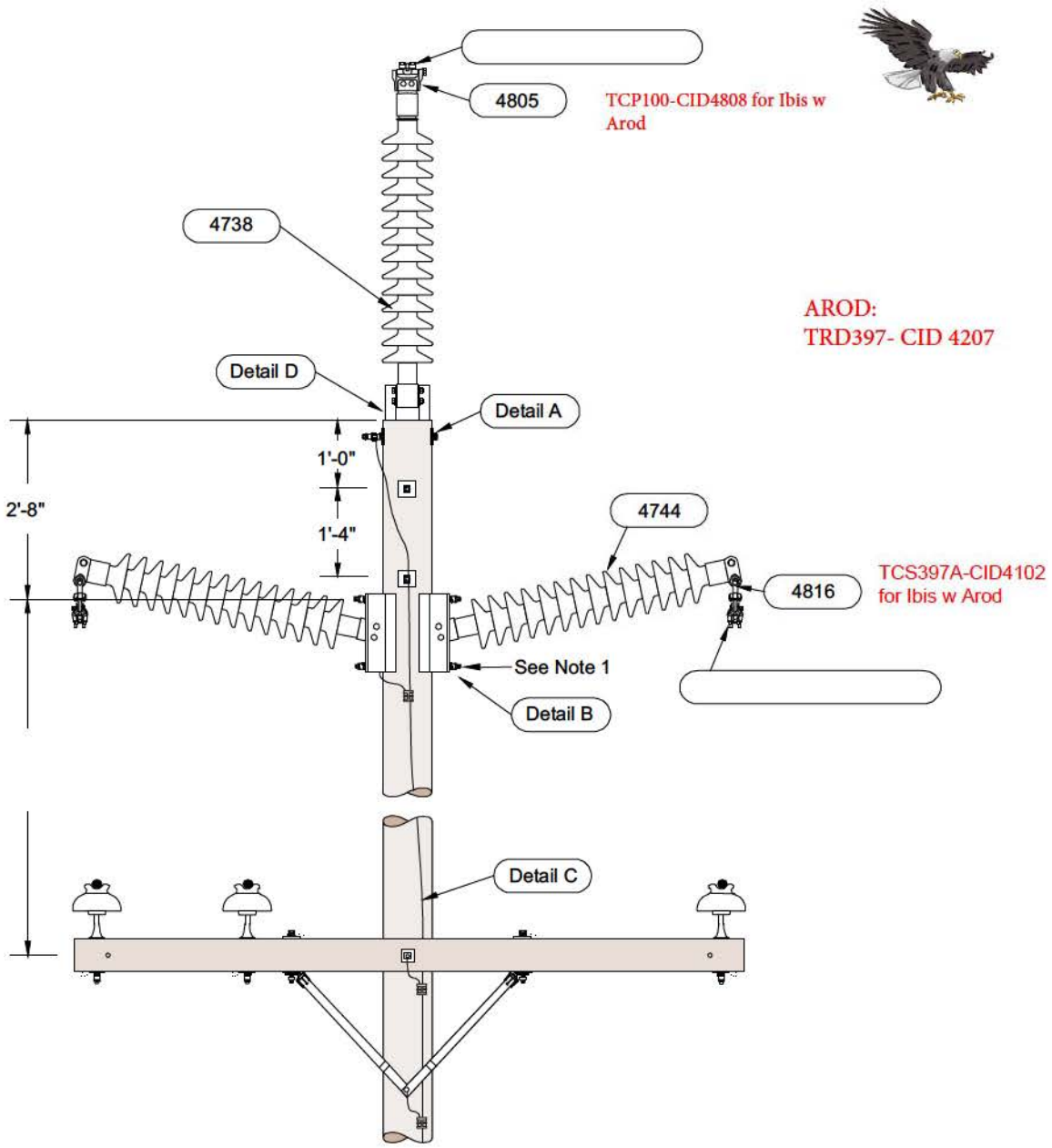
Undeformed geometry displayed

STR 8 & 81 are D2 type

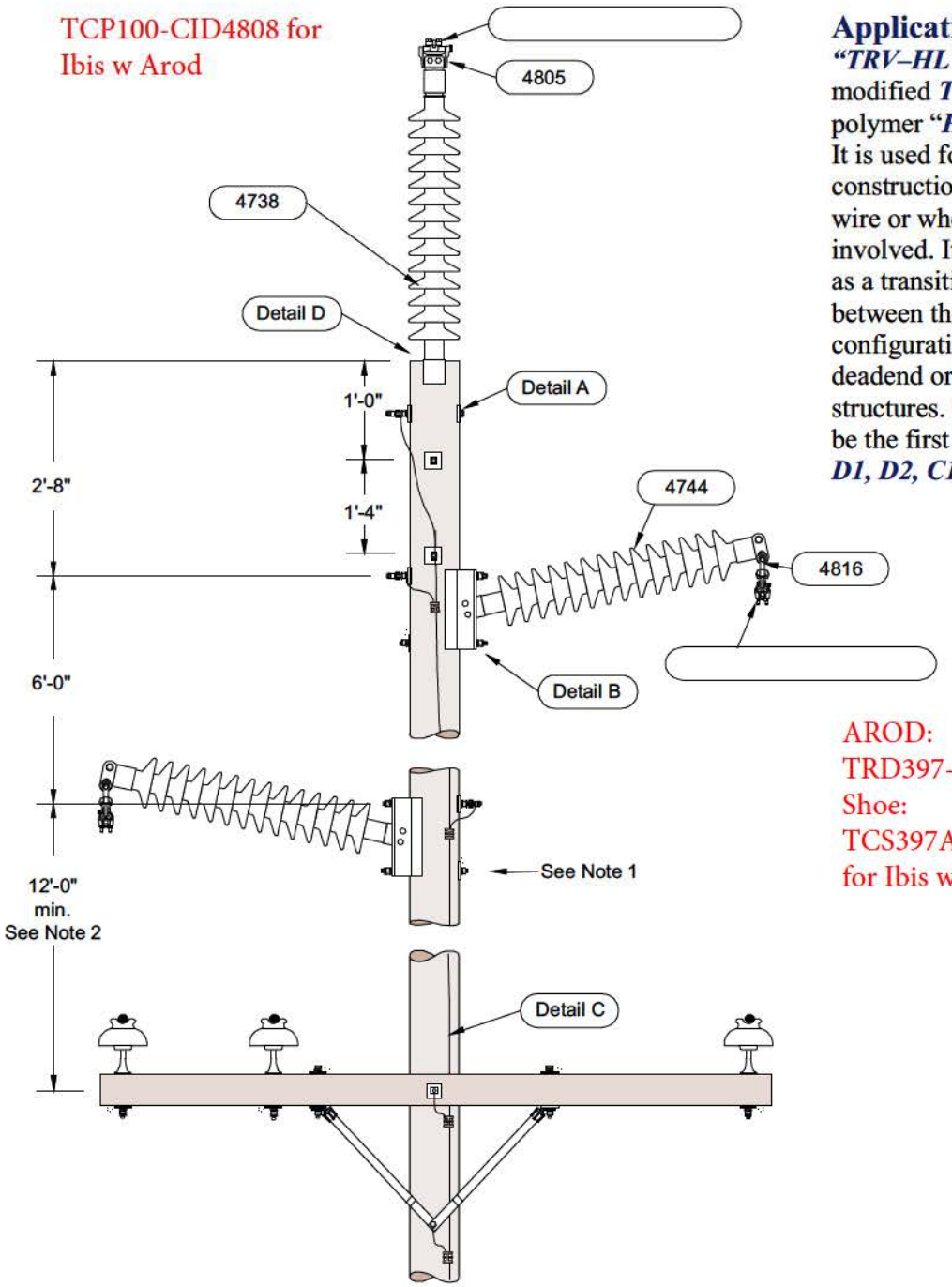


Application. The *"TR–HL"* structure is the preferred method to build a 138 kV *TR*iangular configuration with polymer "*H*i-*L*ite" insulators. It is used for tangent construction where no angles are involved and where a shield wire is not required.



Notes:

1. **Design Reference.** Use the elevation of the bottom bolt of the lowest insulator mount as a conductor reference point for calculating vertical clearances.
2. **Framing Reference.** Maintain a minimum of 12' to the crossarm mounting bolt of any distribution underbuild. This dimension is valid for spans of 300' or less. For longer spans, consult with engineering.
3. **Construction Practice**. If there is a possibility of energizing a broken or sagging down guy then guy strain insulators are required. Anchor type may also require the use of guy strain insulators. See Section 04.



Application. The 138 kV ***"TRV–HL"*** structure is a modified ***TR*** structure with polymer "***H***i-***L***ite" insulators. It is used for tangent construction with no shield wire or where small angles are involved. It is designed for use as a transition structure between the ***TR HL*** configuration and vertical deadend or running angle structures. It would normally be the first structure out from a ***D1, D2, C1,*** or ***C2*** structure.

Notes:

1. **Design Reference.** Use the elevation of the bottom bolt of the lowest insulator mount as a conductor reference point for calculating vertical clearances.
2. **Framing Reference.** Maintain a minimum of 12' to the crossarm mounting bolt of any distribution underbuild. This dimension is valid for spans of 300' or less. For longer spans, consult with engineering.
3. **Construction Practice**. If there is a possibility of energizing a broken or sagging down guy then guy strain insulators are required. Anchor type may also require the use of guy strain insulators. See Section 04.

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Appendix 1
Contact information for key personnel (August 2015)

Role	Contact Information
BLM – Vale District, Baker Office	
Emergency Contacts	
Fire Reporting/Management	General Office 541-523-1256
Hazmat Reporting	Jeff Wall – 541-523-1493
Law Enforcement	Stephanie Cox – 541-523-1493
Administrative Contacts	General Office 541-523-1256
General	Lori Wood – Baker Field Manager 541-523-1431 Trisha Skerjanec – Realty Specialist 541-473-6222
Idaho Power Company	
Emergency Contact	System Dispatch 208-388-2826
Administrative Contacts	Idaho Power Company P.O. Box 70 1221 W. Idaho St. Boise, ID 83707
General Operation & Maintenance	Transmission & Distribution Maintenance Dept. (208) 388-2200 Dale Welch 208-388-2088 (Engineering Leader) Greg Yano 208-388-2909 (Maintenance Lead)
Environmental & Archaeology	Brett Dumas 208-388-2330 (Environmental supervisor) Shane Baker 208-388-2925 (Archeologist) Stacey Baczkowski 208-388-5093 (Environmental Services) Ron Piston 208-388-6438 (Environmental Services)
Land Management	Angela Wood 208-388-5625 (Land Management Leader)

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