

2.0 PROJECT NARRATIVE

This section incorporates the Kittitas County Zoning Conditional Use Permit Application Project Narrative.

2.0 PROJECT NARRATIVE

Below is Application requirement # 10 followed by Pacific Power's response to address this requirement.

10. *Narrative project description (include as attachment): Please include at minimum the following information in your description: describe project size, location, description of water system, sewage disposal and all qualitative features of the proposal; include every element of the proposal in the description.*

2.1 Introduction

Pacific Power proposes to construct, operate and maintain a new 230 kV transmission line from Pacific Power's Pomona Heights Substation located just east of Selah, Washington in Yakima County to Bonneville Power Administration's (BPA's) Vantage Substation located just east of the Wanapum Dam in Grant County, Washington (the Project). Approximately 27.6 linear miles of the transmission line passes through the southeastern corner of Kittitas County.

2.2 Facility Design and Construction

Approximately 145,756 linear feet of the proposed Vantage to Pomona Heights 230 kV transmission line passes through Kittitas County. Project components in Kittitas County include: transmission line right-of-way (ROW), 162 transmission line structures, conductor, fiber optic ground wire (OPGW), shield wire, temporary construction work areas, and access roads. The total ROW width is 125 feet, additional ROW may be required for guys and anchors at particular structure locations. As shown on Figure 1, the transmission line crosses into Kittitas County along the southern county line between Highway 821 and Interstate 82, then continues north-northeast for approximately 6 miles. The transmission line turns northeast a mile before crossing Interstate 82 south of Exit 11 and continues that direction to Badger Pocket where it turns east. The transmission line continues east for approximately 14 miles then turns northeast just before crossing the Columbia River. The new transmission line parallels existing transmission line corridors for most of the length through Kittitas County.

2.2.1 Transmission Line Design and Construction

The transmission line route and other Project components have been designed based on best available information but may shift during final micrositing prior to construction. In the coming months, engineer and construction review will be completed. As part of the engineering and construction review, field staking of the following will occur: the centerline of the transmission line route, ROW boundaries, access roads, spur roads to structure sites, structure locations, and temporary work areas.

Final micro-siting of the centerline will occur to minimize impacts and to accommodate: detailed engineering requirements, the results of pre-construction resource surveys, and landowner negotiations. Updated site plan figures will be provided to Kittitas County when the engineering and construction reviews are complete.

2.2.2 Structures

The 162 transmission line structures that occur in Kittitas County will be a combination of H-frame and three-pole designs depending on location. They range in height from approximately 59 to 216-feet above ground and are spaced an average of 330 feet apart. Structure 2/39 on the western bank of the Columbia River will be lit according to Federal Aviation Administration regulations. Information regarding structure type and height are shown in Figure 2 and Figure 3.

2.2.3 Foundations

Poles will be placed in augured holes, directly embedded into the ground and typically do not require concrete foundations. The embedment depth for these structures ranges from 8 to 16 feet below ground. The diameter of the hole excavated for embedment is typically the pole diameter plus 18 inches. When a pole is placed in a hole, native or select backfill will be used to fill the voids around the perimeter of the hole.

2.2.4 Conductor, Insulators and Shield Wire

The conductor (the wire cable strung between transmission line structures through which the electric current flows) will be aluminum stranded with a steel stranded reinforced core. The aluminum carries the majority of the electrical current and the steel provides the tensile strength to support the aluminum strands. The conductor size will be 1,272 kilo-circular mils (1.354-inch diameter). Across the Columbia River the conductor size will be 1,557.4 kilo-circular mils (1.504-inch diameter). The transmission line will be designed for one 230 kV three-phase (three conductors) circuit and one shield wire.

Conductor phase to phase and phase to ground clearance parameters are determined in accordance with the National Electrical Safety Code (NESC) and Pacific Power design standards. This code provides for minimum distances between the conductors and the ground, crossing points of other lines and the transmission support structures, other conductors and a minimum working clearance for personnel during energized operation and maintenance activities (Institute of Electrical and Electronics Engineers [IEEE]). Minimum conductor height above the ground or vegetation will be 28 to 35 feet, typically. Minimum conductor clearances dictate the height of each structure based on topography and safety clearance requirements.

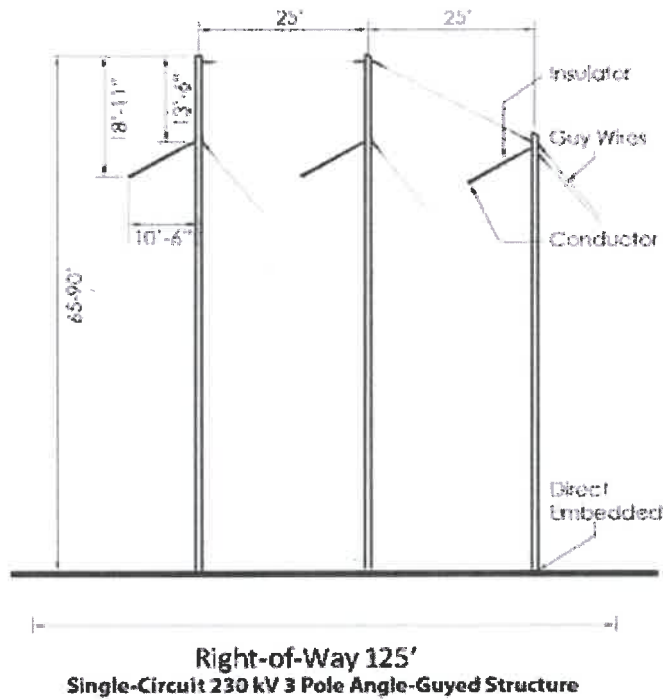
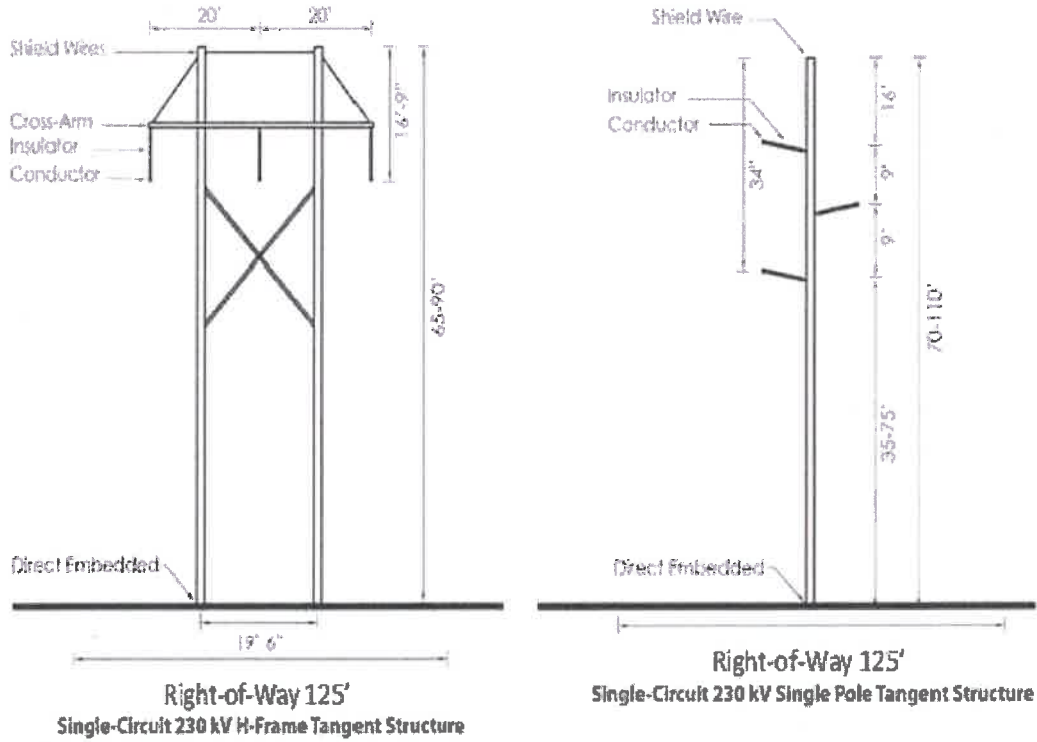


Figure 2 - Structure Diagrams

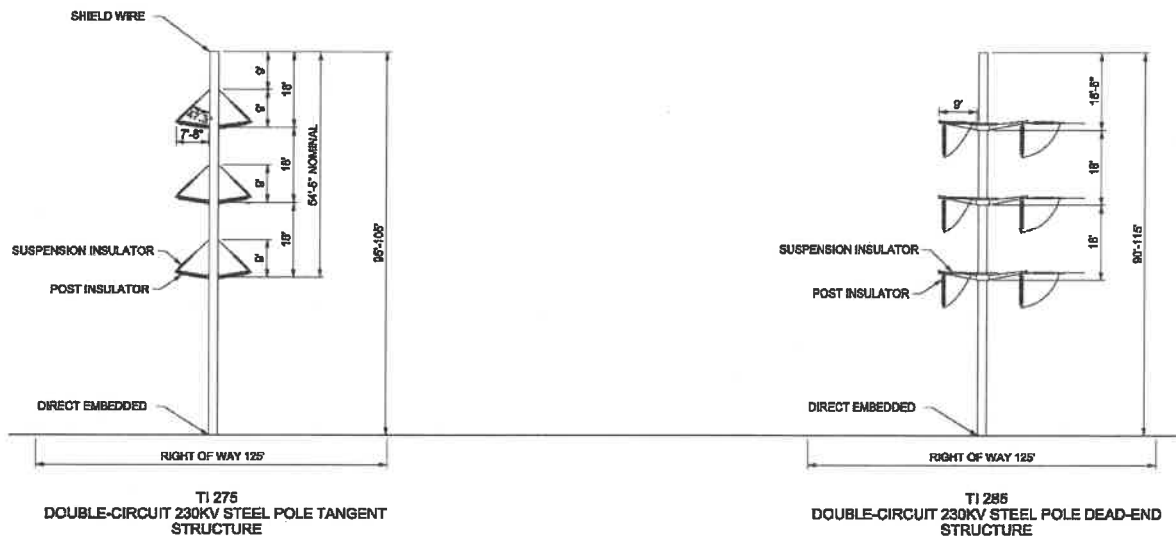
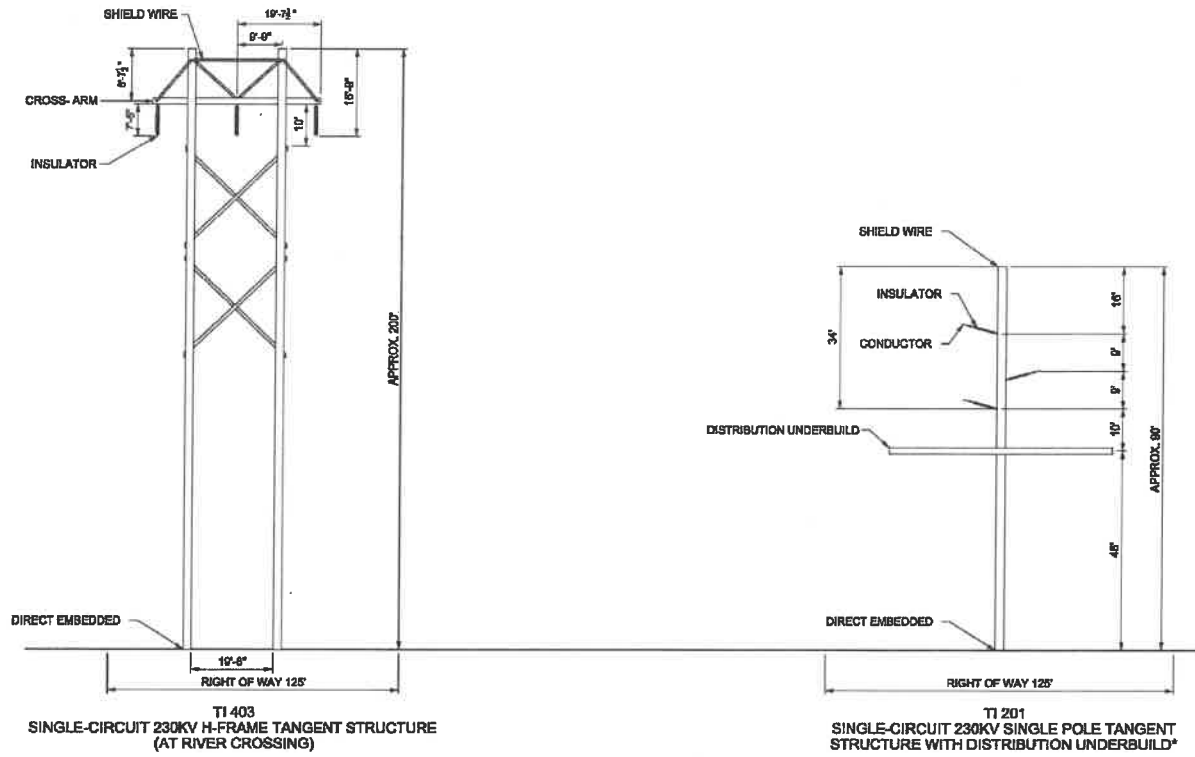


Figure 3 - Additional Structure Diagrams

Insulators, which are made of an extremely low conducting material such as porcelain, glass, or polymer, are used to suspend conductors from each structure. Insulators inhibit the flow of electrical current from the conductor to the ground or another conductor. The 230 kV transmission line will utilize polymer type insulators. The assemblies of insulators are designed to maintain electrical clearances between the conductors, structures, and ground.

To protect conductors from lightning strikes, each structure will have one lightning protection shield wire installed near the top of each pole. Current from lightning strikes will be transferred through ground wire attached to structures into the ground. The shield wire will be grounded at regular intervals to meet NESC and Pacific Power standards.

The overhead ground-wire connected to the structure is grounded with buried ground rods to provide an electrical path to ground (called counterpoise). The number of rods is determined by the structure/ground resistance and typically does not extend 30 feet beyond the structure in perpendicular and parallel directions. Structures will typically require 2-3 grounding rods adjacent to the structure.

Conductors and shield wires will be placed on the transmission line structures by a process called stringing. Insulators and stringing sheaves are installed on the structures. Stringing sheaves are rollers that are temporarily attached to the lower portion of the insulators at each transmission line structure to allow conductors to be pulled along the line. The initial stringing operation commences with the pulling of a lighter weight sock line through the sheaves along the same path the transmission line will follow. The sock line can be pulled in via helicopter or by ground-based equipment. The sock line is attached to the hard line, which follows the sock line as it is pulled through the sheaves. The hard line is then attached to the conductor, shield wire or OPGW to pull them through the sheaves into their final location. Pulling the lines is accomplished by attaching them to a specialized wire stringing vehicle. Following the initial stringing operation, pulling and tensioning the line will be required to achieve the correct sagging or tension of the transmission lines between support structures. Equipment required for pulling and tensioning activities will include tractors and trailers with spooled reels that hold the conductors and trucks with the tensioning equipment. Pulling and tensioning efforts and equipment will occur in the areas shown on the scaled site plan as “Wire Sites” (see Attachment 2). During stringing operations, guard structures may be erected at road crossings to provide added safety protection so the unenergized wires do not accidentally fall onto the roadway.

2.2.5 Access Roads

Access to the ROW is necessary for the construction, operation, and maintenance of the Project. Construction of the transmission line will require vehicle, truck, and crane access to each new structure site for construction crews, materials, and equipment. Access will typically occur from existing roads within the Project area, but upgrades to some existing roads, and construction of some new roads will be necessary. Most new roads will be temporary, overland travel/drive and crush type access roads. Roads existing prior to construction will be left in a condition equal to or better than their condition prior to construction.

When it is necessary to establish a sturdier surface, roads may be graded to a travel surface width of approximately 14 feet to 24 feet depending on terrain. Existing access roads will be used for future operation and maintenance. Roads not required following construction will be reclaimed once construction is complete. Turnout areas and tight curves in the road will require a wider surface width. Culverts or other drainage structures will be installed as necessary across drainages, but the roads will usually follow the natural grade. Wherever possible, roads will be built at right angles to drainages.

2.2.6 Construction and Staging Areas

During construction of the transmission line, there will be temporary work areas at each structure site to facilitate safe construction. There will also be temporary work areas at pulling and tensioning sites, material staging sites, and turn-around areas. Construction areas are identified on the Site Plan located in Attachment 2. Final construction areas will be verified by the construction contractor(s) during the engineering and construction reviews.

2.3 Project Disturbance

See Tables 1-4 below.

2.4 Operations and Maintenance

The design, construction, operation, and maintenance of the Project will meet or exceed the requirements of the NESC, which governs the design and operation of high-voltage utility systems, U.S. Department of Labor, Occupational Safety and Health Administration standards and Pacific Power's requirements for safety and protection of landowners and their property.

The transmission line will be protected with power circuit breakers and line relay protection equipment. If a conductor fails, power will typically be automatically removed from the line in less than 0.5 second. Lightning protection will be provided through overhead ground wires.

SHORT-TERM DISTURBANCE		ICE	TOTAL LONG-TERM ACCESS DISTURBANCE	
Overland Access 14' wide by length			Square Feet	Acres
Square Feet	Acres		Square Feet	Acres
104,100	2.4		967,222	22.2

H-FRAME STRUCTURES WORK AREAS 125' X 150' (18,750 SQ. FT.)			TOTAL SHORT-TERM STRUCTURE AND WORK AREA DISTURBANCE	
Square Feet	Acres		Square Feet	Acres
2,362,500	54.2		3,586,150	82.3

H-FRAME STRUCTURES 20" DIAMETER POLES (2) + AUGER HOLES = 7.5 SQ. FT. X 2 = 15 SQ. FT. PER STRUCTURE		Square	Acres	TOTAL LONG-TERM STRUCTURE AND WORK AREA DISTURBANCE	
Square Feet	Acres			Square Feet	Acres
2,199	0.1	0	1.1	52,920	1.2

TOTAL SHO		BANCE	
Square Feet	Acres	Square Feet	Acres
3,690,249			23.4

Operation and maintenance activities will include transmission line patrols, climbing inspections, structure and wire maintenance, insulator washing in selected areas as needed, and access road repairs. Necessary work areas around all structures will be kept clear of vegetation and the height of vegetation within the ROW will be limited.

Noxious weed control is consistent with Executive Order 13112 (Invasive Species), the Federal Noxious Weed Act, and Washington State Noxious Weed Laws. A pre-construction inventory will be completed; prevention measures and treatment methods will be utilized before and during construction; and monitoring and treatment measures will be implemented following construction

2.5 Water System and Sewage Disposal

The Project will not include any occupied structures and therefor will not be connected to a water or sewage system. Portable restrooms may be temporarily used during construction.

2.6 Project Narrative Application Requirements #11

Below is Application requirement # 11 followed by Pacific Power's response to address this requirement.

11. *Provision of the zoning code applicable: Kittitas County Code, Title 17.61, "Special Utility".*

According to Kittitas County Code-17.61.020, Utilities shall be a permitted use in all zoning districts.

2.7 Project Narrative Application Requirements #12

Below is Application requirement # 12 followed by Pacific Power's response to address this requirement.

12. *A conditional use or administrative conditional use permit may be granted when the following criteria are met. Please describe in detail how each criteria from KCC 17.60A.015 is met for this particular project (attach additional sheets as necessary):*
 - A. *The proposed use is essential or desirable to the public convenience and not detrimental or injurious to the public health, peace, or safety or to the character of the surrounding neighborhood.*
 - B. *The proposed use at the proposed location will not be unreasonably detrimental to the economic welfare of the county and that it will not create excessive public cost for facilities and services by finding that:*
 - i. *It will be adequately serviced by existing facilities such as highways, roads, police and fire protection, irrigation and drainage structures, refuse disposal, water and sewers, and schools; or*
 - ii. *The applicant shall provide such facilities; or*
 - iii. *The proposed use will be of sufficient economic benefit to offset additional public costs or economic detriment.*
 - C. *The proposed use complies with relevant development standards and criteria for approval set forth in this title or other applicable provisions of Kittitas County Code.*

- D. *The proposed use will mitigate material impacts of the development, whether environmental or otherwise.*
- E. *The proposed use will ensure compatibility with existing neighboring land uses.*
- F. *The proposed use is consistent with the intent and character of the zoning district in which it is located.*
- G. *For conditional uses outside of Urban Growth Areas, the proposed use:*
 - i. *Is consistent with the intent, goals, policies, and objectives of the Kittitas County Comprehensive Plan, including the policies of Chapter 8, Rural and Resource Lands;*
 - ii. *Preserves "rural character" as defined in the Growth Management Act (RCW 36.70A.030(15));*
 - iii. *Requires only rural government services; and*
 - iv. *Does not compromise the long term viability of designated resource lands.*

2.7.1 Project Narrative Application Requirements #12A

Below is Application requirement # 12A followed by Pacific Power's response to address this requirement.

12. A. The proposed use is essential or desirable to the public convenience and not detrimental or injurious to the public health, peace, or safety or to the character of the surrounding neighborhood.

The Project is desirable to the public convenience because it minimizes the potential for redistributed loads and the overloading of the adjacent transmission system and will ensure continued reliable and efficient service to the Yakima Valley. It will also address future reliability issues within the Mid-Columbia transmission system.

The Project is not detrimental or injurious to the public health, peace or safety. In Kittitas County the transmission line crosses approximately 6 miles of private land (22-percent of the 27.6 miles of total transmission line in Kittitas County). Public Health and safety impacts were thoroughly analyzed in the Final Environmental Impact Statement (FEIS) and which included analysis of electric and magnetic fields, audible noise, radio noise, and cumulative effects. Short-term impacts include temporary air emissions; temporary noise from construction equipment operation; temporary disruptions to existing land uses; temporary construction related road or lane closures; increased traffic from construction vehicles; and potential for soil erosion from access road construction. Environmental impacts during construction would be relatively short-term (9 to 12 months) and would be mitigated by Required Design Features (RDF), best management practices, and other stipulations identified in the final Plan of Development (POD).

The Project is not detrimental to the character of the surrounding neighborhood as it is primarily within existing utility ROW. Construction sites, construction yards/staging areas, and access roads will be kept in an orderly condition throughout the construction period. Refuse and waste produced along the ROW

during construction will be collected and disposed of in a designated landfill or appropriate waste disposal site. Oils, fuels, and chemicals will be properly characterized per federal and state regulations and then transported to an approved site for disposal. No open burning of construction trash will occur.

Construction practices will comply with applicable federal, state, and local laws and regulations concerning the use, storage, transportation, and disposal of hazardous materials.

Removal of flagging, fencing, and signage will be implemented as a post-construction reclamation action. After construction activities are complete or no longer pose a concern, and during construction clean up and reclamation, the stakes, flagging, and signage demarcating the Project ROW, work, and avoidance areas will be removed. The only exception would be any flagging, fencing or signage indicating where restoration is in progress to protect those areas until restoration is complete.

The Construction Contractor(s) will restore lands disturbed during construction including, but not limited to: temporary access roads, tensioning and pulling sites, structure sites, work areas, and staging areas. Concerted effort will be made to restore the disturbed areas to original contours and conditions and to restore natural drainage within the ROW. Disturbed areas will be re-seeded using a seed mixture as specified by the appropriate land management agency and best management practices for erosion control. On slopes greater than 30 percent, additional measures such as organic fiber mulching, geo-textile fabrics, and sod mats may be used to stabilize ground conditions and promote restoration.

2.7.2 Project Narrative Application Requirements #12B

Below is Application requirement # 12B followed by Pacific Power's response to address this requirement.

- B. The proposed use at the proposed location will not be unreasonably detrimental to the economic welfare of the county and that it will not create excessive public cost for facilities and services by finding that:*
- i. It will be adequately serviced by existing facilities such as highways, roads, police and fire protection, irrigation and drainage structures, refuse disposal, water and sewers, and schools;*
or
 - ii. The applicant shall provide such facilities; or*
 - iii. The proposed use will be of sufficient economic benefit to offset additional public costs or economic detriment.*

The proposed Project can result in both short-term and long-term benefits for the local and regional economies in Kittitas County. These benefits include the creation of new jobs and an increase in regional income, sales and income tax revenues, property tax revenues, and right-of-way rental receipts to the federal government.

12 B.i. The Project will be adequately serviced by existing highways and roads

Project access will typically occur from existing highways and roads within the Project area. The major highways intersecting the Project area are U.S. Highway 82 (State highway 97) and County road 821(Canyon Road). Upgrades to some existing roads, and construction of some new roads will be necessary. Roads existing prior to construction will be left in a condition equal to or better than their condition prior to construction.

12 B.ii. The Project will be adequately serviced by existing police and fire protection and schools.

The Project will not be expected to cause significant demands on public service or facilities. During construction, public services such as police, fire, and medical facilities would be needed only in cases of emergency.

12 B.iii. The Project will be adequately serviced by existing irrigation and drainage structure, refuse disposal, water and sewers.

The Project does not require drainage structure, refuse disposal, water or sewer connections.

2.7.3 Project Narrative Application Requirements #12C

Below is Application requirement # 12C followed by Pacific Power’s response to address this requirement.

C. The proposed use complies with relevant development standards and criteria for approval set forth in this title or other applicable provisions of Kittitas County Code.

The table below summaries how the Project complies with relevant development standards and other applicable provisions of the Kittitas County Code.

Table 5 - Kittitas County Code Requirements

Kittitas County Code Section	Provision	Project Compliance
Title 12 Roads and Bridges 12.6	Storm Water Management Standards and Guidelines	A Stormwater Site Plan (12.06.060) will be submitted and will contain a Stormwater Pollution Prevention Plan in compliance with Title 12 of KCC.
12.56	Franchises for use of roads and other county properties	There will be no permanent impacts to county road right-of-way.
Title 14: Buildings and Construction 14.04.070 14.05.050 14.08	All code requirements including building permits, grading permits, flood damage prevention	Building permits are not necessary for poles, workstations or shipping containers. If a work trailer is in use for more than 180 days, then a construction contractor may need to obtain a temporary building permit.

Kittitas County Code Section	Provision	Project Compliance
Air quality 14.05.140	Dust shall be prevented from becoming airborne. The finished exposed surfaces shall be treated with vegetation or other means to control dust.	<p>An Erosion, Dust Control and Air Quality Plan will be completed by the construction contractor prior to the start of construction.</p> <p>This Plan will inform Pacific Power and its Construction Contractor(s) of design feature recommendations, requirements for regulatory compliance, and requirements for monitoring to minimize impacts associated with construction activities as they relate to erosion, dust control and air quality. The Plan will be implemented by the Construction Contractor during Project construction. The measures described herein are intended to: 1) address soil erosion and sedimentation, and 2) minimize dust and air emissions from construction-related activities.</p>
Title 15 Environmental Policy	Environmental Policy and Burn Bans	The approved Washington State Environmental Policy Act (SEPA) checklist is included at Attached 2 to this Application. No open burning will result from the project.
Title 17 Zoning 17.61 Utilities 17.61.020.9	Nothing in this chapter is intended to interfere with the storage and/or distribution of products associated with on-site natural resource activities, including but not limited to fossil fuels.	The project does not interfere with storage or distribution of natural resource activities.
17.61.030.4	Special utilities and/or associated facilities as defined by this chapter shall use public rights-of-way or established utility corridors when reasonable. Although Kittitas County may map utility corridors, it is recognized and reaffirmed that the use of such corridors is subject to conditional use approval and just compensation to the landowner for the use of such corridor. While a utility corridor may be used for more than one utility or purpose, each utility or use should be negotiated with the landowner as a separate easement, right-of-way, or other agreement, or other arrangement between the landowner and all owners of interests in the property.	The Project uses existing utility corridors where possible. In other areas, ROW negotiations with landowners are currently underway based on good faith negotiation techniques.

Kittitas County Code Section	Provision	Project Compliance
17.61.030.6	The incidental generation of earthen spoils resulting from the construction and/or installment of a utility or special utility, and the removal of said material from the development site shall not require a separate zoning conditional use permit	Construction sites, construction yards/staging areas, and access roads will be kept in an orderly condition throughout the construction period. Refuse and construction debris will be removed from the sites and disposed of in an approved manner. Oil, fuels, and chemicals will not be dumped along the line. Oils, fuels, and chemicals will be properly characterized per federal and state regulations and then transported to an approved site for disposal. No open burning of construction trash will occur. Construction practices will comply with all applicable federal, state, and local laws and regulations concerning the use, storage, transportation, and disposal of hazardous materials. All forms of refuse and waste produced along the ROW during construction will be collected and disposed of in a designated landfill or appropriate waste disposal site. Refuse and waste includes any discarded material, trash, garbage, packing material, containers, waste petroleum products, broken equipment, used parts, or excess construction materials. Refer to the Stormwater Pollution Prevention Plan (SWPPP).
Title 17A	Critical Areas Ordinance	After initial project review, Kittitas County planners determined that a Critical Areas Permit is not required.
Title 17B	Shoreline Substantial Development Permit and a Shoreline Conditional Use Permit (CUP)	After initial project review Kittitas County planners determined that a Shoreline Development Permit or CUP is not required.
Chapter 17 of Revised Code of Washington	Noxious Weed Control	A Noxious Weed and Invasive Plant Management Plan was prepared for the Project and describes the methods that will be used by Pacific Power and its Construction Contractor(s) to manage noxious weeds and invasive plants during construction, operation and maintenance.
Washington State Floodplain Management Act (Chapter 86.16 RCW)	Maintain Kittitas County's eligibility to participate in the National Flood Insurance Program. (Ord. 2001-03; Ord. 93-18 § 1, 1993). Floodplain Development Permit, No-Net Loss Floodplain Storage Study; Elevation Certificate	During the Pre-Application Conference, Kittitas County planners determined that a Floodplain Development Permit is not required.

Kittitas County Code Section	Provision	Project Compliance
Title 20 Fire and Life Safety	Fire Protection Plan	The construction contractor will coordinate with Kittitas County Fire Districts #2 and #4 in developing the plan.

2.7.4 Project Narrative Application Requirements #12D

Below is Application requirement # 12D followed by Pacific Power's response to address this requirement.

D. The proposed use will mitigate material impacts of the development, whether environmental or otherwise.

RDFs, identified in the FEIS and included in BLM and the United States Bureau of Reclamation (Reclamation) records of decision, were incorporated into the Project design and will be implemented during construction and operation of the Project. These are items that Pacific Power has committed to implement as part of the Project development. The RDFs address identified Project impacts. They were developed through an iterative process during the impact analysis with Pacific Power, BLM, and cooperating agencies. A full list of committed protection measures (e.g. required design features, best management practices, mitigation measures) for the Project are included in Attachment 7.

2.7.5 Project Narrative Application Requirements #12E

Below is Application requirement # 12E followed by Pacific Power's response to address this requirement.

E. The proposed use will ensure compatibility with existing neighboring land uses.

According to 17.61.020 of the KCC, utilities shall be a permitted use in all zoning districts. The transmission line is overhead and mostly adjacent to existing transmission line ROW. The transmission line route in Kittitas County is located on 78% federal lands. The transmission line will not affect nearby land uses due to the presence of several transmission line on the landscape currently, a large portion of the transmission line occurring on Federal land within Kittitas County, and the compatibility of transmission lines with the current land uses in this portion of Kittitas County.

2.7.6 Project Narrative Application Requirements #12F

Below is Application requirement # 12F followed by Pacific Power's response to address this requirement.

F. The proposed use is consistent with the intent and character of the zoning district in which it is located.

According to 17.61.020 of the KCC, utilities shall be a permitted use in all zoning districts. The transmission line is overhead and mostly within existing ROW, therefore it will not affect the character of the zoning district in which it is located.

2.7.7 Project Narrative Application Requirements #12G

Below is Application requirement # 12G followed by Pacific Power's response to address this requirement.

G. For conditional uses outside of Urban Growth Areas, the proposed use:

- i. Is consistent with the intent, goals, policies, and objectives of the Kittitas County Comprehensive Plan, including the policies of Chapter 8, Rural and Resource Lands;*
- ii. Preserves "rural character" as defined in the Growth Management Act (RCW 36.70A.030(15));*
- iii. Requires only rural government services; and*
- iv. Does not compromise the long term viability of designated resource lands.*

12 G.i. Is consistent with the intent, goals, policies, and objectives of the Kittitas County Comprehensive Plan, including the policies of Chapter 8, Rural and Resource Lands.

According to 17.61.020 of the KCC, utilities shall be a permitted use in all zoning districts. The Transmission line parallels an existing transmission line and is compatible with existing land uses in the area and therefore the Project is consistent with Kittitas County Comprehensive Plan, Chapter 8.

12 G.ii. Is consistent with the intent, goals, policies, and objectives of the Kittitas County Comprehensive Plan, including the policies of Chapter 8, Rural and Resource Lands.

According to 17.61.020 of the KCC, utilities shall be a permitted use in all zoning districts. The Project is compatible with existing land uses and is consistent with the current landscape condition due to the Project paralleling existing transmission infrastructure. Therefore, the Project is consistent with definition of "rural character" as defined by the Growth Management Act.

12 G.iii. Requires only rural government services.

The Project will not requirement additional government services. Therefore, the Project will only require rural government services.

12 G.iv. Does not compromise the long term viability of designated resource lands.

According to 17.61.020 of the KCC, utilities shall be a permitted use in all zoning districts. The Project parallels an existing transmission line, the Project does not compromise the policies surrounding rural and resource lands. The rural character and resource lands will be preserved, and the project will not compromise the long-term viability of designated resource lands.