Chapter 1 Updated Summary and Project Description

1.1 Introduction

Wallula Generation, LLC (the applicant) is proposing to build and operate a 1,300-megawatt (MW), natural gas-fired, combustion turbine power plant and associated facilities in Walla Walla County, Washington. The applicant proposes to construct the plant on approximately 64 acres of a 175-acre site located about 8 miles south of the City of Pasco, in southeastern Washington. Figure 1-1 presents the project site location.

The Wallula Power Project would be designed to provide electric energy to meet the growing needs of the Pacific Northwest and other interconnected electric transmission areas where electrical energy is needed. No customers for the power have been identified to date. The Washington State Energy Facility Site Evaluation Council (EFSEC) has jurisdiction over the evaluation of major energy facilities such as the Wallula Power Project in the State of Washington and makes recommendations to the Governor regarding approval or denial of facility siting.

Proposed facilities for the Wallula Power Project include a 4.6-mile makeup water supply pipeline from 10 existing Boise Cascade Corporation wells; a 5.9-mile natural gas pipeline interconnection to be engineered, constructed, owned, and operated by PG&E Gas Transmission-Northwest (GTN); and a permanent county access road linking the project site to Dodd Road. In addition, Bonneville Power Administration (Bonneville) has determined that reliable distribution of electricity generated by the Wallula Power Project would require construction of a new switchyard and 5.1 miles of new transmission line from the plant to the switchyard. An additional 28 miles of transmission line may be constructed from the new switchyard to the McNary Substation in the future (see Figure 1-2).

The Draft Environmental Impact Statement (EIS) for the Wallula Power Project and Wallula-McNary Transmission Line Project was issued on February 22, 2002. The comment period for the Draft EIS ended on April 11, 2002. Public comment hearings were held on March 13, 2002, in Burbank, Washington, and on March 14, 2002, in McNary, Oregon. Another public hearing was held on the project in Walla Walla on July 16, 2002.

During the comment period, EFSEC and Bonneville received comments from agencies, citizens, and interest groups. Comments were submitted in letters, orally at the public comment meetings, and via email. The comments and responses are presented in Chapter 2 of this Final EIS.

1.2 Overview of Project Changes Since Draft EIS

This Final EIS is an abbreviated document in that it presents updates to the information that was presented in the Draft EIS. Chapter 3 of this document describes in detail the updates to the Draft EIS text, tables, and figures.

Refinements to the project design that have occurred since publication of the Draft EIS are summarized below.

- Changes in the status of other proposed generation facilities in the region have altered the projected load on the existing Lower Monumental-McNary transmission line. The proposed 28-mile Smiths Harbor-McNary segment of transmission line may not need to be constructed at this time.
- The northern segment of the 5.1-mile transmission line between the proposed power plant and the Smiths Harbor Switchyard has been relocated. Instead of going due east from the power plant, this portion of the line would now run southeast from the plant toward the poplar plantation on current Boise Cascade property. The Smiths Harbor Switchyard location has not changed. There is no change to the type of vegetation or habitat that would be disturbed by the realignment.
- Settlement Agreements addressing mitigation for a number of resources (wildlife, greenhouse gas, and others) have been reached between the applicant and various agencies and organizations that were granted intervenor status before EFSEC. Information regarding mitigation from the agreements is described in Chapter 3 and Appendix A of this Final EIS. (The agreements are available for review from EFSEC.)
- One stormwater detention pond is proposed instead of two. Stormwater is no longer proposed for reuse in power plant operations.
- The applicant has reduced the footprint of the power plant facilities from 97 acres to 64 acres with as much as 89 acres potentially restored with native grasses and shrubs.
- The applicant and Washington State Department of Transportation (WSDOT) have come to an agreement to access the power plant site from Highway 12 using Dodd Road during both construction and operation.

1.3 Purpose and Need for the Project

The applicant and Bonneville have separate needs that they are proposing to meet with the proposed power plant and transmission line, respectively.

1.3.1 Power Plant Purpose and Need

Prior to the wholesale restructuring of the power industry, public authorities needed to undertake detailed energy planning to ensure the availability of adequate power supply, and to avoid construction of unnecessary energy facilities. However, in recent years, industry restructuring has resulted in the development of a market-based wholesale power market in the western United States and Canada. This market is expected to encourage the development of efficient power generation facilities to satisfy increasing power demands and to discourage the development of inefficient and unnecessary facilities. In this market, project developers are expected to move forward with construction of projects only when convinced that a demand exists for the power that the facilities would produce. Project financing, likewise, depends on a demonstration of demand and economic benefit.

[INSERT FIGURE 1-1]

[INSERT FIGURE 1-2]

Recent national and regional forecasts project increasing consumption of electrical energy to continue into the foreseeable future, requiring development of new generation resources to satisfy the increasing demand.

The Western Systems Coordinating Council (WSCC) forecasts a 2.1% per year increase in peak power demand between 1999 and 2009 for the Northwest Power Pool (the states of Washington, Oregon, Idaho, and Utah; the Canadian provinces of British Columbia and Alberta; and portions of Montana, Wyoming, Nevada, and California). The Northwest Power Planning Council predicts a 24% probability of one or more "generation insufficiency events" in the Northwest by 2003. This suggests a probability of service interruption approximately five times the currently accepted standard, and it suggests a shortfall in projected energy supply versus demand in the Northwest of between 3,000 and 6,000 MW. The Northwest Power Planning Council also concluded that some part of the needed new resources would be supplied by new generation developed in response to market forces.

In early 2001, the Governor of the State of Washington issued an emergency proclamation stating that the threat to statewide energy supply could jeopardize the public health, safety, and general welfare. The Governor issued an energy supply alert that directed state and local governmental agencies to minimize the injurious economic, social, and environmental consequences of the energy supply crisis. (After two additional extensions to the order through October 22, 2001, the Governor issued no further extensions to the proclamation.) Finally, the reliance of the Northwest region on hydroelectric power generation makes it vulnerable to variations in generation capacity due to weather.

The purpose of Wallula Generation's project is to construct and operate a new generation resource that will meet a portion of existing and future energy loads in the Pacific Northwest.

1.3.2 Transmission Line Purpose and Need

Generation resources typically require interconnection with a high-voltage electrical transmission system for delivery to purchasing retail utilities. Bonneville owns and operates the Federal Columbia River Transmission System (FCRTS), comprising more than three-fourths of the high-voltage (greater than 230 kV) transmission grid in the Pacific Northwest. Bonneville operates the FCRTS, in part, to integrate and transmit "electric power from existing or additional federal or non-federal generating units."[1] Interconnection with the FCRTS is essential to deliver power from many generation facilities to loads both within and outside the Pacific Northwest.

The FCRTS, as a whole, is nearing the limit of how much electricity it can carry. The system has experienced a rapid increase in use with an annual load growth rate of 4.7% over the past five years. At the same time, there has been very little investment in expansion of the transmission line system. Many transmission paths require significant reinforcement or additional capacity through the construction of new transmission lines to accommodate new power generation.

Bonneville intends to base its comparison of alternatives and final decision on the following objectives or purposes:

- provide an adequate, economical, efficient, and reliable transmission system for the Pacific Northwest;

[1] 16 U.S.C. 838b.

- follow Bonneville's Open Access Transmission Tariff;
- comply with federal environmental and energy laws and policies;
- achieve cost and administrative efficiency; and
- minimize impacts to the natural and human environment through site selection and transmission line design.

1.4 Decisions to be Made

This document is a joint State Environmental Policy Act (SEPA)/National Environmental Policy Act (NEPA) abbreviated FEIS that will address the needs of both EFSEC and Bonneville.

EFSEC has jurisdiction over all of the evaluation and licensing steps for siting major energy facilities in the State of Washington. Once approved by the Governor of the state of Washington, EFSEC's Site Certification Agreement acts as an "umbrella" authorization that incorporates the requirements of all state and local laws and regulations. Through its review, EFSEC coordinates the comments and interests of state and local agencies that participate in the EFSEC review process. EFSEC and Bonneville are jointly issuing this EIS, and EFSEC will ultimately make a recommendation to the Governor to approve or deny the Wallula Power Project.

Bonneville will utilize the Final EIS to meet NEPA requirements and will prepare a Record of Decision. If the Governor of Washington approves the Wallula Power Project for construction, then Bonneville needs to decide whether and how to provide transmission service for the power project. Wallula Generation has requested (1) to integrate power from its proposed Wallula Power Project into the FCRTS at a point on the Lower Monumental McNary transmission line in Township 7 North, Range 32 East, and (2) firm point-to-point transmission service from the Wallula Power Project to the John Day and Big Eddy substations[2].

The original proposed action in the Draft EIS consisted of the power plant and associated facilities and a transmission line (the Wallula-McNary transmission line) running from the power plant site approximately 33 miles to the McNary Substation. Recent changes in load forecasts and distribution as a result of changing generating facility schedules have resulted in a reassessment of the need for the entire McNary line. However, the entire line and its impacts are still included in this EIS. Should the Smiths Harbor-McNary segment of the line be proposed for construction in the future, a decision on the NEPA process that would be required to move forward would be made at that time.

[2] Bonneville has adopted the Federal Energy Regulatory Commission's (FERC) *pro forma* open access tariff as incorporated into Bonneville's Open Access Transmission Tariff. Bonneville offers transmission services, including interconnection of generation projects, in accordance with this tariff to all eligible customers on a first-come, first-served basis. Although Bonneville is not subject to FERC's jurisdiction, Bonneville follows its tariff as a matter of national policy. This course of action demonstrates Bonneville's commitment to non-discriminatory access to its transmission system and ensures that Bonneville will receive non-discriminatory access to the transmission systems of public utilities, which are subject to FERC's jurisdiction. Although Bonneville's interconnection of a generator is subject to NEPA review, Bonneville otherwise will not deny interconnection to any eligible customer that complies with Bonneville's financial and technical requirements.

The Federal Energy Regulatory Commission (FERC) would need to decide whether GTN would construct and connect a new 5.9-mile pipeline lateral to an existing gas pipeline located southeast of the project site.

1.5 Description of the Proposed Action

1.5.1 Project Location

The proposed Wallula Power Project would be located in the northwestern portion of Walla Walla County, Washington, approximately 8 miles south of the City of Pasco, 2 miles north of the unincorporated community of Wallula, and 7 miles southeast of the unincorporated community of Burbank. The project site is within the southern half of Section 34, Township 8 North, Range 31 East, and is bordered on the west by U.S. Highway 12 and on the east by the Union Pacific Railroad. Lake Wallula (the Columbia River behind McNary Dam) is located approximately 800 feet west of the generation plant site. The project area is zoned for heavy industrial development and is surrounded by a variety of industrial businesses. The project site generally slopes westward toward the Columbia River and is characterized by gently rolling topography.

The proposed transmission line would originate at the generation plant and generally traverse southeast and then south, where it would connect with the proposed Smiths Harbor Switchyard. From the switchyard, the transmission line route would run southwest along the southern bank of the Columbia River to the McNary Substation. Much of the approximately 33.1-mile transmission line would follow existing transmission line corridors, traversing industrial land, agricultural croplands, undeveloped grass and shrub-steppe habitat, and federally managed lands and wildlife areas.

1.5.1.1 Wallula Power Project and Related Facilities

The Wallula Power Project would consist of the following components (many of which are described in more detail throughout this chapter):

- two independent 650 MW power generation blocks, each consisting of two 167 MW combustion gas turbine-generators, two heat recovery steam generators (HRSGs) each with steel exhaust stacks that are 175 feet high and 20 feet in diameter, and one single reheat condensing steam turbine-generator;
- two wet mechanical-draft cooling towers;
- two circulating water supply systems including condensers;
- one emergency diesel generator, diesel-fired fire pump, and aboveground 5,600-gallon diesel fuel tank;
- two aboveground 500-gallon fuel tanks (for diesel oil and gasoline);
- a new 1,200 gallon per minute (gpm) capacity deep groundwater supply well, well connections, and water storage tanks;
- one 5.14-million-gallon raw water tank;
- one 1.173-million-gallon raw water tank;

- two 15,000-gallon aboveground aqueous ammonia storage tanks;
- two 225,000-gallon demineralized water storage tanks;
- one 372,300-gallon service water storage tank;
- one brine concentrator;
- two 11-acre lined evaporation ponds;
- one stormwater detention pond;
- six step-up and auxiliary transformers;
- one 45,000 pound per hour auxiliary boiler and building; and
- a turbine building, water treatment building, warehouse, gas metering building, and administrative building.

Project ancillary facilities would include

- a permanent county access road linking the project site to Dodd Road;
- a 4.6-mile makeup water supply pipeline to interconnect the proposed project with the existing 10 Boise Cascade Corporation fiber farm water wells;
- an approximately 33.1-mile, 500-kilovolt (kV) electrical transmission line and switchyard interconnection; and
- a 5.9-mile natural gas pipeline interconnection.

The Port of Walla Walla currently owns the project site. The applicant has a real estate option on the property and will exercise that option contingent upon financing and obtaining the Site Certification Agreement and other approvals.

Bonneville has determined that reliable distribution of electricity generated by the Wallula Power Project would require construction of a new 500 kV transmission line, construction of a new switchyard, and upgrades to the existing McNary Substation. The new line would comprise an initial segment (Wallula-Smiths Harbor segment) that would be approximately 5.1 miles long and would interconnect with a new switchyard (Smiths Harbor Switchyard). A second approximately 28-mile segment (Smiths Harbor-McNary segment) would extend to the McNary Substation.

In addition, the project would need a supply of natural gas. If the project were approved, a 5.9-mile pipeline interconnection would be engineered, constructed, owned, and operated by PG&E Gas Transmission-Northwest (GTN) to provide natural gas to the project site.

Generation Plant Facilities and Process

The proposed generation plant is comprised of a 1,300 MW, natural gas-fired, combined-cycle combustion gas turbine system consisting of two independent 650 MW power “blocks” with backup systems (including a direct current [DC] battery backup power system and an emergency diesel oil-fired generator) to maintain overall plant reliability and availability (see Figure 1-3).

[INSERT FIGURE 1-3]

In this type of electrical generation process, natural gas would be burned to fuel a gas turbine engine that would drive a generator to produce electrical energy. Hot exhaust gas produced by the combustion turbine would be used to boil water in a heat recovery steam generator (HRSG). Steam produced by the HRSG would turn another turbine generator to produce additional electrical energy. Each HRSG would be provided with a 175-foot-tall steel exhaust stack, 20 feet in diameter. The stacks would include continuous emissions monitoring systems and sampling ports, exterior ladders and platforms, lighting, and grounding systems.

Cooling System

Steam leaving the steam turbine would enter the condenser. The water-cooled condenser would use circulating water to condense the exhaust steam to "condensate" (water). Condensate would be pumped from the condenser back to the HRSG feedwater system. The water from the circulating water-cooling system would be pumped to the wet mechanical-draft cooling tower, where the heat would be emitted to the atmosphere. The wet mechanical-draft cooling tower would produce cool water in the closed loop circulating water system by spraying hot circulating water over a large surface, or "fill," and using a fan to pull air through the fill and falling water. As part of this cooling process, a portion of the circulating water would evaporate and need to be replaced.

Heat transfer through water evaporation occurs at lower temperatures than heat transfer through dry cooling. This temperature difference leads to more efficient heat rejection from the cooling water.

Approximately 168,000 gpm of circulating water would be required to pass through the tube side of each condenser to condense the exhaust steam at maximum plant load. An additional closed loop cooling system would use 4,000 gpm of the circulating water to remove heat that would be produced by the closed cooling water system for each unit.

A sidestream water treatment system would be used to control levels of silica and calcium in each cooling tower basin. A portion of the treated water would be recycled back into the circulating water system, reducing the amount of raw water needed as makeup to the cooling towers. The softened/filtered water would then be directed to either the cooling tower forebay or the demineralized water makeup systems.

Sludge generated by the sidestream treatment system would be removed using waste sludge forwarding pumps. The sludge would be transferred to a single softener sludge filter press for removal of most of the water. A polymer injection skid with a feed tote and feed pumps would feed polymer into the waste sludge stream prior to the filter press. The removed water would be returned to the softener; the sludge would be stored in sludge storage bins prior to shipment to a licensed offsite landfill.

Power Plant Cycle Chemical Feed and Blowdown System

Each HRSG would be supplied with continuous blowdown tanks where the quality of power plant cycle water would be maintained by "blowing down" a portion of the power plant cycle water. The quenched blowdown water would be routed to the cooling tower basin.

Power plant cycle water quality would be maintained using several chemical feed systems.

- Oxygen scavenger and amine would be fed to the condensate system for oxygen scavenging and pH control. Both chemicals would be injected into the condensate pump discharge piping.
- The phosphate boiler treatment would be fed to the boiler drums of the HRSG to maintain desired boiler water pH and phosphate residual.
- Oxygen scavenger and amine also may be fed during wet lay-up of the cycle, when the cycle is filled with condensate-quality water from the demineralized water storage and supply system.

Brine Concentrator (Evaporator) System

Concentrated brine (wastewater) from the evaporator would be transferred directly to two 11-acre evaporation ponds. The evaporation ponds would include a 60-mil HDPE liner over a geosynthetic clay liner. A leakage detection system, consisting of a pipe collection system located under the upper two liners, would be provided to collect any leakage into a sump. Existing observation wells and the sump provide the assurance that all leakages are either collected or identified. A final 30-mil liner would be installed under the collection pipe system. Facility personnel would monitor the leakage detection system to ensure the integrity of the evaporation pond liners. The sludge collected in the evaporation ponds would be removed and disposed in a licensed landfill periodically.

Wastewater and Stormwater Collection, Treatment, and Discharge

HRSG blowdown, oil/water separator effluent, and equipment drains each would be pumped to the cooling tower forebay from their individual sources. Evaporator (brine concentrator) distillate would be directed to the clearwell, and chemical spills would be contained in bulk storage areas. Laboratory and water treatment building drains would be drained to the chemical lab chemical waste sump. When the sump is full, the waste would be pumped to the recovered water equalization tank.

Wastewater collected from areas where the potential for oil contamination exists would be routed through oil/water separators. These wastewaters include runoff from the turbine area drains, facility services drains, and building drains (including stormwater from developed areas). Miscellaneous drainage from the water treatment area would be collected by floor drains, pipes, trenches, and sumps and routed to the oil/water separators for processing.

The oil/water separators would remove oil contamination by media adsorption. The oil-soaked media would be retained for eventual removal and disposal off-site by a licensed contractor. Water discharge from the oil/water separators would be routed to the unlined stormwater detention pond

The stormwater detention pond would also receive stormwater from the undeveloped facility area. The water collected in this pond would entirely infiltrate into the ground and/or evaporate.

Sanitary Waste Stream (Sewage)

All sanitary wastes would be collected and directed to an on-site sanitary waste system. Treated liquid effluent from the system would flow to a leaching field. Collected solids in the holding tank would be periodically removed by a sanitary waste hauler and disposed of at a local

wastewater treatment facility or publicly owned treatment works that is licensed to handle these sanitary wastes. No power plant drains would be connected to the sanitary waste system, eliminating the potential for contamination of the leaching field.

Power Plant Electrical Supply

During normal power plant operation, auxiliary alternating current (AC) power systems would be supplied from the low side of each auxiliary transformer for service to each power block via two 18 kV to 4.16 kV oil-filled station service transformers. Each station service transformer would supply power to two separate 4.16 kV bus systems. The 4.16 kV supply system would provide power to equipment such as the large motors, with the load center transformers rated at 4.16 kV to 480-volt distribution. If located indoors, the load center transformers would be dry transformers. If located outdoors, the transformers would be oil-filled.

The power plant would be supplied with a direct current (DC) battery backup power system for use under abnormal or emergency conditions or when the AC power supply system was unavailable. An emergency diesel oil-fired generator would be supplied to provide power to key lighting loads, AC lube oil systems, and AC turbine gear systems for large shaft equipment in case of a complete plant electrical failure (blackout). No full power plant "black start" (startup with no external power available) capacity would be supplied. The emergency diesel generator would be located in the auxiliary boiler building.

Diesel and Gasoline Fuel Storage

A diesel fuel oil system would be located on-site for supplying diesel oil to the emergency diesel generator and the diesel fire protection pump. The diesel system fuel would be supplied from a 5,600-gallon aboveground diesel fuel tank located adjacent to the auxiliary boiler building. In addition, the facility would have a single 500-gallon aboveground diesel fuel tank and a single 500-gallon aboveground gasoline tank to service facility vehicles.

Water Use and Water Rights

It is estimated that the maximum project water usage would be 4,087 gpm, with water usage averaging 3,171 gpm on a yearly basis. Water supply for the plant would be acquired from various sources.

First, the applicant has entered into a purchase option agreement with Boise Cascade Corporation under which it would purchase a portion of a hybrid cottonwood fiber farm and its associated shallow groundwater rights. This groundwater is produced from 10 existing shallow wells with completion depths ranging from 100 to 150 feet below the surface. The shallow aquifer tapped by these wells discharges to the Columbia River. A water supply pipeline would be constructed from these wells to the Wallula Power Project. The distance from the Wallula Power Project to the most remote fiber farm well would be approximately 4.6 miles (Figure 1-4). Pursuant to the associated water rights certificates and water rights requirements of the Washington Department of Ecology (Ecology), the existing Boise Cascade Corporation fiber farm wells would deliver to the Wallula Power Project a total allowable instantaneous pumping rate of 9,485 gpm up to an anticipated volume limited to 5,024 acre-feet per year.

Second, the applicant has entered into a purchase option and lease option agreement with the J.R. Simplot Company that would allow the purchase of conservation easements and associated water rights, and, if needed, the lease of additional agricultural lands and associated water rights. J.R. Simplot Company owns farmlands used to produce feed for the 40,000 head of cattle located at the feedlot adjacent to the proposed power plant. These water right purchase options are expected to be for an instantaneous pumping rate of 3,285 gpm up to a maximum of 1,425 acre-feet per year after Ecology transfer requirements are satisfied. The point of withdrawal for these water rights would shift from the current Legrow Irrigation District McNary Pool surface withdrawals, to the Boise Cascade Corporation shallow groundwater well withdrawals.

Third, additional water supply would also be provided by on-site deep groundwater wells. The applicant would purchase the on-site well groundwater rights from the Port of Walla Walla. One deep well currently exists at the project site and a second deep well would be installed to provide a backup system. The water right provides for an instantaneous pumping rate of 1,200 gpm up to a total of 1,800 acre-feet per year. Thus, the total water right available is an instantaneous pump rate of 13,970 gpm and a total annual water use of up to 8,429 acre-feet per year.

Various water tanks would be built for the project. In addition to the main supplies described above, a raw water tank would be located on-site to store 5.14 million gallons of water to provide 20-hour emergency backup water supply. No pretreatment would be required from the wells to the raw water storage tank. A service water storage tank with a capacity of 372,300 gallons would be used to store makeup water for the demineralized water treatment system, the plant potable water supply, and the plant service water system. In addition, water stored in the service water storage tank would be used for fire suppression. Two on-site 225,000-gallon tanks would store treated water from the demineralization system and would supply water for boiler water makeup, the closed cooling water system makeup, and the other demineralized water use systems.

Project Site Access

The applicant has met with state and county transportation officials to discuss project site ingress and egress and roadway modifications and additions. The Washington State Department of Transportation (WSDOT) is engaged in the early design stages of the proposed widening and realignment of U.S. Highway 12 to four lanes from south of the Snake River Bridge to Depot (Attalia) Road, and eventually to Wallula Junction. The applicant would continue to work closely with Walla Walla County, the Port of Walla Walla, and WSDOT staff to determine the best alternatives to meet current and future state and county access road needs.

In earlier stages of project planning, the applicant proposed the building of a temporary at-grade construction access road with an intersection at U.S. Highway 12 just south of the project site. However, WSDOT was opposed to this alternative and suggested the continued use of Dodd Road as the primary access route as an alternative to this plan. The applicant has since accepted the WSDOT proposal to build a single access road from Dodd Road for both construction and operation.

The new access road would extend between the project site and Dodd Road, designed to county collector or arterial standards. This road would be the primary project site access for construction and operation, as well as a northern link to a future county collector roadway. The applicant has also requested installation of temporary traffic signals at the Dodd Road/U.S. Highway 12 intersection for the construction period. The traffic signals would slow traffic in the vicinity of the project site and allow turning movements in and out of the project site.

[insert Figure 1-4]

1.5.1.2 GTN Natural Gas Pipeline Lateral

GTN would engineer, construct, own, and operate an estimated 5.9-mile natural gas pipeline to interconnect with existing natural gas pipelines (also owned by GTN) located southeast of the proposed generation plant (see Figure 1-4). Interconnection would provide firm delivery of up to 175,000 dectherms per day (Dth/day) of natural gas from Alberta, Canada, to the project site. FERC would be responsible for siting the 5.9-mile natural gas pipeline. Environmental impacts associated with the proposed natural gas pipeline would be assessed under a separate NEPA document.

1.5.1.3 Bonneville Electrical Transmission Line and Substation

Bonneville proposes to design, construct, own, and operate a 500 kV transmission system from the proposed 1,300 MW Wallula Power Project to Bonneville's existing McNary Substation in Umatilla County, Oregon. The system would consist of an approximately 5.1-mile-long transmission line from the proposed generation plant to a new switchyard near Smiths Harbor (Wallula-Smiths Harbor segment) and a new approximately 28-mile-long transmission line from the Smiths Harbor Switchyard to the McNary Substation (Smiths Harbor-McNary segment).

The facilities, equipment, and features to be constructed in the transmission line project include

- steel lattice transmission tower structures, averaging 145 feet high (1,150-foot span), to support conductors, insulators, fiber optic cable, and ground wire;
- counterpoise for lightning protection (buried around the tower structure);
- right-of-way purchases for transmission line corridor segments and access roads;
- 70 to 80 new spur roads, each approximately 250 feet long;
- 11 miles of new access roads;
- 5 culverts;
- 28 new gates;
- installation at the McNary Substation (and at the Wallula Substation by the applicant) of equipment including a power circuit breaker, a disconnect switch, bus tubing and pedestals, and a substation "dead end structure;"
- a transmission "dead end structure" at both substations; and
- a switchyard at the Smiths Harbor site, including all equipment listed above, plus a switchyard fence and crushed rock surfacing.

Two basic types of 500 kV steel lattice structures would be used: tangent, or light-angle, structures, and dead end structures. Approximately 23 structures would be required along the Wallula-Smiths Harbor segment, and approximately 140 structures would be required along the Smiths Harbor-McNary segment. Configurations for the proposed new line in relationship to existing lines are illustrated in Figure 1-5.

Wallula-Smiths Harbor Segment

The Wallula-Smiths Harbor segment is needed to connect the Wallula Power Project to the existing Federal Columbia River Transmission System Grid. There are no existing high voltage transmission lines owned or operated by Bonneville or other utilities along this route. Much of this segment would be on land with rights either owned or optioned by Wallula Generation, LLC.

Approximately 25 structures would be erected on the Wallula-Smiths Harbor segment. Most of these structures would be the delta design averaging 145 feet in height. The average span distance between structures would be approximately 1,150 feet. Five dead end structures would be needed for connecting to the substation and switchyard and at locations where the transmission line turns at sharp angles.

Smiths Harbor-McNary Segment

The Smiths Harbor-McNary segment would be constructed to the west and north of an existing 500 kV Bonneville transmission line. Approximately 140 structures would be needed for the Smiths Harbor-McNary segment. Approximately 123 of these would be delta design tangent and light-angle structures, one would be a flat configuration structure; two would be heavy dead-end flat configuration structures where the line crosses the Walla Walla River, and 14 would be heavy dead-end structures of the delta design. The average span distance between structures would be approximately 1,150 feet. The average structure height would be approximately 145 feet for the delta design and approximately 100 feet for the flat configuration.

Smiths Harbor Switchyard

The Smiths Harbor Switchyard would be a new facility in the transmission system (see Figure 1-2 for switchyard location). A switchyard serves the same functions as a substation except that it does not regulate voltage fluctuations. In addition to the equipment listed for the substation, a chain-link fence with barbed wire on top would provide security and safety, and a 3-inch layer of crushed rock selected for its insulating properties would be placed on the ground within the switchyard to protect operation and maintenance personnel from electrical danger during switchyard electrical failures.

Right-of-Way

Bonneville would acquire any additional easements for right-of-way needed for the transmission lines or access roads from the landowners. The easements would give Bonneville the rights to construct, operate, and maintain the line and access roads in perpetuity. A right-of-way of at least 150 feet wide would be purchased for the 5.1-mile Wallula-Smiths Harbor segment. Additional right-of-way for the Smiths Harbor-McNary segment would range from 140 feet to 200 feet in width. Approximately 19 miles of this segment would parallel the existing Bonneville 500 kV transmission line, requiring the acquisition of additional right-of-way 200 feet in width. Nine miles of this segment would parallel an existing PacifiCorp 230 kV transmission line, which would require the acquisition of 140 feet of additional right-of-way.

The rights-of-way, usually easements, for 14 new access roads would need to be acquired from property owners. Fifty feet of right-of-way would be acquired for new road access and 20 feet of additional right-of-way would be acquired for existing access roads.

[INSERT FIGURE 1-5, page 1]

[INSERT FIGURE 1-5, page 2]

[INSERT FIGURE 1-5, page 3]

[INSERT FIGURE 1-5, page 4]

[INSERT FIGURE 1-5, page 5]

Access Roads

The project would use about 60% of the existing Bonneville Lower Monumental–Wallula transmission line road access system with minimal improvements. Approximately 16 miles of these roads would require reconditioning, minor rock surfacing, and widening. Minor reconstruction and rock surfacing of five existing roads, totaling approximately 3 miles, would be needed for access to the new Smiths Harbor Switchyard site and Wallula-Smiths Harbor segment of transmission line.

Construction of 70 to 80 spur roads (less than 250 feet long) on existing right-of-way would be needed for access to new structure sites. Construction of about 11 miles of new roads within the right-of-way would be needed to support construction of the new structures. Approximately 28 new gates would also need to be installed, most of which would replace existing barbed wire gates.

Culverts

Overall, placement of about five culverts would be required. Four culverts would be installed for seasonal runoff control and the fifth culvert would replace an existing culvert that crosses an irrigation ditch. One of the four culverts for seasonal runoff control is a 60-inch-diameter culvert that would be placed in a small stream just east of Highway 207. This culvert placement would require approximately 50 tons of fill material to allow placement of the roadbed across the stream. Drain dips and water bars would not be required except in a few instances in areas that may carry seasonal runoff.

1.5.2 Schedule and Workforce

The schedule and workforce required to build and operate the Wallula Power Project is estimated as described below.

Construction of the **generation plant** is expected to last approximately 24 months and would employ up to a peak of 520 workers in a monthly period. The construction schedule would depend upon the date the Governor approves the Application for Site Certification and upon the date all required federal permit approvals are obtained. Operation of the generation plant would employ approximately 32 personnel (the generation plant would be staffed 24 hours per day, 7 days per week). A temporary workforce with appropriate skills would also be used during major maintenance or other nonroutine operational work.

Construction of the **makeup water supply pipeline** would require a workforce of approximately 28 workers over a period of 2 months, and would occur at the end of the first year of plant construction. The applicant would operate and maintain makeup water supply wells and the makeup water supply pipeline.

Construction of the **transmission line, switchyard,** and associated facilities would need to begin in the fall of 2002 to accommodate the anticipated commercial startup of the Wallula Power Project in the fall of 2004. The 5.1-mile Wallula-Smiths Harbor segment of transmission line would take 2 months to construct during the summer of 2003. The Smiths Harbor Switchyard would require 18 months to construct. Construction would need to begin in the fall of 2002 to meet the projected energization date of March 2004. For the Smiths Harbor-McNary segment of

transmission line and upgrades to McNary Substation, construction would need to occur in a compressed time frame. For example, two crews could complete two separate 10- to 15-mile segments in a period of approximately 6 months with as many as 120 workers involved. Bonneville's inspection and maintenance staff would check towers, switchyard, and activities in the right-of-way.

The **natural gas pipeline** would take approximately 4 months to complete and would be expected to add an average of 37 additional workers per month. Construction would likely begin in July 2003 and finish in October 2003. GTN would provide regular surveillance and maintenance of the natural gas supply line in compliance with applicable U.S. Department of Transportation and Washington Utilities and Transportation Commission regulations and permit conditions.

1.5.3 Costs

Construction costs of the Wallula Power Project (not including the transmission line and associated facilities) are estimated to be $731.9 million. The total estimated engineering, design, construction, and startup cost for the transmission line project is $56 million (approximately $21 million for the Wallula-Smiths Harbor segment and the new Smiths Harbor Switchyard, and $35 million for the Smiths Harbor-McNary segment).

Operating costs of the Wallula Power Project would vary depending upon the fluctuating prices of items such as fuel, raw water, and other consumables and services. Fixed costs would include items such as direct labor, insurance, property taxes, capital improvements, and others.

The estimated annual operation and maintenance costs electrical transmission lines are $13,300 per year for the Wallula-Smiths Harbor segment and $42,390 per year for the Smiths Harbor-McNary Segment, totaling $55,690 per year for the transmission line project. The estimated annual cost for maintenance of the Smiths Harbor Switchyard would be $95,310, and maintenance of additional equipment at McNary Substation would cost $31,770. Total annual maintenance cost for the transmission line and substation facilities is estimated at $182,770.

1.6 Project Alternatives

1.6.1 No Action Alternative

The No Action Alternative would result in no construction or operation of a 1,300 MW electric generation plant at the project site. It also would preclude the construction and operation of other related projects, including the Bonneville electrical transmission line and substation, the Smiths Harbor Switchyard, the water pipeline, and the gas lateral.

The No Action Alternative would avoid environmental impacts resulting from construction and operation of the generation plant. However, because the site is already zoned industrial, future industrial development could occur at the site. Finally, the No Action Alternative would eliminate the local benefits to Walla Walla County and nearby local communities in the form of tax revenues, opportunities for employment, and mitigation funding provided by the applicant to various organizations.

1.6.2 Alternatives Considered

Two alternatives to the proposed action are evaluated in this document.

- **Alternative Tower Height and Longer Span Design.** Bonneville is considering increasing the height of the standard transmission towers proposed along a portion of the route. This alternative design segment would potentially run from just south of Wallula Junction to a point approximately parallel to milepost 195 on U.S. Highway 730. This would allow for greater distances between towers, and would potentially reduce the number of structures needed, the area of land disturbed, the amount of steel used, and overall construction costs. (See Figure 1-2 for an illustration of the area where longer spans are being considered.)
- **Alternative Alignment near McNary Substation.** Due to extensive development occurring in the approach to the McNary Substation, a slightly different alignment is being considered to reduce potential route congestion issues. (See Figures 1-6 and 1-7.)

Consideration was also given to the following alternatives, which were rejected for various reasons:

- selecting an alternative generation plant location,
- building a larger or smaller generation plant,
- utilizing alternative power generation technologies (including alternative turbine-generator technologies, fuel cells and magnetohydrodynamics, coal, and nuclear, hydroelectric, geothermal, solar, and wind power),
- selecting a different cooling system design,
- selecting a different makeup water supply alternative,
- selecting alternative transmission line routes,
- selecting different site access alternatives, and
- selecting different alternative natural gas pipeline routes.

Please see Section 2.3, Alternatives, in the Draft EIS for a more detailed discussion of the project alternatives listed above.

1.7 Public and Agency Meetings and Opportunities for Involvement

When siting a new energy facility, EFSEC is required to hold a public information meeting in the county in which the project would be located. EFSEC and Bonneville hosted public open houses in Burbank and Walla Walla on the evenings of October 18 and 19, 2000, respectively. The intent of this round of meetings was to record community members' concerns, questions, and comments regarding the Wallula Power Project in a preapplication review process. Similarly, a meeting was held in Pasco, Washington, on the morning of October 19, 2000, to provide agencies the opportunity to offer comments. Bonneville also hosted a public meeting jointly with EFSEC in Umatilla, Oregon on June 7, 2001.

EFSEC and Bonneville co-hosted a second round of agency and public EIS scoping meetings on October 2, 2001. The agency meeting was held in Pasco and the public scoping meeting was held in Burbank.

Two public meetings were held following the release of the Draft EIS to collect comments on the document. The first meeting was in Burbank on March 13, 2002 and the second in Umatilla on March 14, 2002.

At public scoping and agency meetings, the applicant presented a description of the project, reasons why the proposed site or location was selected, and a short summary of anticipated environmental, social, and economic impacts. EFSEC staff then described the state's siting process. At the two October 2001 meetings, the Counsel for the Environment, a Washington State Assistant Attorney General who represents the citizens of Washington State before EFSEC, also made a brief presentation.

Project documents are available to the public through EFSEC and Bonneville websites and in local and state libraries. Adjudicative hearings were held by EFSEC on July 16 through 19, 2002. A public meeting was held to receive comments on July 16, 2002 in Walla Walla. A hearing to receive public comments on the draft Notice of Construction and draft Prevention of Significant Deterioration permits for the power generation facility was held on August 8, 2002, in Burbank, Washington.

1.8 Coordination and Consultation with Agencies and Indian Tribes

Agencies and Indian Tribes represented at the above-mentioned meetings included:

- Bonneville;
- EFSEC;
- U.S. Fish and Wildlife Service (USFWS);
- Bureau of Land Management;
- Washington State Department of Transportation (WSDOT);
- Washington Department of Ecology;
- Washington Department of Natural Resources (WDNR);
- Washington Department of Agriculture;
- Washington Department of Fish and Wildlife;
- U.S. Bureau of Reclamation;
- Confederated Tribes of the Umatilla Indian Reservation (CTUIR);
- Walla Walla County Fire District 5; and
- Walla Walla County Sheriff's Department.

The applicant and Bonneville, along with their consultants, have consulted with the National Marine Fisheries Service (NMFS) to identify whether any fish species listed or potentially listed as threatened, endangered, or candidate under the Endangered Species Act occur within the project area. Project site-specific information on federal status species and state priority species and habitats was also requested from the USFWS, the Washington Department of Fish and Wildlife (WDFW), and the WDNR Natural Heritage Program.

[INSERT FIGURE 1-6]

[INSERT FIGURE 1-7]

Bonneville and its consultants have also consulted with local Indian Tribes and other interested parties. Bonneville initiated a number of meetings with the local Indian Tribes during the development of the transmission line proposal. The proposed transmission line also falls within the ceded lands of the CTUIR. Other interested Tribes include the Yakama Nation, the Nez Perce, and the Wanapum Band of the Yakama Nation. Additional Indian Tribes consulted include the Confederated Tribes of the Colville Indian Reservation and the Warm Springs Indians.

Bonneville and its consultants have consulted with both the Washington and Oregon state historical preservation officers (SHPOs), as required under Section 106 of the National Historic Preservation Act. Bonneville has notified the SHPOs that the proposed transmission line is an "undertaking" as defined in 36 CFR 800.16(Y), and that Bonneville is the lead federal agency.

Bonneville has also met with agency representatives from the U.S. Army Corps of Engineers and Bureau of Land Management and will continue to do so throughout project planning and permitting.

1.9 Summary of Potential Impacts and Mitigation Measures

Table 1-1 summarizes potential impacts resulting from the proposed action and alternatives anticipated for each of the resource areas (earth, water, etc.). The table outlines the potential impacts that could occur during construction, operation, and maintenance of the proposed action and the alternatives. See Appendix A for a summary of mitigation measures proposed by the applicant and Bonneville for the Wallula Power Project and transmission line.

Table 1-1. Potential Impacts of the Wallula Power Project

Impacts of Proposed Action (Construction)	Impacts of Proposed Action (Operation/Maintenance)	Impacts of Alternatives
EARTH		
Construction of the proposed plant facilities, pipelines, and transmission lines would have minor impacts on geology since most excavation and grading activities would involve only near-surface geologic units. Increased potential for runoff and soil erosion.	Potential seismic hazards. (Project design and mitigation would reduce risks.) Slightly increased potential for erosion (erosion impacts would more likely occur during construction). Minimal impacts on geology, soils, topography, unique features.	**Alternative Transmission Structure and Longer Span Design:** Approx. 17 fewer transmission towers would be required and less earthwork would be needed, reducing the potential for erosion and sedimentation. **Alternative Alignment near McNary Substation:** No difference in impacts compared to proposed action. **No Action Alternative:** No impacts. Site could be developed in future for a different industrial project.
AIR QUALITY		
Emissions of fugitive dust (PM10) and exhaust gas from construction equipment and vehicles. Some odors resulting from paint, adhesives, materials.	The plant would release emissions of PM10 in a PM10 nonattainment area. The applicant proposes to offset 110% of the production of 303 tons per year of particulates from the plant through purchasing or leasing up to 640 acres of off-site active farmland (in addition to the 175-acre plant site) and retiring it from agricultural use. With the mitigation proposed, the maximum modeled concentrations of SO2, NO2, and PM10 would be below significant impact levels, as would toxic air pollutants. This project by itself is not expected to contribute significantly to regional haze. Cooling tower plumes would have no significant impact beyond power plant facility boundary. The power plant would emit up to 4.2 million tons per year of greenhouse gases.	**Alternative Transmission Structure and Longer Span Design:** Same as proposed action. **Alternative Alignment near McNary Substation:** No difference in impacts compared to proposed action. **No Action Alternative:** No impacts. Cultivated acreage that is currently contributing to PM10 would not be retired for this project.

Impacts of Proposed Action (Construction)	Impacts of Proposed Action (Operation/Maintenance)	Impacts of Alternatives
WATER RESOURCES		
Increased runoff and sedimentation impacts on local surface water. Increased siltation potential, especially where culverts are needed for access road crossings of streams. Potential spillage of contaminants into local surface water bodies.	Potential spills or release of contaminants used for plant operation/maintenance. Public water supplies would not be impacted by plant operation. Potential instream flow benefit to Walla Walla and Columbia Rivers because of reduction in actual water withdrawals compared to current levels. Groundwater pumping may exacerbate problems at the Iowa Beef Processors well.	**Alternative Transmission Structure and Longer Span Design:** Constructing approx. 17 fewer towers would result in less soil disturbance, less excess soil placement, and less road construction, thus reducing the potential for surface water degradation by sedimentation. Potential for spills or release of hazardous materials used during construction would be slightly reduced. **Alternative Alignment near McNary Substation:** No difference in impacts compared to proposed action. **No Action Alternative:** No impacts. No net benefit to river flow through water rights withdrawals.
WETLANDS AND VEGETATION		
Generation plant: Permanent conversion of approx. 1 acre of wetland vegetation and 3 acres of irrigation pond to native upland habitat. Permanent conversion of 125 acres of cropland, 20 acres of disturbed shrub-steppe, and abandoned orchard to industrial facilities or grass/shrub. **Plant access roads:** Permanent conversion of 10 acres of existing irrigated cropland and 2 acres of native shrub/grasses for placement of county access road (5 additional acres would be disturbed during construction but returned to cropland or native habitat). **Water/gas pipelines:** Temporary impact on 4.5 acres of disturbed shrub-steppe and 22 acres of poplar stands for water pipeline. Temporary disturbance of 59 acres of shrub-steppe, poplar stands, and existing utility corridor for gas pipeline. **Transmission line:** Approx. 70.2 acres cleared for new or improved access roads. Temporary disturbance of 40.9 acres for tower installation, with 8.3 acres permanently converted. Approx. 17.6 acres temporarily disturbed during conductor placement. Approx. 7 acres of shrub-steppe vegetation permanently removed for Smiths Harbor Switchyard. Line would traverse 35 to 37 acres of potential wetland.	Indirect impacts on wetlands as a result of stopping irrigation on project site. Temporary clearing or trampling of vegetation possible during maintenance.	**Alternative Transmission Structure and Longer Span Design:** Potential reduction of impacts because approx. 17 fewer towers would be constructed. **Alternative Alignment near McNary Substation:** Alternative route east of existing Lower Monumental line could disturb a wetland with one tower location. **No Action Alternative:** No impacts.

Impacts of Proposed Action (Construction)	Impacts of Proposed Action (Operation/Maintenance)	Impacts of Alternatives
AGRICULTURAL CROPS AND LIVESTOCK		
Generation plant: Permanent conversion of 125 acres of agricultural cropland (currently alfalfa) to industrial facilities and grass/shrub-steppe habitats. This represents a small percentage of available cropland in Walla Walla County. **Water/gas pipelines:** Temporary impact on 24 acres of fiber farm, 3 acres of farmland, and 20 acres of vacant land during water supply pipeline construction. Temporary disturbance to cottonwood plantation and 12 crop circles during construction of natural gas pipeline. **Transmission line:** Temporary disturbance of 6.8 and 4.0 acres of nonirrigated and irrigated crops, respectively, during placement of towers. Permanent disturbance to agricultural land (1.4 acres of nonirrigated and 0.8 acre of irrigated land) for placement of structures. Another 4.5 acres temporarily disturbed at pulling and reeling sites. A maximum of 27.8 acres of agricultural land removed for construction and improvement of access roads.	Approx. 1,700 acres of cottonwood plantation and irrigated cropland would be purchased or leased as part of water rights acquisitions for the plant. Use of this land for irrigated agriculture would be converted to dryland grasses/shrubs, fallow land, or grazing land for the life of the project. 640 acres of land would be purchased and retired from agricultural use for offset of PM10 emissions.	**Alternative Transmission Structure and Longer Span Design:** Slight reduction in acreage of agricultural land permanently impacted because fewer transmission towers would be built. **Alternative Alignment near McNary Substation:** Amount of pasture land disturbed would be similar for both alignments. **No Action Alternative:** No impacts.
WILDLIFE		
Temporary and permanent loss of wildlife habitat and displacement of wildlife species during construction of project facilities. Potential localized impacts on Ord's kangaroo rats during construction. Noise and visual disturbance during construction could impact wildlife. Potential mortality of nestlings if clearing occurs during nesting season.	Potential bird collisions with HRSG stacks and transmission lines. Noise and visual impacts on wildlife during maintenance activities.	**Alternative Transmission Structure and Longer Span Design:** Use of fewer, taller transmission towers would reduce ground-level habitat impacts (less acreage would be impacted). **Alternative Alignment near McNary Substation:** Alternative approach could impact wetland/riparian habitat at one tower location. **No Action Alternative:** No impact. No enhancement of habitats along Walla Walla River through riparian vegetation replanting associated with the project.
FISHERIES		
Permanent dewatering of pond A would remove the pond as fish habitat but reduce future mortality of fish that currently enter through unscreened pump intakes. Installation of large culvert and associated fill would be needed at the unnamed stream east of Highway 207.	Potential instream flow benefit to Walla Walla and Columbia Rivers because of reduction in actual water withdrawals compared to current levels.	**Alternative Transmission Structure and Longer Span Design:** Impacts similar if not slightly less than proposal because of reduced erosion potential. **Alternative Alignment near McNary Substation:** No difference in impacts compared to proposed action. **No Action Alternative:** No impacts.

Impacts of Proposed Action (Construction)	Impacts of Proposed Action (Operation/Maintenance)	Impacts of Alternatives
ENERGY AND NATURAL RESOURCES		
Materials consumed: Diesel fuel: 520,000 gallons (total) Gasoline: 130,000 gallons (total) Electricity: 14,300 megawatt hours (MWh) per week Water: 5,000 gpd (average); 45,000 gpd (maximum) Aggregate: 14,000 tons (total) No impact on local, regional, or national availability of material expected.	**Materials consumed:** Diesel fuel: 12,000 gallons per year Gasoline: 4,800 gallons per year Water: 4,087 gpm (maximum); 3,171 gpm (average) Natural gas: 157.9 million cf/day (average) No impact on local, regional, or national availability of material expected.	**Alternative Transmission Structure and Longer Span Design:** No difference in impacts compared to proposed action. **Alternative Alignment near McNary Substation:** No difference in impacts compared to proposed action. **No Action Alternative:** No consumption of resources or generation of electricity to meet demand. New energy facilities would likely be built at another location.
NOISE		
Construction activities would temporarily increase noise levels in area (but would seldom exceed ambient background noise levels at the residence nearest the power plant). Potential temporary loud noise during steam cleaning of piping systems. Use of a helicopter and potential daytime blasting to erect transmission towers would create temporary noise impacts at homes and businesses near tower locations.	Sound levels during operation would be audible, but below required nighttime levels.	**Alternative Transmission Structure and Longer Span Design:** No difference in impacts compared to proposed action. **Alternative Alignment near McNary Substation:** No difference in impacts compared to proposed action. **No Action Alternative:** No impacts.
LAND AND SHORELINE USE		
The proposed power plant may conflict with existing residential uses immediately northwest of the project site. Construction noise may be audible at recreation areas. Potential for short-term loss of access at fishing areas at Wallula Habitat Management Unit on Walla Walla River. Project would be consistent with land use plans and policies. Permanent conversion of 125 acres of agricultural land into industrial facilities and grass/shrub-steppe at the plant site. Permanent removal of 55.5 acres of shrub-steppe/grassland and 30.0 acres of agricultural land along transmission line right-of-way as a result of tower placement and construction of access and spur roads.	Project could indirectly increase attractiveness of industrial land in the area for development. Potential for discouragement of recreational use at Wallula Habitat Management Unit and Wanaket Wildlife Area if transmission line towers are needed in these areas. 640 acres of land would be purchased and retired from agricultural use for offset of PM10 emissions.	**Alternative Transmission Structure and Longer Span Design:** Slightly less acreage would be impacted compared to proposal. **Alternative Alignment near McNary Substation:** Alternative would have greater potential to affect future commercial development and traffic improvements. **No Action Alternative:** No impacts.

Impacts of Proposed Action (Construction)	Impacts of Proposed Action (Operation/Maintenance)	Impacts of Alternatives
VISUAL RESOURCES/LIGHT AND GLARE		
Presence of heavy equipment and construction lighting would temporarily reduce quality of visual environment, resulting in low to moderate overall visual impacts.	Low to moderate visual and light/glare impacts expected, lessening at the generation plant site as landscaping and vegetative screening mature. Periodic visibility of plumes from cooling tower and turbine.	**Alternative Transmission Structure and Longer Span Design:** Visual impacts slightly higher where taller structures would be used. **Alternative Alignment near McNary Substation:** No difference in impacts compared to proposed action. **No Action Alternative:** No impacts.
POPULATION, HOUSING, AND ECONOMICS		
Local construction industry appears large enough to supply all or most of the labor needed for the project. Impacts on housing not expected. Plant construction would generate approx. $40.1 million in sales tax revenues for all jurisdictions over 2 years, with minor increase in service costs to local governments (e.g., law enforcement, fire protection, road maintenance).	Long-term net fiscal surplus would probably result for all jurisdictions receiving tax revenue from the project.	**Alternative Transmission Structure and Longer Span Design:** No difference in impacts compared to proposed action. **Alternative Alignment near McNary Substation:** No difference in impacts compared to proposed action. **No Action Alternative:** No impacts.
PUBLIC SERVICES AND UTILITIES		
Increased pressure on local fire fighting capacity (specifically Walla Walla County Fire Protection District 5). Slight increase in need for law enforcement or emergency medical services.	None.	**Alternative Transmission Structure and Longer Span Design:** No difference in impacts compared to proposed action. **Alternative Alignment near McNary Substation:** No difference in impacts compared to proposed action. **No Action Alternative:** No impacts.
CULTURAL RESOURCES		
Ground-disturbing activities associated with project construction could impact undiscovered cultural resources.	None.	**Alternative Transmission Structure and Longer Span Design:** Potential reduction in impacts by providing flexibility for tower placement (thus avoiding sensitive resources) and because fewer miles of access roads and spurs would be required. **Alternative Alignment near McNary Substation:** No difference in impacts compared to proposed action. **No Action Alternative:** No impacts.

Impacts of Proposed Action (Construction)	Impacts of Proposed Action (Operation/Maintenance)	Impacts of Alternatives
TRANSPORTATION		
Increase in traffic resulting from construction workforce and transfer of project-related materials and equipment.	Possible construction of an off-highway road network would encourage future industrial development.	**Alternative Transmission Structure and Longer Span Design:** No difference in impacts compared to proposed action. **Alternative Alignment near McNary Substation:** No difference in impacts compared to proposed action. **No Action Alternative:** No impacts.
HEALTH AND SAFETY		
Risk of fire or explosion during construction is considered low. Small quantities of biodegradable fuel, oil, or grease may leak from construction equipment. Potential for spill from service or refueling trucks. Chemical cleaning of plant equipment would require use of hazardous materials. Some waste materials such as chemical cleaners and lubricants would be produced. Natural gas pipeline crossing of existing Chevron Products pipeline would present risk of fire or explosion if existing pipe were accidentally damaged.	Potential fire or explosion of natural gas at the plant. Natural gas would not be stored on-site. Regulations and safety procedures would be followed. Potential release of hazardous materials to the environment. Release of ammonia is the most likely chemical release accident with potential for off-site impacts. Aqueous ammonia would be used to reduce potential severity of any accident. Generation of waste materials such as paints and lubricants. Transmission lines would produce electric and magnetic fields (EMF), exposure to which may cause possible health effects. The project would meet Bonneville's electric field strength standards. Potential for brush fires near transmission lines.	**Alternative Transmission Structure and Longer Span Design:** Taller transmission towers could reduce EMF field strengths at ground level. **Alternative Alignment near McNary Substation:** No difference in impacts compared to proposed action. **No Action Alternative:** No impacts.

1.10 Cumulative Impacts

The West Coast has short-term and long-term supply needs for electric power. Recent long-term planning estimates by the Pacific Northwest Electric Power and Conservation Planning Council show the region will need an additional 6,000 MW of electricity over the next 10 years. Other estimates run as high as 8,000 MW. This demand for electric power has led to a number of new generating resources being proposed to meet the regional energy need. More than 24,000 MW of resources have been proposed by a variety of independent power projects. These proposals far exceed the need, which makes it difficult, if not impossible, to determine which specific projects will ultimately be constructed and operated.

Although the environmental impacts of proposed power projects are currently evaluated on an individual basis, the recent abundance of project applications has prompted EFSEC and Bonneville to consider potential cumulative effects of the pending proposals. While the high number of power plant proposals would address regional energy shortage concerns, the cumulative impacts of constructing several energy facilities in the Pacific Northwest must be considered. This concern is magnified when several projects are proposed in proximity to each other and/or with similar schedules (such as the Starbuck, Wallula, and Mercer Ranch projects in southeastern Washington, or the multiple projects existing or proposed in Umatilla County, Oregon).[3]

Following is a summary of the cumulative impacts evaluation included in the Wallula Power Project Draft EIS. For the most part, these impacts are from the proposed power plants themselves and not other activities that might add additional impacts.

1.10.1 Global Warming

Most worldwide greenhouse gas emissions are in the form of CO2, while a smaller fraction of the emissions are in the form of other gases such as methane or nitrous oxide. The total annual greenhouse gas emissions associated with the Wallula Power Project (including fugitive leaks of natural gas from the pipeline system serving the plant) would be 4.8% of the greenhouse gas presently emitted from all sources in Washington State and 15.3% of the amount anticipated to be issued from all proposed future power plants in the Northwest. The greenhouse gas emissions from the Wallula Power Project would be approximately 0.06% of the United States emissions. The actual effect on global warming caused solely by emissions from the Wallula Power Project is unknown.

Although there are no federal or state regulations requiring new power plants to offset greenhouse gas emissions, EFSEC's application review process encourages applicants to develop some form of greenhouse gas mitigation. In June 2002, the applicant entered into a legal Settlement Agreement with the Washington State Counsel for the Environment, committing to a comprehensive environmental enhancement package. The Settlement Agreement acknowledges that greenhouse gas emissions are an important worldwide environmental issue with potential negative implications for Washington State. The Settlement Agreement stipulates that the Site Certification Agreement issued by EFSEC for the Wallula project shall require payments by

[3] As of July 2002, the Mercer Ranch project had been cancelled and the Starbuck project had been suspended.

Wallula Generation to environmental organizations for purposes of reducing greenhouse gas emissions and enhancing wildlife habitat. Payments totaling $5.35 million would be directly related to various organizations for environmental restoration and greenhouse gas mitigation and renewable energy projects, as follows:

- $1.0 million to the Last Mile Energy Cooperative to fund research into renewable energy and greenhouse gas reduction,
- $2.55 million to the Washington State University Energy Program, to be used to issue requests for proposals for greenhouse gas mitigation and renewable energy projects,
- $1.65 million to the Bonneville Energy Foundation for renewable energy projects including the photovoltaic solar project at the Hanford, Washington site, and
- $150,000 to the Blue Mountain Action Council to fund home weatherization projects.

1.10.2 Regional Air Quality

Air quality at many of the region's Class I areas (typically wilderness and national parks) is acknowledged to be currently impaired due to regional population growth and industrial activity. Since the majority of the proposed power projects are combustion turbines that would be operated near Class I areas, there is a regional concern over further degradation of air quality.

BPA conducted a cumulative air quality impact analysis of many of the proposed power plants in the Northwest and the potential impacts should they be built (Bonneville 2001a, 2001b, 2001c). The analysis examined the plants themselves and not air emissions from existing sources. The analysis considered various cumulative emissions and impacts, including air emissions as discussed below.

Cumulative increases in ambient concentrations of sulfur dioxide (SO2), nitrogen oxides (NOx), and particulate matter (PM10) caused solely by new power plants proposed in the Pacific Northwest were modeled to be much lower than the allowable Prevention of Significant Deterioration (PSD) Class I increments, and in nearly all cases were below Significant Impact Levels. Even for the worst-case scenario, new power plants in the region would probably not cause concentrations exceeding regulatory limits at any Class I area.

In most of the Class I areas the existing background acid deposition rates are much higher than impact thresholds established by the U.S. Forest Service and the National Park Service, indicating that existing air quality is already significantly impaired. The modeled worst-case increases caused solely by new power plants would be a small fraction of the existing background values.

Operation of between 15 and 45 new power plants in the region could significantly impact regional haze at many Class I areas. However, it is expected that only a fraction of those power plants would actually be constructed.

1.10.3 Water

Many existing and proposed thermal energy generation facilities in Washington and Oregon consume, or plan to consume, water from the Columbia River (through direct withdrawals or through aquifers that recharge the river). While it is unlikely that all of these plants will be

constructed, the fact that so many have been proposed along the Columbia River indicates that cumulative impacts may occur.

The average daily flow from the Bonneville Dam is 2,609 million gallons per day (mgd). Thus the maximum total daily water consumption of all existing, permitted, and proposed plants above the Bonneville Dam (50.0 mgd) represents approximately 1.9% of the Columbia River's daily flow at that point. This does not take into account localized water supply impacts along specific river reaches, where concentrated water withdrawals could result in more pronounced water resource effects. It also does not consider that maximum consumption is likely to occur during hot weather when river flows may be lower.

1.10.4 Natural Gas Supply

Using conservatively high estimates, the need for natural gas for power plants in the region would be approximately 1.58 billion cubic feet per day (cf/day). This represents approximately 53% of Canada's delivery capacity of 3 billion cf/day. Future natural gas needs would potentially exceed current Canadian supply capacity by approximately 6%, which would suggest that additional supplies would be developed.

The report *Convergence: Natural Gas and Electricity in Washington* (2001) published by the Washington State Office of Trade & Economic Development (CTED) creates a more cautionary picture of future natural gas supply in light of potentially high cumulative demand. Although CTED agrees that enough natural gas reserves and transmission line capacity can be developed to support the predicted expansion of the natural-gas fired electricity generation market in the Pacific Northwest, the report warns that the timing of new plants coming online and the expansion of the region's ability to deliver low-priced gas will significantly impact the stability of the market. Inflated natural gas and electricity prices could also translate into higher residential rates.

The higher than anticipated demand for natural gas in 2000 exceeded the need for transmission facilities predicted by pipeline companies and major shippers. The capacity shortage was exacerbated by the greater dependence on natural gas for energy generation in light of low hydroelectric production.

The two methods that can be used to expand natural gas pipeline capacity are (1) increasing operating pressure (requiring upgrades or adding compressor stations) or (2) increasing cross-section (effectively increasing the diameter of the pipe, such as laying additional parallel pipe). Although the Northwest and GTN pipelines are currently operating at or near their capacity, activities are currently underway to expand the interstate natural gas transmission system. Significant interest during the GTN open season suggests that system expansions could be large enough to accommodate future demand. The pivotal question will be whether this new load will actually materialize, and whether shippers of natural gas will commit to contracting for new pipeline capacities.

Impacts associated with natural gas transmission line routes would be similar (though slightly less intensive) than those associated with transmission line impacts. See the next section for further discussion.

1.10.5 Transmission Lines and Natural Gas Pipelines

Cumulative impacts related to transmission lines could occur where multiple new lines would converge on the same substation. For example, several new lines (including the McNary-John Day Project, new lines from the Umatilla Generation Project and the Wanapa Generation Project, a 230 kV line to Brownlee, and an additional McNary-John Day line on the south side of the Columbia River) are all proposed to interconnect at the McNary Substation. If all projects were to be built, transmission line congestion around the McNary Substation could worsen.

Land uses can be directly affected by the amount of new and existing rights-of-way needed to establish transmission line corridors. Constructing new transmission lines (and widening existing rights-of-way) can affect residential, commercial, agricultural, and forest land because new line segments and access roads intrude on existing land uses and can eliminate some land uses.

Removal of vegetation to create and maintain transmission line rights-of-way could gradually alter the composition of vegetation (particularly in forested areas where tall trees must be removed). Maintenance such as herbicide use and the clearing of tall trees would leave only low-growing vegetation. Reseeding right-of-way construction corridors with native vegetation has met with mixed success.

Creating and maintaining transmission line rights-of-way could also negatively affect wildlife. Construction-related impacts such as noise and vegetation clearing could impact local wildlife species, particularly during breeding, calving, and other critical seasons. Operation impacts could also include bird strikes on towers or other tall structures at night or in foggy weather. Maintaining rights-of-way also increases access for hunters, and could result in habitat fragmentation.

It is impossible to quantify the total length of natural gas pipeline construction projects anticipated in the Pacific Northwest over the next few years, although it is assumed that applicants would consider proximity to natural gas pipelines as an important consideration when selecting a project site, thus limiting the length and cost of natural gas pipeline extensions. Furthermore, applicants would consider natural gas availability on a project-specific basis (i.e., if obtaining the necessary gas supply were not feasible, the project applicant would likely select a different location).

1.10.6 Transportation

If two or more large projects were constructed in proximity and on similar schedules (such as the Wallula and Starbuck Power Projects), construction workers commuting to both project sites could contribute to added congestion on the same local streets and highways. Planned transportation improvement projects could also reduce capacity on local roads, making the burden of additional commuter traffic difficult to absorb.

1.10.7 Population and Housing

The workforce analysis conducted for the Wallula Power Project suggests that there is a sufficient labor supply available to complete both the Wallula and Starbuck Power Projects within the same time frame. If an additional project (or projects) were to be constructed simultaneously (i.e.,

Mercer Ranch, other transmission lines, etc.), the local workforce supply might be strained. This would likely require more workers from outside of the project area to relocate to the project vicinity, thus potentially affecting local population and housing.

1.10.8 Cultural Resources

Constructing power project components such as generation plants, water pipelines, natural gas pipelines, electrical transmission lines, and so forth requires the disturbance of earth to create foundations, trenches, rights-of-way, and staging areas. Every time native soil is disturbed for these activities, the likelihood increases that cultural resources will be uncovered.

Power project operation could also impact cultural resources. Water withdrawal from reservoirs behind dams could reveal sensitive historic tribal areas, and discharge of warm wastewater could threaten the integrity of cultural resources. Cumulative air quality degradation from power plant emissions and other sources could lead to acid deposition, resulting in corrosion of historic structures and resources (e.g., the corrosion of petroglyphs in the Columbia River Gorge).

1.11 Issues to be Resolved

Although most of the issues associated with this proposal have been clearly identified and assessed, or will be addressed in some clearly identified action plan in the future, there are some that have not been totally resolved or that may require further analysis or future decisions. This section summarizes those issues, consistent with NEPA and SEPA.

Water Rights – Although the applicant has a clearly described plan to acquire water rights sufficient to operate the facility, it would involve acquisition and transfer of rights from various sources. These purchases and transfers have not yet occurred, although the Washington Department of Ecology has provided a preliminary examination that indicates that the transfers appear to be acceptable. If they occur and are approved as described within this EIS, this will no longer be an issue. This EIS does not attempt to make an independent legal review of this water rights issue.

Prevention of Significant Deterioration (PSD) Permit and Best Available Control Technology (BACT) – The BACT and LAER controls described in Chapter 3, Section 3.2 of this Final EIS have been proposed by the applicant as part of the PSD and Notice of Construction (NOC) review process. The applicant's proposal was reviewed by EFSEC and EFSEC's PSD permit writer (Washington Department of Ecology), and EFSEC has issued a draft PSD permit and a draft NOC permit for public comment. Should the Council recommend approval of this proposal to the Governor, final PSD and NOC permits would be appended to the proposed Site Certification Agreement forwarded to the Governor. If the Governor approves the project, the NOC permit becomes final, and the PSD permit is considered approved by the state. The PSD permit must then be approved by the U.S. Environmental Protection Agency (EPA) Region 10.

PM10 Offsets – Under the requirement to offset at least 303 tons per year of particulates, the applicant proposes to retire most agricultural operations at the Wake property located on the west side of the Columbia River roughly 7 miles southwest of the power plant site (see Figure 1-1). The current wheat growing operations there would be converted to cultivated dry grass operations or would be retired to shrub-steppe. Current PM10 emissions from the Wake property are estimated at 552 tons per year, and the proposed changes would reduce the emissions to 36 tons

per year, for a reduction of 516 tons per year. The overall PM10 reductions achieved by retiring agricultural operations at the power plant site and the Wake property would be 566 tons per year, which would more than offset the 303 tons per year of emissions from the proposed future power plant operations.

The applicant's offset proposal was reviewed by EFSEC and EFSEC's PSD permit writer as part of the air quality permit process. EFSEC concurred with the proposal, which has been incorporated into the draft NOC permit issued for public comment.

1.12 Regulations and Permits

If a power generation project is approved, EFSEC specifies the conditions of construction and operation, issues a Site Certification Agreement in lieu of any other individual state or local agency authority, and manages the environmental and safety oversight program of project operations. As part of EFSEC's permitting process, Wallula Generation, LLC submitted an Application for Site Certification on August 20, 2001. EFSEC is the sole nonfederal agency authorized to permit the proposed generation plant project. Federal agency approvals are also needed.

For informational purposes, Table 1-2 lists the major state and local permit requirements preempted by EFSEC, as well as federal requirements.

As a federal agency, Bonneville is constitutionally prohibited from complying with the procedural requirements associated with obtaining state and local land use approvals or permits. The agency would, however, strive to meet or exceed the substantive standards and policies of the environmental regulations listed in Table 1-2.

Table 1-2. Overview of Permit, Approval, and Consultation Requirements for Wallula Power Project

Agency	Permit/Authority
Federal Government	
Advisory Council for Historic Preservation	Consultation under Section 106/National Historic Preservation Act. Historic and cultural resources also protected under Archeological Resources Protections Act, American Indian Religious Freedom Act, National Landmarks Program, World Heritage List, and Native American Graves Protection and Repatriation Act
Bonneville Power Administration	Bonneville is co-lead agency with EFSEC for preparation of the EIS, to ensure the compliance of the project with the National Environmental Policy Act (NEPA) and the Council on Environmental Quality regulations for implementing NEPA
	Under Executive Order 12898—Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, federal agencies are required to identify and address any disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and/or low-income populations
Bureau of Land Management	BLM manages Baker Resource Management Area under 1989 Resource Management Plan
Federal Aviation Administration	Establishes aviation regulations and lighting. Determines whether a Notice of Proposed Construction or Alteration is required for potential obstruction hazards

Agency	Permit/Authority
Federal Energy Regulatory Commission	FERC would be responsible for siting of the 5.9-mile natural gas pipeline. Environmental impacts associated with the proposed natural gas pipeline would be assessed under a separate NEPA document
National Marine Fisheries Service	Provides consultation for essential fish habitat (EFH) under the Magnuson-Stevens Act, amended by Public Law 104-297, the Sustainable Fisheries Act of 1996
	Provides consultation under the Endangered Species Act for anadromous fish
Natural Resources Conservation Service	Identifies and quantifies adverse impacts of federal programs on farmlands under the Farmland Protection Act
U.S. Army Corps of Engineers	Wallula Habitat Management Unit is owned by the Corps and managed by USFWS; Juniper Canyon Wildlife Management Unit is owned and managed by the Corps. Easements would be required for any pipeline or transmission line crossings of Corps-owned property
	Authorization from the Corps is required in accordance with the provisions of the Clean Water Act, Section 404 when there is a discharge of dredged or fill material into waters of the U.S., including wetlands
	Under Section 10 of the Rivers and Harbors Act, authorization would be required for the transmission line crossing of the Walla Walla River
U.S. Department of Energy	Administers compliance with Floodplains/Wetlands Environmental Review and Executive Orders 11988 and 11990
U.S. Environmental Protection Agency	The Clean Water Act establishes requirements to prevent or contain discharges or threat of discharges into navigable waters or adjoining shorelines and to prepare a spill prevention, control, and containment plan
	The Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) establishes reporting requirements for reportable releases of CERCLA-designated hazardous substances
	The Accidental Release Prevention Program specifies required procedures for plant design, operation, and maintenance to reduce potential for accidental spills of ammonia
	Emergency Planning and Community Right to Know requires annual submittal of a Toxic Release Inventory report describing use and discharge of ammonia via air emissions and wastewater discharges
	The Resource Conservation and Recovery Act, as amended, provides a program for managing and controlling hazardous waste by imposing requirements on generators and transporters of this waste, and on owners and operators of treatment, storage, and disposal facilities
	The Federal Insecticide, Fungicide and Rodenticide Act registers and regulates pesticides
U.S. Fish and Wildlife Service	Division of Migratory Bird Management establishes specific lighting guidelines for the siting, construction, operation, and decommissioning of communication towers (which are applicable to tall stacks)
	USFWS would provide a biological opinion if it were determined that wildlife and/or plant species that are federally listed under the Endangered Species Act would be adversely affected by the project
	Migratory Bird Treaty Act, as amended, protects migratory birds against the act of "taking," killing, or possessing. USFWS issues permits for the destruction of nesting birds protected by the Act, but only when related to human health or safety issues
U.S. Department of Transportation, Office of Pipeline Safety	Governs the design, construction, testing, maintenance, and operation of natural gas piping systems. Provides for gas pipeline safety approval

Agency	Permit/Authority
State Government (EFSEC has single permit authority over all Washington state and local permits)	
Washington Energy Facility Site Evaluation Council (EFSEC)	EFSEC is co-lead agency with Bonneville for preparation of the EIS and issues the Site Certification Agreement. EFSEC's responsibilities derive from the Revised Code of Washington (RCW) 80.50. EFSEC has been delegated authority by the U.S. Environmental Protection Agency to issue permits under the federal Water Pollution Control Act and the federal Clean Air Act for facilities under its jurisdiction. EFSEC provides a single permit authorization to all other Washington state and local permits; incorporates equivalent requirement and reviews National Pollutant Discharge Elimination System (NPDES), Hydraulic Project Approval (HPA), 401 Certification, and all other Washington state and local permits and approvals
Washington Department of Ecology	Notice of Construction (NOC) approval
	Prevention of Significant Deterioration (PSD) permit
	Air operating permit
	Acid rain permit
	Water quality certification
	Coastal zone management program consistency certification for Washington (administered through state Shoreline Management Act)
	NPDES and state waste discharge baseline general permit for stormwater discharge associated with construction and industrial activities
	Waste discharge permit for wastewater discharges of more than 14,500 gallons per day to on-site sewer system
	Water rights permitting and review
	Review and approval of design, construction, operation, and maintenance of dams
	Noise standards (173-60 WAC)—daytime construction noise is exempt
Washington Department of Fish and Wildlife Oregon Department of Fish and Wildlife	The Fish and Wildlife Conservation Act of 1980 encourages federal agencies to conserve and promote conservation of nongame fish and wildlife species and their habitats. In addition, the Fish and Wildlife Coordination Act requires federal agencies undertaking projects affecting water resources to coordinate with the USFWS and the state agency responsible for fish and wildlife resources. For the proposed project, the relevant state agencies are the Washington Department of Fish and Wildlife and the Oregon Department of Fish and Wildlife
	The Washington Department of Fish and Wildlife issues state Hydraulic Project Approval permits under the Hydraulic Code (RCW 75.20.100-160) when any construction activity in or near state waters is proposed
Washington Department of Labor and Industries	Ensures compliance of structures with electrical contracting and certification laws, as well as safety of construction workers
Washington State Department of Transportation	WSDOT is required to reasonably accommodate utilities within its right-of-way corridors and issues utility permits and franchises
	WSDOT ensures compliance with roadway design criteria, including limited access standards
Washington Utilities and Transportation Commission	WUTC regulates privately owned utilities offering service to the public, primarily through rate and other economic reviews, but also has some public safety responsibilities for in-state pipelines and railroads. It would provide for natural gas pipeline construction approval
Washington State Department of Health	Waste discharge permit for wastewater discharges of between 3,500 and 14,500 gallons to on-site sewer system

Agency	Permit/Authority
Local Government	
Umatilla County	Umatilla County Comprehensive Plan (1983-2003)
	Umatilla County Comprehensive Plan Amendment
	Umatilla County Code of Ordinances
Walla Walla County	Walla Walla County Comprehensive Plan 2000-2020
	Western Walla Walla County Development Plan (1968-1988, superceded by Walla Walla County Comprehensive Plan 2000-2020)
	Walla Walla County Zoning Regulations (17.12.040-Establishment of districts—Designated—General Purposes)
	Walla Walla County Shoreline Management Master Program (1975)
	Walla Walla County Code 15.04 (Building Codes)
	Walla Walla County Code Titles 8.12 and 8.16 (Sewage Disposal Installation and Design, Septic Tank Cleaning Regulations)
	Walla Walla County Code Title 9.20 (Noise Regulations)
	Walla Walla County Code Title 8.24 (Hazardous Weeds, Rubbish, and Debris)
	Walla Walla County Code Title 18.08 (Wetland Protection)

1.13 Identification of the Agency Preferred Alternative

The preferred alternative is to implement the proposed action with associated mitigation measures described in Appendix A. If the proposal is approved by the Governor of Washington, Wallula Generation would construct, own, and operate the power plant and associated facilities; GTN would construct, own, and operate the natural gas pipeline; and Bonneville would construct, own, and operate the Wallula-Smiths Harbor segment of transmission line and Smiths Harbor Substation to interconnect the power generated at the new plant to the Federal Columbia River Transmission System.

The Smiths Harbor-McNary segment of transmission line would not be constructed at this time. Projected loads on the existing Lower Monumental-McNary line are not as high as predicted and there is available capacity to allow the additional load of the power generated at the plant to be wheeled on the existing line. If a need for the Smiths Harbor-McNary segment of line does arise in the near future due to increasing loads, then a decision on the NEPA process that would be required to move forward would be made at that time.