

## Instructions for Revising Hermiston Generating Project ASC (Addendum 2)

The following table identifies the text, tables, or figures that should be replaced or added to the Hermiston Generating Project ASC to update your original copy.

<b>Remove</b>	<b>Replace with</b>	<b>Add</b>
<b>Exhibit B</b>		
Pg. B-10a thru B-14a Fig. B-1a & B-1b	Pg. B-10a.2 thru B-14b.2 Fig. B-1a.2	
<b>Exhibit C</b>		
Fig. C-1a & C-4a	Revised Fig. C-1a & C-4a	
<b>Exhibit D</b>		
No Revisions		
<b>Exhibit E</b>		
Pg. E-1	Pg. E-1a.2	
<b>Exhibit F</b>		
Pg. F-2a thru F-7a Fig. F-1a and F-1b	Pg. F-2a.2 thru F-5a.2 Fig. F-1a.2	
<b>Exhibit G</b>		
Pg. G-7a Table G-3	Pg. G-7a.2 Table G-3a.2	
<b>Exhibit H</b>		
Fig. H-1a	Revised Fig. H-1a	
<b>Exhibit I</b>		
Pg. I-2a thru I-4a Pg. I-7a Pg. I-12a and I-13a Pg. I-22a thru I-27a Fig. I-1a Fig. I-3a Fig. I-4a	Pg. I-2a.2 thru I-4a.2 Pg. I-7a.2 Pg. I-12a.2 thru I-13a.2 Pg. I-22a.2 thru I-27b.2 Revised Fig. I-1a Revised Fig. I-3a Revised Fig. I-4a	

	<b>Remove</b>	<b>Replace with</b>	<b>Add</b>
	Exhibit I-1	Exhibits I-1a & I-1b	
<b>Exhibit J</b>	No Revisions		
<b>Exhibit K</b>	Pg. K-2a	Pg. K-2a.2	Exh. K-2a after Exh. K-2
<b>Exhibit L</b>	No Revisions		
<b>Exhibit M</b>	Pg. M-1 & M-2	Pg. M-1a.2 & M-2a.2	
<b>Exhibit N</b>	No Revisions		
<b>Exhibit O</b>	No Revisions		
<b>Exhibit P</b>	Fig. P-1a	Revised Fig. P-1a	
<b>Exhibit Q</b>	Fig. Q-1a	Revised Fig. Q-1a	
<b>Exhibit R</b>	Pg. R-7 Table R-2	Pg. R-7a.2 Table R-2a	
<b>Exhibit S</b>	Pg. S-5	Pg. S-5a.2	
<b>Exhibit T</b>	Pg. T-4a & T-5a	Pg. T-4a.2 & T-5a.2	
<b>Exhibit U</b>	Pg. U-12a thru U-19a	Pg. U-12a.2 thru U-19b.2	

	<b>Remove</b>	<b>Replace with</b>	<b>Add</b>
<b>Exhibit V</b>	Pg. V-3	Pg. V-3a.2 thru V-9a.2	
<b>Exhibit W</b>	Pg. W-7a	Pg. W-7a.2	
<b>Exhibit X</b>	Entire Text	Pg. X-1a.2 thru X-4a.2	
<b>Exhibit Y</b>	No Revisions		
<b>Exhibit Z</b>	No Revisions		
<b>Exhibit AA</b>	No Revisions		
<b>Exhibit BB</b>	No Revisions		
<b>Exhibit CC</b>	Pg. C-2	Pg. C-2a.2 thru C-5a.2	

**Application**  
for a  
**Site Certificate**  
*for*  
**Hermiston Generating Project**  
Addendum 2



*Interconnecting Transmission Line -- Project Order Addendum 2 Paragraph I.B*

The Project will deliver electric power to the regional power grid at BPA's McNary Substation at Umatilla, Oregon, approximately 12 miles from the energy facility site. The transmission interconnection schematic arrangement is shown in Figure B-5.

The Project will require upgrading of an existing 115 kV transmission line, operated by Umatilla Electric Cooperative, to 230 kV. Approximately 12 miles of this transmission line, entirely within Umatilla County and partially within the City of Umatilla will be upgraded between the energy facility site and the interconnection with the McNary Substation. This upgrade will consist of replacing existing wooden poles with single-shaft steel poles and adding the new 230 kV circuits to the steel poles that will then carry both the existing 115 kV and the new 230 kV circuits. The 12.47 kV underbuild along the entire length of the present line will also be retained, possibly with continued use of some of the wooden poles. Depictions of typical steel pole designs under consideration are provided as Figure B-6. The new poles will incorporate raptor-proof design features described in Exhibits P and R. The upgrade will occur within the existing transmission right-of-way. Figure C-3a shows a detail of the transmission line route, including the sections where the existing 115 kV and 12.47 kV lines will be maintained, replaced, or upgraded. Figure I-3a shows the proximity of the transmission line route to the City of Umatilla.

Because of the expected routing of the new 230 kV transmission line into the McNary Substation, it is likely that approximately 1/4 mile of new 230 kV transmission line will be constructed north of Highway 730, as the line enters the McNary Substation. This new section of transmission line will be of similar design to that of the upgraded portion of the line, except only the 230 kV circuit will be carried on the new poles.

*Electric and Magnetic Fields (EMF)*

The Energy Facility Siting Council, in adopting the March 1993 Report of the EMF Committee, concluded that it is premature to set "health based" limits for exposure to EMF at this time. Furthermore, they encourage the exploration of low-cost ways to reduce or manage EMF exposure until such limits are established.

In light of these considerations, Applicant has been sensitive to the EMF issue and has included EMF reduction in its overall design philosophy for the project. Applicant selected a project site and transmission line route in a primarily agricultural area, away from populated areas. The energy facility site is located near the Lamb-Weston potato processing facility, with an existing UECA transmission line running adjacent to the site. This will allow the new 230 kV transmission line to be added to an existing 115 kV transmission line, rather than requiring a new transmission routing system.

In addition, Applicant has consciously designed the line to reduce ground EMF levels and undertook modeling to estimate the impact of these design changes in reducing ground EMF levels. These design features are exchanging the A-phase and C-phase of the 230 kV line. Applicant's model confirmed that its design will introduce a partial canceling effect between the conductors and thereby reduce the ground EMF level.

### **Environmental Protection Components**

#### ***Air Pollutant Emissions Control -- Project Order Addendum 2 Paragraph II.A.3***

The Project will emit NO<sub>x</sub> (nitrogen oxides), CO (carbon monoxide), non-methane hydrocarbons, and small quantities of particulate. Emission controls incorporated in the Project design are described below.

#### ***NO<sub>x</sub> Control Systems***

The Project will be designed to control NO<sub>x</sub> using an advanced Dry Low-NO<sub>x</sub> combustor and a Selective Catalytic Reduction (SCR) system. This will be a state-of-the-art design, capable of achieving 4.5 ppmvd NO<sub>x</sub> levels.

#### ***Continuous Emissions Monitoring System***

A separate monitoring system for airborne pollutants will be installed to provide monitoring and alarming of NO<sub>x</sub> and CO concentrations in both HRSG exhaust systems. The continuous emissions monitoring systems ("CEMs") will provide input signals to the microprocessor based

data acquisition system, previously described, and will meet all the requirements of the Oregon Department of Environmental Quality for monitoring and reporting.

#### *Other Emissions*

Because the facility will be fueled by natural gas, only trace amounts of SO<sub>2</sub> will be emitted. Control of CO and non-methane hydrocarbons will be achieved through maintenance of proper combustion controls.

#### *Process Water*

As part of the cooling cycle, make-up water will be added at the cooling tower basin to replace water lost through evaporation or discharged from the cooling tower. As the cooling water is concentrated through evaporation in the cooling towers, cooling water must either be discharged from the system as wastewater (blowdown); or scaling constituents (silica and carbonates), and other dissolved solids must be removed from the cooling water, maintaining water quality levels to protect the cooling tower. The Hermiston Generating Project incorporates a sidestream softener system to remove the dissolved solids rather than generating blowdown. This process is discussed below.

#### *Sidestream Softener Approach*

Hermiston Generating Project will not have a process water discharge (blowdown) typical of conventional power plants. The facility design will incorporate a sidestream softener to control water chemistry and allow for reuse of the process water. Control of the water chemistry in the cooling tower is managed primarily through the removal of scale causing constituents (primarily silica and carbonate) which have been concentrated by evaporation of fresh water in the cooling tower. Sidestream softening removes silica and carbonates through chemical reactions with lime and other precipitation-inducing chemicals in a clarifier fed by a sidestream of the cooling tower water flow.

This approach has the advantage of reducing make up water requirements (i.e. reduced water use) and eliminating the need for wastewater disposal. Approximately 200 gallons per minute (gpm)



of water (per combined cycle unit) from the cooling tower will be directed to a clarifier instead of requiring disposal.

Hydrated lime ( $\text{Ca}(\text{OH})_2$ ) and magnesium sulfate (or, depending on specific water chemistry requirements, other similar chemical compounds) would be added in the clarifier to control calcium hardness and silica. Because these constituents are removed from the sidestream in the clarifier, the effluent from the clarifier is suitable for makeup to the cooling tower and would be mixed with fresh water in the cooling tower basin.

Precipitated silica and calcium would be thickened and dewatered in a filter press. Liquids would be recycled back to the clarifier and ultimately reused in the cooling tower. Depending on the actual total water loss from the cooling tower through the combined mechanisms of evaporation, drift and water entrained in the filter cake solids as well as final design configurations there may be a need to further control the build-up of dissolved solids (TDS) in the cooling water. If necessary, this TDS build up would be managed by a combination of increased cycles of concentration in the cooling tower and additional water treatment in the sidestream process. This water treatment could include the use of Reverse Osmosis (to create a low TDS stream and a more concentrated, lower volume stream), and either a brine crystallizer/concentrator system or other method of evaporation of water to separate out the scale-causing salt solids.

The solids by-product, consisting primarily of magnesium silicate and calcium carbonate, is a non-hazardous material suitable for off-site landfill. Depending on extent of dewatering, approximately 650 lb/day (per combined cycle unit) of filtercake would be produced from the sidestream softening operation. About 10 tons/month of filtercake (per combined cycle unit), at full operation, would be disposed off-site in a permitted landfill (see Exhibit F for details on disposal).

Each combined cycle units would be served by a separate sidestream softener, with the following main components:

- A 16 to 20 foot diameter clarifier with a flow of approximately 200 gpm; calcium hydroxide and calcium sulfate will be added to remove hardness and silica.

- Transfer pumps with a capacity of approximately 200 gpm to pump clarifier effluent to final filters. Filtered water will be returned to the cooling tower basin as part of the overall make up water supply.
- Sludge transfer pumps that take precipitated silica and carbonates from the clarifier to the sludge thickener.
- Sludge thickener which further concentrates flocculant for transfer to the solids filter press.
- Plate press or belt type filter press to dewater sludge. Resulting filter cake containing approximately 50 percent liquid will be disposed of off-site and removed liquids will be returned to the cooling tower.
- Brine crystallizer (if necessary) to evaporate a portion of the sidestream cooling water flow to boil out the salts. Relatively pure water vapor would be recovered and reused back into the cooling tower. The non-hazardous salts would be added to the solids being transported to off-site disposal.

A process diagram for the sidestream softener is provided as Figure B-1 and a letter from the manufacturer describing the process is included as Exhibit B-3.

***Roof and Stormwater Discharge -- Project Order Addendum 2 Paragraph II.M.2***

A storm drainage system will be provided for the entire plant area. Individual drain systems will be provided for the turbines, HRSG, water treatment and service areas. Each roof system will include curbing, allowing the areas to drain into catch basins located at ground elevation. Runoff from the roof will be collected in a common gutter; it will then be conveyed to an on-site detention basin for quiescent settling.

Stormwater from the Project will be collected by a system of drains and catch basins. Catch basins and manholes will be connected by underground piping into a gravity system. The gravity system will discharge to detention basin designed to detain runoff from the 100 year, 24 hour storm event with approximately a 50 percent surplus capacity. Water from the detention basin

will be discharged to the cooling tower basin to be used as process cooling water.

***Solid Waste***

Construction of the Project is expected to generate waste steel, other waste metals, and normal

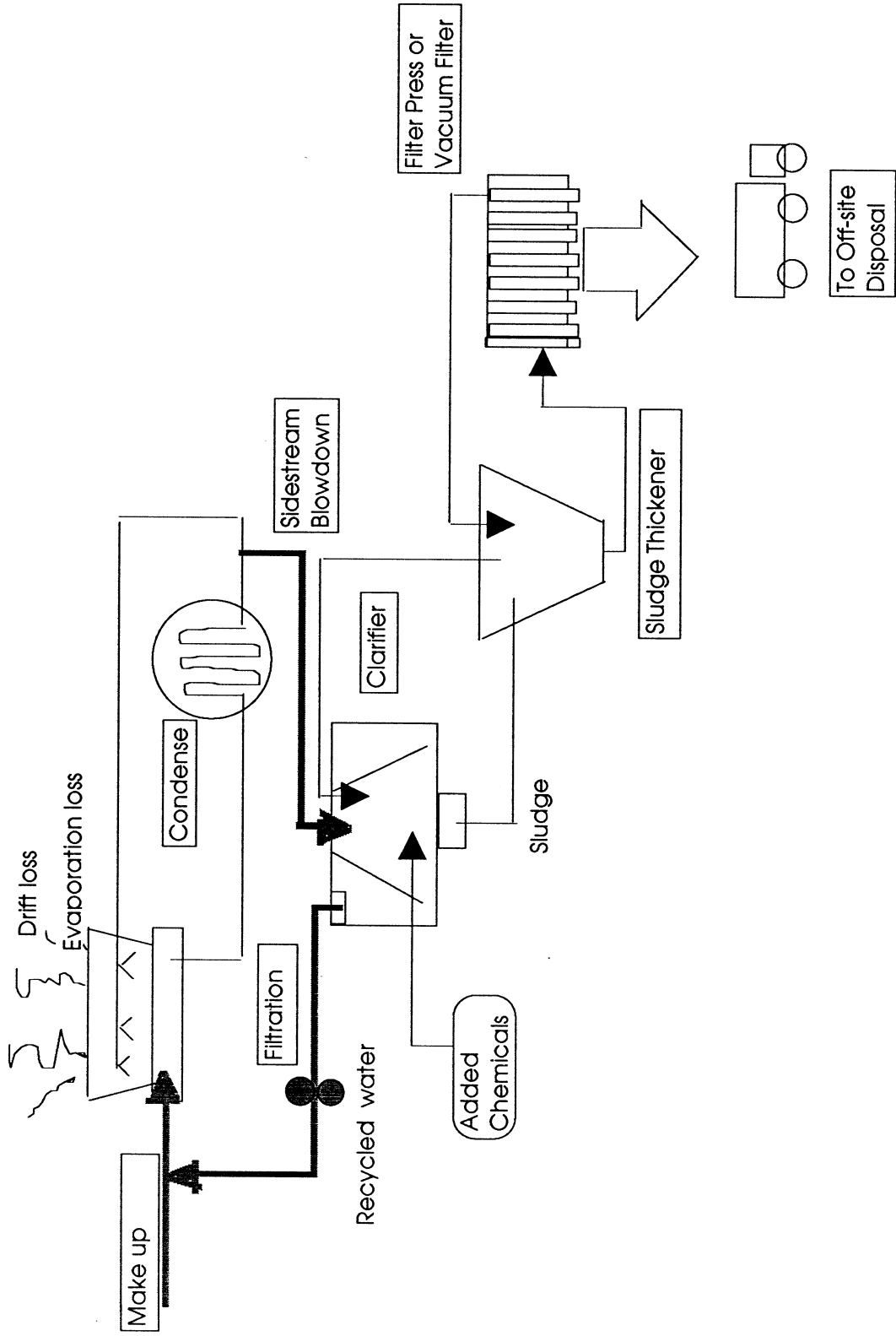
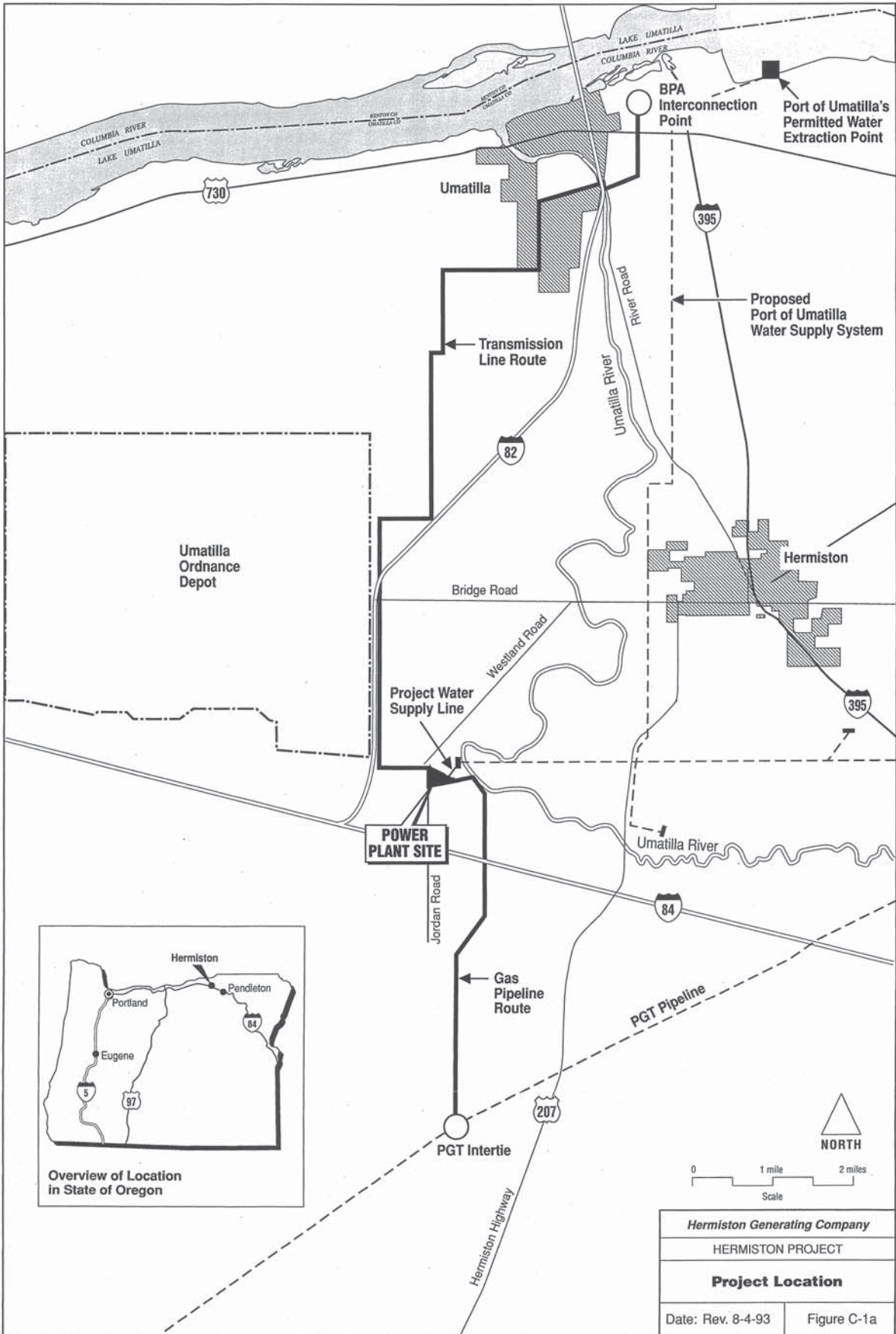
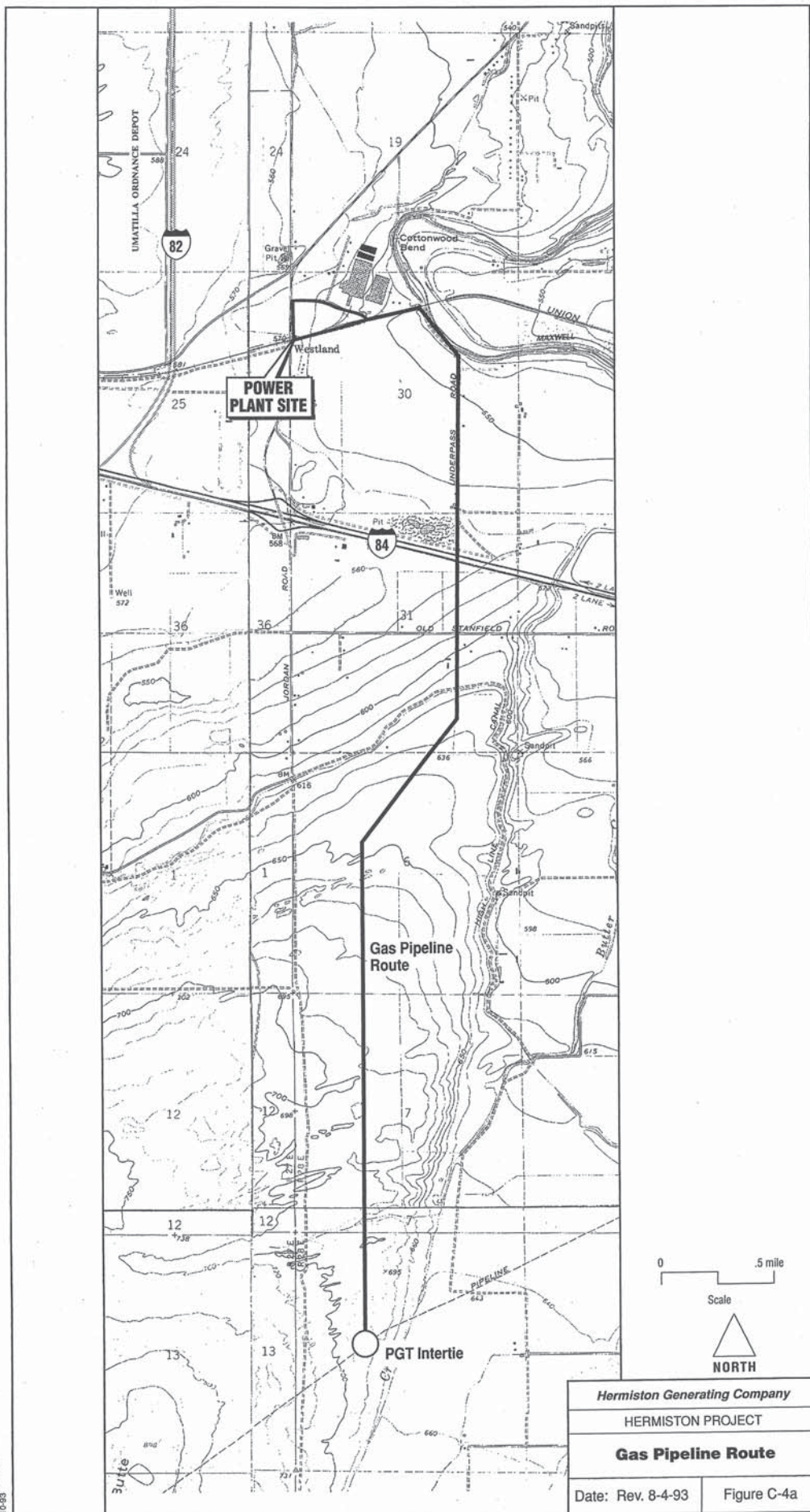


Figure B-1a.2: Process Flow Diagram





<i>Hermiston Generating Company</i>	
HERMISTON PROJECT	
<b>Project Location</b>	
Date: Rev. 8-4-93	Figure C-1a



92-43450-019/m7  
8-10-83

<i>Hermiston Generating Company</i>	
HERMISTON PROJECT	
<b>Gas Pipeline Route</b>	
Date: Rev. 8-4-93	Figure C-4a





# EXHIBIT E

## PROPERTY OWNERSHIP

### INTRODUCTION

Exhibit E identifies the owners of public and private lands that must be utilized for the Project and describes the specific plans to acquire the right to use these lands, including identification of titles, rights-of-way, easements and conditional or special use permits needed for the Project.

### IDENTIFICATION OF LAND OWNERS AND SPECIFIC PLANS TO ACQUIRE NECESSARY LAND RIGHTS - OAR 345-21-051(e)

The energy facility will be located on a site directly adjacent to a potato processing facility owned and operated by Lamb-Weston, Inc., and would either be partitioned and purchased by Applicant, or leased to Applicant under a long-term agreement. An exclusive letter agreement has been executed among Lamb-Weston and USGen, on Applicant's behalf, in which both parties state their intent to negotiate such lease for the Project.

Access to the site will be from Lamb-Weston's existing access road, which also lies entirely on Lamb-Weston's property, and the lease will provide for Applicant's use of that road. The access road intersects Westland Road at the northwest corner of the site, approximately 1000 feet south of the intersection of Westland Road and Lamb Road. Leaving the site, Interstate-84 can be accessed from Westland Road and Interstate-82 can be accessed from Lamb Road.



## **SOLID WASTE MATERIALS**

Construction of the proposed facility is expected to generate waste steel, other waste metals, and normal miscellaneous construction debris (consisting of wood, concrete, paper, and other refuse). Debris will be stored in on-site dumpsters, with periodic hauling via a private contractor, to a properly licensed facility. Construction material and office recycling programs will be implemented to the greatest extent practical to reduce waste. Sewage generated during construction will be stored in tanks, and periodically removed from the site by a sewage disposal vendor. Flushing oils and other wastes will be stored in barrels or tanks prior to disposal by an appropriate vendor licensed for waste disposal.

Approximately 10 tons per month (per combined cycle unit) of filter cake will be generated from the process water sidestream softener utilized for the project (see Exhibit B). This filter cake will be stored on site in bins and periodically removed for off-site disposal at local landfills. Two local landfills are available to accept the filter cake; the Finley Buttes landfill and the Columbia Ridge landfill. Both facilities are relatively new, large capacity landfills. The Columbia Ridge landfill has in excess of 50 years of capacity (Coenen 1993). A copy of the Columbia Ridge Landfill Special Waste Management Plan is attached as Exhibit F-1.

Approximately 40 tons per year of normal domestic waste will be generated by the Project, which will be disposed of by a private contractor. Recycling programs will be instituted to further minimize waste. Standard maintenance activities at the facility will generate small quantities of solid waste on a periodic basis.

Waste oils and potentially hazardous wastes generated by the facility will be disposed of by an appropriate permitted waste vendor.

## **WATER USE AND SUPPLY**

### **Introduction**

The average total daily water demand for the Project is projected to be approximately 2,61,900 gpm. As described in Exhibit B, the major consumption of water for the facility will be through

the evaporative losses from each of the two cooling towers and from the inlet air cooling system. Water will also be required for makeup in other systems, for general maintenance activities, and for domestic purposes.

Boiler water pre treatment effluent will be reused within the plant. Regeneration of ion exchange resins will be performed off site.

### **Water Balance**

A water balance diagrams for the proposed facility is shown in Figures F-1. The water and effluent flowrates listed depict facility requirements based on an ambient air temperature of 95°F assuming that the cooling towers are operated at twenty cycles of concentration, and with evaporative inlet-air cooling. Columbia River water will be the supply source.

The average total daily water demand for the facility under these conditions is projected to be approximately 1,900 gpm. To minimize the total water requirements for the Project, internal recycle/reuse has been designed into the energy facility. As shown in the water balance (Figure F-1), reverse-osmosis effluent and boiler blowdown will be reused within the plant. The total water savings through reuse will be approximately 50 gpm compared to what the water demand would be without these conservation measures.

A conventional wet evaporative cooling tower system will be used to dissipate process heat and condense steam back into water in the steam turbine condensers. The cooling system will operate on a continuous basis using a mechanical draft cooling tower for each steam turbine condenser. Cooling water in the cooling system will be recirculated continuously and dissolved solids will be removed through the sidestream softener system. Dissolved solids result from the concentration of native dissolved salts and minerals due to evaporative loss from the system.

Based on available data and information, typical cooling tower chemical additives will include the following:

- sodium hypo chlorite as a disinfectant and biocide
- tolytriazole and a non-hazardous acrylic co-polymer for corrosion control

- sulfuric acid for corrosion control and to neutralize pH
- sodium bisulfite to dechlorinate cooling tower blowdown (if required)

Constituents in the cooling water effluent will primarily be higher concentrations of native impurities. Concentrations of other additives should be below detectable levels.

### **SCR SYSTEM**

The SCR system utilizes aqueous ammonia as a reagent for control of NO<sub>x</sub> emissions. The ammonia will be stored on-site in a 20,000 gallon tank. Secondary containment for the ammonia will be provided by means of a diked concrete area around the storage tank. The diked area will have the capacity to contain 125 percent of the volume of the ammonia tank.

The SCR system utilizes a catalyst which requires periodic replacement. The spent catalyst will be removed for off-site recovery and/or disposal by the supplier.

### **OTHER CHEMICALS**

Approximately two to five thousand gallons of sulfuric acid, used for pH control, will be stored in two tanks on site. The tanks will be supported on saddles and surrounded by a secondary containment dike. A normally closed drain valve will be provided at the bottom on the dike. The area enclosed by the dike will be partially filled with coarse limestone to passively neutralize any potential leakage from the tank.

FDA approved chemicals will be used for boiler feedwater treatment and include erythorbate for oxygen scavenging, inorganic phosphates, synthetic polymers and alkaline amines for corrosion protection. These will be delivered and stored in four hundred gallon totes. The totes provide considerable protection because they include leak proof plastic liners, permitting these materials to be stored in normal warehouse spaces. In the unlikely event of leakage, the barrel would be quickly used or processed through the neutralization tank, described below.

Oxygen scavengers for boiler water treatment will be transported and used directly from shipping containers that are designed to be leak proof and highly resistant to damage. Injection pumps will take suction directly from these containers, so that personnel are not exposed to the solution.

Sodium hypo chlorite for chlorination is required in the pretreatment system. Purchased sodium hypo chlorite solution will be stored in a tank and pumped via metering pumps.

The process water sidestream softener will require the use of calcium hydroxide, ferric sulfate, soda ash, and sulfuric acid. These chemicals will be stored in tanks and pumped via metered pumps.

Curbs and drains will be installed at all chemical treatment areas that will route spills along underground gravity feed lines to a chemical sump. Any spilled chemicals would then be pumped to a neutralization tank for containment and treatment prior to disposal. All transport piping will be constructed of compatible material to prevent corrosion or deterioration by the liquid being carried.

## **OTHER MATERIALS**

A number of miscellaneous chemicals and equipment lubricants, in addition to spare parts and equipment, will be stored within either the warehouse or other Project buildings.

Compressed gases used at the energy facility, such as carbon dioxide (CO<sub>2</sub>) and nitrogen, will be stored outdoors in returnable cylinders. Hydrogen will be stored outdoors in high pressure storage cylinders mounted above ground and enclosed with a safety fence.

HERMISTON WATER BALANCE: NORMAL OPERATION with 70,000 lb/hr to process

(VALUES ARE FOR A SINGLE UNIT at AVERAGE TEMPERATURE CONDITIONS - 50 Deg)

WATER REQUIREMENTS (GPM)

Deliver to Process	Process Return	Cooling Twr Evaporation	Cooling Twr blowdown	HRSG Blowdown	Steam for NOx Control	RO Reject	Demin Reject	Reuse	Total
140.06	70.03	820.00	0.00	7.35	Dry	32.43	0.00	0.00	941.03

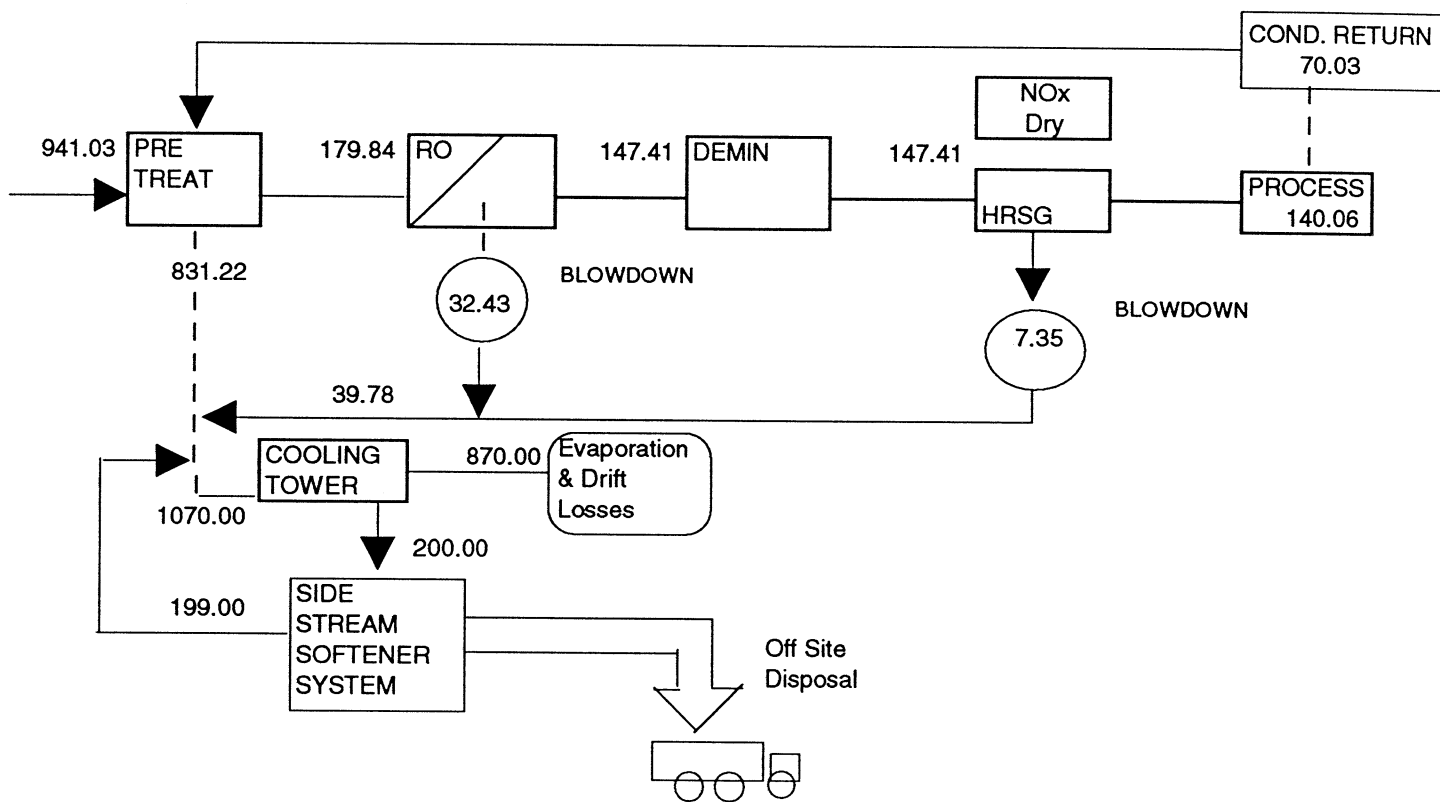


Figure F-1a.2: Water Balance





the Milton-Freewater event has ranged from 5.8 (Jacobson 1986) to 6.2 (Zollweg, personal communication, 1992) and had a Modified Mercalli Intensity of VII-VIII (see Table G-2), with Intensity V in the Hermiston area (US Army Corps of Engineers 1993). In the vicinity of the Wallula fault zone, the earthquake was associated with ground breakage and possible localized liquefaction features (Mann and Meyers, in preparation). The location of these features strongly suggest the earthquake was generated by movement in the Wallula fault zone.

An earthquake centered near Umatilla on March 3, 1893 had a Modified Mercalli Intensity of VII. Jacobson (1986) estimated, based on the Intensity VII, that this earthquake had a Richter magnitude of 5.7. However, Zollweg (personal correspondence 1992), suggests the Umatilla earthquake was a relatively small earthquake on the order of Richter magnitude 4.5 that occurred at a very shallow depth (<2 mi). This is supported by the fact that the Umatilla earthquake was felt over a very localized area. The source structure for the Umatilla earthquake has not been identified.

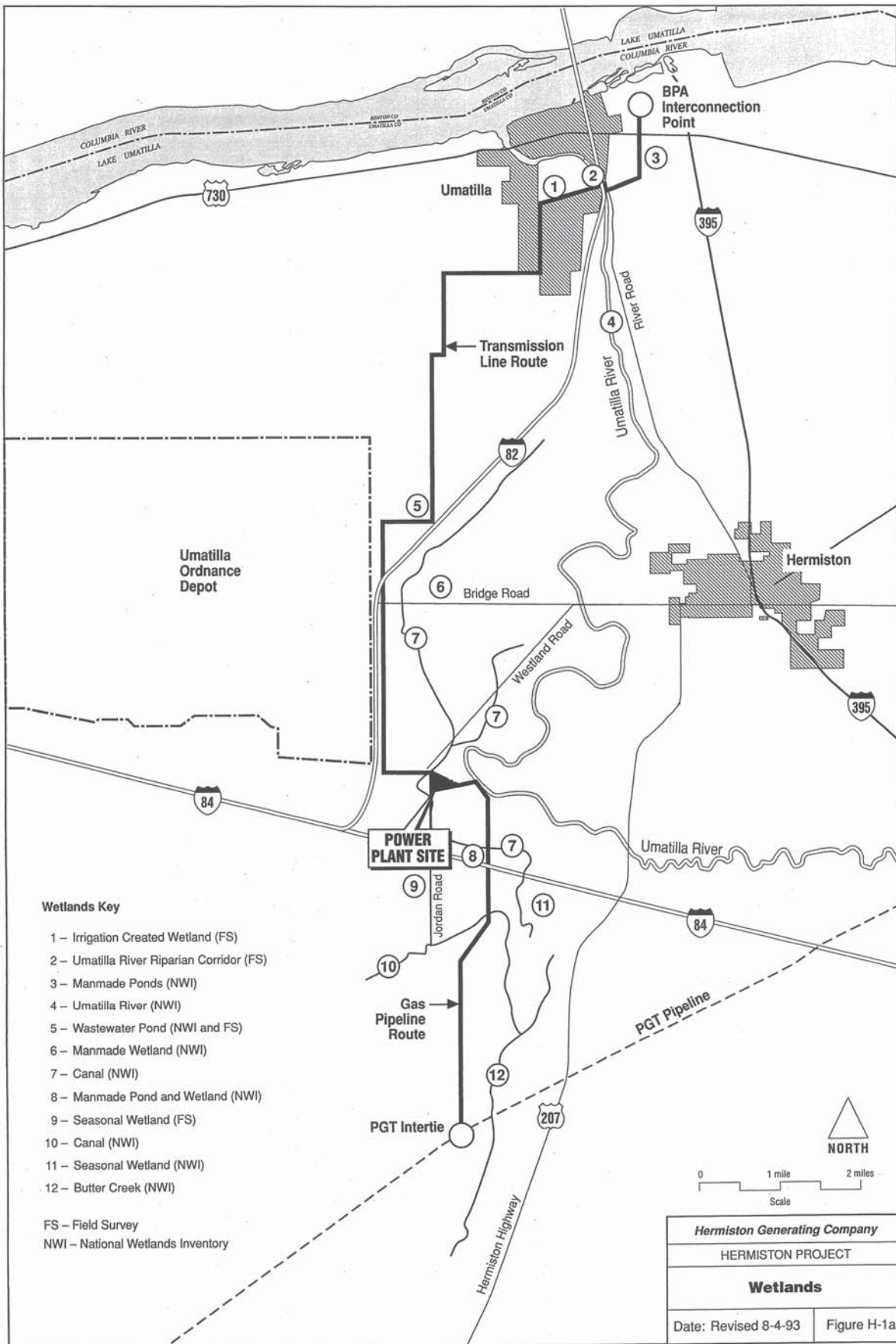
This past summer, a 3.7 magnitude earthquake was recorded in the Hermiston-Umatilla area; and a 4.2 magnitude earthquake occurred in the Milton-Freewater area.

*Regional MCE Estimates -- Project Order Addendum 2 Paragraph II.C.1*

Pertinent faults within a 100-km radius of the site, and their estimated maximum credible earthquakes ("MCE") and corresponding peak bedrock accelerations ("PGA") are summarized in Table G-3. The values in Table G-3 represent the most recent quantitative estimates of seismic risk for the region. Gary Mann of the U.S. Geological Survey is currently preparing a paper on the OWL; however, his draft paper does not include estimates of MCE for either the OWL or the Wallula fault segments (Mann, in preparation). As shown in Table G-3, the MCE for the site corresponds to a 5.5 Richter magnitude event occurring within the Umatilla Basin. The Service Anticline, located approximately 4 miles east of the energy facility site, is the most likely location for an earthquake of this magnitude in the area. Using the empirically derived curves for PGA (Campbell 1981) and conservatively assuming a seismic event at the energy facility site rather than the Service Anticline, the estimated PGA for the site is 0.25 times gravity (g).

Groundwater levels are important in evaluating potential seismic hazards because shallow groundwater in unconsolidated, sandy material can contribute to liquefaction potential. Static





**Wetlands Key**

- 1 – Irrigation Created Wetland (FS)
- 2 – Umatilla River Riparian Corridor (FS)
- 3 – Manmade Ponds (NWI)
- 4 – Umatilla River (NWI)
- 5 – Wastewater Pond (NWI and FS)
- 6 – Manmade Wetland (NWI)
- 7 – Canal (NWI)
- 8 – Manmade Pond and Wetland (NWI)
- 9 – Seasonal Wetland (FS)
- 10 – Canal (NWI)
- 11 – Seasonal Wetland (NWI)
- 12 – Butter Creek (NWI)

FS – Field Survey  
 NWI – National Wetlands Inventory

<i>Hermiston Generating Company</i>	
HERMISTON PROJECT	
<b>Wetlands</b>	
Date: Revised 8-4-93	Figure H-1a



## CONCLUSION

Both Umatilla County (the "county") and the City of Umatilla (the "city"), the two local governments having land use jurisdiction over the Project, have acknowledged comprehensive plans and zoning ordinances (see Exhibits I-1a and I-1b). The Project is consistent with the acknowledged comprehensive plans and zoning ordinances of the city and county, and complies with applicable City of Umatilla ordinances. In addition, the Project complies with the applicable Statewide Planning Goals. No federal land use management plan is applicable to the proposed facility.

## LAND USE IMPACT AREA

The Project Order issued by the EFSC identifies the land use impact area for the power plant as the area that consists of either the noise boundary as determined by 10 dBA over ambient background noise under normal conditions, or a distance of one-half mile from the energy facility site, whichever is greater. The one-half mile impact area represents the greater distance and has been utilized for analysis of the land use impacts of the Project. For the transmission line and pipeline, the Project Order identifies the land use impact area as provided for in OAR 345-01-010(22)(f) as the area determined by 10 dBA over ambient background noise under normal conditions, or one-half mile from the pipeline or transmission line, whichever is greater. The one-half mile distance represents the greater distance and has been utilized for analysis of land use impacts of these facilities. Figure I-1 shows the land use impact areas.

## STANDARD OF REVIEW AND APPLICABLE LAW

### 1. Standard of Review

The EFSC's Division 22 standards for site certificates require compliance with state law and city ordinances, OAR 345-22-000(1), and consistency with county and city comprehensive plans and land use regulations. OAR 345-22-030. The terms "compliance" and "consistency" are not defined in the EFSC rules.

Under other provisions of state law, state agency decisions affecting land use are required to "comply" with the Statewide Planning Goals, and to be "consistent" or "compatible" with acknowledged comprehensive plans and land use regulations. Statewide Planning Goal 2; OAR 660-30-005; ORS 197.180. Under the LCDC's rules, the term "consistent" is expressly defined as meaning the same thing as "compatible," OAR 660-30-005(7). "Compatibility" is defined by LCDC rule OAR 660-30-005 (5). A state agency action is not "compatible" (or "consistent") if it approves an activity not allowed under the local government's comprehensive plan and land use regulations. ORS 197.180(10). In contrast, "compliance" presumably means that all applicable standards are satisfied. Based on the distinction in the rules with respect to the land use standard for cities and counties and OAR 345-22-000(4) which provides a general preemption of county ordinances, the applicant believes that the EFSC intended that a lower standard be used for evaluating projects in relation to county comprehensive plans and land use regulations (through the use of the terms "consistent" and "consistency").

This exhibit identifies the applicable state, county, and city land use regulations or standards and demonstrates how the Project meets the referenced standards. Following issuance of the Site Certificate by EFSC, the local jurisdictions will act to issue their respective local approvals in accordance with the Site Certificate.

## **LCDC RULES AND THE STATEWIDE PLANNING GOALS**

The Project Order references ORS 197; OAR 660, Divisions 4, 9, 11, 12, 15, 16, 18, and 25; and the Statewide Planning Goals as applicable to the Project.

1. OAR 660, Division 4: "Interpretation of Goal 2 Exception Process"

This rule specifies when exceptions to the Statewide Planning Goals are required, and how such exceptions are to be processed and evaluated. The rule does not apply to the Project because the Project does not require an exception to any of the Statewide Planning Goals and is not located in an exception area. Moreover, Umatilla County has received acknowledgment as to the exception areas in its comprehensive plan, except for the McNary Industrial Site (the Project is not located on this site). The City of Umatilla has taken no exceptions to the Statewide Planning Goals.

2. OAR 660, Division 9: "Industrial and Commercial Development"

This rule sets requirements for county and city comprehensive plans for areas within urban growth boundaries. See OAR 660-09-010(1). The only portion of the Project located within an urban growth boundary is a portion of the transmission line, which is located within the urban growth boundary for the City of Umatilla. Under the Urban Growth Area Management Agreement (see attached Exhibit I-2), the City of Umatilla's comprehensive plan goals and policies are applied inside the UGB. The city's comprehensive plan and land use regulations will be reviewed and amended as necessary to comply with the Division 9 rule at the time of the next periodic review. OAR 660-09-010(2). The city was not directed to comply with this rule at its first periodic review. No amendments are required for this Project.

3. OAR 660, Division 11: "Public Facilities Planning"

This rule applies to areas within an urban growth boundary containing population greater than 2,500. The City of Umatilla is responsible for public facilities planning within the city's urban growth boundary. The Division 11 rule was addressed during the City of Umatilla's most recent periodic review, which terminated on January 8, 1988. See Exhibit I-3. [Periodic Review Report at pp. 12-14]. The city was found to satisfy the requirement.

4. OAR 660, Division 12: "Transportation Planning"

This rule applies to the City of Umatilla and to Umatilla County. However, under OAR 660-12-055(2), the city and county have until May 8, 1996 to adopt Transportation System Plans and implementing measures. The Project does not require amendments to functional plans, acknowledged comprehensive plans, and land use regulations. Thus, OAR 660-12-060 ("plan and land use regulation amendments") does not apply to the Project.

5. OAR 660, Division 16: "Requirements and Application Procedures for Complying With Statewide Goal 5"

extent possible, and to mitigate conflicts where they are unavoidable (as described in Exhibit W).

As described in Exhibits M and O, the Project will utilize a portion of an existing water right held by the Port of Umatilla, and wastewater will be treated and beneficially reused for cooling water make up. This element of the Project conserves scarce surface and ground water resources in the area.

As discussed in Exhibit T, no significant historic or cultural areas have been identified for the Project site. The applicant will continue to coordinate and consult with the Confederated Tribes of the Umatilla Indian Reservation to assure that no conflicts develop, or that if they do, appropriate remedial measures are taken.

For the foregoing reasons, and the additional reasons identified below in connection with the local government comprehensive plan and land use regulations, the Project complies with Goal 5.

Goal 6 (Air, Water and Land Resources Quality)

Goal 6 addresses waste and process discharges and their impacts on air, water and land. All waste and process discharges from the Project will comply with state and federal environmental quality statutes, as demonstrated in Exhibit M of this SCA. For these reasons, the Project complies with Goal 6.

Goal 9 (Economic Development)

Goal 9 is directed towards identifying areas suitable for increased economic growth and activity. The location of the energy facility for this Project has been inventoried and planned for industrial use by Umatilla County, is designated as an enterprise zone, and services for the site have been planned by the county and the Port of Umatilla. The Project is not located in an area designated as unsuitable by the EFSC, and for these reasons the Project complies with Goal 9.



Land inside the UGB but outside the city (i.e., in the "urban growth area") is under county jurisdiction. However, under the "Urban Growth Area Joint Management Agreement" between the county and the City of Umatilla, the county has agreed to incorporate into the Umatilla County Comprehensive Plan that portion of the City of Umatilla Comprehensive Plan which addresses the urban growth area. Thus, in the urban growth area, county zoning designations apply, but the city's comprehensive plan designations apply.

Approximately 1/4 mile of existing right-of-way along Spud Road is within the urban growth area, and has county zoning of F1 (Exclusive Farm Use, 19 acres) and a city comprehensive plan designation of SR (suburban residential). The transmission line then enters the city limits, and passes through several zones. As discussed below, the city allows transmission lines as a conditional use under a "Community Service" designation which can be applied in any city zoning district.

After leaving the city, the remainder of the existing UECA transmission line right-of-way is within the urban growth area, and has county zoning of F1 (Exclusive Farm Use, 19-acres), F2 (General Rural, 19-acres) and R1 (Agricultural-Residential, 4 acres). These zones predate the current County Development Ordinance, and are not part of that ordinance, but these zones are still in effect. The City comprehensive plan designations are R1 (Residential, Single Family); FP (Flood Plain) where the transmission line crosses the Umatilla River; NR (Natural Resource); SR (Suburban Residential); and PF (Public Facilities).

The portion of the transmission line requiring new right-of-way will be within the urban growth area, on land zoned F1, with city comprehensive plan designations of PF (Public Facilities) and R-O/S (Recreation-Open Space). The new transmission line will be located on federally-owned land.

Land uses within a one-half mile area of the transmission corridor include agriculture and agribusiness, the Umatilla Ordinance Depot, and urban and rural uses including residential, commercial and industrial uses.

## COMPLIANCE WITH LOCAL LAND USE REGULATIONS

This section describes the land use regulations applicable to each part of the Project (the power plant, the gas pipeline and the transmission line) and describes how the Project is consistent with the comprehensive plans and land use regulations of Umatilla County and complies with the ordinances of the City of Umatilla. Particular local approvals and permits necessary for the construction and/or operation of the Project will be required as a condition of the site certificate, including conditional use permits from Umatilla County for the power plant and from the City of Umatilla for the transmission line. Following issuance of the site certificate, the appropriate local approvals will be issued.

### Umatilla County

#### *Power Plant*

This subsection describes how the proposed power plant is consistent with the applicable comprehensive plan policies and zoning regulations of Umatilla County. The gas pipeline and those portions of transmission line under Umatilla County's jurisdiction are addressed in the two subsections following this one.

As described above, the power plant is located in the county's LI zoning district. In addition, because portions of the related and supporting facilities (the gas pipeline and the electrical transmission line) also are located in the same LI zoning district, these aspects of the Project are also addressed here.

The power plant site is on property presently owned by Lamb-Weston, Inc. Applicant may purchase the power plant site from Lamb-Weston, Inc. Prior to completing any purchase of the site, Applicant will obtain approval from Umatilla County of a tentative partition plan and a final partition map in conformance with the map shown on Figure I-5, and consistent with the applicable standards in Chapter 10 of the Umatilla County development ordinance.

The proposed power plant will add approximately 25 full-time, year-round jobs to the county's economy, helping to offset seasonal unemployment and underemployment. This will be done on non-agricultural lands. As a new source of employment in a sector that is not highly developed in the county, the proposed Project directly supports these policies.

**7. Cooperate with development-oriented entities in promoting advantageous aspects of the area.**

The Project links with and promotes the area's comparative advantages in availability of labor, reasonably priced land, access to energy sources, and excellent transportation access. It supports this policy.

**8. Evaluate economic development proposals upon the following: will the proposal: (a) increase or decrease available [water] supplies; (b) improve or degrade [water] qualities; (c) balance [water] withdrawal with recharge rates; (d) be a beneficial use; (e) have sufficient quantities available to meet needs of the proposed project and other existing and reasonably anticipated needs; and (f) reduce other opportunities and, if so, will the loss be compensated by other equal opportunities?**

This policy concerns the availability of water for future economic growth in the county. The proposed power plant is located within one of the Port of Umatilla's industrial areas, which the Port has applied for, and received a water right permit to allow for future industrial development. In other words, a supply of water for this project has already been set aside, and by helping to fund the delivery system needed to complete the water supply to this area of the county, the proposed power plant is supportive of this policy. Cooling water from the facility will be treated and reused for cooling water make up. The Project is supportive of this policy.

13. **Provide for two types of industrial classification: light industry with less offensive odors and likely compatibility with commercial uses and heavy industry which may generate noise, offensive odors, vehicular traffic, or require large amounts of energy and require isolation from people-oriented land uses.**

The proposed power plant is compatible with commercial uses. Noise and odors generated by the project are within applicable Oregon DEQ limits. Traffic generation, with 25 employees, is quite low and well within the capacity of surrounding streets. There is no health or safety reason to isolate the proposed facility and doing so would make the proposed co-generation of steam to supply Lamb-Weston difficult if not impossible.

*Agriculture Policies:* As noted above, the power plant is located outside of agriculturally designated areas, and is not on land currently in farm use (the gas pipeline and the transmission line are addressed in the subsections following this one). As a source of process steam to the Lamb-Weston potato processing plant, the power plant is supportive of agricultural uses in Umatilla County. As a result, to the limited extent they apply to the power plant, the power plant is consistent with the policies.

*Open Space, Scenic and Historic Areas, and Natural Resources Policies:* There are no inventoried significant open space, scenic, historic, or natural resource areas in the vicinity of the power plant or that portion of the natural gas pipeline or electrical transmission line within the LI zoning district. The only inventoried site in the vicinity, the Westland School, burned down in the late 1980s. There is no wetland and/or riparian vegetation on site. Although there are no inventoried significant scenic sites or views in the area, Exhibit S contains a description of the scenic impacts of the Project, and proposed measures to mitigate for potential adverse visual impacts.

Policy 26 of the county's Open Space, Scenic and Historic Areas, and Natural Resources Comprehensive Plan element calls for the county to "cooperate with the [Umatilla] Tribe, Oregon State Historic Preservation Office, and others involved in identifying and protecting Indian cultural areas and archeological sites." In accordance with this policy, the county has

referred the SCA to the Confederated Tribes of the Umatilla Indian Reservation ("CTUIR") and the State Historic Preservation Office for further consultation, and the applicant will continue to consult with all of these entities.

CTUIR has pointed out that the Comprehensive Plan anticipates an on-going effort to identify and inventory cultural resources. Exhibit T to this SCA contains the results of the site surveys conducted for cultural and archeological resources at the location of the proposed energy facility. Additional consultation with the CTUIR will occur as the Project progresses.

*Air, Land and Water Quality Policies:* The following policies from Chapter IX of the County's Comprehensive Plan are relevant to the proposed power plant:

1. **Discharges from existing and future developments shall not exceed applicable federal and state environmental quality standards.**
  
7. **Consider cumulative noise impacts and compatibility of future developments, including the adoption of appropriate mitigating requirements of plan updates.**

The Project has been designed with the Best Available Control Technology to maintain air emissions within state and federal air quality standards as described in Exhibits B and M.

Cooling water will be treated and reused beneficially for cooling water make up, as described in Exhibits B, avoiding impacts to surface and groundwater, and reducing demands on limited water supplies. Impacts to fish and wildlife are assessed in detail in Exhibit P. The power plant is consistent with Policy 1.

The power plant will comply with state noise regulations. The surrounding land uses are predominantly industrial, commercial and agricultural, and are not noise sensitive as defined by DEQ rule. The power plant is consistent with Policy 7.

*Natural Hazards Policies:* The power plant is located outside of the designated floodway and floodplain boundaries of the Umatilla River. Seismic issues are addressed in Exhibit G, and the

power plant's design takes into account potential earthquake hazards. As described above, the twenty-acre site is generally level, and has no slopes exceeding 25 percent.

### *Gas Pipeline*

The entire natural gas pipeline is within the land use jurisdiction of Umatilla County. This subsection describes how the proposed natural gas pipeline, connecting the power plant with the PGT gas pipeline to the south, is consistent with the applicable comprehensive plan policies and zoning regulations of Umatilla County. As described above, the pipeline would temporarily remove about 27 acres of land from agricultural use. This land would be contained within approximately a 50 foot wide, four-mile long corridor. Construction of the pipeline is expected to occur over a 3 to 4 month time frame. Once installed, the pipeline will be covered, and soils replaced. The pipeline will be partially constructed along County Road 1237 and would not seriously interfere with farm operations and practices. Although it will temporarily affect a limited amount of agricultural lands, these lands will be returned to agricultural production upon completion of the pipeline construction. The Project will not permanently remove agricultural lands from production and the Project will be in conformance with the Comprehensive Plan.

### *Applicable County Zoning Regulations*

#### *Light Industrial Zone*

As discussed above, the section of the gas pipeline closest to the plant site is on land zoned Light Industrial. The pipeline is a "utility facility," which is a conditional use in the LI zone. UCDO Section 3.184(16). This portion of the pipeline is included in the discussion above of the consistency of the plant site with the conditional use criteria of the County Development Ordinance.

*Exclusive Farm Use (EFU) Zone*

The county's EFU zone permits outright the "construction and maintenance of local feeder lines of utility companies and agencies." UCDO Section 3.011.4. The pipeline corridor for the Project consists only of a lateral to connect the plant site to the PGT line, much of which is along existing road right-of-way. Therefore, its construction is permitted outright in the county's EFU zone.

*Applicable County Comprehensive Plan Policies*

As a use allowed without review under the county's zoning code, the lateral natural gas pipeline is consistent with the county's Comprehensive Plan. While the county's Agriculture Policies (Nos. 9a and 9b) prohibit certain non-farm uses in particular areas and make others conditional uses, they do not regulate this use. The only agricultural policy with any relevance is Policy 8, which states that "the county shall require appropriate procedures/standards/policies be met in the Comprehensive Plan and Development Ordinance when reviewing non-farm uses for compatibility with agriculture." As noted above, the pipeline will largely utilize existing road right-of-way and will be buried, such that the only impacts to agriculture are during the three to four month construction period. These impacts, due to the limited area and timeframe, are not significant. The proposal is consistent with Policy 8.

*Transmission Line*

As described above, almost all of the required upgrading of the existing UECA transmission line will occur on lands under the land use jurisdiction of Umatilla County. The 1/4 mile of new transmission line is also within county jurisdiction. This subsection describes how the transmission line is consistent with applicable zoning regulations and comprehensive plan policies of Umatilla County. Compliance with the City of Umatilla's comprehensive plan and land use regulations is addressed in the next section of this Exhibit.

*Applicable County Zoning Regulations*

*Light Industrial Zone*

As discussed above, the section of the transmission line closest to the plant site is on land zoned Light Industrial. The transmission line is a "utility facility," which is a conditional use in the LI zone. Section 3.184(16). The transmission line is included in the discussion above of the energy facility.

*EFU and EFU-40 Zones*

The majority of the transmission line corridor is in the county's EFU and EFU-40 zones. The "maintenance and minor betterment of existing transmission lines and facilities of utility companies and agencies" is an outright permitted use in both of these zones. UCDO Sections 3.011.5 (EFU) and 3.051.5 (EFU-40). The proposed upgrading of the existing transmission line operated by UECA consists of the replacement of approximately every other existing wooden pole with single-shaft steel poles which will carry both existing 115 kV and 12.47 kV lines, and the new 230 kV lines. The remaining wood poles may be maintained to help support the existing 12.47 kV circuit. No new right-of-way is required in the EFU and EFU-40 zones. The upgrading of UECA's existing transmission lines within an existing right-of-way is "minor betterment of existing transmission lines and facilities" and is a permitted use in the EFU and EFU-40 zones.

As a use allowed under the County's zoning code, the upgrade of the existing UECA transmission line in the EFU and EFU-40 zones is consistent with the County's comprehensive plan. Although the County's agricultural policies (Nos. 9a and 9b) prohibit certain non-farm uses in particular areas and make others conditional uses, they do not regulate the upgrading of the transmission line. The only agricultural policy with any relevance is Policy 8, which states that "the county shall require appropriate procedures/standards/policies be met in the Comprehensive Plan and Development Ordinance when reviewing non-farm uses for compatibility with agriculture." The portion of the transmission line located in the EFU and EFU-40 zones will be an upgrade of the existing UECA transmission line, entirely within the existing right-of-way. The impacts to agriculture will be insignificant; the only disruption of

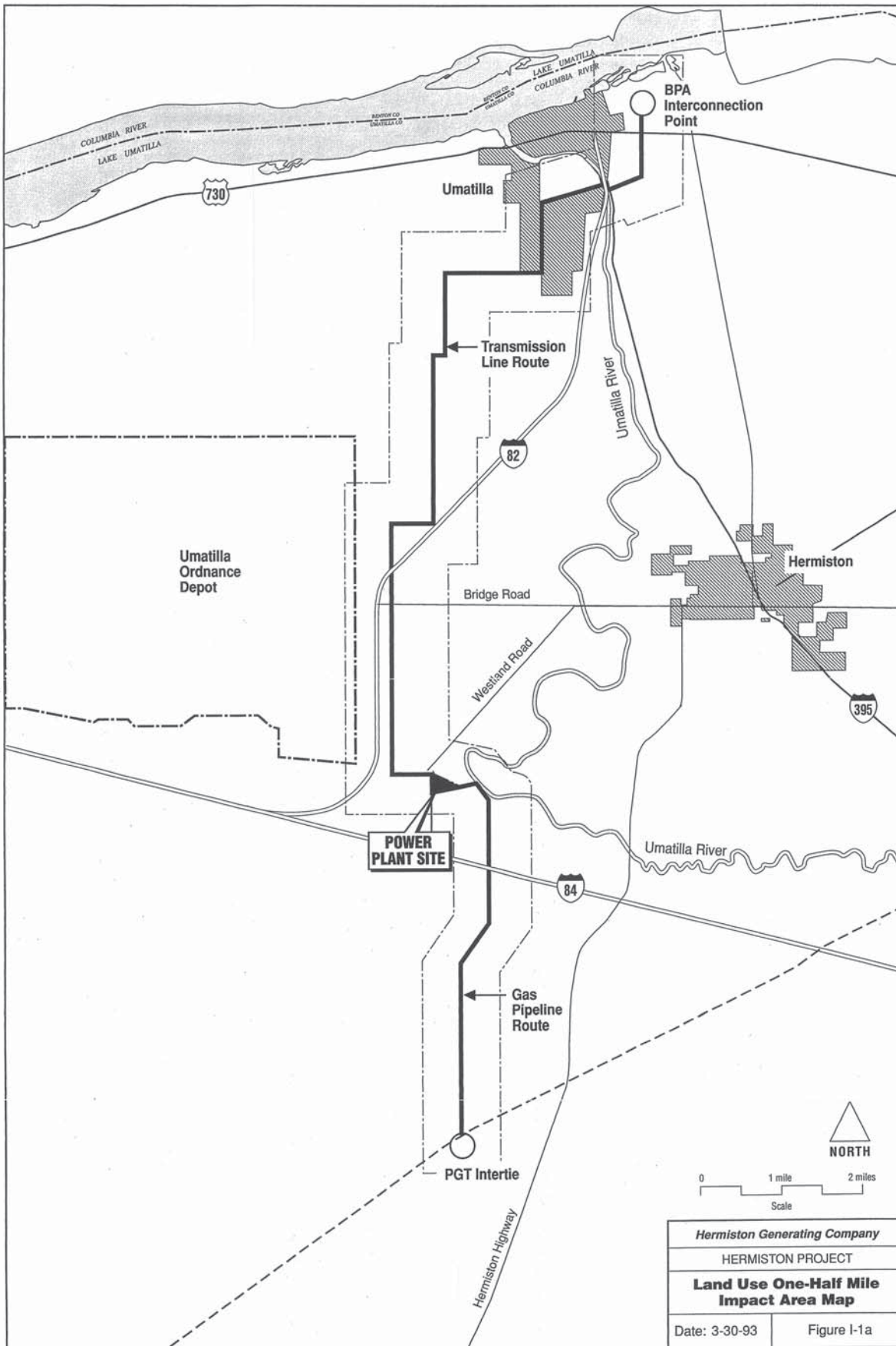



soil will occur during a brief construction period, when existing wooden poles will be replaced with single shaft steel poles within the existing right-of-way. Thus, the proposal is consistent with Policy 8.


*F-1, F-2, and R-1 Zones*

As discussed above, the transmission line passes through land within the City of Umatilla's urban growth boundary zoned by the county as F-1, F-2, and R-1. The one-quarter mile section of new transmission line is located entirely within the F-1 zone. These three zones are in effect only within the City of Umatilla's urban growth boundary.

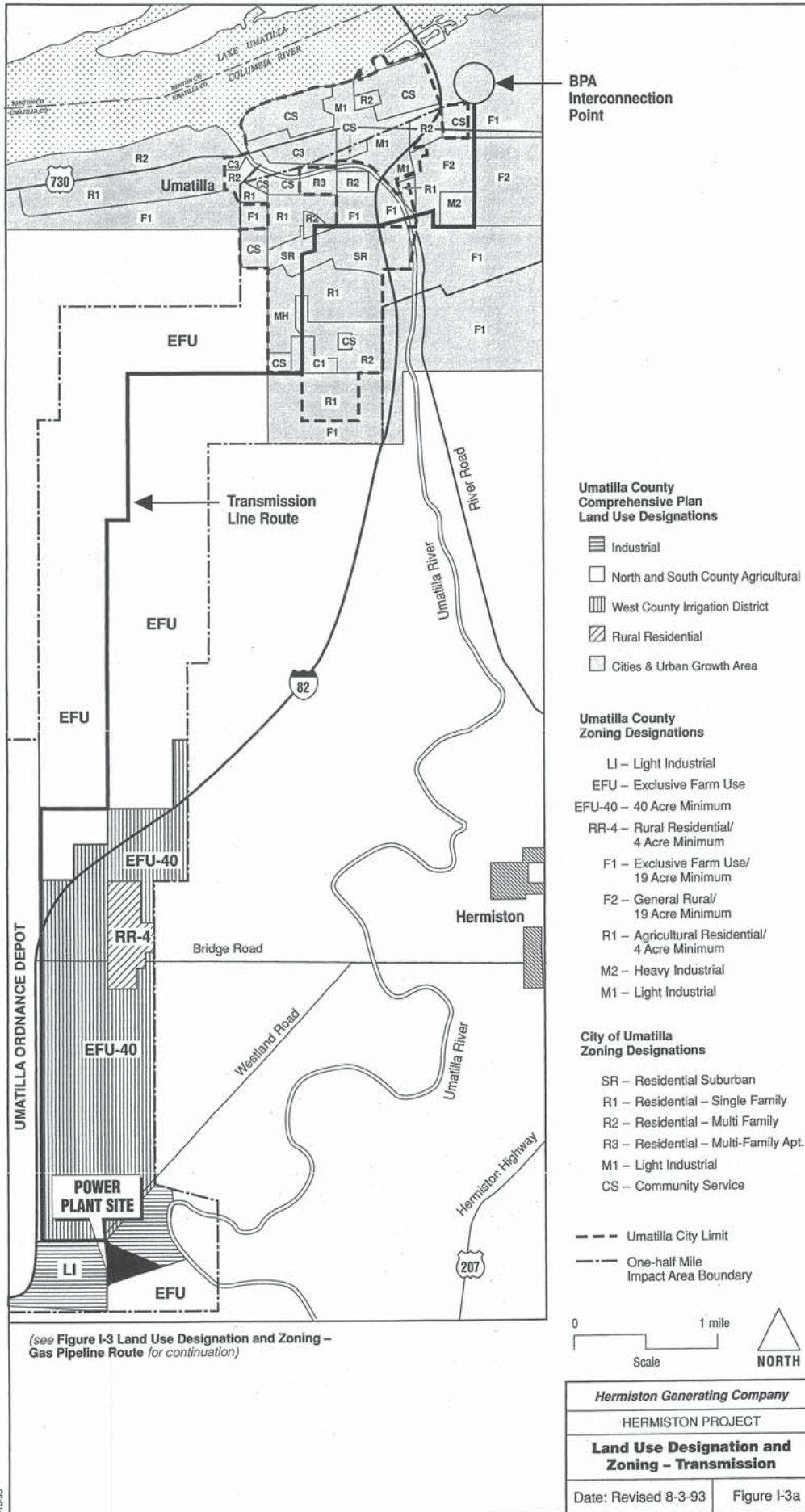
A portion of the upgraded transmission line and all of the new transmission line is located on land zoned F-1. The F-1 zone is an exclusive farm use zone. Included among the permitted uses allowed outright within the F-1 zone are "utility facilities necessary for public service except



  
**NORTH**

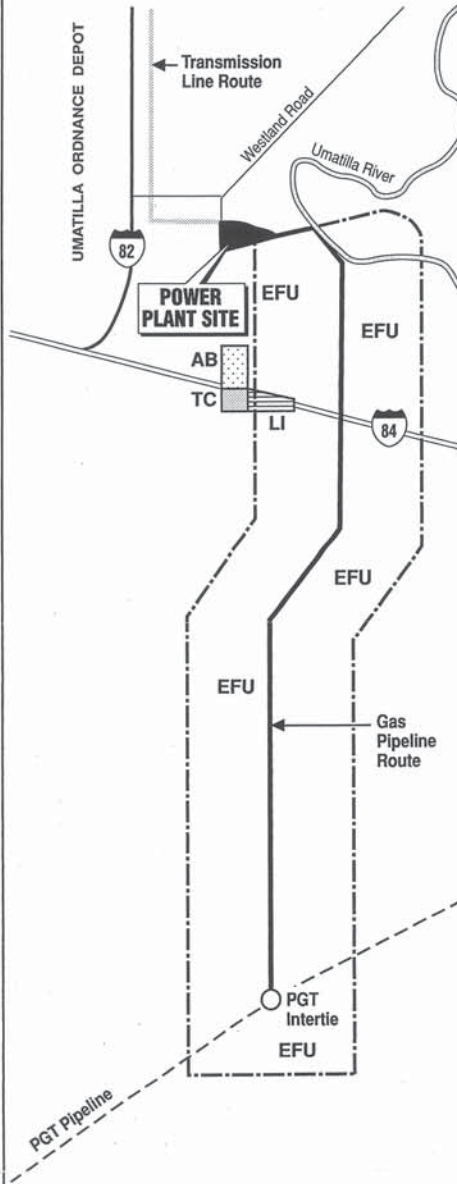
  
 Scale

<b>Hermiston Generating Company</b>	
HERMISTON PROJECT	
<b>Land Use One-Half Mile Impact Area Map</b>	
Date: 3-30-93	Figure I-1a





(see Figure I-3 Land Use Designation and Zoning – Gas Pipeline Route for continuation)

(see Figure I-3 Land Use Designation – Transmission Route for continuation)

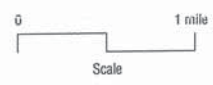


**Umatilla County Comprehensive Plan Land Use Designations**

-  Industrial
-  North and South County Agricultural
-  Commercial
-  Agribusiness

**Umatilla County Zoning Designations**

- LI – Light Industrial
- EFU – Exclusive Farm Use
- TC – Tourist Commercial
- AB – Agribusiness



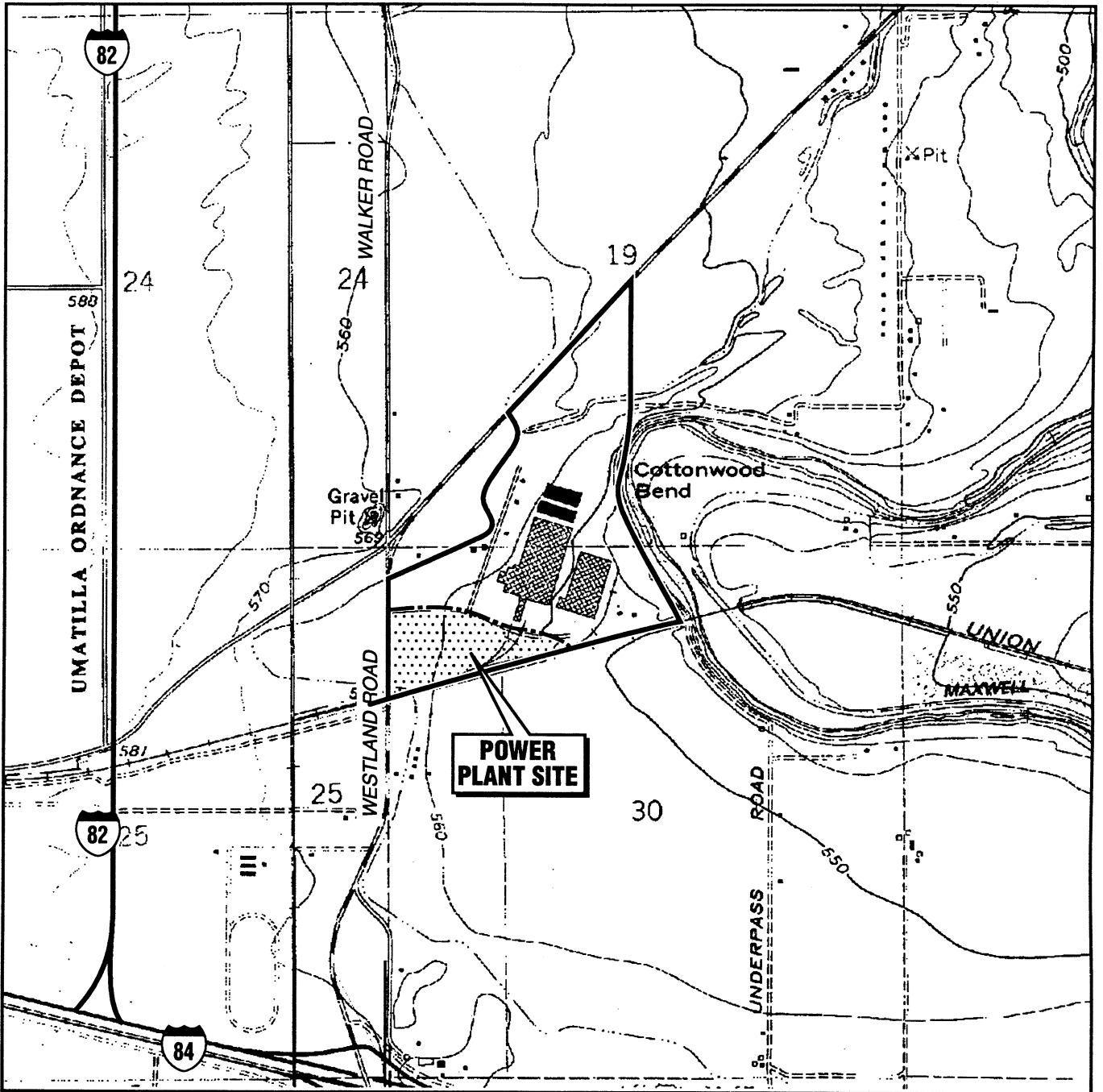
*Hermiston Generating Company*

HERMISTON PROJECT

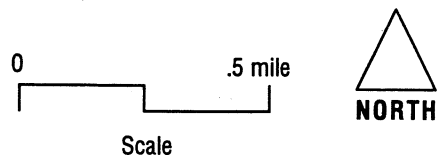
**Land Use Designation and Zoning – Gas Pipeline Route**

Date: Revised 8-4-93

Figure I-4a



--- Parcel Division Boundary



<b>Hermiston Generating Company</b>	
HERMISTON PROJECT	
<b>Parcel Division Map</b>	
Date: 8-3-93	Figure I-5

92-4345b.026  
8-10-93 rs'0

**EXHIBIT I-1a**

**CITY OF UMATILLA  
ACKNOWLEDGMENT ORDER**

ACKNOWLEDGED (LAND WATER)

BEFORE THE  
LAND CONSERVATION AND DEVELOPMENT COMMISSION  
OF THE STATE OF OREGON

IN THE MATTER OF THE ) COMPLIANCE ACKNOWLEDGMENT  
 )  
CITY OF UMATILLA )  
 ) ORDER  
 ) (Ack-78-001)  
 )

On December 27, 1977, the City of Umatilla pursuant to ORS ch 197 as amended by 1977 Oregon Laws ch 664 S20 requested the Land Conservation and Development Commission to acknowledge that the comprehensive plan and implementing ordinances consisting of the Comprehensive Plan, adopted December 19, 1977, ordinance no. 410; the zoning ordinance, adopted December 28, 1977, ordinance no. 411; the subdivision ordinance, adopted December 28, 1977, ordinance no. 412 of the City of Umatilla and the Urban Area Joint Management Agreement adopted December 19, 1977 by the City of Umatilla and by Umatilla County on January 25, 1978, are in compliance with the Statewide Planning Goals.

The Commission received and reviewed the written report of the staff of the Land Conservation and Development Department regarding the compliance of the aforementioned plans and ordinances with the Statewide Planning Goals. Pertinent portions of this report (sections V and VI) are attached hereto, and constitute the findings of fact of the Commission.

Based on its review, the Commission finds that the aforementioned comprehensive plan, zoning ordinance, subdivision ordinance and Urban Area Joint Management Agreement.

comply with the Statewide Planning Goals adopted by this Commission pursuant to ORS ch 197, as amended by 1977 Oregon Laws ch 664.

Now therefore be it ordered that:

The Land Conservation and Development Commission acknowledges that the aforementioned comprehensive plan, zoning ordinance, subdivision ordinance and Urban Area Joint Management Agreement of Umatilla are in compliance with the Statewide Planning Goals.

Dated this 23 day of February, 1978.

  
Chairman, LCDC

- Attachment A - List of all persons to whom notice was given, including date of notice.
- Attachment B - List any objections to acknowledgment and reference the findings adopted by the Commission which address the objection(s).

RE:krm/MC  
2/2/78



**EXHIBIT I-1b**

**UMATILLA COUNTY  
ACKNOWLEDGMENT ORDER**

BEFORE THE  
LAND CONSERVATION AND DEVELOPMENT COMMISSION  
OF THE STATE OF OREGON

IN THE MATTER OF UMATILLA )  
COUNTY'S COMPREHENSIVE PLAN ) COMPLIANCE ACKNOWLEDGMENT  
AND LAND USE REGULATIONS ) ORDER 88-ACK-349

This matter came before the Commission on April 21, 1988, as a request for acknowledgment of compliance pursuant to ORS 197.251 and the Commission's Acknowledgment Rule, OAR 660-03-000 to 660-03-033. The Commission, having fully considered Umatilla County's comprehensive plan and land use regulations, comments and objections of interested parties, and the report of the Department of Land Conservation and Development, now enters its:

Findings of Fact and Conclusions

1. Umatilla County's request for acknowledgment of compliance was reviewed by the Commission previously on November 17, 1983 and March 15, 1984, pursuant to ORS 197.251 and the Commission's Acknowledgment Rule, OAR 660-03-000 to 660-03-033. For these reviews, the Commission found that the county's comprehensive plan and land use regulations did not comply with certain statewide planning goals and continued the two requests for acknowledgment (Continuance Orders 83-CONT-277 and 84-CONT-062, Exhibit A and B).

2. The Commission again reviewed Umatilla County's plan and land use regulations on October 24, 1985, regarding its compliance with the statewide planning goals. For this review, the Commission found that the county's comprehensive plan and land use regulations complied with the statewide planning goals pursuant to certain specified amendments. The county's comprehensive plan and land use regulations were acknowledged by delayed signing on November 6, 1985 (Acknowledgment Order 85-ACK-176, Exhibit C).

3. On April 22, 1987, the Oregon Court of Appeals reversed and remanded the Commission's Acknowledgment Order (85-ACK-176) for Goal 2 as applied to the Hinkle-Feedville site, the McNary Industrial site, the Battle Mountain site (parcel C), and the Tollgate site (parts of two parcels in Special Exception Area 5). (Exhibit C). Also the Court of Appeals reversed the Commission's ~~acknowledgment with regard~~ to the Goal 5/FPA issue. On July 1, 1987, the Court of Appeals affirmed on reconsideration the Commission's acknowledgment with regard to the Goal 5 FPA issue in light of the Oregon Supreme Court's decision in 1000 Friends of Oregon v. LCDC/Tillamook County (May 27, 1987).

4. On June 11, 1987, the Commission on remand from the Court of Appeals considered the compliance of the plan and land use regulations with the statewide planning goals. The Commission found that Umatilla County's comprehensive plan and land use regulations did not comply with certain statewide planning goals with respect to the four exception areas listed in Finding 3 above, for the reasons set forth in the Director's report of May 28, 1987, as amended by the Commission on June 11, 1987 (Continuance Order 87-CONT-251, Exhibit E). Also, the Commission found that Umatilla County's comprehensive plan and land use regulations complied with the goals, as applied to the remainder of the county for the reasons set forth in the Commission's previous Acknowledgment Order (85-ACK-176), as readopted and made part of that order (Acknowledgment Order 87-ACK-252, Exhibit F).

5. On April 21, 1988, the Commission again considered the compliance of Umatilla County's plan and land use regulations with the statewide planning goals for three of the four exception areas listed in Finding 3 above. The Commission found that Umatilla County's comprehensive plan and land use regulations complied with the statewide planning goals for the reasons set forth in Section IV of the Director's report of April 7, 1988 as amended by the Commission on April 21, 1988 except for Goal 3 regarding the McNary Industrial site (Exhibit G).

6. All areas of Umatilla County's comprehensive plan and land use regulations remain acknowledged as in compliance with the Commission's July 3, 1987 Acknowledgment Order (87-ACK-252) as readopted and made part of this order except for the McNary Industrial site which was remanded by the Court of Appeals decision.

#### Conclusion

The comprehensive plan and land use regulations of Umatilla County, as applied to all lands in the county, comply with the requirements of the statewide planning goals for the reasons set forth in the Commission's previous Acknowledgment Order as described in Finding 4 above. All areas addressed in the Umatilla County plan and land use regulations are acknowledged to be in compliance with the aforementioned statewide planning goals for the reasons set forth in the Director's report of April 7, 1988, as amended by the Commission on April 21, 1988 and the Commission's previous Acknowledgment Order (87-ACK-252) except for the McNary Industrial site.

THEREFORE, IT IS ORDERED THAT:

In accordance with ORS 197.251 and the Commission's Acknowledgment Procedures Rule, OAR 660-03-000 to 660-03-033, the Land Conservation and Development Commission acknowledges that the comprehensive plan and land use regulations of Umatilla County are in compliance with the statewide planning goals except for the McNary Industrial site (see Continuance Order 87-CONT-251).

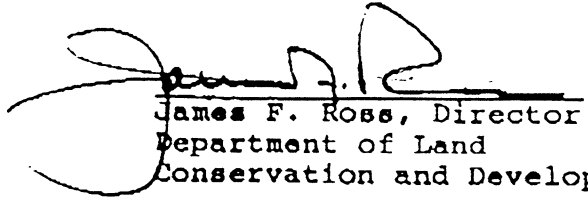
#### Severability

If, upon judicial review, this order is reversed or remanded solely with respect to an identifiable geographic area, the remainder of the order shall remain valid and shall be treated as a limited acknowledgment order under ORS 197.251(6). If requested by the local government or if otherwise necessary, the Director may issue, without further review by the Commission, an

amended acknowledgment order describing the geographic area that remains acknowledged.

DATED THIS 17TH DAY OF MAY 1988.

FOR THE COMMISSION:



James F. Ross, Director  
Department of Land  
Conservation and Development

NOTICE: You are entitled to judicial review of the order. Judicial review may be obtained by filing a petition for review within 60 days from the service of this final order. Judicial review is pursuant to the provisions of ORS 183.482 and 197.650.

\*\* Copies of all exhibits are available for review at the Department's office in Salem.

JFR:DW/tmc  
<orders>



approximately \$352 million in long-term debt obligations and \$88 million in owners' equity or net worth.

*Partners' Equity Percentage -- Project Order Addendum 2 Paragraph II.F.2*

According to the Partnership Agreement provided as Exhibit A-1, the partners in Hermiston Generating Company, L.P. - wholly owned affiliates of PG&E and Bechtel Group, Inc, - have contributed capital and are allocated profits and losses according to the following percentages:

General Partner:	Buckeye Power Corporation (Bechtel)	49%
General Partner:	Larkspur Power Corporation (PG&E)	49%
Limited Partner:	PG&E Generating Company (PG&E)	2%

Buckeye Power Corporation will make its unconditional equity contribution pursuant to an agreement with its corporate parent, Bechtel Enterprises, which is the wholly owned subsidiary of Bechtel Group, Inc, and is the Bechtel parent of U. S. Generating Company. Larkspur Power Corporation and PG&E Generating Company will make their unconditional equity contributions pursuant to an agreement with their corporate parent, PG&E Enterprises, which is the wholly owned subsidiary of PG&E and is the PG&E parent of U. S. Generating Company.

**Funds for Operation and Retirement**

Funds for the operation and retirement of the Facility will be generated through the sale of electricity produced over the term of the power sales contracts that Applicant will execute. A requirement of financing (whether construction or permanent) will be satisfying potential lenders and equity investors that the revenues generated through the sale of electricity under these power sales contracts will be sufficient to cover all operating and capital costs, repay all loans and provide a market rate of return on both debt and equity. Applicant's provisions for retirement are described in Exhibit Z.

**OPINION OF LEGAL COUNSEL - OAR 345-21-015(k)(A)(ii)(II)**

## U.S. Generating Company

August 3, 1993

Ms. Christine Ervin, Director  
Oregon Department of Energy  
625 Marion Street, N.E.  
Salem, Oregon 97310

Re: Application of Hermiston Generating Company, L.P. for Cite Certificate

Dear Ms. Ervin:

I am assistant General Counsel to U.S. Generating Company, with which Hermiston Generating Company, L.P. (the "Applicant") is affiliated. In such capacity, I have reviewed: Limited Partnership Agreement of Central Florida Generating Company Limited Partnership, dated as of September 17, 1991 and First Amendment to Limited Partnership Agreement of Central Florida Generating Company Limited Partnership (collectively, the "Agreements") and the duly maintained partnership books and records of Applicant as those books and records may bear upon the Agreements (collectively, the "Records").

In rendering the opinion expressed below, I have examined the originals or conformed copies of the Agreements and the Records and such matters of law as I have deemed appropriate as the basis for the opinion hereinafter expressed. As to factual matters, I have relied, to the extent deemed proper, upon statements and certifications of officers of the Applicant. In giving the following opinion, I have assumed the genuineness of all signatures and the authenticity of all documents that I reviewed.

Based upon the foregoing, I am of the opinion, based upon my best knowledge, that subject to Applicant meeting all applicable federal, state and local laws (including all rules and regulations promulgated pursuant thereto), and complying with the terms and conditions of the Agreements, Applicant has the authority under the Agreements to retire the power generating facility (the "Project") from operation that Applicant proposes in its Applicant for Site Certificate filed with the Oregon Energy Facility Siting Counsel on or around December 29, 1992.






Ms. Christine Ervin  
August 3, 1993  
Page 2

The foregoing opinion is limited solely to whether Applicant has the authority under the Agreements to retire the Project from operation. I express no opinion as to the applicability of any federal, state and local laws (including all rules and regulations promulgated thereto) to such construction and operation or as to the effects of the foregoing laws on such retirement.

I am admitted to the Bar in the District of Columbia. In rendering the opinion set forth above, I do not express any opinion concerning the laws of any jurisdiction other than the District of Columbia.

Sincerely,



Sanford L. Hartman  
Assistant General Counsel





# EXHIBIT M

## DEPARTMENT OF ENVIRONMENTAL QUALITY PERMIT APPLICATIONS - OAR 345-21-015(m); PROJECT ORDER, PARAGRAPHS 17 AND 18

Applicant must obtain the following permits from the Oregon Department of Environmental Quality (DEQ) prior to the commencement of Project construction and/or operation:

Air Contaminant Discharge Permit

Water Pollution Control Facilities Permit

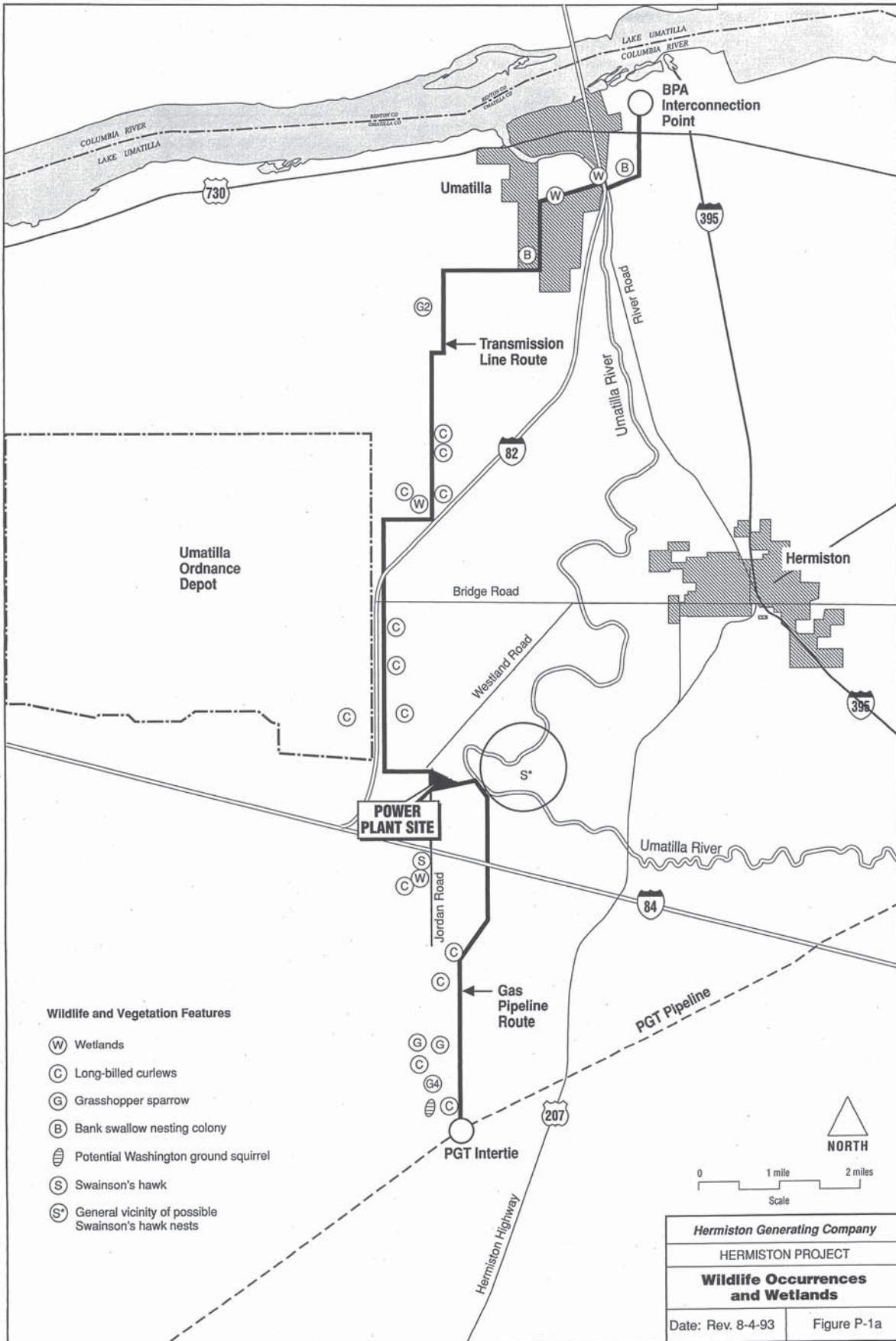
General Stormwater Discharge Permit for Construction Activities

Applicant hereby provides copies of the Application for Air Contaminant Discharge Permit, along with the Prevention of Significant Deterioration (PSD) and Best Available Control Technology (BACT) analyses required for New Source Review, which was submitted to the DEQ on December 22, 1992, and which complies with the "Requirements for Air Quality Modeling Submittals."

A General Stormwater Discharge Permit for Construction is required to address erosion control for construction activity for the Project. Under DEQ rules, a Stormwater Discharge Permit is required for stormwater leaving an operating industrial site as a point source which can discharge to surface waters either directly or through a drainage system or storm sewer. Based on conversations with DEQ, no Stormwater Discharge Permit is required for plant operation because stormwater from the Project site will not discharge to surface water at a point source. A

copy of the application for the General Stormwater Discharge Permit for Construction is hereby provided, along with a letter to DEQ confirming that no Stormwater Discharge Permit is required for operation of the Project.



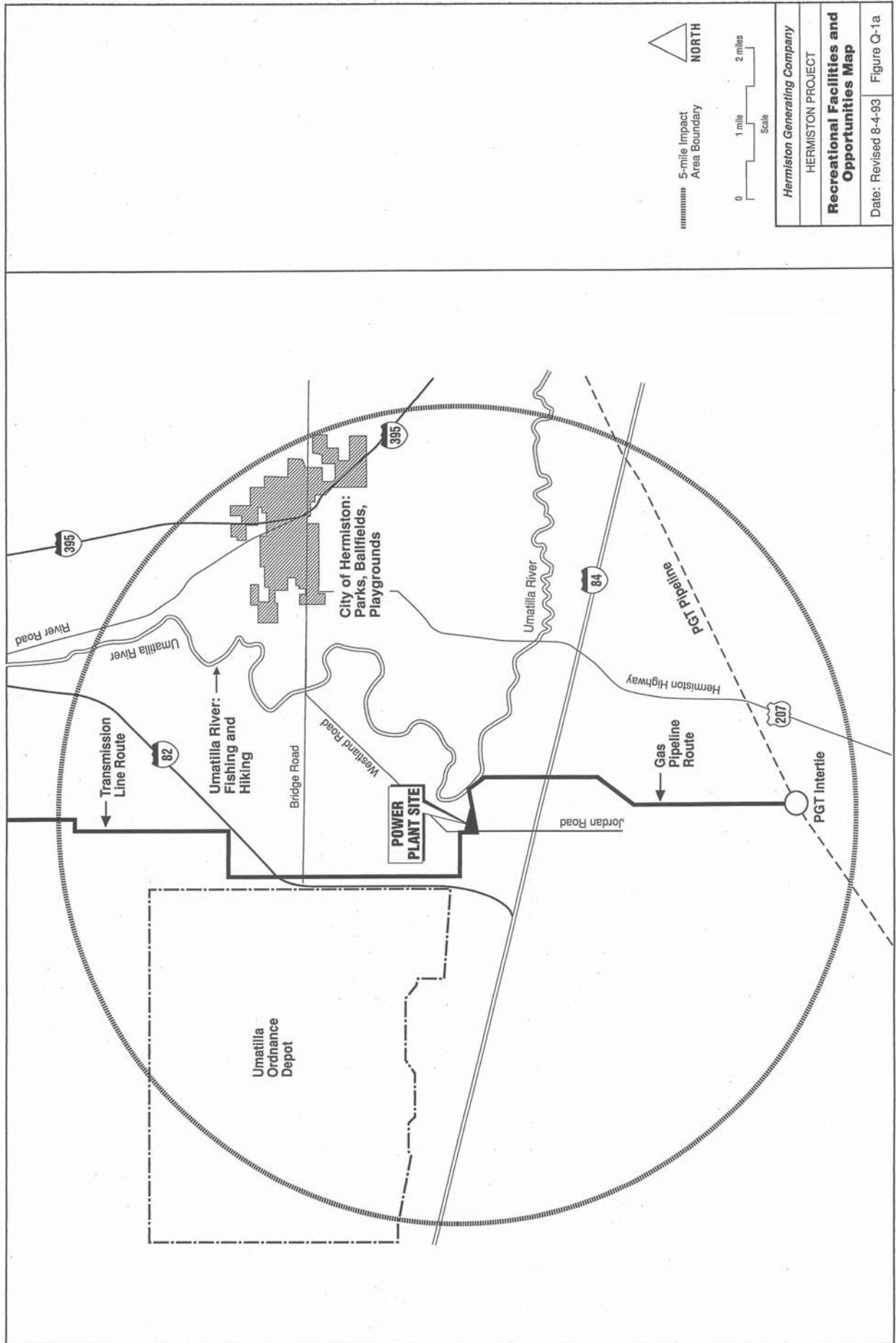


**Wildlife and Vegetation Features**

- (W) Wetlands
- (C) Long-billed curlews
- (G) Grasshopper sparrow
- (B) Bank swallow nesting colony
- (S) Swainson's hawk
- (S\*) General vicinity of possible Swainson's hawk nests

<i>Hermiston Generating Company</i>	
HERMISTON PROJECT	
<b>Wildlife Occurrences and Wetlands</b>	
Date: Rev. 8-4-93	Figure P-1a





NORTH

5-mile Impact Area Boundary



Scale

Hermiston Generating Company
HERMISTON PROJECT
<b>Recreational Facilities and Opportunities Map</b>
Date: Revised 8-4-93 Figure Q-1a





## MITIGATION MEASURES

Potential adverse impacts on nesting birds can be avoided by scheduling construction of the transmission line and gas pipeline to avoid the nesting season for these species. Black (1992, personal conversation) suggested that the nesting season includes the period of mid-April through August 1. If construction schedules can not be arranged to avoid the nesting season, the energy facility site and the transmission line and gas pipeline right-of-ways will be surveyed to identify nest sites. If nests are identified, mitigation will be provided, which mitigation may include contributing funds to DFW habitat conservation programs. The gas pipeline route will be surveyed for the Washington ground squirrel during the late April to early May active season for the species. If any are located, the colonies will be avoided by construction if possible. If avoidance is not possible, Applicant will consult with DFW on appropriate mitigation measures to be taken.

Potential electrocution hazard to bald eagles and other raptors can be avoided by using a raptor-proof design for the new transmission line. Raptor protection will be employed in the design of the transmission towers, following the methods described by Olendorff et al (1981). Detailed design will be submitted to DFW for review during the design phase of the Project. All energized facilities will either be designed with a minimum separation of nine feet (the greatest wingspan expected in the area is the 8.5 foot wingspan of the bald eagle) or other raptor protection measures to reduce the potential for electrocution.

## References

- Betts, Burr. 1990. Geographical distribution and habitat preferences of Washington ground squirrels. *Northwestern Naturalist* 71:27-37.
- Black, Mike, Wildlife Biologist, Umatilla District Office, ODFW. Personal Communication. Meeting with Lynn Sharp on October 26, 1992.
- Daubenmire, R. F. 1975. Plant succession on abandoned fields, and fire influences in a steppe area in southeastern Washington. *Northwest Sci.* 49:36-48.
- Ingles, Lloyd G. 1965. *Mammals of the Pacific states.* Stanford University Press, Stanford, California. 506 pp.

**Table R-2a:** Sensitive plant species known from the 50 mile radius around the project site

Scientific and Common Name	Status <sup>1</sup>			Range	Habitat	Flowering Period
	FWS	ODA	ONHP			
<i>Astragalus collinus</i> var. <i>laurentii</i> Lawrence's milkvetch	C2	CS		Known only from Morrow Co., OR	Basaltic Grassland	
<i>Arenaria franklinii</i> var. <i>thompsonii</i> Thompson's sandwort	C1 <sup>2</sup>	CS		Gilliam, Morrow and possibly Wasco counties, OR	Sagebrush Desert Sand dunes, scabland, sagebrush slopes along the Columbia R.	May-Jun
<i>Rorippa columbiana</i> Columbia cress	C2	CS		Widespread, sporadic occurrence throughout WA to CA, east to MT, NB, NM	Wet sites (lake, stream or ditch edges) in clayey soil	May-Aug
<i>Allium robinsonii</i> Robinson's onion	C3c			Vantage, WA to the mouth of the John Day R., OR	Sand and gravel deposits along the Columbia River	Apr-May
<i>Allium pleianthum</i> Many-flowered onion			3	Restricted to John Day Valley, Wheeler and Morrow counties, OR	Lower elevations, hillsides and flats with clayey soils and scanty vegetation	Apr-May
<i>Cryptantha lecophaea</i> Gray crypiantha	---		2-ex	Near the Columbia and lower Yakima rivers, from Wenatchee, WA to The Dalles, OR	Dry, sandy places or basalt talus	May-June
<i>Lomatium watsonii</i> Watson's desert parsley	---		2	South-central WA to north-central OR	Open hills, often in sagebrush	May
<i>Myosurus minimus</i> ssp <i>apus</i> var <i>sessiflorus</i> Sessile mouse-tail	C2		1	Umatilla and Gilliam counties	Alkali flats	Apr-May
<i>Silene spaldingii</i> Spalding's campion	C2	CS	1	WA, ID, MT and OR (Wallowa and Umatilla counties)	Undisturbed prairie on hillsides with deep loess soils	Jun-Jul
<i>Mimulus jungermannioides</i> Hepatic monkeyflower	---	CS	1	E. end of Columbia R. gorge south along the Deschutes and Umatilla rivers	Moss mats and/or seeps on cliffs in river canyons	May-Jun
<i>Balsamorhiza rosea</i> Rosy balsamroot	---		2-ex	Three localities in WA, 1 in Umatilla County	Rocky ridges at lower to mid-elevations	Apr-May

**Notes:**

<sup>1</sup> Status abbreviations are:

U.S. Fish and Wildlife Service (FWS) ranks are: C1 = candidate list 1; C2 = candidate list 2; C3c = non-candidate plants

Oregon Department of Agriculture (ODA) ranks are: CS = candidate species list (May 1991)

Oregon Natural Heritage Program (ONHP) ranks are: 1 = taxa threatened with extinction throughout their entire range; 2-ex = presumed to be extirpated from the state of Oregon; 3 = species for which more information is needed before status can be determined.

<sup>2</sup> Was federally proposed Candidate, but there may be taxonomic problems.

**Sources:**

ONHP, 1991 and 1992.



## Visual Characteristics of the Project

The energy facility, which will be at an elevation of about 560 feet, is to be constructed on a flat, open, undisturbed area. Vegetation within the site boundary consists primarily of non-native grasses. The adjacent Lamb-Weston facility forms a backdrop of industrial buildings (see Figure S-2). Railroad tracks bound the southerly edge of the site, and a power line traverses the southeast portion of the site. Farther south of the site is a stand of trees. Agricultural fields are located west and northwest of the proposed energy facility site, across Westland Road. The predominant visual element in the immediate vicinity of the energy facility is the Lamb-Weston plant.

The transmission right-of-way is characterized by relatively flat terrain, with elevations ranging from about 560 feet at the site of the energy facility to about 300 feet at the McNary Substation.

The pipeline right-of-way is comprised primarily of grazing lands and croplands. County Road 1237 is within the right-of-way, and several residences are located along the road. The terrain is relatively flat, with an elevation of about 560 feet at the energy facility site to approximately 700 feet at the interconnection point with the PGT pipeline.

The energy facility will consist of two approximately 190-foot high emission stacks, numerous buildings and structures ranging in height from approximately 40 feet to 63 feet; storage yards; and parking facilities. The site would be landscaped and the plant structures painted in neutral colors. See Exhibit B for a detailed description of the Project and a site plan.

The upgrade of the transmission line that would run from the energy facility to the McNary Substation will require the replacement of existing 60-foot high wooden power poles with approximately 95 foot high metal poles. This will result in a slight change to the existing view of the transmission right-of-way.

During operation, the gas pipeline would not be visible. Visual intrusion would only occur during pipeline construction. They would consist of the disturbance of an approximately fifty foot wide corridor that will be less than five miles long. Excavation would occur over a three to four month period and would consist of digging an approximately four foot deep trench.



system when they were in use, but no evidence of this larger system remains in the energy facility site. These features do not retain any degree of integrity and there is no indication that they are more than 50 years old. Therefore, these ditches were not recorded. No other historic or prehistoric cultural materials were found in this area.

### **Electric Transmission Line Right-of-Way**

A dirt or gravel road access road parallels the transmission line on one side or the other for most of the route. Agricultural fields also border the transmission line for much of the route. Ground visibility was fair to good for most of the route, although this visibility was primarily due to disturbances created by the road or the plowed fields. No prehistoric or historic cultural materials were found during the survey of the electrical transmission line route.

### **Gas Pipeline Right-of-Way**

The portion of the gas pipeline right-of-way north of Interstate-84 parallels railroad tracks and a gravel road. South of the highway the right-of-way parallels north-south fences until it crosses the High Line Canal. From this point, the remainder of the route crosses range and agricultural land, including plowed and center pivot irrigated fields. The majority of the route supports introduced grasses or is under cultivation. Ground visibility varied from greater than 90 percent in the plowed areas to between 20 and 30 percent elsewhere. No historic or prehistoric cultural resources were observed along the gas pipeline route.

### **Confederated Tribes of the Umatilla Indian Reservation (CTUIR) Involvement -- Project Order Addendum 2 Paragraph II.J.1**

To further ensure that cultural resources are not adversely affected by the Project, Applicant will consult with the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) to identify specific concerns relating to cultural resources. Based on input from CTUIR representatives, Applicant proposes the following steps to further ensure that cultural resources are identified and protected to avoid inadvertent discovery during construction. Prior to commencement of construction, CTUIR will be given the opportunity to conduct a review of the oral history of the tribes to identify areas having high potential for cultural resources that may be affected by the Project. Representatives of CTUIR will also have the opportunity to review the results of the archaeological studies described above. If deemed necessary by CTUIR, additional pre-construction field surveys will be conducted with the cooperation of CTUIR. If resources are

identified through these surveys, appropriate action will be taken to avoid or otherwise protect these resources. CTUIR will have the opportunity to have a representative, knowledgeable in cultural resources of the area, available for on-site monitoring during construction activities.

### **Potential Impacts**

Because no known historical, cultural, or archaeological resources exist within the Impact Area and no resources were identified during the surveys of the Impact Area, the Project is not expected to affect these resources. However, the possibility always exists that during construction excavation, subsurface resources or resources covered by vegetation that could not be seen during field surveys may be discovered. Should that be the case, such resources could be adversely affected by the excavation.

### **Measures to Protect Cultural Resources -- Project Order Addendum 2 Paragraph II.J.1**

To ensure that any potential cultural resources in the project area are identified and protected, CTUIR will have the opportunity to have a representative, knowledgeable in cultural resources of the area, available for on-site monitoring during construction activities. If historic, cultural, or archaeological resources are found during Project excavation, work in the affected area will be stopped until an appropriate representative of the CTUIR or other archaeologist has evaluated the significance of the find and determined all necessary actions to minimize or avoid further impacts. SHPO will also be consulted to assist in developing procedures to avoid impacting such resources or to preserve those resources that may be disturbed upon the resumption of excavation. Construction activities in the area of the discovery will not resume until appropriate action has been taken as determined by the CTUIR or the SHPO.





(Pointer 1992). There is no available information on level of service or roadway capacity for Westland Road.

## **POTENTIAL IMPACTS**

### **Potential Impacts on Essential Government Services**

#### ***Sewer and Sewage Treatment***

During Project operation, domestic wastewater would be treated by the Lamb-Weston treatment system. Industrial waste water generated by operations would be treated and reused in the cooling cycle process. The Project would not deliver wastewater to the Hermiston treatment facility or any other municipal treatment facility, and would therefore not result in any adverse impacts to municipal sewer systems.

It is expected that plant employees will be hired from the local area. Therefore, the Project will not result in increased demands placed on the sewer system from an increase in local populations generated by the Project.

#### ***Water Supplies***

##### ***Process and Cooling Water***

The Project will obtain process and cooling water from the Port of Umatilla's regional water supply system (see Exhibit O). Therefore, water use for process and cooling will not impact the ability of the local municipal water system to serve its other users.

##### ***Domestic Water Supply -- Project Order Addendum 2 Paragraph II.L.4***

Water for domestic use will be supplied by Lamb-Weston's existing water supply system. If a new or major modification of an existing water treatment and supply system is required for domestic water supply for a project, plans for the system must be submitted to and reviewed by the Oregon State Department of Human Resources, Health Division's regional office in Pendleton. Lamb-

Weston's system will not require any modifications to supply water to the Hermiston Generating Project other than a supply line from their facility to the Project. Therefore, review and approval by the Health Division will not be required.

Because the Hermiston Generating Project will be supplied by the existing Lamb-Weston system, domestic water use at the project will not impact the ability of the local municipal water system to serve its other users.

### *Stormwater*

Stormwater from the Project will be contained on site and used in the cooling water system, as described in Exhibit B. Stormwater discharge from the Project will not have a significant adverse impact on the ability of governmental entities within the Impact Area to provide stormwater disposal services.

### *Solid Waste*

The Plant will generate approximately 40 tons per year of solid waste. A recycling and waste minimization program will be developed for the Project that establishes guidelines for conservation and recycling of materials (see Exhibit V). Project generated solid waste could be accommodated by the Hermiston Landfill and would not result in adverse impacts to landfill capacities over the short or long term.

Because Project employees would be drawn from the local labor pool and are expected to be residents of the Impact Area, the Project would not result in an increase in new households. Therefore, the Project would not result in an increase in solid waste generated from new residences.

### *Libraries*

The Project will not result in the creation of a significant number of new households within the Impact Area and will therefore have no impact on existing library services.

## *Police and Fire Protection*

### *Police*

The energy facility will be fenced and it will operate 24-hours a day with personnel on site at all times. This will minimize opportunities for theft or vandalism. Police protection would be provided by the Oregon State Police and the Umatilla County Sheriff's Department. According to the Sheriff's Department, the Project is not expected to result in significant adverse effects to the department nor its capability to provide adequate service to the area (Cameron 1992). Second response calls for emergency services would be provided by the Hermiston Police Department through its mutual aid agreement with the Sheriff's Department. The Hermiston Police Department anticipates no problems with providing police services to the site (Asher 1992).

The Project is not expected to generate significant numbers of new households within the Impact Area because most Project employees are expected to be hired from local communities. Therefore, the Project will not cause an increase in demand for police services as a result of new residents moving to the area.

### *Fire*

The Project will be constructed with full hydrants and a sprinkler and deluge system. Project employees would be trained in emergency first aid procedures. According to the Hermiston Fire Department, if the Project provides all fire protection equipment and facilities in accordance with the Oregon Fire Code, it will not be expected to result in significant adverse impacts to the Department's existing capabilities (Stearns 1992).

The Project is not expected to generate significant numbers of new households within the Impact Area because most Project employees are expected to be hired from local communities. Therefore, the Project will not cause an increase in demand for fire services as a result of new residents moving to the area.

### ***Health Care***

The Project is not expected to adversely affect medical services in the Impact Area. Good Shepherd Community-Hospital has ample capability to handle any emergency situation at the Project (Franz 1992).

### ***Schools***

The Project will not result in the creation of significant new numbers of households because it is expected that most plant employees will be hired from local communities. There will be no significant in-migration of new families, and consequently, no significant increase in the student population. The Project will not adversely affect the local schools.

The construction work force is not expected to include families. Consequently, temporary increases in the local population caused by the in-migration of an average of 270 construction workers over a two year period will not result in increases in the student population and there will be no impact on schools within the Impact Area.

### **Impacts on Other Socioeconomic Factors**

#### ***Employment***

The Project will result in the creation of approximately twenty-five permanent jobs over a twenty-four hour period. Fifteen employees would work during the 8:00 a.m. to 5:00 p.m. period, and five employees would cover each of the evening and nighttime shifts. Applicant expects that most, if not all, of these jobs will be filled by existing residents within the region.

The number of new permanent jobs created as a result of the project is considered to be moderate and will not result in significant increased demands to local services. The new jobs created by the Project will provide a positive impact to the local economy, as would the contribution of the Project to the local tax base.

Construction is expected to last approximately two years. The average construction work force will be approximately 270 workers, with a peak of about 450 workers. Of the total construction work force, Applicant expects that about 55 -225 workers will be filled from outside the region. The remaining 225 - 395 will be drawn from the regional labor pool.

The temporary construction jobs created by the Project will contribute to the local economy through the purchase of goods and services by the temporary construction work force during their stay in the area.

### ***Increased Economic Activity***

As noted above, the Project will create up to 450 temporary construction jobs and approximately 25 permanent jobs. These employees will purchase goods and services locally. In addition, the Project itself will purchase considerable quantities of goods and services from local and regional businesses, from plant maintenance services to office equipment to business services. All of this will result in a net in-flow of dollars into the local economy that will have a beneficial effect beyond that of the immediate new employees.

### ***Increased Tax Revenues***

The Project will be a major taxpayer to local government. This injection of additional tax revenues - at a time of widespread cutbacks in government services - will contribute to the provision of quality education, police, fire, and other municipal needs that will benefit the entire community.

### ***Improved Lamb-Weston Competitiveness***

The Project will provide considerable savings to Lamb-Weston by helping the potato processor reduce its operating costs. This will help to keep the Lamb-Weston Hermiston facility viable in the very competitive food processing market. Since Lamb-Weston employs over 500 people at the Hermiston plant, its economic viability is critical to the well-being of the Hermiston community.

***Population***

Limited in-migration is expected to occur as a result of the Project. Applicant expects to fill most, if not all, of the full-time plant operations jobs with residents from the local communities. Because new employees will be existing local residents, the Project is not expected to result in direct population increases.

Up to 450 workers will be required for construction at any one time over the two year construction period. Of this, about 225 - 395 of the construction workers are expected to be drawn from the region; the remaining work force is expected to be brought into the area. Applicant does not anticipate that these construction workers will bring their families with them because most would remain on the job site for only a matter of months.

***Housing***

During operation, the Project is not expected to increase demand for permanent housing in the Impact Area because plant employees will be hired mostly from the local community and are assumed to have housing already.

Temporary housing accommodations for the construction work force would significantly increase demand for the motels, rental housing, and RV parks in the region during the construction period. Vacancy rates for these accommodations tend to be low throughout much of the year. Applicant estimates that accommodations can be arranged for the transient construction workers in the existing motels, rental units, and RV parks in the region.

***Traffic -- Project Order Addendum 2 Paragraph II.L***

***Fuel Oil Tanker Traffic -- Project Order Addendum 2 Paragraph II.L.1***

As fuel oil will not be required for the project, there will be no impact resulting from fuel oil deliveries.

*Normal Operations Traffic -- Project Order Addendum 2 Paragraph II.L.2*

During project operations, the average peak hour volumes of traffic from normal Project operations are estimated to be as follows:

<b>AM Peak Hour</b>	<b>PM Peak Hour</b>
enter: 9 trucks	enter: 9 trucks
20 cars	7 cars
leave: 9 trucks	leave: 9 trucks
7 cars	20 cars

*Construction Period Traffic Project Order Addendum 2 Paragraph II.L.3*

During the two-year construction period for the facility, it is estimated that the project would generate approximately 225 auto and 56 truck trips on a daily basis. Of these, about 17 trucks would enter and leave the project site during the AM and PM peak traffic hours. The portion of this traffic projection representing heavy haul loads is unknown at this time; however, the need for heavy haul loads may be reduced through the use of the adjacent railroad siding.

*Expected Impacts*

The estimated Project traffic both during construction and operation is a fraction of the over 500 trips occurring currently in connection with the Lamb-Weston plant and the approximately 3,000 trips occurring daily at Westland road, discussed above. According to the Public Works Department, increased traffic generated by the Project during operation would not be considered to result in significant traffic impact on Westland Road.

Construction activities would generate a greater number of vehicles using Westland Road than would project operations. Although construction traffic will be somewhat distributed throughout the day, impacts may occur during peak hours.



The County indicated concern about overall increased truck traffic on Westland Road as a result of its close proximity to Interstate Routes 82 and 84, and road maintenance as a result of this traffic (Phillips 1993).

## **MITIGATION**

To minimize the potential for the adverse impacts on the supply of temporary housing, Applicant will coordinate with local businesses and individuals providing housing to secure adequate facilities in advance of the arrival of the construction workers. This could include arrangements with local Realtors to secure rental housing, and reserving blocks of motel rooms and RV spaces. If necessary, Applicant will consider the feasibility of providing temporary RV park accommodations during the construction period. This would require compliance with OAR 918-650-065 which permits exemptions from the State Building Code occupancy requirements including toilet facilities, road surface treatment, and spacing. In addition to State approval, planning and zoning approval would be required by Umatilla County.

Although construction traffic from the project may create temporary impacts on Westland Road during peak traffic hours, these impacts can be minimized through implementation of typical mitigation measures such as traffic controls or staggering site access to avoid conflicts with shift changes at the Lamb-Weston facility.

### **Road Degradation Monitoring Plans and Traffic Impact Mitigation -- Project Order Addendum 2 Paragraph II.L.3**

Rail delivery will be used to the extent practicable to minimize heavy-haul truck trips during construction.

In light of the County's concerns over increased truck traffic on Westland Road due to the proximity to Interstate Highways 82 and 84, the County recommends that Applicant enter into an Irrevocable Consent Agreement (ICA) with the County which formally acknowledges that Applicant agrees to waive their right to oppose the formation of any Local Improvement District (LID) that could be proposed at some future point in time to finance road maintenance and improvements (Mabbott 1993). Applicant will enter into an ICA with the County regarding

possible future development of an LID as suggested by the County, to mitigate potential traffic impacts.



## **EMPLOYEE TRAINING**

An employee education, training, and incentive program will be developed to optimize the effectiveness of waste minimization and recycling. The program will be designed to educate employees on the need for and benefits of waste minimization and recycling and to provide training for effective implementation of the program. An incentive program will be established to encourage development of new or alternate methods of waste minimization and recycling.

## **AUDITS**

Periodic audits will be conducted to ensure compliance with and evaluate the effectiveness of the waste minimization and recycling program. As a result of these audits, the program will be revised or expanded as necessary to meet the needs of the Project. The program will also be evaluated and revised on a regular basis to reflect changes in waste minimization and recycling technology.

## **DESIGN CONSIDERATIONS FOR CONSERVATION OF WATER**

### **Water Saving Features**

The Hermiston Generating Project incorporates a host of design features to minimize consumptive water use. Most significantly, these include the selection of electrical generation technology itself, which results in a 300% water savings; further specific design choices made for this facility yield an additional savings of approximately 40% in consumptive water use. Each is described below.

### ***Generating Technology***

The choice of an advanced technology, high efficiency gas turbine engine as the primary source of electrical power generation results in a significant savings of consumptive water use. Conventional steam boilers, whether fueled by natural gas or coal, require three to four times more cooling water per kWh of electricity generated. Water use is minimized

in the combined cycle plant, which generates approximately two thirds of its power output from gas turbines that require no cooling water.

***NO<sub>x</sub> control***

The Project proposes to use General Electric's dry low NO<sub>x</sub> combustion system instead of the more conventional methods of controlling NO<sub>x</sub> which require either water or steam injection into the gas turbine. If the gas turbines were using water or steam as the control for NO<sub>x</sub>, the project would consume an additional 300 gpm of water or steam. Using the dry low NO<sub>x</sub> combustion system saves approximately 700 acre-feet of water per year.

***Waste stream recycling***

Each boiler (HRSG) discharges about 1% of its total flow as blowdown. The water system for the Project will be designed to capture this blowdown and add it to the make up flow to the cooling tower. The combined flow equals about 50 gpm which adds up to approximately 75 acre-feet of water savings per year.

Operation of the reverse osmosis system to produce boiler quality make up water yields a reject stream of between 5 - 30 gpm, depending on the amount of steam being delivered to the thermal host. This reject stream is also captured and routed as make up to the cooling tower. At an average of 25 gpm for the two units combined this represents an annual water savings of another 37 acre-feet per year.

The storm runoff will be collected and reused as make up to the cooling tower. Depending on weather conditions this could reduce the amount of makeup water required by perhaps 5 - 6 acre-feet.

Normal operation of the cooling tower system would call for a blowdown stream to be discharged and subsequently replaced with purer supply water as a means of controlling the water chemistry within the cooling tower and the condenser. The amount of blowdown depends in part on the chemical characteristics of the incoming water and on the amount of added chemicals. If operated with standard conditions the cooling tower blowdown would be about 250 gpm per unit or 500 gpm total for the two units.

Instead, the Hermiston Project will be using a combination of sidestream softening and brine concentration to eliminate the need for this blowdown stream; the treated water will then be recycled back to the cooling tower to replace water which would otherwise come from the raw water supply system. Approximately 750 acre-feet of water savings will be realized each year from this system.

#### *Advanced drift eliminators*

Drift from the cooling towers will be minimized through the use of high efficiency fill and drift eliminators. By using drift eliminators which only allow 0.008% drift rather than a drift of 0.02%, approximately 12 gpm of loss is prevented for an annual savings of about 18 acre feet.

Table W-1: Summary of Water Savings Incorporated into the Hermiston Plant Design

SAVINGS TECHNIQUE	ANNUAL WATER SAVINGS -- Acre-Feet
DRY NO <sub>x</sub> CONTROL	700
BOILER BLOWDOWN REUSE	75
REVERSE OSMOSIS REJECT REUSE	37
STORM RUNOFF REUSE	5 - 6
RECYCLE OF COOLING TOWER BLOWDOWN	750
REDUCE COOLING TOWER DRIFT	18
ESTIMATED TOTAL Savings	1,585 Acre-Feet
Projected Consumptive Water Use of Project as Proposed	2,445 Acre-Feet

#### **Alternative Designs Considered**

Since cooling water represents by far the majority of the water demand for the project, HGC considered several alternative design features to determine the most efficient use of cooling water. The advantages and disadvantages of each approach are discussed below.

The Hermiston Generating Project proposes to condense the steam from the steam turbine by using a conventional wet-cooling system, in which cooling water is circulated around the condenser tubes and then through cooling towers to exhaust heat to the atmosphere through evaporation. The non-evaporated water is collected in basins at the base of the cooling tower, and recirculated through the condensers to minimize water use. The net consumptive water use of this process is approximately 2.3 mgd under annual average weather conditions; this is the water which is evaporated during the cooling process (see Exhibit B for a description of the proposed cooling system, and the preceding discussion for a description of water saving measures incorporated into the design).

### *Once-Through Cooling*

Steam condensation could also be accomplished by once-through cooling, which involves running water past the condensor tubes once, and then discharging the heated water. In a once-through cooling design, no water is evaporated; instead, the heated water is available for discharge and could be used to replenish a groundwater or surface water system.

However, concerns regarding this method were identified in the areas of plant efficiency, water sources, and water discharge. Each of these is considered below.

### *Plant efficiency*

The pumping power required for once-through cooling is approximately 150 times greater than for evaporative cooling (an increase of more than 6 MW in auxiliary power load for a two unit installation) This results in a further reduction in plant efficiency of approximately 1%, translating into lost revenues as well as greater air emissions per net kWh.

### *Water requirements*

The amount of water required for once-through cooling is a function of the size of the steam turbines and the designed temperature increase of the cooling water after it has

passed through the condenser. Assuming cooling water may be discharged from the plant at a 23° F higher temperature, the total water requirements for the two unit facility would be about 144 million gallons per day, or 100,000 gpm. HGC's water allotment under the Port of Umatilla's permit is 2600 gpm, which would require the project to secure substantial additional water allotments.

Assuming that water rights could be obtained for the quantities needed, the large volumes of water would need to be delivered to the site. Two methods could be used, either an open irrigation canal similar to existing ones, or an underground pipe system.

Delivery of 100,000 gpm of cooling water would require an irrigation canal about ten feet wide by eight feet deep and would flow at approximately 4 feet per second. Local residents have expressed concern over the safety aspects of open irrigation canals. There is also the impact of surface evaporation from the canal. At an annual pan evaporation rate of 56 inches each mile of ten foot wide irrigation canal would lose approximately 1.86 million gallons per year (5.7 acre-feet of water) per year to evaporation. If the canal were unlined, additional water would be lost through infiltration into the subsurface.

Irrigation canals are commonplace throughout the farm area and it is possible that many of the existing canals could be utilized by interconnection to provide delivery of 160,000 acre-feet per year to the plant. In the worst-impact scenario, twelve to fifteen miles of new right-of-way would be required for the construction of a new canal system to deliver water from the Columbia River to the facility.

Alternatively, water could be delivered to the site through a buried pipeline. A pipeline capable of handling the 100,000 gpm flow would need to be about 8 1/2 feet in diameter.

Land for pumping stations and pipeline right-of-way would have to be obtained. No work has been done to identify a possible right-of-way for a line this size connecting possible supply points at or near the Columbia River to the power plant. Land requirements for a pipeline right-of-way are twice those required for evaporative cooling.

Applicant determined that acquisition of such a large amount of water, even if it were returned to the regional water flow, would be difficult to permit and deliver and may not represent the most effective use of scarce water resources. Put into a regional water use



perspective, the amount of water passing through the plant on an annual basis would be approximately 160,000 acre-feet per year, or almost 36,000 acres worth of water rights. In addition, the need for irrigation occurs primarily in the summertime whereas the power station requires cooling at all times of the year.

#### *Water discharge*

Water from a once-through cooling system could be discharged via land application, injection into the groundwater aquifer, or discharge into the Columbia or Umatilla Rivers. Water temperature at exit from the plant would increase from an assumed 65 °F to about 88 °F. In order to permit discharge of these thermal waters to either surface or ground waters, Applicant anticipated that extensive (and expensive) monitoring studies would need to be undertaken and that the project schedule would be compromised.

During the summer, the discharge could be utilized for watering crops, but in the winter when farming activity, and therefore water usage, is much lower, it would be difficult to dispose of the 100,000 gpm cooling water stream. If a storage reservoir of adequate capacity could be designed, it would have to be permitted and constructed at substantial cost. Extensive monitoring studies would be required, potentially impacting the project schedule and remaining as a project obligation throughout the life of the project.

Discharge to the nearest river, the Umatilla, is likely to be prohibited because of the elevated discharge water temperature. The cost of pumping the water an additional 12 - 15 miles to the Columbia River would be prohibitive, and the temperature increase would probably still be high enough to impact fisheries and other aquatic life.

No work has been undertaken to determine whether the 100,000 gpm cooling water stream could realistically be discharged to the aquifers in the area. The elevated temperature and volume of the discharge water would also be of concern to the characteristics of the aquifer.

#### *Dry Cooling/Condensing Systems*

The use of a dry cooling system, consisting of air cooled condensers and other heat exchangers, would eliminate evaporative losses at the plant site and greatly reduce water

consumption. However, preliminary investigation of this alternative showed it to have environmental concerns and to be uneconomical.

Dry cooling requires a larger land area and is far noisier than the evaporative cooling option. The site is not of sufficient size to accommodate the number of cells associated with the dry cooling system. Additional land or an alternative site would be required for this system. The dry cooling system would also require more cooling fans, that would be moving more air than the wet evaporative system. These fans would result in much higher noise levels from the project. Because of the already high ambient noise levels in the project area, it would be difficult for the project to comply with Oregon noise regulations if a dry cooling system were used.

Capital costs for the dry cooling system are estimated at \$12 million, a cost which would compromise project viability. Project economics would suffer further because of the reduced efficiency imposed by the dry cooling system; in addition, net heat rate could be compromised sufficiently to jeopardize the project's need exemption. Finally, dry cooling requires a significantly higher auxiliary power consumption with a resulting large reduction in cycle output. The combined reduced efficiency and increased parasitic load would result in a reduction in net capacity of approximately 6% when compared to the evaporative cooling option. This loss in capacity yields greater emissions of regulated pollutants per kWh and higher costs per kWh.

#### ***Hybrid Wet/Dry Cooling Systems***

The project considered a hybrid of the wet and dry cooling systems. This would require the purchase of what is essentially a double cooling system, one for dry operation and another for wet operation. The cost and performance penalty associated with this type of system excluded further consideration.

#### ***Mechanical Draft Evaporative Cooling Towers with Blowdown to Agricultural Reuse***

This is a secondary alternative to the onsite treatment and reuse of blowdown. It would provide for a beneficial use of water discharge for agricultural use but would require large storage and retention during the winter months and introduces questions about the impact of the cooling water discharge on the groundwater system.



## **THREATENED AND ENDANGERED SPECIES**

Potential adverse impacts on nesting birds can be avoided by scheduling construction of the transmission line and gas pipeline to avoid the nesting season for these species. Black (1992, personal conversation) suggested that the nesting season includes the period of mid-April through August 1. If construction schedules can not be arranged to avoid the nesting season, the energy facility site and the transmission line and gas pipeline right-of-ways will be surveyed to identify nest sites. If nests are identified, mitigation will be provided, which mitigation may include contributing funds to DFW habitat conservation programs. The gas pipeline route will be surveyed for the Washington ground squirrel during the late April to early May active season for the species. If any are located, the colonies will be avoided by construction if possible. If avoidance is not possible, Applicant will consult with DFW on appropriate mitigation measures to be taken.

Potential electrocution hazard to bald eagles and other raptors can be avoided by using a raptor-proof design for the new transmission line. Raptor protection will be employed in the design of the transmission towers, following the methods described by Olendorff et al (1981). Detailed design will be submitted to DFW for review during the design phase of the Project. All energized facilities will either be designed with a minimum separation of nine feet (the greatest wingspan expected in the area is the 8.5 foot wingspan of the bald eagle) or other raptor protection measures to reduce the potential for electrocution.

## **VISUAL QUALITY AND AESTHETICS**

### **Mitigation for Identified Areas of Scenic Value**

The only portion of the Project that will be visible from the areas identified by the County as having scenic value is the upper portion of the stacks, the cooling tower plume, and the northern end of the electrical transmission line. Because of the relatively flat terrain and the height of these features, topographic screening is not practical.



# EXHIBIT X

## CONSTRUCTION SCHEDULE - OAR 345-21-015(1)(x)

Figure X-1a shows an anticipated construction schedule for the two combined-cycle generating units of the facility. This schedule is representative of the construction process that applicant may follow for construction of the energy facility.

The electric transmission line will be constructed concurrently with the energy facility to ensure its completion on or before the date of the first unit's commencement of operation. Construction of the electric transmission line will be performed primarily during the winter, when irrigation loads on this portion of the Umatilla Electric Cooperative Association distribution system are the lightest and to avoid nesting and mating seasons of local wildlife. It is expected that the transmission line can be completed within a single winter. The in-substation work at McNary Substation will be scheduled to minimize the impact on BPA's system.

The gas pipeline line will also be constructed concurrently with the energy facility so that fuel will be available on or before the date of the first unit's commencement of operation. Construction of the gas pipeline will require approximately three months of field work. This will be performed primarily in the fall and winter months in order to minimize impacts on agricultural activities and to avoid nesting and mating seasons of local wildlife.

As shown in Figure X-1a and X-1A a, the development, construction and procurement schedule (including permitting) is projected to require twenty six months from Notice to Proceed to guaranteed commercial operation. Preliminary engineering and design work, which can be

accomplished prior to obtaining financial closing for the Project but does not involve any on-site activities will occur ahead of Notice to Proceed.

All construction work will be performed either at the site of the energy facility or within the transmission and gas pipeline rights of way that are described in Exhibit C and shown on Figures C-2 through C-4. It is possible that some construction materials and equipment may be temporarily stored on property adjacent to the site of the energy facility site.

### **Two-Unit Sequencing Detail -- Project Order Addendum 2 Paragraph III.A**

It is Applicant's intent to construct both units at the earliest possible date. At this time, both units are being developed for operation by 1996. The optimal construction schedule for the two units, reflected in Figure X-1a, would include an approximate four-month lag between the time construction begins on the first unit and the time construction begins on the second unit. This would allow for sequencing of the various phases of work so that crews completing work on one phase of construction of the first unit could then immediately begin work on that phase of the second unit. However, actual construction schedules for the units will be dictated by the conditions of the power sales agreement(s).

### **Factors Affecting Construction Delay -- Project Order Addendum 2 Paragraph III.A**

As explained in Exhibit K, project financing commitments adequate to fund construction and operate the project may be secured only after the power sales agreement, along with all other commercial agreements, becomes effective, and all necessary permits, as well as review under NEPA if required, are obtained. Construction may then commence.

At present, the Hermiston project does not have an executed power purchase agreement for the sale of its electrical output to an energy supplier. Such an agreement will be negotiated after an energy supplier makes a commitment to the Project's output following a process such as a competitive solicitation in which the energy supplier compares the Project with available resource alternatives. Satisfaction of additional conditions, such as review under NEPA, discussed below, may be required before the contract, once negotiated, is executed or becomes effective.

In the Northwest, it is not unusual for competitive solicitations to require a year or more from bid preparation to final awards. For an immediately-identified resource need, the energy supplier

would proceed directly to power purchase agreement contract negotiations and initiate the two-year NEPA review if it is required.

If power from one or both units is purchased by an energy supplier for potential future needs, such as the BPA Resource Contingency Program, construction of the Project may be delayed somewhat to accommodate the energy supplier's power needs. The maximum delay that could occur under this scenario is unknown at this time.

The development schedule provided in Figure x-1A excludes power marketing and power purchase agreement negotiations as elements on the critical path for project completion.

EFSC specifically recognized and encouraged the participation of non-utility generating companies competing in the wholesale marketplace without captive customers by providing that a Site Certificate could be issued for a project without an executed power purchase agreement specifying the terms for commencement of operations. On the other hand, Applicant would like to acknowledge the legitimate concerns on the part of EFSC and ODOE over issuing site certificates for facilities for an indefinite period of time. We agree that the potential for changes in permit conditions and technology advances, as well as changes in the prospects for a particular project, all dictate that there should be time limits as Site Certificate conditions. We believe such conditions can be structured to accommodate the desires the Applicant and the needs of the marketplace as well as to protect the interests of EFSC as issuer of the Site Certificate.

#### **Impact of Federal EIS on Project Construction Schedule -- Project Order Addendum 2 Paragraph I.C**

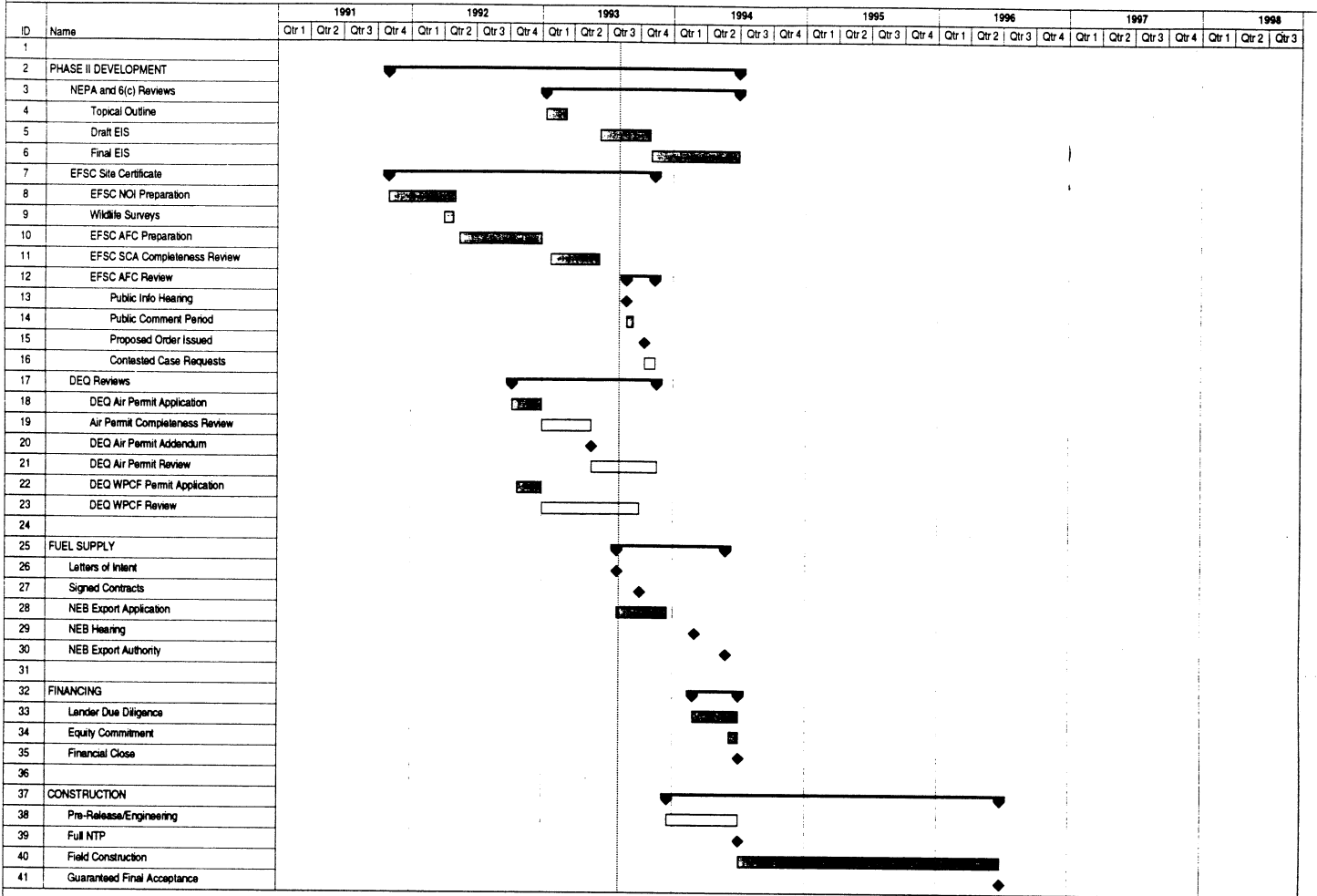
The purchase of power from the Project by BPA will likely require evaluation of the Project under the National Environmental Policy Act (NEPA), including, potentially, preparation of an Environmental Assessment (EA) or Environmental Impact Statement (EIS) under the requirements of NEPA. Further, wheeling service provided by BPA in connection with a purchase of the Project's output by a buyer other than BPA may also require review under NEPA. Scoping of the NEPA review requires that the conditions for energy supply under the power purchase agreement be established, and, in the case of BPA transmission, that the impacts of the energy supply on the transmission system be considered. BPA has estimated that NEPA review could require up to two years from scoping to completion. However, it is possible that the time required for the NEPA review can be reduced, particularly if optimal use is made of the results of the reviews performed for the Oregon siting process.



**Design Review**

Building permit applications will be submitted to State of Oregon Building Codes Agency (BCA) with appropriate construction documents and required fees when these construction documents are completed but prior to the start of construction. BCA has estimated that review of these documents will require approximately two to three months following their submittal. In general, these construction documents will be prepared during the "pre-release" period and during the early phases of the "design" and "construction" periods shown in Exhibits X-1 and X-1A a.

**Figure X-1A a  
Hermiston Generating Project  
Preliminary Development Schedule**







**PROJECT ORDER PARAGRAPH 17**

The Cooling Water Reuse Land Application Management Plan provided with Exhibit M includes the information required by DEQ to comply with the "Checklist for Land Application of Industrial Wastewaters."

**PROJECT ORDER PARAGRAPH 19(i)**

Exhibit P includes a discussion of the type and design of protective measures that which will be provided at transmission towers to minimize the potential for raptor electrocution.

**PROJECT ORDER PARAGRAPH 19(ii)**

A copy of the biological survey conducted for the impact area, *Vegetation and Wildlife Investigation, Hermiston Generating Project* (Woodward-Clyde, 1992), is attached as Appendix P-1.

**PROJECT ORDER PARAGRAPH 19(iii)**

As explained in Exhibit R, a search of the Oregon Natural Heritage Program (ONHP) data base for sensitive plant species was conducted to develop a search list for plant species that might potentially occur within the Project's Impact Area. This list was expanded to include a 50-mile radius from the Project site. The list of species identified in this search is shown in Table R-2 of Exhibit R.

**OREGON DEPARTMENT OF ENERGY LETTER DATED APRIL 3, 1993**

**Fogging and Icing**

Potential occurrences of cooling tower-induced fogging and/or icing were modeled, using the SACTI model and five years of surface meteorological data from Pendleton, Oregon.

Meteorological conditions which trigger predicted cooling tower-induced fogging typically will not coincide with natural fogging.

Results of the cooling tower impact analysis indicate that the greatest potential for occurrences of tower-induced fogging is to the north of the property along the local access road that runs approximately east-west along the northern property boundary. Impacts on this roadway are predicted to occur at a maximum frequency of 14 hours per year; this predicted frequency represents a summation over the year and may result from several fogging periods of short duration. In addition, fogging impacts on Westland Road are predicted to be one hour or less per year at any given location. Fogging to the north-northwest along Walker Road at two different locations is also predicted to occur with a frequency of one hour or less per year.

Based on the modeling, there are no predicted occurrences of cooling-tower induced icing on nearby roadways. Icing on the railroad tracks to the south-southeast of the site is predicted to occur in only one year, out of the five years modeled, at a maximum frequency of 0.2 hours per year.

### **Impacts to Vegetation**

Cooling tower drift contains dissolved solids, which are entrained in the droplets emitted from the towers and then deposited on the surrounding vicinity. The SACTI model used to predict icing and fogging impacts also projects the deposition of salts by direction and distance from cooling towers. The projected analysis of the composition of dissolved solids in the circulating water, which is emitted as drift, was calculated using Columbia River water as the source and an expected maximum concentration factor of 40. Finally, the sensitivity of surrounding vegetation to the constituents of the drift was researched to assess whether the concentration and deposition of the drift components is likely to have an adverse effect on nearby vegetation.

The circulating water will contain an estimated 5,200 ppm dissolved solids. Of this, about 3,500 ppm is composed of sulfate and sulfite, calcium, and magnesium, which are plant nutrients and, at the predicted levels, will have no adverse effects on vegetation as part of the cooling tower drift. The remaining dissolved solids are composed mainly of sodium, chloride, silica, and carbonate and bicarbonate, which are all expected to be present in concentrations between 100

and 1100 ppm. While not essential to plants, these components are all typically found in soils and in plant tissue. In the concentrations anticipated for the circulating water and in the deposition rates projected for the cooling towers, these components are expected to have no adverse effects on nearby vegetation.

**OREGON DEPARTMENT OF ENERGY LETTER DATED JULY 7, 1993**

Operation of new industrial or commercial noise sources is regulated by the Oregon Department of Environmental Quality under OAR 340-35-035. No permit is required. However, a new unused industrial or commercial site must meet the standards set forth in OAR 340-34-025 (b) (B). These standards prohibit operation of a noise source if the noise levels (as measured at noise sensitive properties) generated or indirectly caused by the noise source increase the ambient statistical noise levels by more than 10 dBA in any one hour, or exceed the following levels:

<u>7 a.m. - 10 p.m.</u>	<u>10 p.m. - 7 a.m.</u>
L50 - 55 dBA	L50 - 50 dBA
L10 - 60 dBA	L10 - 55 dBA
L1 - 75 dBA	L1 - 60 dBA
Impulse - 100 dBA	Impulse - 80 dBA

The applicant retained an acoustical engineering firm (Hessler Associates, Inc.) to measure ambient noise levels at sensitive receptors in the vicinity of the project site. These levels are identified in the attached figures. The L5 value shown on the attached figure is essentially the same as the L1 for conditions at the site.

Based on the measured ambient noise levels, noise generation information supplied by manufacturers for the generating facility, and information from other similar facilities that are operational, expected noise impacts associated with operation of the project have been evaluated. This analysis has included an evaluation of those ODEQ standards most likely to be limiting from the 7 a.m. to 10 a.m. limits and the 10 a.m to 7 a.m. limits, as well as the 10 dBA increase over existing ambient noise limits. Because noise levels from the generating facility are expected to be relatively constant, the L50 restrictions are expected to be more limiting than the L10 or L1 limits.

Additionally, due to the fact that existing ambient noise levels as measured in the vicinity of the site are already relatively high (due largely to the presence of I-82 and I-84, and other industrial noise sources in the area), the 50 dBA noise limit is expected to be more limiting than the 10 dBA above ambient level.

Based on this analysis, the facility will comply with the ODEQ noise standards through noise abatement at the generating facility or through other methods as necessary.