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BLUE MOUNTAIN AUDUBON SOCIETY

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APR 15 2002

Comments of Blue Mountain Audubon Society in regards to the Wallula Power Project ENERGY FACILITY SITE EVALUATION COUNCIL

We of the Blue Mountain Audubon Society are dedicated to working for a healthy environment for present and future generations. The health and well being of generations to come will be determined by environmental decisions we make in the present. We believe that due to the serious effects of green house gas emissions on global climate it is time that we consumers of energy bring our seemly insatiable demand for new power under control by implementing conservation measures and economic strategies in line with the realities of the natural systems we live in and are a part of. We must move away from fossil fuels as our energy source and work to develop those sources that will have least detrimental effects on the environment. According to the DEIS Wallula Power Project will be the largest power plant in Washington, Oregon, Idaho and Montana at the time it is scheduled to go on line. It will consume 225.6 million Cubic Feet of natural gas per day with the annual CO2 emission of 5,251,556 tons; also the most in the NW There will be an estimated 24,000 tons of methane emissions per year from leaks from the supply pipelines serving the Wallula Project. While the DEIS points out that this project is 4.8% of Washington States greenhouse gas emissions and 9.6 % of the amount estimated to be released by all the future power plants in the Northwest this is considered small by comparison to the total amount released throughout the world. It is the unwillingness to look at the cumulative effect of all these individual contributions to the problem that will be our undoing in the long run. It is for these reasons we do not feel that this project is justifiable now or in the future.

23-1

We also would like to comment on various areas of the DEIS.

On page 3.2-9 Table 3.2-4 Facility Criteria Pollutant Emissions Summary indicates that PM10 emissions are 88lb/hr which excludes start up emissions and assumes ambient temperature of 11 degrees Fahrenheit. On page 3.2-11 at the bottom of the page, the DEIS states that the amount of particulate formed are limited to 12lbs/hr rather than 88lbs/hr listed in the chart. There appears to be a serious discrepancy regarding the level of PM10 emissions. Please clarify this discrepancy.

23-2

On page 3.2-8 the bottom paragraph states that emissions were calculated with ambient temperature of 54 degrees F. yet in the notation on Table 3.2-4 it states that ambient air temperature was 11 degrees F. Were the emissions calculated at two different times with the different ambient temperatures? If so, why were these specific temperatures chosen and how does the difference effect the emission levels.

23-3

On page 3.2-3 and 3.2-15 the DEIS states that Eagle Cap Wilderness area in the Wallows of Northeast Oregon is the closest Class I area at a distance of 71.5 miles. In reading this it appears that the DEIS has failed to acknowledge of assess the impacts on the two Class

23-4

I areas closest to the project. These are the Juniper Dunes Wilderness area, approximately 20 miles to the North East and directly down wind of the project, and the Wenaha-Tucannon Wilderness area, approximately 60 miles to the East of the project. It is important that these Class I areas be assessed for impact, especially the Juniper Dunes which is particularly at risk.

23-4  
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On page 3.2-23 there are listed five examples of measures being taken by power projects to offset the effects of the greenhouse gas emissions. The Sumas plant is proposing a payment of \$.57 per ton of CO2 emissions. As one of the largest contributors of greenhouse gas emissions in the Northwest we believe that the Wallula Project should also provide measures to offset their emissions. A possible offset measure for CO2 emissions would be an emission driven amount of money to be donated annually to research efforts into non-greenhouse gas producing power generation such as fuel cell production or wind power efficiency.

23-5

On page 3.17-7 annual CO2 emissions are given as 4.27 million tons per year. In the chart on page 3.17-4 the project is listed with 5,251,556 tons per year. This is a discrepancy of over a million tons per year. Please clarify this discrepancy.

23-6

On page 3.2-14 under the section entitled Toxic Air Pollutant Analysis there a couple of paragraphs describing the use of air quality dispersion modeling utilized to assess the compliance of levels of ten toxic pollutants according to the state regulations. The concluding statement is that based on these modeling results, the project is *not expected* (italics added) to create significant impacts. We feel strongly that *not expected* conveys a level of uncertainty that when the public health is involved it is imperative that one or more permanently functioning toxic pollutant air monitoring stations be installed to assure that the modeling that was performed is indeed accurate in reality. It was acknowledged in section 3.2.1.4 that "because of the rural nature of Walla Walla County and the lack of large industrial sources of pollutants" that the county has been classified as an attainment area for all critical pollutants except for PM10. This paragraph goes on to acknowledge that there are no monitoring stations in SE Washington for the critical pollutants that are assumed to be in attainment while in fact it states that there is no local source available to assess the existing concentrations of these pollutants. If this project were to become a reality with its admitted levels of emissions it can no longer be said that the Walla Walla County lacks "large industrial sources of pollutants" hence the air quality monitoring should be considered a mandatory part of the project.

23-7

On page 3.2-13 local air quality impact assessment is discussed. We believe that the radius of 15 kilometers (9.3 miles) from the site is too narrow a scope to assess impacts of NO2, SO2, toxic air pollutants and PM10 impacts on Class II areas. The land to the East of the project includes the towns of Touchet, Lowden and Walla Walla, as well as important agricultural lands. From as far away as Walla Walla, there are times when the odors of Bouise Cascade and Iowa Beef can be smelled. If there are regional assessments done on Class I areas up to 125 miles than Class II areas should be assessed for impact at least up to 50 miles away.

23-8

On page 3.2-12 there is a discussion of the purchase or lease of up to 1300 acres of active farm land which would be converted to cultivated dryland grasses to mitigate for PM10 emissions in the non-attainment zone. We are concerned with this approach to offsetting PM10 emissions from the plant. Not all active farmland creates serious PM10 impacts. Hence the conversion of a farm land that has very little wind erosion would do little to offset the emissions from the plant. We are concerned that the applicants plan is to kill two birds with one stone by purchasing the Boise Cascade fiber farm to transfer the water rights then convert the land from fiber to dryland grasses as an offset measure for the PM10 emissions. If this is an accurate concern then it would not seem likely that the wind erosion from the fiber farm would be very significant and therefore an inadequate offset measure. Please clarify the project intent regarding this offset of emissions plan. Since there are toxic pollutants other than dust that can also be of particulate matter it is most important that the PM10 be maintained within the plant rather than trying to offset it with agricultural lands.

23-9

Chapter 2, Figure 2-2 – This plate incorrectly shows that numerous blocks of land along the left bank of McNary reservoir are owned by McNary National Wildlife Refuge. The plate should be corrected to show these lands are owned by the U.S. Army Corps of Engineers and are being managed by the U.S. Fish and Wildlife Service.

23-10

Section 2.1.2.1 Power Plant Purpose and Need – The Draft EIS does not present a compelling need for the proposed gas-fired power plant. The DEIS states that recent forecasts project increasing consumption of electrical energy and that the governor of Washington issued an energy supply alert, but neither of those reasons automatically leads the reader to believe that construction of more power plants is the only way to address the energy issue. The DEIS should at least acknowledge the potential role of energy conservation before concluding that constructing a power plant is necessary.

23-11

Section 2.3 Alternatives – The DEIS should also consider energy conservation measures as an alternative. Energy conservation may not provide a complete solution to the energy problem, but it should be considered as part of the preferred alternative.

23-12

Page 2-45, Table 2-4. Overview of Permit, Approval, and Consultation Requirements for Wallula Power Project – This table appears to be intended to provide a listing of the permits and approvals needed for this project. However, several of the necessary permits or approvals seem to be missing. Please address the following:

- National Marine Fisheries Service – They also provide consultation under the Endangered Species Act (ESA) for anadromous fish. The DEIS states there are several fish species present in the adjacent rivers that are listed as either threatened or endangered under ESA, therefore NMFS' role under ESA should also be included.
- U.S. Army Corps of Engineers – An easement would be needed from the Corps for any crossing of Corps –owned property by pipelines or transmission lines.

23-13

- U.S. Environmental Protection Agency – The table makes statements about several laws, but does not state how EPA is involved in the implementation of the laws or how the laws relate to this project.

- U.S. Fish and Wildlife Service – The table states that USFWS would provide a biological opinion on the ESA-listed wildlife and plants. However, the main text does not indicate that there are any ESA-listed wildlife or plants that would be affected by this project. USFWS would not prepare a biological opinion unless they have entered into formal consultation because the proposed project would have an adverse effect on listed species.

23-13  
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- U.S. Fish and Wildlife Service – The table states what the Migratory Bird Treaty Act is, but does not state how the USFWS is involved. The table should state that USFWS issues a permit for the destruction of nestling birds protected by the Act, but only when it's a human health and safety issue. The construction of this power plant would not likely meet the requirements for such a permit.

- Washington Department of Fish and Wildlife – The table does not mention the state Hydraulic Project Approval, which is issued by WDFW for work in waters of the state of Washington and for some shoreline work.

Page 3.66-10, Section 3.6.2.1 Construction – The DEIS states that the clearing of vegetation during the bird nesting season could result in direct mortality of nestlings. This destruction of nests and nestlings would be in violation of the Migratory Bird Treaty Act. Any vegetation clearing should be performed either prior to the nesting season or after the nestlings have fledged.

23-14

Please indicate clearly which section or sections discuss the presence of species listed under the Endangered Species Act and the potential impacts to those species. Table 2-4 implies there are at least listed wildlife and plant species, but there is no ESA section listed in the Table of Contents.

23-15

Page 3.6-13, Section 3.6.2.2 Operation and Maintenance – The discussion of the possibility of bird and bat strikes should be expanded to include data gathered for the adjacent Stateline Wind Farm (wind-generation project developed a few miles south/southeast of the proposed Wallula Power Plant). The potential of bird and bat collisions with the windmill generators was of great concern because of the proximity of the wind farm to McNary Wildlife Refuge, the delta at the mouth of the Walla Walla River, and bird and bat flyways. The same concerns would be associated with the Wallula Power Plant. Interviewing the environmental managers, current and retired, of Boise Cascade Corporation is not considered adequate research into this important matter.

23-16

Page 3.6.16, Section 3.6.4 Mitigation Measures – As a mitigation measure for the permanent loss of shrub-steppe habitat, please consider re-establishing shrub-steppe vegetation on the lands to the south of this project adjacent to both Highway 12 and the

23-17

Walla Walla River. A fire burned these lands in summer 2001 and the bare soil has been a source of blowing dust. Non-native Cheatgrass is returning, but the sagebrush is not. This burned off area is a major source of PM10 from dust resulting from wind erosion.

23-17  
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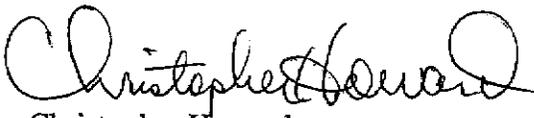
On Page 3.17-5 the chart lists the Coyote Springs cogeneration project in Boardman, Oregon. The chart only lists the annual CO2 emissions. On a recent field trip to the Coyote Springs project, with an output of 280 MW, it was learned from information provided that there seems to be a significant variance in the level of emissions in some areas that are far more than the difference in output capacity can account for. Refer to the following chart:

	Coyote Springs Actual Emissions (year 2001)	Wallula Project from Table 3.2-4
(tons / year)		
NOx	109	430
CO	37	396
PM10	18	303
SO2	4	22
VOC	6	267

23-18

The Wallula Project has approximately 4.5 times the amount of output capacity than the Coyote Springs Project. It appears from the table that the emissions from the Wallula Project of the various substances are, with the exception of NOx, far more than 4.5 times greater than the Coyote Springs Project. Please explain this apparent emission reduction efficiency.

Thank you for the opportunity to comment on this project. We look forward to your responses to our comments.



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**Responses to Comment Submission 23,  
Letter from Christopher Howard, Blue Mountain Audubon Society**

- 23-1. Section 3.17 of the Draft EIS has been revised to describe the applicant's proposal to provide funding for greenhouse gas research and greenhouse gas offsets. Please see Chapter 3 of this Final EIS for updated text.
- 23-2. Section 3.2 has been updated to reflect the applicant's revised emission estimates, as confirmed by EFSEC's PSD permit writer as part of the PSD application review. The value of 88 lbs/hr in Table 3.2-4 was the plant-wide total. The value of 12 lbs/hr was meant to refer only to each combustion turbine, excluding duct burners. An updated version of Table 3.2-4 is provided in Chapter 3 of this Final EIS.
- 23-3. The value of 11°F listed in the footnote to Table 3.2-4 was a typographical error. It has been corrected to read 11°C (52°F).
- 23-4. According to guidance from the Federal Land Managers' Air Quality Related Values Workgroup (FLAG), neither the Juniper Dunes Wilderness nor the Weneha/Tucannon Wilderness has been designated a PSD Class I area. Please note that not all wilderness areas are PSD Class I areas.
- 23-5. Your comment is well founded. After publication of the Draft EIS, the applicant agreed to provide an environmental enhancement package that includes funding for greenhouse gas research and direct greenhouse gas offset projects. Section 3.17 in Chapter 3 of this Final EIS has been updated to describe the applicant's environmental enhancement package.
- 23-6. The correct value is 4.27 million tons per year of CO<sub>2</sub>. This correction to Table 3.17-1 is indicated in Section 3.17 of this Final EIS.
- 23-7. The predictive modeling for toxic air pollutants was done using EPA-approved models. The modeling showed the worst-case ambient concentrations to be less than the Washington Department of Ecology's health-based limits, and therefore additional monitoring of ambient toxic air pollutant concentrations is not required. The review of the Prevention of Significant Deterioration and Notice of Construction permit application did not trigger any thresholds that would require ambient air quality monitoring should this facility be approved and become operational.
- 23-8. The applicant's predictive air quality modeling was performed in accordance with state and federal requirements. The applicant's local modeling grid (extending out 15 km) adequately identified the location of the maximum concentrations and demonstrated those maximum concentrations to be less than regulatory limits. Ambient concentrations farther from the power plant would be lower than the maximum values and therefore would also be below regulatory limits. Class II areas were included in the assessment of long-range impacts in applicable Class I areas and were presented in the Wallula Power Project application.
- 23-9. State and federal regulations require the applicant to offset at least 100% of the project's PM<sub>10</sub> emissions. Section 3.2 has been updated to reflect the applicant's offset proposal, presented in the draft Notice of Construction permit issued for public comment. See Chapter 3 of this Final EIS. You are correct that the fugitive emissions from any given agricultural parcel depend on the specific crop, soil, and farming practices. The applicant's offset proposal accounts for site-specific variables at each parcel. Purchase of the fiber farm is not claimed in the applicant's proposal as a quantifiable emission offset.
- 23-10. Figure 2-2 from the Draft EIS has been corrected and is included as Figure 1-2 in Chapter 1 of this Final EIS.
- 23-11. Please see response to comment 10-11.
- 23-12. Please see response to comment 19-9.

- 23-13. An updated version of the table listing additional permit, approval, and consultation requirements is included as Table 1-2 in Chapter 1 of this Final EIS. The table is not intended to provide in-depth guidance regarding regulatory compliance or agency responsibility but to summarize potentially involved agencies and the regulatory context within which the project would be developed.
- 23-14. Please see Appendix A, Mitigation Measures for measures that will be used to avoid critical periods for birds.
- 23-15. The presence of special-status species was discussed in Section 3.6.1.1 (Species of Special Concern) and Section 3.6.1.2 (Wildlife Habitat) of the Draft EIS, while potential impacts to these species were discussed throughout Section 3.6.2.1 (Construction) and Section 3.6.2.2 (Operation and Maintenance). Threatened and Endangered Species were included with Species of Special Concern in Section 3.6.1.1.
- 23-16. Bird fatality projections for the Stateline and Vansycle wind turbines are estimated at 0.63 fatalities/turbine/year (Erickson et al. 2000). With a current number of turbines of 437, this totals approximately 275 bird fatalities per year from the wind turbines. The fatalities discovered during the study of this area included over 60% passerines, 27% fowl-like birds (chukar and partridge), and 9% other. Overall relative bird use at Stateline, Nine Canyon, and Vansycle wind farms was small compared to other study areas in a draft report on avian and bat use currently under review (Erickson et al. 2002). This same draft report summarizes bird mortality due to collision with buildings and other human objects. Some mortality from collision with the cooling towers at the generation plant would be expected.

A study of bat mortality at nearby Vansycle wind farm estimates mortality of 0.74 bats/turbine/year. A large majority of bats killed by wind turbines nationally are migrating or dispersing. The data indicate that resident breeding bat populations in the United States are not being impacted by wind turbines. Preliminary data suggest that the numbers of bats susceptible to turbine collisions is large but that the observed mortality is not sufficient to cause declines in numbers of potentially affected bats. The effect on migrant bat populations of sustained collision mortality over several years is not known. (Erickson et al. 2002).

The U.S. Fish and Wildlife Service sent to its Regional Directors a

communication dated September 14, 2000, concerning the siting, construction, operation, and decommissioning of communication towers. This communication strongly encouraged that “towers (be) no more than 199 feet above ground level, using construction techniques which do not require guy wires.” Section 3.6.2.2 of the Draft EIS states that the towers will be 175 feet tall and no guy wires will be needed to support the stacks.

Dr. Albert Manville II stated in a speech to the Avian Interactions Workshop in 1999 that “the taller the tower, the more likely it will kill birds.” This is often the case because taller towers require the support of guy wires which Dr. Manville states “...are critical in their effects on birds.” (Manville, A.M. II 2000).

- 23-17. Specific mitigation has been developed in a Settlement Agreement between Washington Department of Fish and Wildlife and the applicant. Further information is provided in Section 3.4 and Appendix A of this Final EIS.
- 23-18. It is not valid to compare the “actual emissions” to the “permitted emissions.” The permitted tons/year emission rates for the Wallula plant assume the plant operates 365 days per year while emitting air pollutants at their peak hourly rates (e.g., the maximum rates during facility startup). In reality, the Wallula plant will not operate continuously and its actual hourly emission rates are expected to be lower than its permitted peak hourly rates. Thus, the actual annual emissions are expected to be a fraction of its permitted annual emissions. The actual emission factors for the Wallula plant (expressed as tons of emissions per MW-hour of electricity production) are expected to be similar to, or lower than, the Coyote Springs plant.