Washington State

ENERGY FACILITY SITE EVALUATION COUNCIL

Wallula Power Project

Prevention of Significant Deterioration Permit No. EFSEC/2001-03

Notice of Construction Permit No. EFSEC/2001-03

RESPONSIVENESS SUMMARY

11-14-02

TABLE OF CONTENTS

1 Background

In August 2001, Wallula Generation, L.L.C., submitted an application for Site Certification to the Energy Facility Site Evaluation Council (EFSEC or Council) requesting the authorization to construct and operate the Wallula Power Project, a 1300 megawatt (MW) combined cycle combustion turbine facility, near the town of Wallula, Walla Walla County, Washington. The submittal included an Application for Prevention of Significant Deterioration (PSD) and Notice of Construction (NOC) permits.

Draft PSD permit No. EFSEC/2001-03 and draft NOC permit No. EFSEC/2001-03 were issued for public comment on July 9, 2002. Public notice of the comment period and of a public hearing on this matter was performed by mailing to EFSEC's interested persons list for this project, and EFSEC's minutes and agendas list on (July 8, 2002) publication of a legal notice in the Walla Walla Union Bulletin (July 12, 2002), The Tri-City Herald (July 13, 2002), and the Hermiston Herald (July 12, 2002). Copies of the draft permits and associated fact sheet were made available for public reference in local libraries (Touchet Community Library, Burbank Library, Walla Walla Public Library, Umatilla City Library), the EFSEC offices in Olympia, Ecology's Offices in Lacey, the Washington State Library (Joel M. Pritchard Branch) in Olympia, Washington, on EFSEC's web site and to any interested person upon request.

A public comment hearing was held the evening of August 8, 2002, at the Columbia Middle School, in Burbank, Washington.

The public comment period closed on August 8, 2002, at the adjournment of the public comment hearing held at the Columbia Middle School, in Burbank, Washington.

The Council received six written comment letters:

- Gregory S. Flibbert, Department of Ecology, Eastern Regional Office, dated July 11, 2002 – see responses in Section 2.1;
- Bob King, Department of Ecology, Industrial Section, dated July 12, 2002 – see responses Section 2.2;
- Michael L. Dunning, and Ronald L. Lavigne, Counsel for the Environment, dated August 8, 2002 - see responses section 2.3
- Jeff KenKnight, Environmental Protection Agency, Region 10, dated August 8, 2002 -see responses section 2.4
- Fred R. Bennet, Port of Walla Walla, dated August 8, 2002 – see response section 2.5
- Melissa Elmore, Richland, WA, dated August 8, 2002 – see response section 2.6
- Kirk Deal, Lacey, WA, dated August 8, 2002 – see response section 2.7

One citizen presented oral comment at the August 8, 2002 public hearing: Fred R. Bennet, Port of Walla Walla – see response section 2.5.

A second public comment period was noticed by mailing to EFSEC's interested persons list for this project, and EFSEC's minutes and agendas list on September 22, 2002, and publication of a legal notice in the Walla Walla Union Bulletin (September 24, 2002), the Tri-City Herald (September 24. 2002), and the Hermiston Herald (September 25, 2002). The public comment period was open through October 24, 2002.

In response to this second comment period, three comment letters were received:

- Alvin Wahl, Walla Walla, WA, dated September 28, 2002 – see responses in Section 2.8;

- Robert J. Carson, Walla Walla, WA, dated October 8, 2002, requesting to include his DEIS comments of April 3, 2002 as comments to the draft air emissions permits – see responses Section 2.9;

- Richard K. Wright, Kennewick, WA, dated October 18, 2002 – see responses Section 2.10.

In addition, this Responsiveness Summary also addresses general comment letters addressing air emissions submitted within the Council's adjudicative process, as well as air emissions related comments received at the Council's July 16, 2002 Public Witness Testimony session, held as part of the Council's adjudicative proceedings for the review of this proposal – see responses Section 2.11 through 2.15.

2 Responses to Comments

Note: Some of the comments have been paraphrased or generalized to allow direct responses to the concerns expressed. Copies of the original comment letters are available upon request from the Energy Facility Site Evaluation Council.

2.1 Gregory S. Flibbert, Department of Ecology, Eastern Regional Office

2.1.1 Comments on the draft NOC permit

Comment 1: No mention in the findings of Title IV and Title V (AOP) applicability. Will EFSEC issue the Title IV and AOP permits.

Response: Yes EFSEC will issue the Title IV and Title V permits. The Title IV (Acid Rain) permit will be prepared and issued in conjunction with the Title V (Air Operating) permit. Washington Administrative Code (WAC) Chapter 173-401-500(3)(c) requires the source to submit a Title V application within 12-months of commencing operation. The project fact sheet Section 1.1.3 and Section 1.1.4 lists the applicable rules to this project. The state and federal rules for acid rain and operating permits are listed in the above sections.

Comment 2: Findings 29: should read ambient air quality standards. There will certainly be impacts to ambient air quality, but maybe not to the standards.

Response: It was intended to state that the impacts would not be "significant". The finding has been modified to state that the ambient air quality standards will not be exceeded.

Comment 3: Approval Condition 3.1, 4.1, 5.1: Will EFSEC be implementing the permit, or will they assign it to ERO AQP. If ERO AQP will implement the permits, EFSEC shouldn't be approving test method substitutions. I think dropping "by EFSEC" would meet either contingency.

Response: Even if EFSEC contracts with Eastern Regional Office (ERO) of Ecology's Air Quality Program (AQP) to implement the permit, EFSEC would remain the responsible agency for all permit decisions.

2.2 Bob King, Department of Ecology, Industrial Section

2.2.1 Comments on the draft PSD permit

Comment 1: Item #8 of Page 2. The "major modification" should be changed to "major stationary source".

Response: The intent of Finding # 8 was to show that a new major stationary source would be experiencing an emission increase greater than the significance levels and that the project was subject to Prevention of Significant Deterioration (PSD) permitting. This finding was revised to clarify the applicability of PSD permitting to this project.

Comment 2: Item #3 of Page 6. The emissions limit for NO_X could be 2.0 ppm, not 2.5 ppm. If 2.5 ppm determined as a BACT, it should be one hour average, not three hours average. In 2001, at least seven similar power plants in California have determined their BACTs for NO_X by using Dry Low NO_X and SCR and with emission limits 2.5ppmvd @ 15% oxygen at one hour average. The names of the company include: Blythe Energy Project, Metcalf Energy Center, Contra Costa Power Plant, Morrow Bay Power Plant, Three Mountain Power Plant, Midway-Sunset, and Western Midway Sunset Power Plant.

Response: The California 2.0 parts per million (ppm) nitrogen oxides (NO_X) emission limits were permitted in ozone nonattainment areas and received Lowest Achievable Emission Rate (LAER) determinations. Only one facility, the Goldendale Energy Project, has received a Best Available Control Technology (BACT) limit of 2.0 ppm limit on NO_X emissions.

Voluntarily Elected Emission Limits vs. BACT Requirements

There are two other natural gas fired power plants in the State of Washington that were proposing a 2.0 ppm NO_X emission limit. They are the Sumas Energy 2 Generation Facility (Sumas 2) and the Satsop Combustion Turbine Phase 2

(Satsop 2) power projects. At the time this permit was prepared neither of these permits with the 2.0 ppm NO_X emission limit had begun construction[1]. The Satsop 2 project proposed the 2.0 ppm limit because of concerns with impacts to visibility in Class I areas. At 2.5 ppm, modeling results showed the visibility in the Olympic National Park would have been impaired. The proposed 2.0 ppm limit was necessary to protect the visibility but was not a BACT decision. The Sumas 2 project voluntarily proposed the 2.0 ppm NO_X emission limit.

Other Factors

Each of the four power projects proposed to reduce the emissions of NO_X by installing a piece of add-on control technology called Selective Catalytic Reduction (SCR). The basic operating principles of SCR involve the injection of ammonia (NH_3) into a catalyst bed where the NH_3 reacts with the NO_X converting it to nitrogen and water. The amount of reduction is based on several factors including temperature, size and shape of the catalyst bed, and the amount of excess NH_3 added to ensure that each molecule of NO_X reacts with a molecule of NH_3 (ammonia slip). The Wallula Power Project has a limit on its ammonia slip of 5 ppm. The size of the duct burners is directly proportional to the amount of NO_X generated. The duct burners from the Wallula Power Project are 25% larger than those of Satsop 2 and almost 100% larger than those of the Goldendale Energy Project, as shown in the table below. The applicant, Wallula Power Project, has stated that they are unable to get a vendor to guarantee the projects NO_X emissions to below 2.0 ppm without increasing the ammonia slip limitation.

Size of duct burners in various permitting decisions considered in Washington State:

Project	Project Size Megawatts (MW)	Duct Burner Size Million British Thermal Units (MMBtu)
Wallula Power Project	1,300 MW	640 MMBtu
Goldendale Energy	249 MW	323 MMBtu
Sumas 2	660 MW	466 MMBtu
Satsop 2	650 MW	513 MMBtu

In addition to the arguments above, adding additional catalyst would increase backpressure and ultimately increase the cost per megawatt of energy produced. Also, due to the increased ammonia usage unreacted NH_3 in the form of ammonium salts would increase the particulate matter finer than 10 microns in diameter (PM10) generated from this project. Since this project is located in a PM10 nonattainment area the generation of additional PM10 is not desirable.

Comment 3: Item #5 of Page 6. The concentration limit, grains per dry standard cubic feet (g/dscf), for PM emissions is averaged over one hour. Mass limit in lb/hr is used is averaged over 24 hours. Why mass limit in lb/hr is not average over one hour

[1] Since the issuance of the draft Wallula Power Project NOC and PSD permits for public comment, the Sumas Energy 2 Generation Facility PSD/NOC permit has been approved by Washington State and U.S. EPA Region 10. The review of the Satsop CT Phase II proposal was suspended in August 2002, and a permit action with respect to a 2.0 ppm NOx limit has not been taken.

as the concentration limit? What is the difference between the lb/day and lb/hr average over 24 hours? If there is no difference, then lb/day should be used for lb/hr average over 24 hours.

Response: Typically the units of compliance (e.g., pounds per hour {lb/hr}) when used as an approval condition in a permit are not given the same averaging period as the unit of compliance (e.g., 4.0 lb/hr averaged over one hour). This difference is deliberately used to account for minor fluctuations in the operation of the equipment. When averaged over 24 hours, there is a difference in lb/hr and pounds per day (lb/day) emissions on an hourly basis but not on a daily basis. The lb/day limit was not proposed because the lb/hr averaging period is considered more restrictive.

Comment 4: An opacity CEM should be considered as a BACT requirement for each PGU to ensure continuous compliance for Item #8.3.

Response: EFSEC disagrees with the comment. Opacity from combustion turbines fired by natural gas is usually very low. The unit is expected to normally operate with no visible emissions. A 5% opacity limit was placed in the permit and compliance will be monitored by source testing in accordance with Chapter 40 Code of Federal Regulations (CFR) 60 Appendix A Method 9. A Continuous Emission Monitor (CEM) was considered but rejected because the cost of the CEM did not justify continuous monitoring of a unit normally operating with no visible emissions.

Comment 5: The capacity of the auxiliary boiler should be addressed on Page 8 of Item #9.

Response: EFSEC disagrees with this comment. The capacity of the boiler is discussed in Section 1.3.3 and Section 2.4.2 of the Fact Sheet. Approval Condition 9 places a federally enforceable limitation on the hours of operation of the auxiliary boiler. The permit intentionally did not include the capacity of the boiler in this condition. Approval conditions should only be used to place operational requirements on the facility. Each operational requirement then has a corresponding method of compliance.

Comment 6: Item #12 of Page 8. How did you determine 10 %, not 5 %, as the opacity limit for the auxiliary boiler firing natural gas? All natural gas fired boilers should not have an opacity limit larger than five percent if the boilers are properly operated and maintained.

Response: The auxiliary boiler is a relatively small boiler rated at 55.3 Million British Thermal Units per Hour (MMBtu/hr). While it is true that units fired by natural gas are relatively clean burning, the units' size, as well as its use, should be considered when setting its opacity limit. Since the boiler is a relatively small auxiliary boiler, and not a base load boiler, a 10% opacity limit was selected.

Comment 7: Item #13 of Page 8. What is the relationship between 3.7 lb/hr for 24 hours average limit and 14.5 tons per year? The relationship has not been clearly addressed either in this draft permit or in the Fact Sheet.

Response: The applicant requested an annual limitation on particulate matter (PM) emissions from cooling towers. This request is reflected in the final PSD permit by the addition of Finding 13. The PM emissions will be limited to 14.5 tons per year.

Comment 8: The capacity of the emergency diesel generator should be addressed in Item #14 of Page 9.

Response: Approval Condition 14 places a federally enforceable limitation on the hours of operation of the auxiliary boiler. The permit intentionally did not include the capacity of the emergency diesel generator (1500 kW) in this condition. Approval conditions should only be used to place operational requirements on the facility. Each operational requirement would then have a corresponding method of compliance.

Comment 9: The permit would be easier to read if tables were used for the approval conditions for the emission units - PGUs, duct burners, and auxiliary boiler. The table for each unit should include the pollutant, emission limit, method for monitoring, and frequency of monitoring. The table should also include the basis of authority for the emission limit.

Response: Thank you for your comment. The requirement to produce a table containing pollutant, emission limit, method for monitoring, frequency of monitoring and the basis of authority for the emission limit is a Title V requirement not a PSD requirement.

2.2.2 Comments on the draft NOC permit

Comment 1: Item #3 of Page 4. The concentration limit, grains per dry standard cubic feet (g/dscf), for PM10 emissions is averaged over one hour. Mass limit in lb/hr is used and averaged over 24 hours. Why mass limit in lb/hr is not average over one hour as the concentration limit? What is the difference between the lb/day and lb/hr average over 24 hours? If there is no difference, then lb/day should be used for lb/hr average over 24 hours.

Response: Typically the units of compliance (e.g., pounds per hour {lb/hr}) when used as an approval condition in a permit are not given the same averaging period as the unit of compliance (e.g., 4.0 lb/hr averaged over one hour). This difference is deliberately used to account for minor fluctuations in the operation of the equipment. When averaged over 24 hours there is a difference in lb/hr and pounds per day (lb/day) emissions on an hourly basis but not on a daily basis. The lb/day limit was not proposed because the lb/hr averaging period is considered more restrictive.

Comment 2: Item #3.3 of Page 5. What is the legal authority to reduce annual emissions testing to once every three years if three years test results are all less than 75% of the limit in the Approval Condition 3.1? Why is 75%, not 50% or 25%, below the limit? Where is the 75% come from?

Response: The legal authority to select compliance determinations comes from the Washington State Clean Air Act. When EFSEC places an emission limitation in a permit approval the testing procedures for monitoring compliance are also included. Please note that credible evidence may also be used to determine if violations of the emission limit have occurred. It is common practice for vendor guarantees to over estimate the emission units' emissions at worst case scenarios. A combustion turbine in a power plant is expected to operate at a very stable load with constant emissions. EFSEC believes that continuously testing for the sake of testing is unnecessary and expensive. Approval Condition 3.3 provides an opportunity to prove that PM10 emissions from the power generating unit are lower that the permitted limit. If the power generating unit is continuously operating significantly lower (less than 75 percent) than the permitted limit three years in a row the Wallula Power Project will not be required to test as frequently. Should any source test result in emissions of greater than 75 percent of the permitted limit the source testing frequency will return to annual. EFSEC does not think it would be appropriate to use this approach if 25% or 50% were used. For example if the limit was 100 and the permit allowed the testing frequency to be reduced if the emissions were less than 75% of the permitted limit then a test resulting in 70 would qualify for the reduced testing frequency. This concept was also previously used in Washington State, in PSD-92-02 Amendment 1, a permit issued by the Department of Ecology for the Pacific Gas Transmission Compressor Station.

Comment 3: Is there an opacity limit for PM10 from each PGU stack? An opacity CEM should be considered as a BACT requirement for each PGU to ensure continuous compliance.

Response: There is no such thing as an opacity limit for PM10. A CEM is not a BACT determination. The permit was not modified.

Comment 4: Item #7 of Page 6. What is the relationship between 3.7 lb/hr for 24 hours average limit and 13.9 tons per year? The relationship has not been clearly addressed either in this draft permit or in the Fact Sheet.

Response: The applicant requested an annual limitation on PM10 emissions from cooling towers. This request is reflected in the final NOC permit by the addition of Finding 13. The PM10 emissions will be limited to 13.9 tons per year.

Comment 5: The permit would be easier to read if tables were used for the approval conditions for the emission units - PGUs, duct burners, and auxiliary boiler. The table for each unit should include the pollutant, emission limit, method for monitoring, and frequency of monitoring. The table should also include the basis of authority for the emission limit.

Response: Comment noted. The permit was not changed.

2.2.3 Comments on the Fact Sheet

Comment 1: Page 2 of 1.1.2 Federal Regulations Summary. The first sentence is not clearly addressed which requirements this permit may not contain. Does this project comply with all Acid Rain requirements under Title 40 CFR? If it is, please make it clearly addressed. If it is not, address the reason why this project does not need to comply with acid rain related requirements. The acid rain related requirements under 40 Code of Federal Regulations (CFR) include: 40 CFR Part 72, (Acid Rain) Permits Regulation; 40 CFR Part 73 (Acid Rain) Sulfur Dioxide Allowance System; 40 CFR Part 75, (Acid Rain) continuous Emission Monitoring; and 40 CFR Part 76, Acid Rain Nitrogen Oxides Emission Reduction Program.

Response: The purpose of Section 1.1.3 was to list all the federal air requirements. Section 1.1.3 states that "… after the Title V and Acid Rain permits are issued each of the following regulations will be addressed." The requirements of Acid Rain and Title V programs are beyond the scope of this permit and will be addressed in a subsequent permitting process.

Comment 2: Page 5 of 1.4 THE PSD APPLICATION**.** The first sentence "All of the information used to prepare this fact sheet and the permit is not contained in the original PSD application" is not very informative. If the application was not complete it should be noted or if information was used from other sources then they should be listed.

Response: The first sentence of Section 1.4 was intended to convey that the supplemental information submitted on September 26, 2001, September 27, 2001, October 17, 2001, December 21, 2001, December 24, 2001 January 18, 2002, February 8, 2002, and April 3, 2002 when combined with the original application contains all of the information used to prepare this permit and fact sheet. The application was found to be complete on April 9, 2002.

Comment 3: Page 5, the last sentence "…handled as a major modification…" is questionable. The Wallula Power Project is a new stationary source that should be subject to a major stationary source, 40 CFR 52.21(b)(1) and should not be subject to a major modification**,** 40 CFR 52.21(b)(2). All the "modification" on other pages of this fact sheet should also be changed to "stationary source".

Response: The commentor is correct. Fact Sheet section 1.5 PSD Applicability should have read: "The Wallula Power Project is a "major stationary source" because it is one of the 28 listed industries that becomes a "major source" when emitting more than 100 tons per year of any regulated pollutant.", and "Therefore, the Wallula Power Project is subject to PSD review and will be permitted in accordance with the requirements contained in 40 CFR 52.21."

Fact Sheet section 1.6 Attainment Area NOC Applicability should have read: "The Wallula Power Project is a "major stationary source" because it is one of the 28 listed industries that becomes a "major source" when emitting more than 100 tons per year of any regulated pollutant.", and "Therefore, the Wallula Power Project is subject to NOC review and will be permitted in accordance with the

requirements contained in WAC 173-400-110, WAC 173-400-113, and WAC 173-460-040."

Fact Sheet section 1.7 Nonattainment NOC Applicability should have read: "The Wallula Power Project is a "major stationary source" because it is one of the 28 listed industries that becomes a "major source" when emitting more than 100 tons per year of any regulated pollutant.", and ""Therefore, the Wallula Power Project is subject to nonattainment area review and will be permitted in accordance with the requirements contained in WAC 173-400-110 and WAC 173-400-112."

Comment 4: Page 8 of 1.8.4 Particulate Matter. Does the second paragraph "… that PM10 and PM emissions are equal…" means all PM are PM10?

Response: Yes, that is what was intended.

Comment 5: Page 14 of 2.3.1 Natural Gas Fired Turbines. The first paragraph discussing the existing EPA's BACT/LAER Clearinghouse for NO_X indicates that 2.0 ppm is an achievable emission limit for NO_X. Even if 4 out of 5 entries were LAER determinations, there is still one existing source using 2.0 ppm (BACT?) as the limit for NO_X. Please address the reasons why 2.0 ppm can not be used as BACT for this project.

Response: Please refer to Section 2.2.1, Comment 2, Response.

Comment 6: Page 15 of 2.3.1 Natural Gas Fired Turbines. The first paragraph of this page discusses control technology for PM10. What are the PM10 limits and the control technologies used for the other ten entries? Please address whether or not these limits were determined by BACT or by LAER.

Response: There is no need to revisit or gather additional information on the other ten BACT or LAER facilities with emissions greater than or equal to those proposed in this project. Control of PM10 emissions from natural gas fired turbines is the use of natural gas. No examples of add on control equipment used to control PM10 emissions from natural gas fired turbines were found.

Comment 7: Opacity limits have not been widely addressed in this fact sheet and the permits. An opacity limit monitored by a CEM would better meet the continuous monitoring requirement for the Air Operating permit in the future. A five percent opacity requirement is commonly used when burning natural gas. CEM should be considered as BACT/LEAR for opacity for the main emission units.

Response: A CEM is not an emission limit and is therefore not BACT or LAER.

Comment 8: Are there any MACT requirements for this project now or in the future?

Response: There are no Maximum Achievable Control Technology (MACT) requirements that apply at the time of issuing this permit. EPA is proposing to develop a rule on combustion turbines. It is beyond the scope of this permit to address this rule.

Comment 9: Based on information received by Ecology's Industrial Section, the two 11-acre storage/evaporation ponds will dry out in the summer. Some dust emissions will be emitted from these two ponds. The company should be required to estimate the dust emissions from the ponds when they are dry and determine how to reduce or eliminate dust emissions from the ponds?

Response: Emissions from the evaporative cooling ponds were estimated by the applicant in June of 2002 at the request of EFSEC. The ponds are estimated to receive effluent from the cooling towers with estimated total dissolved solids of 150,000 mg/liter. During the majority of the year it was assumed the influent and precipitation will exceed the evaporation rate. During the warm summer months the amount of standing water will decrease. If the water layer is evaporated, a crust will form over the dried area. The crust will result in a solid homogeneous surface that will act to hold in moisture and resist wind erosion. Studies have shown that if the crust is more than 0.6 centimeters thick and not easily crumbled between the fingers then the soil may be considered non-erodible. In order for wind erosion to occur, the surface crust would have to be disturbed (broken and crumbled) and even then it would have limited wind erosion potential since only a portion of the crusted surface would be susceptible to wind erosion. Normally, any surface crust that is formed would not be disturbed and the potential for PM10 emissions is minimal.

Comment 10: Page 38 of 3.0 EMISSION OFFSETTING. Particulate emissions from agricultural sources are generally larger than PM10. But particulate emissions from this gas turbine plant are mostly PM10. Did Dr. Keith Saxton address in detail the particulate size for agricultural sources? If he did, what is the ratio for PM/PM10?

Response: EFSEC is not aware of any data that supports the hypothesis that particulate emissions from agricultural sources are larger than PM10. The studies Dr. Keith Saxton performed were specifically designed to look for PM10 emissions from agricultural sources. In fact, the studies were performed on the actual soils in the Wallula area.

Comment 11: WAC 173-460 requires that BACT be applied to control toxic air pollutants (TAP) emissions from new or modified sources. Oxidation catalysts have been used for TAP control at other gas turbines. Should this project have a T-BACT determination?

Response: Yes. This project underwent a T-BACT determination for toxic air pollutants. Section 2.10 of the fact sheet explains that since this project will install an oxidation catalyst for controlling emissions of CO and VOC's, approximately 80 percent of the aldehydes will be removed. Other organic compounds will be removed but to a lesser extent.

2.3 Michael L. Dunning, and Ronald L. Lavigne, Counsel for the Environment

2.3.1 Comments on the draft PSD permit

Comment 1: EFSEC should require Wallula Generation to analyze its impacts on the Columbia Gorge National Scenic Area, Juniper Dunes and Wenaha-Tucanon Wilderness areas as part of the Site Certification Agreement.

Response: The impacts of the Wallula Power project on the Columbia River Gorge National Scenic Area (CRGNSA) were evaluated. Unfortunately, that analysis was unintentionally omitted from the project fact sheet. Table 20: Modeled Change in Extinction Coefficients, and Table 21: Sulfur and Nitrogen Deposition, should have had the following additional entries for the CRGNSA:

Table 20: Modeled Change in Extinction Coefficients

Class I area	State	Distance in kilometers	? b_{ext} (%)
CRGNSA	WA	184 -276	3.27
Significance level	-	-	5.00

Table 21: Sulfur and Nitrogen Deposition

Class I area	Nitrogen deposition (kg/ha/yr)	Sulfur deposition (kg/ha/hr)
CRGNSA	0.00037	0.00012
Significance level	0.01000	0.00600

Visibility, deposition and increment consumption analysis were performed for the CRGNSA. A brief summary of the analysis is given below.

Modeling results showed that the Wallula Power Project will cause a change in the extinction coefficient of 3.27% for the CRGNSA as shown on Table 6.1.8.9.4-3 in the application. This value is below the 5% extinction coefficient change significance level that land managers use when evaluating impacts on Class 1 Areas even though the CRGNSA is a Class 2 Area that is not required to undergo this analysis.

Nitrogen deposition from the CRGNSA is expected to increase 0.00037 kilograms per hectares per year (kg/ha/yr) in the CRGNSA for a total increase of 0.0037%. Modeling results show that the cumulative deposition of nitrogen is approximately 10.00037 kg/ha/yr. Sulfur deposition from the CRGNSA is expected to increase 0.00012 kilograms per hectares per year (kg/ha/yr) in the CRGNSA for a total increase of 0.0010%. Modeling results show that the cumulative deposition of nitrogen is approximately 12.00012 kg/ha/yr. These increases are very low and are not considered significant. Table 6.1.8.9.3-1 from the application is the source of the deposition rates.

Increment consumption is between one and four orders of magnitude below the EPA Class II significance levels. A portion of Table 6.1.8.9.1-1 from the application has been reproduced to help display the modeling results.

Class I Area	Maximum Concentration Predictions (ug/m3)					
	NO2	SO2			PM10	
	Annual	Annual	24-hr	3-hr	Annual	24-hr
EPA Proposed Class I SIL	0.10	0.10	0.20	1.00	0.20	0.30
FLM Proposed Class I SIL	0.03	0.03	0.07	0.48	0.08	0.27
Class II Area of Interest						
CRGNSA	0.00051	0.00012	0.00433	0.01356	0.00287	0.11185
EPA Class II Significance Level	1.0	1.0	5.0	25.0	1.0	5.0

As for the Juniper Dunes and Wenaha-Tucannon areas, EFSEC has not evaluated any such Class 2 Areas for visibility in the past nor have we been requested to do so by any federal land manager.

2.3.2 Comments on the draft NOC permit

Comment 1: CFE request that it be allowed to review the data required in Approval Condition 11. CFE also recommends that EPA review the data required by Approval Condition 11.

Response: Since the offsets will need to be incorporated into the NOC permit a public comment period will be held when that permit is reopened. The Council for the Environment (CFE) will have the opportunity to review the data during the public comment period.

Comment 2: There is no provision that the offset land will be inspected or otherwise monitored to ensure that the land continues to be a real offset.

Response: Approval Condition 10.2 requires each parcel of land used for offsetting to be inspected twice per year. This Approval Condition also requires that after each inspection the Wallula Power Project submit a written statement to EFSEC regarding the status of the offset lands.

Comment 3: The NOC should ensure that Wallula Generation undertakes the re-seeding project in a manner that ensures no additional PM10 is generated.

Response: Approval Condition 17 requires the review and approval of a dust control plan prior to construction. EFSEC will require that a statement regarding minimizing PM10 emissions during re-seeding be placed in the dust control plan.

2.4 Jeff KenKnight, U.S. Environmental Protection Agency (EPA), Region 10

2.4.1 Comments on the draft NOC permit

Comment 1: Pursuant to WAC 173-400-112(2)(c), a proposed source in a nonattainment area must satisfy the requirements for reasonable further progress (RFP) established by the SIP.

Response: EFSEC has requested the Washington State Department of Ecology (Ecology) to respond to this comment because Ecology is responsible for Wallula nonattainment area State Implementation Plan issues. Ecology's response to Mr. KenKnight is included in this Responsiveness Summary as Attachment 1.

Comment 2: The administrative record does not demonstrate that current emissions from the targeted offset properties (Wake property and project site) are real.

Response: The applicant has satisfied EFSEC that emission estimates from agricultural practices such as dry land wheat farming are real and were based upon an on-site studies performed by Dr. Keith Saxton. The administrative record for this project includes copies of the studies.

Comment 3: Should WPP receive and use the credits from these reductions to offset its impacts on the area's ability to achieve attainment, then the State needs to ensure that emissions from the targeted offset properties, as well as from surrounding properties, are reflected in the State's attainment demonstration for the area.

Response: EFSEC is not responsible for attainment demonstrations in the Wallula nonattainment area. EFSEC has forwarded a copy of the EPA comments to Ecology and Ecology has agreed to respond to EPA under a separate cover letter. Ecology's response to Mr. KenKnight is included in this Responsiveness Summary as Attachment 1.

Comment 4: WPP has not demonstrated that in the event the Wake property is converted from wheat farming to grasslands, the displaced Wake family would not buy existing grassland property in the nonattainment area for purposes of maintaining its wheat production capabilities.

Response: Nothing in state or federal law allows for, or requires, EFSEC to place restrictions on the Wake family's future farming practices.

Comment 5: Pursuant to WAC 173-400-112(2)(iii), emission offsets must be federally enforceable for the source providing the offset by the time the order of approval for the new source is effective.

Response: EFSEC is issuing these permits under the authority of its rule Chapter 463-39 Washington Administrative Code (WAC). The rule was effective May 3, 1992 and is State Implementation Plan (SIP) approved. The rule adopts by reference the February 19, 1991 version of Chapter 173-400 WAC. The 1991 version of

Chapter 173-400 WAC is silent on when the offsets must be federally enforceable. The September 20, 1993 version of Chapter 173-400 WAC specifically states in WAC 173-400-112(5)(c) the following:

> "If the offsets are provided by another source, the reductions in emissions from that source must be federally enforceable by the time the new or modified source commences operation. The new source may not commence operation before the date such reductions are actually achieved."

The September 2, 2001 version of WAC 73-400-112(2)(e)(iii) requires that offsets from another source be in place at the time the order of approval is effective. It is important to note that the September 2, 2001 version of Chapter 173-400 WAC is not yet SIP approved.

The draft NOC permit required the offset land be purchased and the deed restrictions be recorded prior to beginning construction (see Approval Condition 10). On August 8, 2002 Wallula Generation entered into a real estate contract for Section 35, township 7 North, Range 30 East (640 acres of land). EFSEC will modify the existing NOC prior to beginning operation to incorporate the emissions offsets.

EFSEC believes that the proposed approach satisfies the requirements of the SIP approved program while maintaining the flexibility for the source

Comment 6: Nothing in the proposed NOC ensures that the Wake property is converted from wheat farming to grasslands. Nor is there any provision that establishes an enforceable emission reduction from any other source. It is Region 10's understanding that the WPP has not yet entered into contracts to take control of the Wake property. Neither the offset property nor accompanying management practices are identified in the proposed NOC. Permit conditions prescribing such details are necessary to make the proposed offsets federally enforceable. Lacking such clarity in the proposed NOC, its issuance appears inconsistent with EFSEC's rule requirements.

Response: On August 8, 2002 Wallula Generation entered into a real estate contract for Section 35, township 7 North, Range 30 East (640 acres of land). The current NOC requires the source to purchase the property, prior to beginning construction. The offsets will become federally enforceable when the NOC is modified prior to beginning operation.

Comment 7: In summary, Region 10 is concerned that the WPP administrative record on PM10 offsets may not adequately support a permit decision, and the proposed permit does not satisfy all the requirements of the SIP. In order to better demonstrate that the agricultural offsets are creditable, enforceable, and satisfy RFP, Region 10 recommends EFSEC supplement the administrative record and revise the proposed NOC consistent with the comments provided here.

Response: Please see the discussion on SIP approved programs in the response to Comment 5 above. EFSEC intends to supplement the administrative record and revise the NOC prior to the project beginning operation.

2.5 Fred R. Bennet, Port of Walla Walla

Comment 1: Testimony of Fred Bennett, August 8, 2002:

> Fred Bennett, Port Commissioner. The Port of Walla Walla is anxious to see this project to fruition. The proponents have done a fine job of preparing responses to all of the issues of which the Port is aware. In particular, we, the Port, have taken keynote in the ecological air emissions concerns and of the fixes proposed in reference to those concerns. We feel that the Company has done an adequate and sufficient job of those fixes, and we appreciate your interest, and we also appreciate the committee being here this evening to hear our replies. Thank you.

Response: Thank you for your comment.

Comment 2: Written comment submitted August 8, 2002

> The Port of Walla Walla is anxious to see this project to fruition. The proponents have done a fine job of preparing appropriate responses to all of the issues of which the Port is aware. In particular, we, the Port, have taken keen note of the ecological air emission concerns and of the "fixes" proposed in reference to these concerns. We find their responses to adequately cover the control of the projects emissions as projected, monitored and eventually engineered to protect the air environment and its mitigating contingencies.

Response: Thank you for your comment.

2.6 Melissa Elmore, Richland, WA

Comment 1: I and some people I have talked to are concerned about the combined effect of the two plants in Umatilla County, plus one being built there, plus one in the permitting process there, plus this one, plus Boardman. Need to address the cumulative impacts.

Response: The modeled emissions indicate that any contribution from the Wallula Power Project would be so small that an evaluation of cumulative impacts in Umatilla County is not warranted. The federal land manager has proposed and EFSEC has followed guidance on performing Class II Area impact analysis. When modeled impacts are below the Significant Impact Levels (SILs) no further analysis is required. These SILs are used as a conservative screening tool for determining the need for further analysis. Based upon this analysis any impacts in Umatilla County can not be attributed to the Wallula Power Project.

Comment 2: Also, the Umatilla County (OR) Planning Dept. wishes they would have been notified about this.

Response: The following Oregon state and local organizations received notification of the draft permits being issued for comment, and their availability for review:

- City of Hermiston (incl. Councilors, Manager and Planner)
- City of Umatilla (incl. Planner)
- Sate of Oregon Department of Environmental Quality – Air Quality Headquarters
- State of Oregon Energy Facility Siting Council
- Port of Umatilla
- Umatilla County (Commissioners)
- Other State of Oregon agencies not directly involved with air quality review.

In addition, EFSEC published a legal notice on July 12, 2002 and September 24, 2002 regarding issuance of the permits for public comment and notice of the August 8, 2002 Public hearing, and a display ad on August 8, 2002, regarding the public hearing in the Hermiston Herald.

2.7 Kirk Deal, Lacey, WA

Comment: All criteria pollutants evaluated are found to be below their applicable Significant Impact Levels.

Response: Thank you for your comment.

2.8 Alvin Wahl, Walla Walla, WA

Comment 1: Mr. Wahl commented that he was convinced the facility could easily meet all the clean air requirements needed to allow this plant to operate.

Response: Thank you for your comment.

Comment 2: Mr. Wahl voiced concerns over the impact on natural gas prices that a large consumer such as this facility would have.

Response: The response to the issue of impacts to natural gas prices is not within the requirements of NSR (attainment and nonattainment area) or PSD review. However, the Council has considered and addressed such impacts. The Final Environmental Impact Statement (EIS) issued on August 16, 2002, potential impacts to residential natural gas prices in Section 3.17, page 3-82.

Comment 2: Mr. Wahl asked why a coal-fired plant couldn't be proposed instead.

Response: The choice of type of generation facility is up to the project proponent, and as a regulatory agency, the Council must consider the application that was put before it.

Comment 3: Mr. Wahl asked why additional power was needed.

Response: The review of the issue of need for power is not within the requirements of NSR (attainment and nonattainment area) or PSD permitting requirements. However, the Council has considered and addressed this issue in both the Draft and Final EIS, issued on February 22, and August 16, 2002, respectively.

2.9 Robert J. Carson, Walla Walla, WA

Note: Since Mr. Carson's letter was received as a comment to the Draft EIS, his concerns were already answered in the Final EIS, issued by the Council on August 16, 2002.

Comment 1: The current issue of the Journal of the American Medical Association contains an article that correlates "normal" air pollution with adverse health effects.

Response: Worst-case air pollutant concentrations resulting form the proposed facility were modeled and compared to EPA's national ambient air quality standards (NAAQS). The NAAQS are health-based standards set by EPA to provide an adequate margin of safety to protect human health and welfare.

Comment 2: Mr. Carson comments that the DEIS seems to fairly address the problems related to the project being proposed in a nonattainment area for PM10, and that there should be concern over the cumulative impact of other fossil fuel plans either operating or being proposed and constructed in the area.

Response: The applicant is required to offset 100% of the project's PM10 emissions (the pollutant for which the Wallula area is in nonattainment). The applicant has offered to offset 110% of the project's PM10 emissions. Using meteorological data from Wallula, the project's modeled air quality impacts for other pollutants are less than EPA's Significant Impact Levels (SILs). The federal land manager has proposed and EFSEC has followed guidance on performing Class II Area impact analysis. When modeled impacts are below the SILs no further analysis is required. These SILs are used as a conservative screening tool for determining the need for further analysis. Therefore, it is unlikely the power plant's emissions (when combined with emissions from other local sources) would significantly increase air pollutant concentrations.

Comment 3: Mr. Carson comments that the proposed facility would be required to offset PM10 emissions released, and indicates that there could be "significant unavoidable adverse impacts" from the PM10 particulates emitted by the proposed facility, when combined with particulates emitted by other gas-fired power plants and industrial facilities.

Response: The proposed location of the Wallula Power Project has been designated as a serious nonattainment area for particulate matter finer than 10 microns in diameter (PM10). Major stationary sources located in nonattainment areas are required to offset all emissions above the significance levels. The Council's conclusions that the agricultural offsets met the requirements for nonattainment offsets were based on studies performed by Dr. Keith Saxton of Washington State University that have shown that the conversion of crop land will directly reduce emissions of PM10 in the vicinity of the proposed project. The quantity of proposed offsets for this project exceeds the project's emissions. In fact the proposed offsets are equal to 110% of the PM10 emissions from the proposed project. The overall effect is a 10% improvement of air quality in the nonattainment area.

Comment 4: Mr. Carson comments that the facility will emit a number of toxic air pollutants in excess of Washington State's "small quantity emission rates". The emissions of

these carcinogens are reported to be in concentrations "less than acceptable source impact levels". The specific threshold concentration of carcinogens at which health hazards begin is unknown.

Response: The "acceptable source impact level" air toxics concentration limits were established by the Washington Department of Ecology based on carcinogenic and non-carcinogenic risk factors to be protective of human health. The worst-case air toxics impacts modeled for the power plant correspond to lifetime cancer risks of less than one per million and were assessed to be below the acceptable source impact levels.

Comment 5: Mr. Carson comments that due to the facility's emissions of water vapor (6.9 million gallons per day), the occurrence of winter fog could increase. Mr. Carson asks whether the pollutants make the smog even more dangerous to citizen's health during inversions.

Response: The final EIS responded to several comments regarding the possibility of increased occurrences of winter fog. Attachment 2 to this Responsiveness Summary excerpts the Final EIS section addressing such impacts.

As described in Section 3.2 of the Final EIS, water vapor emissions from the power plant exhaust stacks and cooling towers are unlikely to significantly impact regional humidity. The water emissions from the plant would be a small fraction of the naturally occurring water vapor that blows through the area, so it is unlikely the plant would cause regional fog.

Emissions from the project would have no discernable effect on air temperature beyond the facility boundary. It is highly unlikely the emissions would affect the occurrence or duration of natural temperature inversions in the Wallula area.

The applicant's predictive air quality modeling was done using meteorological data for Wallula. It predicted ground-level air pollutant concentrations well below EPA's health based ambient air quality standards, even during winter months with relatively limited atmospheric dispersion conditions.

Comment 6: Mr. Carson addresses the issue of this facility's contribution to global warming and greenhouse gas emissions.

Response: The review of impacts associated with greenhouse gas emissions and global warming is not within the requirements of NSR (attainment and nonattainment area) or PSD permitting. However, the Council has considered and addressed this issue in both the Draft and Final EIS, issued on February 22, and August 16, 2002, respectively.

Comment 7: Mr. Carson raises a number of issues related to need for power, benefits of tax revenue to local government, and conservation and renewable energy.

Response: The review of such issues is not within the requirements of NSR (attainment and nonattainment area) or PSD permitting requirements. However, the Council has considered and addressed these issues in both the Draft and Final EIS, issued in February 22, 2002 and August 16, 2002, respectively.

2.10 Richard, K, Wright, Kennewick, WA

Comment 1: It was stated in the preliminary determination that modeling shows no significant impact resulting from pollutant deposition on soils and vegetation in many Class 1 areas. Most of the areas commented on are hundreds of miles from the proposed site. It is not a surprise that there would be no significant impact. Why was there no mention of the Wenaha Wilderness Area? Why was there no mention of the Blue Mountains? What will be the impact on these valuable resources?

Response: This project underwent all the appropriate ambient air quality analysis. The Wenaha Wilderness and the Blue Mountains have been designated Class II for the purpose of air quality analysis. Class II areas are not required to under go a visibility analysis, nor has EFSEC been requested by a federal land manager to perform such an analysis.

Comment 2: In the preliminary determination it also states, "the site of the proposed modification is in an area designated as "serious" nonattainment with respect to the National Ambient Air Quality Standards (NAAQS) for PM10 emissions. It seems irresponsible to site a plant that emits 303 tons of PM10 per year in an area of serious nonattainment. It will make the air pollution problems worse.

Response: The proposed location of the Wallula Power Project has been designated as a serious nonattainment area for particulate matter finer than 10 microns in diameter (PM10). Major stationary sources located in nonattainment areas are required to offset all emissions above the significance levels. The Council's conclusions that the agricultural offsets met the requirements for nonattainment offsets were based on studies performed by Dr. Keith Saxton of Washington State University that have shown that the conversion of crop land will directly reduce emissions of PM10 in the vicinity of the proposed project. The quantity of proposed offsets for this project exceeds the project's emissions. In fact the proposed offsets are equal to 110% of the PM10 emissions from the proposed project. The overall effect is a 10% improvement of air quality in the nonattainment area.

Comment 3: The proposed solutions to this issue seem more like a maneuver to address the letter of the law than to actually address a serious air pollution problem that these permits will only allow to get worse. It seems that if it is determined an air quality problem exists, then we should work on solving the problem instead of construction and operation of a plant that we know will make it worse.

Even without this plant, we have air quality problems. Today, after a few calm days, the view of the Horse Heaven Hills is partially blocked by haze. It is impossible to see the Blue Mountains.

I was born in this area and remember the days when the haze did not exist like it does today. I've been fishing and hiking the Blue Mountains for over 40 years. The mountain valleys are some of the most beautiful in the state. If the environment is truly an issue here, additional information is needed. This is a very poor location for this plant and the permits should not be issued.

Response: The United States Environmental Protection Agency (EPA) has designated the Wallula area as a "Serious Nonattainment" area for PM10. The area has been designated as in "Attainment" for all other criteria pollutants. In response to this designation the state is developing a plan for returning the Wallula area to attainment status. That plan will allow for the expansion of existing industrial sources, and construction of new sources, in the Wallula area provided emissions of PM10 are offset. The Wallula Power Project is being proposed with state of the art air pollution control devices. While the proposed plant will have emissions of air pollutants, the control of these emissions meets or exceeds all state and federal requirements.

2.11 Jim Van Pelt, Waitsburg, WA

Comment 1: A comparison of emissions from the Coyote Springs Generation Facility to the Wallula Power Plant shows that while the Wallula Power Plants is 5.7 times larger, emissions of PM and VOC are 6.3 and 10 times larger respectively.

Facility	Wallula	Coyote Springs
Generation Capacity	1300 MW	230 MW
VOC's	267.4 tons/year	26 tons/year
PM	302.8 tons/year	48 tons/year

Both facilities have General Electric 7000-series gas turbines in their designs with about the same megawatt rating (155 MW at Coyote Springs vs. 167 MW at Wallula).

Response: The Council reviewed the Coyote Springs Title V permit in order to prepare a response to this comment. Emissions from the Coyote Springs facility are actually higher than those from the proposed Wallula Power Plant. The Coyote springs emissions were based upon a Best Available Control Technology (BACT) review that is 6 years old. Numerous reasons exist for this difference.

For particulate matter (PM) the Coyote Springs emissions were based on filterable emissions only. Approximately two years ago, the State of Washington began counting PM emissions differently. We now require filterable as well as condensable PM emissions be quantified, modeled, and tested for. Condensable PM emissions are emissions that form after they exit the exhaust stack. Condensable emissions are not included in the Coyote Springs facility plant wide emission.

For volatile organic compounds (VOC), several of the arguments listed above also apply to this pollutant. The one addition is that the Coyote Springs facility was modified after it began normal operation to allow for duct firing. The VOC emission limits listed in the Coyote Springs permit do not reflect the duct firing process. Using AP-42 emission factors a recalculation of the VOC emissions including the duct firing resulted in almost identical emissions between the two facilities.

Comment 2: The Wallula plant has not been designed with the latest and best technology.

Response: As explained in detail in the fact sheet issued with the draft NOC and PSD permits, the proposal underwent the required review to determine that the pollution control technology met the most recent requirements for Best Available Control Technology (BACT), and Lowest Achievable Emission Rate (LAER). The Council determined that the controls proposed were BACT for all criteria pollutants except for PM10, and met LAER requirements for PM10 emissions. In addition the controls for toxic pollutants met the requirements of Toxics-BACT.

2.12 Sandra Simmons, Walla Walla, WA

Comment 1: The DEIS predicts that only an area of 15 kilometers will be affected.

Response: Ms. Simmons misunderstood the language in the DEIS. The DEIS stated that assessment of local impacts from the Wallula Power Project, as required by PSD regulation, covered an area with a radius of approximately 15 km from the project site. The results of this assessment concluded that the criteria pollutant emissions form this facility were all below national and state ambient air quality standards in the assessed area. Since areas further than the 15 km assessment radius benefit from greater pollutant dispersion from this source, criteria pollutant concentrations would be even lower in those areas than within the 15 km assessment radius, and would pose no threat to the ambient air quality standards.

Comment 2: Ms. Simmons states that emissions from the facility will reach the city of Walla Walla and will contribute to the fog and inversion problem that they experience every winter.

Response: The final EIS responded to several comments regarding the possibility of increased occurrences of winter fog. Attachment 2 to this Responsiveness Summary excerpts the Final EIS section addressing such impacts. As described in Section 3.2 of the Final EIS, water vapor emissions from the power plant exhaust stacks and cooling towers are unlikely to significantly impact regional humidity. The water emissions from the plant would be a small fraction of the naturally occurring water vapor that blows through the area, so it is unlikely the plant would cause regional fog.

Emissions from the project would have no discernable effect on air temperature beyond the facility boundary. It is highly unlikely the emissions would affect the occurrence or duration of natural temperature inversions in the Wallula area.

Comment 3: Ms. Simmons comments that the conversion of cropland would do nothing to mitigate the finer particulate matter that would be emitted by the power plant. The commenter stated that it was this finer material that causes health problems.

Response: The proposed location of the Wallula Power Project has been designated as a serious nonattainment area for particulate matter finer than 10 microns in diameter (PM10). Major stationary sources located in nonattainment areas are required to offset all emissions above the significance levels. The Council's conclusions that the agricultural offsets met the requirements for nonattainment

offsets were based on studies performed by Dr. Keith Saxton of Washington State University that have shown that the conversion of crop land will directly reduce emissions of PM10 in the vicinity of the proposed project. The quantity of proposed offsets for this project exceeds the project's emissions. In fact the proposed offsets are equal to 110% of the PM10 emissions from the proposed project. The overall effect is a 10% improvement of air quality in the nonattainment area.

2.13 John and Sue Rogers, College Place, WA

Comment 1: I (John) am a Family Practice physician who cares for people who have various medical problems, including asthma, chronic obstructive pulmonary disease, allergies, cancer, and other environmentally induced or modified diseases. I am amazed that the people of the Walla Walla Valley have a significantly higher rates of these illnesses than the average person in America. I have been doing some research on the Web (mostly at EPA.gov and ScoreCard.com) concerning the pollution of our county and state. Again, I am surprised that Walla Walla County is ranked the third most polluted county in Washington. The Walla Walla County is an EPA non-compliance area with Boise Cascade's emissions and the releases of the Dodd-Iowa Beef plant being the most abundant point sources, but not the only contributors to this problem.

Walla Walla County's toxic releases to the environment are rated at the 75th percentile of all counties of the nation for dirtiest/worst counties. (A ranking of 5th percentile is excellent.) Air releases of recognized carcinogens are ranked at the 75th percentile nationally. While the water releases in our county of recognized carcinogens are ranked at the 85th percentile. We have the unfortunate distinction of being ranked at the 90th percentile in the nation for air and water releases of toxins suspected to cause 1) embryologic/developmental problems, 2) gastrointestinal/liver problems, 3) neurological problems, 4) respiratory problems, 5) skin and sense organ problems.

As of the latest evaluations, the people of Walla Walla County are ranked above national average for pollution-related health problems. More than 55,000 people of this county are subjected to approximately 100 per cent increased risk of cancer due to the pollution problem than are the average citizens of the USA. The toxic relapses, weighted by potential environmental health impact, place the people of Walla Walla County at the nation's 75th percentile for cancer risk, and at the 75th percentile for non-cancer health risk.

Response: Thank you for your comment.

Comment 2: Now it appears that for monetary gain, the people of our valley will be subjected to even more pollution and ultimately more illness, suffering, and premature death. The green-house effect from the excess carbon dioxide, the acid rain, and other toxins will change our agriculture and the forests' flora and fauna in adverse ways we may not even be aware of currently. Apparently, there has been no environmental impact study done on the Class I areas which are closest to and down wind from the proposed generating plant. On more than one occasion, we have stood on a ridge in the Blue Mountains and watched a brown cloud of pollution move up the Walla Walla River valley, through the gap at Nine

Mile Hill, and fill the valley to the top of the hills south of Milton-Freewater, OR and then move on north through Walla Walla.

Response: The review of the Prevention of Significant Deterioration (PSD) application is not required to perform a cumulative impact analysis. However visibility, deposition, and increment consumption were evaluated at the Class I areas and all standards were met. In addition, cumulative impacts of the project were addressed in both a Draft and Final EIS, issued on February 22, and August 16, 2002, respectively. Furthermore, the Bonneville Power Administration (BPA) conducted a regional air quality study to evaluate the potential air quality impacts from 45 natural gas-fired combustion turbines proposed for construction in BPA's service area[2]. The Regional Air Quality Modeling Study suggested the proposed power projects, including the Wallula Power Project, would probably not significantly contribute to sulfur and nitrogen deposition in Class I areas, the Class I PSD Increments, regional Class II PSD Increments or regional concentrations in excess of the National Ambient Air Quality Standards. The model simulations did suggest the proliferation of proposed projects in the Service Area could potentially degrade visibility within Class I and Scenic Areas should all the projects become operational. In a second phase of this study[3], BPA examined potential cumulative regional haze impacts on a case-by-case basis for each new project. Since BPA considered it would be unlikely all the proposed power plants will be built, the second phase analysis investigated the cumulative impacts from a Baseline Source Group consisting of projects that have all ready been issued a Record of Decision (ROD) by BPA, other recently permitted power projects not requesting access to BPA's transmission grid but within the Service Area, and the Wallula Power Project being considered for a ROD.

2.14 Kris King, Walla Walla, WA

Comment 1: Natural gas plants such as the one presently planned for Wallula are cleaner than other sources of power such as coal, but are still far from being considered clean. Natural gas fired plants emit nitrogen oxides, sulfur dioxides, carbon monoxide, carbon dioxide and unburned hydrocarbons, as well as particulate matter. If the Wallula power Project is approved and constructed, all these pollutants will be added to an area that already has serious air quality problems. Based on monitoring by Washington State Department of Ecology, the Wallula area has been classified as a serious nonattainment area for particulate matter under the federal Clean Air Act. The Washington State Department of Ecology now has to implement an 18 month planning process to figure out a way for the Wallula area to comply with the Clean Air Act. How can a new source of pollution, which includes particulate matter even be considered before existing air quality issues are resolved?

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[2] Phase I Results Regional Air Quality Modeling Study, Bonneville Power Administration, August 1, 2001. The *Phase I Results* of the Regional Air Quality Modeling Study can be found at http://www.efw.bpa.gov/cgi-bin/PSA/NEPA/SUMMARIES/air2.

[3] Newport Wallula Power Project Contribution to Regional Haze, Bonneville Power Administration, December 10, 2001. This report can be found at: http://www.efw.bpa.gov/cgi-bin/PSA/NEPA/SUMMARIES/air2.

Response: The proposed location of the Wallula Power Project has been designated as a serious nonattainment area for particulate matter finer than 10 microns in diameter. The designation of an area as "nonattainment" with respect to one or more criteria pollutants under the federal Clean Air Act does not preclude the siting of new sources within that area. Major stationary sources located in nonattainment areas are required to offset all emissions above the significance levels. The Council's conclusions that the agricultural offsets met the requirements for nonattainment offsets were based on studies performed by Dr. Keith Saxton of Washington State University that have shown that the conversion of crop land will directly reduce emissions of PM10 in the vicinity of the proposed project. The quantity of proposed offsets for this project exceeds the project's emissions. In fact the proposed offsets are equal to 110% of the PM10 emissions from the proposed project. The overall effect is a 10% improvement of air quality in the nonattainment area.

Comment 2: The Walla Walla Valley in which I live, experiences frequent air inversions during the fall and winter months which traps pollutants near the surface.

Response: The final EIS responded to several comments regarding the possibility of increased occurrences of winter fog. Attachment 2 to this Responsiveness Summary excerpts the Final EIS section addressing such impacts. As described in Section 3.2 of the Final EIS, water vapor emissions from the power plant exhaust stacks and cooling towers are unlikely to significantly impact regional humidity. The water emissions from the plant would be a small fraction of the naturally occurring water vapor that blows through the area, so it is unlikely the plant would cause regional fog.

Emissions from the project would have no discernable effect on air temperature beyond the facility boundary. It is highly unlikely the emissions would affect the occurrence or duration of natural temperature inversions in the Wallula area.

Comment 3: Natural gas fired power plants also contribute heavily to haze which greatly reduces visibility. If this power plant is built, viewing the Blue Mountains from Walla Walla may become nearly as difficult as seeing Mt. Rainier from Puget Sound has become.

Response: This project underwent all the appropriate ambient air quality analysis. The Blue Mountains have been designated Class II for the purpose of air quality analysis. Class II areas are not required to under go a visibility analysis.

2.15 Oral comments received on July 17, 2002 Public Witness testimony Session[4]

Shirley Muse: Why is the Wenaha-Tucannon Wilderness left out of Class I assessments?

[4] The July 17, 2002 Public Witness Testimony session was part of the adjudicative process designed to hear comments of a general nature about the proposal from the public. Since several commentors addressed air issues, and the hearing was held during the first public comment period on the draft NOC and PSD permits, we are responding to air related issues here. Several members of the public also addressed inadequacies of the Draft EIS. It should be noted that the Draft EIS was open to public comment from February 22, through April 11, 2002. A Final EIS was issued on August 16, and included a response to comments submitted during the Draft EIS comment period.

Response: This project underwent all the appropriate ambient air quality analysis. The Wenaha-Tucannon Wilderness has been designated Class II for the purpose of air quality analysis. Class II areas are not required to under go a visibility analysis, nor has EFSEC been requested by a federal land manager to perform such an analysis.

Jim Graham: Mr. Graham commented that the proposed facility will be putting a lot of heat into the air which will affect the fog in this valley. Sometimes the valley is fogged in for a week, and the existing plant has been blamed for increasing fog on this area.

Response: The final EIS responded to several comments regarding the possibility of increased occurrences of winter fog. Attachment 2 to this Responsiveness Summary excerpts the Final EIS section addressing such impacts. As described in Section 3.2 of the Final EIS, water vapor emissions from the power plant exhaust stacks and cooling towers are unlikely to significantly impact regional humidity. The water emissions from the plant would be a small fraction of the naturally occurring water vapor that blows through the area, so it is unlikely the plant would cause regional fog.

Tom Osborn (1): Mr. Osborn commented that the Draft EIS must address the cumulative impacts of planned and current combustion turbines that are upwind of Walla Walla.

Response: The review of the Prevention of Significant Deterioration (PSD) application is not required to perform a cumulative impact analysis. However visibility, deposition, and increment consumption were evaluated at the Class I areas and all standards were met. In addition, cumulative impacts of the project were addressed in both a Draft and Final EIS, issued on February 22, and August 16, 2002, respectively. Furthermore, the Bonneville Power Administration (BPA) conducted a regional air quality study to evaluate the potential air quality impacts from 45 natural gas-fired combustion turbines proposed for construction in BPA's service area[2] (Phase I study) as well as a phase II study[3] where BPA examined potential cumulative regional haze impacts on a case-by-case basis for each new project.

Tom Osborn (2): Mr. Osborn requested that the EIS address effects on agricultural crops in this valley. Impacts from emissions for the closest agricultural neighbor were addressed, specifically regarding cherry and alfalfa crops. Mr. Osborn also addressed the impact of the facility on local fog and temperature inversions.

Response: The Draft and Final EIS addressed possible impacts to agricultural corps in the vicinity of the project, and the influence of the facility on local fog and temperature inversions. An excerpt of the final EIS text on these issues is included as Attachment 2 to this responsiveness summary.

Barlow Corkrum: How do the agricultural offsets being proposed meet the requirements for offsetting the particulate matter emissions form the proposed facility.

Response: The proposed location of the Wallula Power Project has been designated as a serious nonattainment area for particulate matter finer than 10 microns in

diameter. Major stationary sources located in nonattainment areas are required to offset all emissions above the significance levels. The Council's conclusions that the agricultural offsets met the requirements for nonattainment offsets were based on studies performed by Dr. Keith Saxton of Washington State University that have shown that the conversion of crop land will directly reduce emissions of PM10 in the vicinity of the proposed project. The quantity of proposed offsets for this project exceeds the project's emissions. In fact the proposed offsets are equal to 110% of the PM10 emissions from the proposed project. The overall effect is a 10% improvement of air quality in the nonattainment area.

Randy Buchanan: Mr. Buchanan raised concerns about impacts to agricultural crops, in particular cherries and alfalfa.

Response: The Draft and Final EIS addressed possible impacts to agricultural corps in the vicinity of the project. An excerpt of the final EIS text on this issue is included as Attachment 2 to this responsiveness summary.

Christopher Howard, Blue Mountain Audubon Society (1): Why were the Wenaha-Tucannon and Juniper Dunes Wilderness areas not considered in the assessment of impacts to Class I areas?

Response: This project underwent all the appropriate ambient air quality analysis. The Wenaha-Tucannon and Juniper Dunes Wilderness areas have been designated Class II for the purpose of air quality analysis. Class II areas are not required to undergo a visibility analysis, nor has EFSEC been requested by a federal land manager to perform such an analysis.

Christopher Howard (2): Mr. Howard requested that one or more permanently functioning toxic air pollutant monitoring stations be installed to assure the modeling of toxic air pollutant emissions was indeed in line with reality. Air quality modeling needs to be considered a mandatory part of this project for the health of the citizens and other species in the environment.

Response: Emissions of Toxic Air Pollutants (TAPs) were modeled based upon emission factors developed for natural gas combustion. All modeling results indicated that TAP emissions are below the acceptable source impact levels set forth in Chapter 173-460 Washington Administrative code. When emissions are below those levels there is no need to do additional monitoring. The Council will be requiring periodic source testing for volatile organic compounds and ammonia to verify the emission factors used in the models.

Christopher Howard (3): Mr. Howard indicates that air quality modeling needs to be considered a mandatory part of this project for the health of the citizens and other species in the environment.

Response: The applicant performed all air emissions modeling required under NOC (attainment and nonattainment area) and PSD review. The modeling was required to allow the regulatory agency to assess the impacts of the air emissions of this proposal.

Christopher Howard (4): Assessment of criteria and toxic air pollutant was limited to a 15 km radius around the proposed site. Areas further away (Towns of Touchet and Lowdin, and Walla Walla) should be included, and EFSEC should assess impacts within at least 50 miles.

Response: The federal land manager has proposed, and EFSEC has followed, guidance on performing Class II Area impact analysis. When modeled impacts are below the Significant Impact Levels (SILs) no further analysis is required. These SILs are used as a conservative screening tool for determining the need for further analysis. As required by PSD regulation, the modeling area for ambient air quality impacts to Class II areas covered an area with a radius of approximately 15 km from the project site. The results of this assessment concluded that the criteria pollutant emissions form this facility were all below national and state ambient air quality standards in the assessed area. Since areas further than the 15 km assessment radius benefit from greater pollutant dispersion from this source, criteria pollutant concentrations would be even lower in those areas than within the 15 km assessment radius, and would pose no threat to the ambient air quality standards.

Christopher Howard (5): Mr. Howard believes that agricultural offsets should not be allowed for the proposed PM10 emissions.

Response: As explained in the fact sheet, and in the responses to comments submitted by Jeff KenKnight, US EPA Region 10, (see section 2.4 above), the agricultural offsets proposed by the applicant met all of the regulatory criteria to be acceptable. The Council's conclusions that the agricultural offsets met the requirements for nonattainment offsets were based on studies performed by Dr. Keith Saxton of Washington State University that have shown that the conversion of crop land will directly reduce emissions of PM10 in the vicinity of the proposed project. The quantity of proposed offsets for this project exceeds the project's emissions. In fact the proposed offsets are equal to 110% of the PM10 emissions from the proposed project. The overall effect is a 10% improvement of air quality in the nonattainment area.

Beth Call: The project would further pollute the air. Air pollution is already a problem in the area, and contributes to global warming.

Response: It is correct that the project would introduce additional pollutants into the air. However, the project has undergone all modeling and analysis required for NSR (attainment and nonattainment area) and PSD permitting, and the applicant has demonstrated that all regulatory requirements are met for discharges of these pollutants in a manner that is safe for both the environment and human beings.

3 Permit Changes

3.1 Changes from the draft PSD permit to the final PSD permit

Finding 7:

7. The Wallula Power Project is a new major stationary source that will emit more than 100 tons of a regulated pollutant per year and is therefore subject to PSD permitting.

Finding 8 (new Finding):

8. The Wallula Power Project will be located in an area that is designated as "attainment" for the purposes of PSD permitting for the following pollutants: nitrogen oxides (NOX), volatile organic compounds (VOC), particulate matter (PM), sulfuric acid (H2SO4) mist, and carbon monoxide (CO).

Finding 9:

9. This project is subject to PSD permitting because emissions of ~~nitrogen oxides (~~NOx~~)~~ , ~~volatile organic compounds (~~VOC~~)~~, ~~particulate~~ matter (PM~~)~~, ~~sulfuric acid (~~H2SO4~~)~~ mist, and ~~carbon monoxide (~~CO~~)~~ have "significant" emission increases that are greater than 40, 40, 25, 7, and 100 tons per year respectively.

Finding 13 (new Finding):

13. Wallula Generation, LLC, has elected to take a federally enforceable limitation on emissions of PM10 from the cooling towers.

Findings 8 through 35 in the draft permit have been re-numbered to reflect the addition of findings 8 and 13.

3.2 Changes from the draft NOC permit to the final NOC permit

Finding 13 (new Finding):

13. Wallula Generation, LLC, has elected to take a federally enforceable limitation on emissions of PM10 from the cooling towers.

Findings 13 through 32 in the draft permit have been re-numbered to 14 through 33 to reflect the addition of finding 13.

Finding 30:

30. The project will have no significant impact on ambient air quality and no ambient standards will be exceeded.