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ENERGY FACILITY SITE
EVALUATION COUNCIL

Energy Facility Site Evaluation Council

In the Matter of

Comments by REBOUND on Draft
Environmental Impact Statement

Application No. 2001-01

Wallula Generation, LLC

Wallula Power Project

REBOUND files these comments on the Draft Environmental Impact Statement in the matter of EFSEC Application No. 2001-1, also known as the Wallula Power Project.

Identification of Commentor

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Statement of Commentor's Interests

REBOUND works to promote, protect and support the interests of its members, chiefly centering on environmental issues surrounding large construction projects. REBOUND's members are the individual members of construction craft trade unions in Washington State and

REBOUND COMMENTS ON DEIS, EFSEC APPLICATION NO. 2001-01, WALLULA POWER PROJECT

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1 north Idaho, including the Tri-Cities and Walla Walla areas. REBOUND has a long history of
2 working to promote environmentally responsible construction projects and has been involved
3 with a variety of power plant projects around Washington State and in Idaho. REBOUND has
4 consistently commented, lobbied, supported and argued for the construction of facilities in ways
5 that minimize environmental impacts on local communities. Specifically, REBOUND has
6 commented on the Chehalis Power Project, Sumas Energy 2, Avista Mint Farm Generation
7 Project, Benton REA power project, Fredericksen Power II, Calpine Tahoma Energy Center,
8 Longview Energy Development project, Goldendale Energy Project and others. In all its
9 comments and other efforts, REBOUND has promoted lower air emissions, less water use, safer
10 handling of hazardous chemicals and additional environmental mitigation.

11 REBOUND has many members who live, work and recreate in the cities of Kennewick,
12 Richland, Pasco, Burbank, Walla Walla and surrounding areas. Our members hunt, fish, boat
13 camp and enjoy the outdoors like everyone else. Our members rely on continued, steady
14 economic growth to provide jobs and a stable income. Our members, like all residents of the
15 area, rely on clean air for purposes of daily living, working and recreation.

16 REBOUND and its members are particularly concerned about the impacts of the project
17 on the air quality non-attainment status in the Wallula area. Non-attainment status can be a
18 limiting factor in economic development and growth. REBOUND's members rely on steady
19 economic development and growth to make a living.

20
21 **Comments on Substantive Environmental Issues**

22 We wish to focus on two specific substantive environmental issues:

1 *Water*

2 We contend that the water right applications necessary to construct and operate the power
3 plant could have a detrimental impact on the Columbia river, Walla Walla river, surrounding
4 streams, wetlands, wells and water systems and our members' interests therein. 15-2

5 Specifically, our concerns are centered on the onsite, deep well water right that is being
6 sought for the project. The water right in question may or may not be valid based upon historic
7 use and the water right transfer is being handled in a way that could shut out the public and treats 15-3
8 the applicant in a way that is not available to other water right applicants in the region. The
9 current water right process may not allow the public any opportunity to comment on or appeal
10 the proposed water right transfer.

11 The well in question may be connected to the Columbia river and could potentially
12 negatively effect flows in the Columbia and in a nearby National Wildlife Refuge. The well in
13 question has not been used in recent years and putting it to actual use could negatively effect the 15-4
14 aquifer it draws from and the surrounding water rights which draw from the same aquifer. The
15 actual use of the well in recent years is an important fact to be cognizant of: water rights that
16 have not been used for the past five years are not valid water rights.

17 *Air*

18 We contend that the Wallula Power project as currently designed could have a negative
19 impact on air quality in the Wallula/Tri-Cities/Walla Walla area. The Wallula area is currently
20 classified by the Environmental Protection Agency(EPA) as being in 'Serious' non-attainment 15-5
21 for Particulate Matter Less than 10 Microns in Diameter (PM10). Particulate matter is a known
22 contributor to human health problems such as asthma and other diseases. We assert that our

1 members could potentially be harmed by breathing air made dirtier by emissions from the
2 Wallula Power Project. Our concerns are focused specifically on emissions of PM10, Oxides of
3 Nitrogen (Nox), Ammonia (NH3) and Volatile Organic Compounds (VOC).

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contd

4 The Wallula Power Project would be located directly north of the Boise Cascade pulp
5 and paper mill, directly west of the IBP feedlot/slaughtering facility and directly east of a
6 fertilizer plant in Finley. Beyond these industrial facilities the project is surrounded by large
7 areas that are extensively farmed, particularly to the east and northeast. It is our concern that
8 emissions from the Wallula Power Project, when combined with emissions from the nearby
9 industrial and agricultural facilities and farms could have negative and harmful impacts on air
10 quality in the region.

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11 This matter is of particular interest because the United States Department of Agriculture
12 Research Service is currently engaged in a long-term study of the air emissions associated with
13 agricultural activities such as pesticide spraying, feedlots, slaughterhouses and other agricultural
14 processes. The USDA Agricultural Research Service (ARS) is investigating five specific areas
15 relating to air quality and agricultural operations: 1.) Particulate emissions; 2.) Ammonia and
16 Ammonium emissions; 3.) Malodorous Compounds; 4.) Ozone Impacts; 5.) Pesticides and other
17 Synthetic Organic Chemicals.¹

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18 The site-specific location of the Wallula Power Project, directly across the street from a
19 feedlot/slaughterhouse, downwind of a fertilizer plant and upwind of a large agricultural area
20 presents unique and potentially harmful effects from the combination of emission sources. The

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¹<http://www.nps.ars.usda.gov/programs/programs.htm?NPNUMBER=203>

1 study areas identified by the USDA ARS dovetail almost completely with the emission impacts
2 of the Wallula Power Project.

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contd

3 We are concerned about potentially significant negative impacts from the combination of
4 particulate matter from the Wallula Power Project and particulate matter from nearby
5 agricultural and industrial operations. We are concerned about potentially significant negative
6 impacts from the combination of ammonia emissions from the Wallula Power Project and
7 ammonia emissions from nearby agricultural and industrial operations. We are concerned about
8 potentially significant negative impacts from emissions of Nox, VOC, PM10 and NH3 from the
9 Wallula Power Project and airborne pesticide residues from agricultural operations. This is
10 merely a brief summary of our concerns and should not be viewed as a complete or final list of
11 concerns.

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12 We also wish to raise issues of concern surrounding the applicant's PM Emission
13 Mitigation Plan. Our understanding of the plan is that it involves the purchase and/or lease of
14 farmland that is to be left uncultivated, thus reducing PM emissions. It is our belief that
15 additional mitigation measures are possible and feasible and should be required in addition to
16 merely letting the land remain uncultivated.

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17 The California Air Resources Board conducted a study in 1997/1998 titled: *Revegetation*
18 *Techniques and Fugitive Dust in the Western Mojave Desert.*² The study found that wind fences
19 placed perpendicular to the prevailing winds were capable of reducing windblown dust
20 downwind of the fences by 90%. Additionally, furrowing of soil perpendicular to prevailing

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²*Revegetation Techniques and Fugitive Dust in the Western Mojave Desert*, Final Report, Contract No. 94-337, California Air Resources Board, May 1998.

1 winds also reduced emissions of fugitive dust.

2 While the Mojave Desert is different than the high desert of the Tri-Cities region, it is
3 possible that additional measures may significantly reduce fugitive dust and PM emissions from
4 any land left uncultivated by the project applicant. Given the non-attainment status of the
5 region, the applicant should be required to examine the efficacy of and benefits of wind fences
6 and soil furrowing as part of its plan to reduce PM emissions.

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7 Furthermore, it is possible that the applicant has underestimated total PM10 emissions by
8 not including secondary particulate matter formation in its calculations. Should secondary PM
9 formation not be included in the calculation of total emissions it is possible that the PM10
10 Emission Mitigation Plan is inadequate. The applicant should be required to include and
11 delineate primary and secondary PM emissions in its application.

15-16

12 The Environmental Protection Agency recently won a Federal Appeals Court case over
13 its ability to enforce new air quality regulations governing PM2.5 and Ozone. The United States
14 Supreme Court had overturned a lower court decision and remanded the case to the Federal
15 Appeals Court for settlement. No legal questions remain to be decided.³ The applicant should
16 therefore demonstrate in its application that it can comply with the coming rules or how it will
17 comply with the new rules.

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18 In order to determine compliance with the new rules and in the general vein of improving
19 data collection on criteria pollutants, the applicant's particulate matter emission calculations
20 should distinguish between PM10 and PM2.5. PM2.5 particles can collect in the respiratory

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³“U.S. Court Uphold Pollution Standards,” Washington Post, March 27, 2002. Page A1.

1 system and are connected to numerous health effects including the aggravation of respiratory
2 illnesses.⁴ A study of PM pollution in California's San Joaquin valley, published in 1998, found
3 that in the winter, PM2.5 made up between 70% and 80% of total PM measured. The dominant
4 component of the PM2.5 was ammonium nitrate, which constituted 46% of the PM2.5.⁵ This is
5 of particular concern since ammonium nitrate contributes to soil deposition and could combine
6 with other source emitters nearby to dramatically raise total ammonium nitrate emissions and
7 deposition.

15-18
contd

8 **Conclusion**

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10 REBOUND requests that additional studies be required of the applicant in the areas of
11 the on-site irrigation well, its possible continuity with surrounding waters and its historic use
12 patterns.

15-19

13 REBOUND requests that additional studies be required of the applicant in the areas of air
14 quality, specifically:

- 15 1.) The composition and quantity of facility-emitted PM emissions so as to improve
16 scientific understanding of the chemical composition of PM and such things as
17 PM precursors, how PM combines with other known air pollutants and other
18 areas where additional study is needed;

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⁴*Trends in Air Quality*, American Lung Association Best Practices and Programs Services, August 2000.

⁵*Conceptual Model of Particulate Matter Pollution in the California San Joaquin Valley*, Betty Pun and Christian Seigneur, Atmospheric and Environmental Research, San Ramon, CA, 8 September, 1998. California EPA document number CP045-1-98

Responses to Comment Submission 15, REBOUND Comments

- 15-1. Thank you for your comment.
- 15-2. Detailed hydrogeologic studies have been conducted to evaluate the potential for impacts on the groundwater and surface water in the project and well vicinities. Based on these studies, there would be no perceptible effect on the Columbia River, a net increase in discharge to the Walla Walla River, and no impact on wetlands and streams. The groundwater extraction and resultant impact from use of the shallow wells that are now used by the Boise Cascade fiber farm would be reduced, so the availability of groundwater to any wells in that area would not be reduced and may actually be increased.
- Extraction from the deep well or wells on site could result in an adverse impact to the well at Iowa Beef Processors. The applicant would provide groundwater monitoring of that well to evaluate whether it was being adversely affected, and would provide a remedy in the event that its intended use was compromised by groundwater use for the power plant. The text of the Draft EIS has been clarified to address this issue; see Section 3.3 in Chapter 3 of this Final EIS.
- 15-3. The applicant has applied for a transfer of an existing water right from the Port of Walla Walla. The Washington Department of Ecology has evaluated that application, prepared Reports of Examination for the proposed transfer of water rights, and concluded that the transfer would not enhance the original water rights and would not have a detrimental effect on other groundwater rights or the public welfare. This EIS process has provided an opportunity for the public to comment on the proposed water right transfer, as indicated in the response to comment 19-26.
- The Reports of Examination for each water right that would be transferred are included in Appendix C of this Final EIS. The
- Draft EIS discussion of public and private water supplies has been updated; see Section 3.3 in Chapter 3 of this Final EIS.
- 15-4. An aquifer test was performed in the deep on-site well in part to evaluate whether the proposed groundwater withdrawal would have any effect on flows in the Columbia River. The results indicated that the aquifer is not in direct hydraulic continuity with either of the two overlying aquifers, the uppermost of which is directly connected to the Columbia River. Similarly, water levels measured in the aquifer are well below the level of the river, indicating that there is no efficient connection between the river and the aquifer from which the well water would be withdrawn. As discussed in response to comment 15-3, the Washington Department of Ecology has reviewed the water right, found it to be in good standing, and has not questioned the validity of the use of this water for the proposed plant site.
- 15-5. As described in Section 3.2, state and federal regulations require the applicant to install LAER emission controls and to offset at least 100% of their PM10 emissions. These requirements are designed to protect human health by preserving the health-based National Ambient Air Quality Standards. The applicant has offered to offset 110% of the PM10 emissions generated by the proposed generation facility.
- 15-6. Thank you for your comment. The PSD permit and NOC evaluated Wallula emissions when combined with background conditions.
- 15-7. Section 3.2 of the Draft EIS has been updated to describe potential formation of secondary ammonium nitrate aerosol caused by chemical reaction of the power plant plume with regional agricultural emissions. Please see Chapter 3 of this Final EIS for updated text.

- 15-8. Please see response to comment 15-7.
- 15-9. Please see response to comment 15-7.
- 15-10. Please see response to comment 15-7.
- 15-11. Please see response to comment 15-7.
- 15-12. Section 3.2 has been updated to provide more detail on the applicant's proposed PM10 offset program. Please see Chapter 3 of this Final EIS for updated text.
- 15-13. Thank you for your comment.
- 15-14. Thank you for your comment.
- 15-15. Thank you for your comment.
- 15-16. State and federal regulations for nonattainment area emission offsets do not require the applicant to offset secondary particulate.
- 15-17. The applicant's predictive modeling presented in Section 3.2 of the EIS shows the worst-case PM10 concentrations to be lower than EPA's new limits for PM2.5 as specified under the National Ambient Air Quality Standards.
- 15-18. Section 3.2 has been updated to address potential formation of secondary ammonium nitrate particulate. Please see Chapter 3 of this Final EIS for updated text.
- 15-19. A detailed hydrogeologic study has been performed to evaluate the groundwater in the vicinity of the on-site well and its possible hydraulic continuity with surrounding wells and water bodies. This information is presented in detail in the Application for Site Certification (Wallula Generation 2001).
- 15-20. Please see response to comment 15-7.
- 15-21. Thank you for your comment.
- 15-22. Thank you for your comment.