

STATE OF FLORIDA
DIVISION OF ADMINISTRATIVE HEARINGS

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BUREAU OF AIR REGULATION

CLARENCE ROWE)
)
 Petitioner,)
)
 vs.)
)
 OLEANDER POWER PROJECT, L.P., and)
 STATE OF FLORIDA DEPARTMENT)
 OF ENVIRONMENTAL PROTECTION,)
)
 Respondents.)
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DOAH CASE NO. 99-2581
OGC CASE NO. 99-0932

**DEPARTMENT OF ENVIRONMENTAL PROTECTION'S
PROPOSED RECOMMENDED ORDER**

Pursuant to notice, the Division of Administrative Hearings, by its duly designated Administrative Law Judge, Daniel Manry, held a formal hearing in the above-styled case on August 30, 1999, in Viera, Florida.

APPEARANCES

For Petitioner, Clarence Rowe:

Clarence Rowe (*pro se*)
418 Pennsylvania Avenue
Rockledge, Florida 32955

For Respondent, Oleander Power Project, L.P.:

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For Respondent, the Florida Department of Environmental Protection:

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STATEMENT OF THE ISSUE

The issue to be determined in this case is whether the Florida Department of Environmental Protection ("DEP") should issue a Prevention of Significant Deterioration air construction permit ("PSD") authorizing Oleander Power Project, L.P. ("Oleander") to construct five combustion turbines and two fuel oil storage tanks on a site located in Brevard County, Florida.

PRELIMINARY STATEMENT

On November 24, 1998, Oleander filed an application with DEP for a Prevention of Significant Deterioration air construction permit--i.e., a permit authorizing the construction of certain stationary sources of airborne emissions. On March 26, 1999, DEP issued a "Public Notice of Intent to Issue an Air Construction Permit" ("Public Notice") to Oleander. The Public Notice was attached to DEP's draft "Air Construction Permit" (Permit No. PSD-FL-258; DEP File No. 0090180-001-AC) (the "Draft Permit"), "Technical Evaluation and Preliminary Determination", and "Best Available Control Technology Determination" for the Project. Clarence Rowe ("Mr. Rowe") subsequently filed a petition for a formal administrative hearing concerning DEP's Draft Permit and proposed agency action.

On August 30, 1999, a formal administrative hearing was conducted pursuant to Sections 120.569 and 120.57(1), Florida Statutes ("F.S.") At the administrative hearing, Oleander called four expert witnesses: Richard Zwolak (accepted as an expert regarding land use planning, land use compatibility analyses, and socioeconomic and environmental impact assessments); Ken Kosky (accepted as an expert regarding air pollution control and best available control technology); Bob McCann (accepted as an expert in meteorology, air quality dispersion modeling and air pollution impact assessments); and Al Linero (accepted as an expert in air pollution control issues, the DEP regulations that govern new sources of air pollution, and air permitting). Oleander introduced exhibits 1-3, 5-17, 19-32 and 34-46 into evidence. T 131-32, 175-76, 216-18, 237.

The DEP did not call any witnesses or introduce any exhibits.

Mr. Rowe called no expert witnesses and one non-expert witness, Mrs. Juanita Barton. Mr. Rowe introduced exhibits 1, 3 and 7 into evidence. T 180, 252, 261.

At the administrative hearing, the public was given an opportunity to provide oral and written comments about the Project. Five individuals availed themselves of this opportunity. The individuals were not sworn or placed under oath.

In response to various allegations by Mr. Rowe, Oleander attempted to introduce evidence at the final hearing concerning "environmental justice" issues. DEP objected to the introduction of this evidence on the ground that DEP does not have jurisdiction to consider environmental justice concerns. T 68, 116. DEP's objection was sustained, but Oleander was allowed to proffer its evidence concerning environmental justice. T 117.

The transcript of the administrative hearing was filed with the Division of Administrative Hearings on September 7, 1999, and the parties were allowed 10 days to submit proposed recommended orders. Oleander and DEP timely filed proposed recommended orders on September 17, 1999.

Based on all of the evidence of record, the following findings of fact are determined:

FINDINGS OF FACT

Description of the Proposed Project

1. Oleander intends to build and operate an electrical power plant (the "Project") in Brevard County, Florida. T 96. Oleander's Project involves the construction and operation of five 190 megawatt ("MW") combustion turbines that will be used to generate electricity. Exs. 1, 11; T 96, 98. The Project also includes the construction and use of two fuel oil storage tanks, two water storage tanks, an administrative building, a stormwater management system, and other associated and ancillary facilities. Exs. 1, 11; T 106-07.

2. Oleander's Project will be a "peaking" power plant. Exs. 1, 11; T 96. A peaking power plant operates only during times of peak demand for electricity (e.g., during hot or cold weather). T 96-97. Since the Project will be a peaking power plant, Oleander only requested authorization from DEP to operate the Project's combustion turbines for a maximum of 3,390 hours per year (approximately 39% of the total hours in a year). T 97; Ex. 1 at 2-1; Ex 11, Draft Permit at 7. During the remainder of the year, the Project's combustion turbines will not operate and will not have any airborne emissions. T 163. As a practical matter, peaking power plants in Florida historically have operated less than 800 hours per year. T 98.

3. Oleander's combustion turbines will be the most advanced turbines used in Florida for peaking service. T 162. Oleander's turbines will be more efficient, in terms of emissions and producing power, than the turbines currently used at other peaking plants in Florida. T 162, 166.

4. The primary fuel for the power plant will be natural gas, which is the cleanest burning fossil fuel. T 162-63. If natural gas is unavailable, low sulfur distillate fuel oil (a maximum of 0.05 percent sulfur) may be used as back-up fuel, but only for the equivalent of 1,000 hours per year of full load operations. T 162; Ex. 9; Ex. 11, Draft Permit at 6. Oleander has economic incentives to minimize the use of oil; oil is 35% to 50% more expensive to use than natural gas. T 173; Ex. 6 at 3, 4.

The Site

5. The Project will be built on a site ("Site") that is located northeast of the intersection of Interstate 95 ("I-95") and State Road ("SR") 520 in unincorporated Brevard County. T 101; Ex. 36, 46. The Site contains approximately 38 acres of land. Ex. 1 at 2-1.

The DEP Review Process

6. On November 24, 1998, Oleander filed an application with DEP for a Prevention of Significant Deterioration air construction permit for the construction of the five combustion turbines and two fuel oil storage tanks that Oleander intends to build at the Site. Exs. 1, 11. DEP reviewed Oleander's application, it requested and received additional information concerning the Project, and it independently verified the impacts assessments contained in the application. T 229-31; Exs. 3, 5, 6, 9, 10. On March 3, 1999, DEP held a public meeting in Brevard County to receive public comments regarding Oleander's application. T 129; Ex. 11 at TE-11. On March

26, 1999, DEP issued its Public Notice of DEP's intent to grant the Draft Permit to Oleander. Ex. 11. On April 8, 1999, DEP's Public Notice was published in Florida Today. Ex. 12. On May 13, 1999, DEP held a second public meeting in Brevard County to receive public comments concerning Oleander's application. T 231-33. Public comments also were presented at the final administrative hearing on August 30, 1999. T 29-65. Having considered Oleander's application, the public comments, and other relevant information, DEP recommends issuance of the air construction permit for the Project. T 231-33, 236.

Best Available Control Technology

7. The Project was evaluated by Oleander and DEP in accordance with the requirements established for DEP's PSD program. T 169-70, 233-34; Ex. 11 at TE-5. As part of the PSD review process, a determination of the Best Available Control Technology ("BACT") was made. T 233-34; Ex. 11, Appendix BD. A BACT determination involves a case-by-case analysis of those air pollution control technologies that are feasible and can achieve the maximum emissions reductions. T 168-69. The BACT determination also requires an analysis of the costs, environmental impacts, and energy impacts associated with the use of each one of the proposed control technologies. T 168-69; Ex. 11 at BD-2. A BACT determination results in the establishment of an emission limit for each pollutant of concern. T 170. In this case, DEP determined the appropriate BACT limits for the Project's emissions of carbon monoxide ("CO"), oxides of nitrogen ("NOx"), sulfur dioxide ("SO₂"), sulfuric acid mist ("SAM"), volatile organic compounds ("VOC's"), particulate matter ("PM") and particulate matter less than ten microns in

diameter ("PM₁₀"). (PM and PM₁₀ are referred to herein as "PM/PM₁₀"). T 170; Ex. 30; Ex. 11, Appendix BD.

8. The DEP determined that BACT for NO_x is an emission limit of 9 parts per million ("ppm") (corrected to 15% oxygen) when the Project is operating on natural gas. T 170; Ex. 11, Appendix BD at BD-11. This emission limit is based on the use of dry low NO_x ("DLN") combustion technology, which is incorporated into the design of the combustion turbines that will be used for the Project. T 170. DEP's proposed NO_x emission limit of 9 ppm is the lowest emission limit in Florida for simple cycle peaking power plants and is setting the standard for similar facilities throughout the United States. T 166, 171-72, 233-34; Ex. 6 at 4; Ex. 11, Appendix BD at BD-11, BD-12.

9. The DEP determined that BACT for NO_x is an emission limit of 42 ppm (corrected to 15% oxygen) if the Project operates on fuel oil. Ex. 11, Appendix BD at BD-11. This emission limit is based on the use of DLN and wet injection technology. Ex. 11, Appendix BD at BD-5; T 170. Wet injection technology involves the injection of either water or steam directly into the combustor to lower the flame temperature and thereby reduce the formation of NO_x. Ex. 11, Appendix BD at BD-5.

10. The U.S. Fish and Wildlife Service ("USFWS") provided comments to DEP concerning the Project. Exs. 4, 13. In their comments, the USFWS suggested that the NO_x emission limit should be 25 ppm when the Project is operating with fuel oil. Exs. 4, 13. However, the USFWS' suggestion was based on the USFWS' misreading of the provisions of other PSD permits. T 171, 177-78; Ex. 13. When read correctly, those permits establish the

same NOx emission limit when firing fuel oil that DEP established in this case--42 ppm. T 171, 177-78; Ex. 13.

11. In its BACT determination, DEP considered whether a selective catalytic reduction ("SCR") system should be used to reduce the Project's NOx emissions. Ex. 11, Appendix BD at BD-7. SCR is an add-on NOx control system in which ammonia is injected into the exhaust gases of a combustion turbine. Ex. 11, Appendix BD at BD-7. The exhaust gases are then exposed to a catalyst where the ammonia and the NOx react to form nitrogen and water. Id.

12. The DEP determined that SCR does not represent BACT in this case and should not be required for the Project. Ex. 11, Appendix BD at BD-12. The use of SCR would impose excessive costs on the Project, adversely impact the Project's energy efficiency, and cause increased emissions of particulate matter and ammonia. Ex. 10 at 4-16; Ex. 11 at BD-12; see Ex. 30.

13. The DEP determined that BACT for CO and VOC's is based on the Project's use of an advanced combustor design (i.e., DLN technology) and good combustion practices. T 170; Ex. 11, Appendix BD at BD-11. The use of an oxidation catalyst for CO removal was not required by DEP as BACT because an oxidation catalyst is not cost effective for the Project. Ex. 11, Appendix BD at BD-13; see Ex. 30.

14. The DEP determined that BACT for PM/PM₁₀, SO₂ and SAM is based on good combustion practices and the use of clean low sulfur fuels. T 170; Ex. 11, Appendix BD at BD-13.

15. All of the DEP's BACT emission limits are set forth in the Draft Permit. Ex. 11

Impacts on Air Quality

16. The U.S. Environmental Protection Agency ("EPA") has adopted primary and secondary Ambient Air Quality Standards ("AAQS"). T 188. The primary standards are designed to protect the public health, with an adequate margin of safety. T 189. The AAQS protect the young, the old, and those with respiratory diseases. T 189. Secondary standards are designed to protect the public welfare from any known or anticipated adverse effects of air pollution. T 161, 189; Ex. 1 at 3-1. The standards are reviewed every five years by scientists and physicians in light of the most recent scientific studies and data. T 189. DEP also has adopted AAQS. T 189-90.

17. In Brevard County, the existing levels of air pollution are less than the applicable AAQS. T 191. Brevard County is an attainment area--the existing air quality is better than the levels allowed under the AAQS. T 191; Ex. 11 at TE-5. 18. Oleander analyzed the Project's potential impacts on ambient air quality, in compliance with the applicable DEP requirements for such analyses. T 191-92. Oleander's analyses were based on conservative assumptions that were intended to over-estimate the Project's impacts. T 198; Ex. 10 at 2. For example, Oleander assumed that the Project would operate continuously throughout the entire year, even though the Project's annual operations will be limited to a maximum of 3,390 hours. T 198. In addition, Oleander assumed that the Project would use fuel oil for the entire year, even though the Project will be limited to firing fuel oil for a maximum of 1,000 hours per year. T 198.

19. Even with these conservative assumptions, Oleander's analyses demonstrate that the Project's maximum impacts on ambient air quality will be 0.6% or less of the applicable

AAQS for each criteria pollutant. T 197-98; Exs. 23, 25, 27. Since the AAQS are designed to protect public health and welfare, and the Project's impacts will be far less than the applicable AAQS, Oleander's analyses demonstrate that there will be a wide margin of safety for public health and welfare in this case. T 199.

20. The Project's maximum potential impacts are less than the EPA "significant impact" levels. T 183, 194-95; Ex. 11 at TE-10; Ex. 20. Consequently, the Project's impacts are deemed insignificant from a regulatory perspective, and more detailed analyses of the Project's impacts on ambient air quality are not required under the DEP's PSD review process. T 194-95; Ex. 11 at TE-8, TE-10.

21. The Project is located in an area that has been categorized in the PSD program as a "Class II" area. T 191. The Project's impacts on ambient air concentrations will be below all applicable PSD standards ("increments") for this Class II area. Ex. 20. The nearest PSD Class I area is the Chassahowitzka Wildlife Refuge ("Chassahowitzka"), which is approximately 180 kilometers from the Site. Ex. 1 at 7-1. An analysis of the Project's impacts on Chassahowitzka was not required because the Site is more than 150 kilometers away from Chassahowitzka. Ex. 1 at 6-1, 7-1. Given the great distance to Chassahowitzka, the Project's impacts on this PSD Class I area are expected to be insignificant. Ex. 1 at 7-1.

22. Although it was not required, Oleander evaluated the Project's impacts together with the impacts of the major sources of air pollution in the area (i.e., the Florida Power & Light Cape Canaveral Plant, the Orlando Utilities Commission's Indian River Plant and the Orlando Utilities Commission's Stanton Energy Center.) T 199, 205; Ex. 21. Oleander's analysis shows

that when all of these sources are considered together, the maximum impact from their combined emissions will be 50% or less of the applicable AAQS. T 205-06; Ex. 21. The Project itself will not have any measurable effect on the ambient conditions resulting from the operation of all these sources. T 206.

Ambient Air Quality Monitoring

23. Mr. Rowe suggested that Oleander should be required to install an ambient air monitor and measure ambient air quality in Brevard County prior to commencing construction of the Project. However, under DEP's PSD program, Oleander is not required to perform any ambient air quality monitoring for any pollutant prior to commencing construction of the Project because the Project's air quality impacts will be less than the applicable DEP "de minimis" levels. T 206-07; Ex. 1 at 6-7; Ex. 10 at 3-21; Ex. 11 at TE-8, TE-9; see DEP Rule 62-212.400(3)(e)1, F.A.C.

24. Mr. Rowe contends that Oleander should be required to monitor ambient ozone levels near the Site before commencing construction. Under the DEP's PSD program, preconstruction monitoring for ozone is not required unless a facility will have VOC emissions equal to or greater than 100 tons per year. Ex. 10; see DEP Rule 62-212.400(3)(e) and Table 212.400-3. In this case, the Project's maximum potential VOC emissions will be only 64 tons per year and, therefore, preconstruction monitoring for ozone is not required. T 222; Ex. 10; Ex. 11 at TE-11; Ex. 13. Accordingly, DEP's Draft Permit does not require Oleander to install any ozone monitors. See Ex. 11; see also Ex. 11 at TE-11, TE-12.

25. Requiring Oleander to conduct preconstruction or post-construction ozone monitoring is unnecessary and unjustified. Exs. 10, 13; T 208, 220. DEP already has installed two ambient air quality monitors in Brevard County to measure ozone concentrations. T 207. DEP also has ambient air quality monitors for ozone in Volusia, Seminole, Orange, Osceola, and St. Lucie Counties. T 207, 208. The ambient air quality data from these monitors demonstrate that the ozone concentrations in Brevard County are below the applicable AAQS. T 208. Further, the data demonstrate that ozone is a regional issue--i.e., the ozone levels in the region tend to rise and fall at the same time and to the same degree. T 207-08, 220; Ex. 10. An additional ozone monitoring station in Brevard County would provide no meaningful benefits when assessing whether Brevard County is meeting the AAQS for ozone. T 208, 220; Ex. 13.

26. Even if Oleander installed a new monitor, the Project's impacts on ozone and other ambient air quality parameters are so small that the impacts could not be measured with the monitor. T 206-07; Ex. 11 at TE-12. However, it would cost Oleander \$75,000 to \$100,000 per year to install and operate an ozone monitor. T 209.

27. In light of the foregoing facts, Oleander should not be required to install any new ambient air quality monitors. Ex. 11 at TE-11, TE-12; T 208, 220.

Impacts on Water Quality from Airborne Emissions

28. Mr. Rowe alleged that the Project's air emissions may adversely affect the water quality in the St. Johns River and the Indian River. However, Mr. Rowe did not introduce any competent, credible evidence to demonstrate that the Project's airborne emissions would adversely affect water quality in any water body.

29. DEP's PSD review process normally does not involve an evaluation of the impacts of a facility's air emissions on water quality. T 213, 235-36. Nonetheless, Oleander performed an assessment of this issue and demonstrated that the emissions from the Project will not cause any significant impact on water quality in water bodies in Brevard County. T 210, 213.

30. Oleander's assessment showed that there will be minimal, if any, "fallout" of particles into nearby waters. T 210. The maximum amount of nitrogen that could be deposited annually as a result of airborne NO_x emissions from the Project is 0.0007 grams/square meter (g/m²). T 210. By comparison, the current nitrogen deposition rate from other sources in the area is 0.4 g/m². T 211. Thus, the Project's impact on nitrogen deposition in the area will be only a very small fraction of the deposition that is occurring already. T 210-12.

Compliance with Air Standards

31. The airborne emissions from the Project will not cause or significantly contribute to a violation of any ambient air quality standard or PSD increment. T 193-94, 199, 234; Ex. 11 at TE-8. The Project complies with all applicable DEP air quality requirements, including the applicable policies, rules and statutes. T 215, 234; Ex. 11 at TE-6.

32. Oleander has provided reasonable assurance that the Project will be able to comply with all of the conditions and emissions limitations contained in the Draft Permit. T 174, 215, 237. Oleander will use General Electric ("GE") Frame 7FA combustion turbines. Ex. 10. GE has demonstrated that these turbines are capable of complying with the emission limits and requirements in the Draft Permit. T 174; Ex. 11 at BD-6, BD-7, BD-11. Oleander will be able to hire staff or train their own staff to operate the Project in compliance with the DEP permit limits.

T 174. Oleander's parent company already has a training program for its plant operators. T 174. Oleander also has operated similar projects successfully. T 146.

Public Notice and Participation

33. Oleander and DEP provided various notices to the public concerning the Project. T 128-32; Exs. 7, 8, 12, 17, 31. DEP held two public meetings to receive public comments about the Project. T 231. DEP and Oleander published notice of both meetings. Exs. 7, 8, 12, 17, 31. Oleander also held neighborhood meetings and provided other opportunities for the public to comment about the Project. T 128; Ex. 31. These actions by DEP and Oleander have satisfied all of the applicable DEP requirements concerning public notice and public participation in the PSD review process. T 130, 232, 238-41.

CONCLUSIONS OF LAW

34. The Division of Administrative Hearings has jurisdiction over the subject matter of and the parties to this action. This proceeding was conducted in accordance with Sections 120.569 and 120.57(1), F.S. The parties were duly noticed for the hearing.

35. The issue for determination in this case is whether DEP should issue a Prevention of Significant Deterioration air construction permit to Oleander for the Project.

36. As the applicant in this proceeding, Oleander has the ultimate burden of persuasion. Florida Department of Transportation v. J.W.C. Co., Inc., 396 So. 2d 778, 787 (Fla. 1st DCA 1981). Oleander also has the initial burden of presenting prima facie evidence that Oleander has complied with all of the applicable DEP standards and rules. See id., at 788. To prevail, Mr. Rowe must present "contrary evidence of equivalent quality" proving the truth of the

allegations in his petition. Id. at 789. Mr. Rowe cannot merely rely on speculative concerns about potential or possible adverse environmental effects. See Chipola Basin Protective Group, Inc. v. Florida Chapter Sierra Club, 11 F.A.L.R. 467, 481 (DER Final Order, May 29, 1988); J.T. McCormick, 12 F.A.L.R. 960, 971 (DER Final Order, January 22, 1990); Altman v. Kavanaugh, 15 F.A.L.R. 1588, 1576 (DOAH Recommended Order, adopted in pertinent part by DER Final Order, November 1, 1991).

37. In this case, Oleander presented competent substantial evidence at the final hearing to demonstrate that: (a) DEP properly determined BACT for the Project; (b) the airborne emissions from the Project will not cause or significantly contribute to a violation of any ambient air quality standard or PSD increment; (c) the airborne emissions from the Project will not cause any significant adverse impacts on human health or the public welfare; (d) the Project satisfies all of the applicable DEP rules and criteria; and (e) the DEP should issue the air construction permit for the Project. Mr. Rowe speculated about potential impacts from the Project, but Mr. Rowe presented no competent, credible evidence to support the allegations in his petition.

RECOMMENDATION

Based upon the findings of fact, conclusions of law, the evidence of record, the candor and demeanor of the witnesses, and the pleadings and arguments of the parties, it is, therefore, RECOMMENDED:

That DEP enter a Final Order granting Oleander's application for a Prevention of Significant Deterioration air construction permit for the Project, subject to the conditions and limitations contained in DEP's Draft Permit.

CERTIFICATE OF SERVICE

I CERTIFY that a true copy of the foregoing was mailed to:

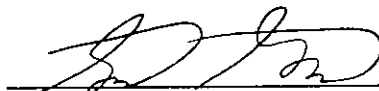
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on this 17th day of September 1999.

STATE OF FLORIDA DEPARTMENT
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