6/05/01

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CITY OF COCONUT CREEK,

Petitioner,

v. OGC File No. 01-0489

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

And

POMPANO BEACH ENERGY, L.L.C.
(AN AFFILIATE OF ENRON NORTH AMERICA),

Respondents.
_____/

AMENDED PETITION FOR ADMINISTRATIVE HEARING

Petitioner, City of Coconut Creek, a Florida municipal corporation ("CITY"), in compliance with an Order of the Department dated May 21, 2001, hereby files this Amended Petition for Administrative Hearing challenging the Department of Environmental Protection's ("DEP") Intent to Issue Air Construction Permit for Permit No. 0112515-001-AC(PSD-FL-304) ("Permit") to Pompano Beach Energy, L.L.C., an affiliate of ENRON North America ("ENRON"), which would allow the construction of a five hundred ten (510) megawatt "peaking" power plant at 3300 Northwest 27 Avenue in Pompano Beach, Broward County, Florida. As amended grounds for this Administrative Hearing, CITY states:

1. CITY is a Florida municipality comprising approximately 11.7 square miles in the central northern end of Broward County.

2. The DEP is the permitting authority in this proceeding and has its offices located at 400 North Congress Avenue, West Palm Beach, Florida 33416 and 111 S. Magnolia Drive, Suite 4, Tallahassee, Florida 32301.

3. Pompano Beach Energy, L.L.C. has its offices located at 1400 Smith Street, Houston, Texas 77002.

SUBSTANTIAL INTEREST

4. CITY is a Florida municipality with over 40,000 residents, located within the immediate adjacent area that will be affected by the building of a power plant. As a result, CITY has a substantial interest in this proceeding.

BACKGROUND

5. On or about March 10, 2001, the CITY received a copy of DEP's Public Notice of Intent to Issue Air Construction Permit for ENRON's proposed power plant facility.

6. On October 23, 2000, ENRON filed its Application with the Broward County Department of Planning and Environmental Protection. On December 15, 2000, ENRON filed a Revised Application with the Broward County Department of Planning and Environmental Protection.

7. On December 20, 2000, the Department of Planning and Environmental Protection found that the Application was complete.

8. On or about March 21, 2001, the CITY moved for an extension of time to file its Petition.

9. On April 9, 2001, the DEP granted CITY's Request for Extension of Time and gave the CITY until April 25, 2001 to file its Petition.

10. ENRON is proposing to construct three (3) one hundred seventy (170) megawatt duel-fuel combustion turbines with inlet chillers, three (3) mechanical draft cooling towers, three (3) eighty (80) foot stacks, a natural gas heater, a two and one half million gallon fuel oil storage tank, and a 0.6 million gallon fuel oil storage tank at the site.

11. If approved, fuel oil will be permitted at the power plant for up to three thousand (3000) hours per year or one hundred twenty-five (125) days per year.

12. The following regional producers of noxious emissions are located within the immediate vicinity of ENRON's proposed cogeneration power plant facility: (1) Broward County North Regional Wastewater Treatment Plant; (2) Florida Power and Light Electrical Substation; (3) Broward County Central Sanitary Landfill; (4) Wheelabrator Resource Recovery Facility; (5) Broward County Hazardous Materials Receiving Facility; and (6) Waste Management Trash Transfer Station. These large regional significant sources of noxious emissions, which are publicly or privately owned, are immediately adjacent to the eastern boundary of the CITY.

13. In addition, the proposed power plant is within thirteen (13) miles of the Arthur R. Marshall Loxahatchee National Wildlife Refuge, administered by the U.S. Department of the Interior, and within ten (10) miles of the Florida Everglades, specifically, Conservation Area No. 2, which is administered by the State of Florida Fish and Wildlife Conservation Commission.

14. CITY has received no indication that an Environmental Impact Statement/Evaluation has been undertaken for this proposed use.

15. Further, from a review of the available documentation, it appears that a quantitative cumulative air quality analysis has not been performed with regard to the facilities referenced in Paragraph 12 above. The issuance of a Federal Permit for the Prevention of Significant Deterioration (PSD) subjects the facility to the requirements of the National Environmental Policy Act (NEPA) (specifically regulations in 40 CFR Part 1508). Under NEPA, the cumulative environmental effects of a proposed project and other significant sources must be considered in an environmental assessment or an environmental impact statement.

16. CITY's experts believe that a quantitative cumulative air quality analysis should be performed in order to satisfactorily demonstrate that the combined emissions from the sources referenced in Paragraph 12 above do not cause a contravention of applicable air quality standards.

DISPUTED ISSUES OF FACT AND LAW

17. Whether an environmental impact statement/evaluation should have been conducted by ENRON prior to the Notice of Intent to Issue Air Construction Permit.

18. Whether the assessment of environmental impacts associated with industrial-related activities, including those on ambient air quality, must be performed prior to the issuance of a permit.

19. Whether the impact upon the CITY of the prevailing wind direction from the proposed facilities has been considered and factored into the decision to issue a Permit.

20. Whether it is necessary for a quantitative cumulative air quality analysis to be performed prior to the issuance of a Permit to ensure that the combined emissions

from the various sources in the area do not cause a contravention of applicable air quality standards:

(i) The proposed facility is anticipated to emit approximately 572 tons per year (tpy) of NO_2, 171 tpy of CO, 55 tpy of PM/PM_{10}, 166 tpy of SO_2, 18 tpy of VOC, and 25 tpy of sulfuric acid mist. The facility will also emit trace quantities of total fluorides (0.09 tpy), mercury (0.003 tpy) and lead (0.003 tpy). Emissions of cumulative hazardous air pollutants (HAP_5) up to 5 tpy.

(ii) The issuance of Federal Permits such as Prevention of Significant Deterioration subjects the proposed power plant facility to the requirements of the National Environmental Protection Act.

(iii) Under the National Environmental Protection Act, the cumulative environmental effects of a proposed project must be considered in an environmental assessment.

21. Whether DEP's Intent to Issue Air Construction Permit was based on erroneous and misleading information concerning the proposed power plant's distance to environmentally sensitive lands and, therefore, should be reassessed:

(i) The Technical Evaluation and Preliminary Determination provides in Paragraph 2 entitled "Facility Information" that the proposed power plant is located approximately 60 kilometers (37.2 miles) from the Everglades National Park; this statement may be accurate on its face as to the distance from the park entrance, but a map of the Conservation Areas potentially affected by the proposed power plant demonstrates that the affected

ecosystems are far closer than stated. Please See Exhibit "A", attached hereto and made a part hereof.

(ii) The pristine, environmentally sensitive ecosystem of the Loxahatchee National Wildlife Refuge is within thirteen (13) miles of the proposed power plant, as it is located immediately adjacent to Everglades Conservation Area No. 2, to the north;

(iii) While the public entranceway of Everglades National Park may be over thirty-seven (37) miles away from the proposed power plant, the environmentally sensitive ecosystem of the Florida Everglades, specifically Conservation Area No. 2 is within ten (10) miles of the proposed site; and

(iv) The proximity of these ecosystems was not taken into account by the DEP in their review of the proposed location.

22. The project must use best available control technology ("BACT") to limit the emissions of nitrogen oxide ("NOx"), carbon monoxide ("CO"), volatile organic compounds ("VOCs"), sulfur dioxide ("SO_2"), sulfuric acid mist, and particulate matter with an aerodynamic diameter less than 10 microns ("PM10"), pursuant to Rule 62-212.400(2)(f), F.A.C.

23. Rule 62-210.200(38), F.A.C. defines BACT as "an emission limitation...based on the *maximum* degree of reduction of each pollutant emitted which the Department, on a case by case basis, taking into account energy, environmental and economic impacts, and other costs, determines is achievable through application of production processes and

available methods, systems and techniques (including fuel cleaning or treatment or innovative fuel combustion techniques) for control of each such pollutant." (emphasis added)

24. In determining BACT, the Department shall give consideration to, among others, "all scientific, engineering, and technical material and other information available to the Department," "the emission limiting standards or BACT determination of any other state," and "the social and economic impact of such technology." Rule 62-212.400(6), F.A.C.

25. The City believes and will demonstrate to the Department that the applicant's proposed BACT limits (or absence thereof) for the turbines, fuel oil heater, tanks, and cooling towers, accepted by the Department, are not consistent with the definition of BACT in Rule 62-210.200(38), F.A.C. and the requirements in Rule 62-212.400(6), F.A.C. as specifically set forth below. The Department's BACT determinations do not recognize the much lower limits currently being permitted in other states, nor do they address the social and economic impacts to the City for failing to appropriately limit emissions from the facility.

26. The draft permit establishes BACT for NOx from the gas turbines as 9 ppmvd at 15% O_2 on gas, achieved with dry low NOx combustors and 42 ppmvd at 15% O_2 on fuel oil, achieved with water injection. Continuous compliance would be demonstrated based on a 24-hour block average. (Permit, § III.13.) Other states have permitted a large

number of simple cycle peaking power plants with NOx limits of 2 to 5 ppmvd at 15% O_2 on gas using SCR, XONON, or SCONOx and 5.9 to 13 ppmvd on oil, achieved with water injection and SCR. Continuous compliance is demonstrated based on 1-hour to 3-hour rolling averages. These lower limits have been achieved in practice. The City recommends a much lower NOx limit be established for the turbines, consistent with the permitting history in other states.

27. The draft permit establishes BACT for CO for the gas turbines as 9 ppmvd @ 15% O_2 on gas and 20 ppmvd @ 15% O_2 on oil, achieved with good combustion. Compliance would be demonstrated based on a 3-hour source test. (Permit, § III.14.) Other states have permitted simple cycle peaking power plants with CO limits of 2 to 6 ppmvd at 15% O_2 on oil and gas, achieved using an oxidation catalyst. Much lower limits have been demonstrated in source tests and with continuous emission monitors. The City believes a much lower CO limit should be established for the turbines and that continuous compliance be demonstrated with a continuous emission monitor.

28. The draft permit establishes BACT for VOCs from the gas turbines as 2.8 ppmvd @ 15% O_2 on gas or oil, achieved with natural gas and good combustion. Compliance would be demonstrated based on a 3-hour source test. (Permit, § III.15.) Other states have permitted simple cycle peaking power plants with VOC limits of 2 ppmvd at 15% O_2 on oil and gas, achieved using an oxidation catalyst. Much lower limits have been demonstrated in source tests. The City believes a much lower VOC limit should be established for the turbines.

29. The draft permit indicates that the facility includes one 2.5 million gallon distillate storage tank, one 0.6 million gallon distillate storage tank, one 13 MMBtu/hr gas-fired fuel heater, and four wet mechanical draft cooling towers. (Permit, § III.2.) The draft permit contains no BACT determinations, emission limits, or monitoring requirements for these sources, even though they emit criteria and hazardous air pollutants. These sources, although individually minor, must use BACT and be regulated by permit, pursuant to Rule 62-210.200(112), F.A.C., which defines a facility as "all of the emissions units which are located on one or more contiguous or adjacent properties, and which are under the control of the same person (or persons under common control)." The City requests that the Department conduct a formal BACT analysis for these minor sources and revise the permit to include appropriate emission limits and monitoring requirements.

30. The draft permit and files that were reviewed do not identify any other emission sources at the facility. However, power plants normally additionally include an emergency firewater pump and emergency generator, run by diesel internal combustion engines. The diesel exhaust from any such engines are a great concern to the City. Thus, the City requests that the Department investigate whether emergency diesel engines would be used and if so, that these be subjected to a formal BACT analysis and permit limits, pursuant to Rule 62-210.200(112), F.A.C.

31. The project proposes to use distillate oil as a backup fuel for an average of 1,000 hours per installed unit. (Permit, § III.7.) The combustion of distillate in the turbines would produce "diesel exhaust," which is recognized by the U.S. Environmental Protection Agency and California as a potent human carcinogen and respiratory irritant. The City is deeply concerned about the impact of these emissions, as well as others, set out below, on the residents of Coconut Creek.

32. The definition of BACT in Rule 62-210.200(38) and implementing EPA guidance in the NSR Manual (EPA, New Source Review Workshop Manual, October 1990, Section IV.D.3) require taking into account the "environmental" impacts during the top-down BACT process. The Department is further required to evaluate the social and economic impacts of its decisions, pursuant to Rule 62-212.400(6)(a)4, F.A.C.

33. The draft permit establishes BACT for SO_2 and sulfuric acid mist as the use of pipeline natural gas and low sulfur (0.05%) fuel oil, without performing any analyses, evaluating alternatives, or considering the substantial health impacts that may result from this choice. The City maintains that the use of distillate fuel in a densely populated area is inappropriate, has far-reaching social and economic implications for its residents, and is not consistent with Rule 62-212.400(6)(a), F.A.C.

34. Notwithstanding the health issues, 0.05% sulfur distillate is not BACT for SO_2 and sulfuric acid mist when firing oil. A sulfur content of 0.05% is equivalent to 5,000 parts per million sulfur by weight ("ppmw"). Lower sulfur distillate, containing only 30

ppmw sulfur, is currently available on the east coast. Further, the EPA has adopted stringent fuel regulations that limit the sulfur content of diesel fuel to 15 ppmw. These regulations go into effect in June 2006 (Federal Register, v. 66, no. 12, January 18, 2001, p. 5002 *et seq*), at which point ultra low sulfur diesel will be widely available in the Florida market.

35. Thus, the City requests the permit be modified to eliminate the use of distillate oil. In the short-term, a backup fuel such as LNG or propane or a noninterruptible gas supply contract for curtailments should be required, until such time as the capacity constraints on the Florida Gas Transmission Pipeline are alleviated, but no later than January 2003. If distillate is retained, diesel exhaust emissions should be rigorously controlled and 30 ppmw diesel fuel be required on startup and 15 ppmw diesel when it becomes available, but no later than June 2006.

36. The permit contains no limits on the number of startups/shutdowns nor on the emissions during these periods. During startups and shutdowns, combustion temperatures and pressures change rapidly, resulting in inefficient combustion and much higher emissions of NOx, CO, and VOCs (including aldehydes) than during steady state operation.

37. The City is concerned that virtually unlimited and uncontrolled startup and shutdown emissions will result in significant health impacts in downwind areas of Coconut Creek, particularly during combined operation of the Pompano and Deerfield

Beach Energy Centers. Emissions of formaldehyde, for example, can increase by over a factor of 500 during startups, compared to full load operation. If each turbine experienced as few as 100 startups per year, lasting only 10 minutes, the emissions of formaldehyde would exceed 10 ton/yr and require the use of maximum achievable control technology ("MACT"), pursuant to Rule 62-204.800, F.A.C.

38. Omitting limits on startup and shutdown emissions is not consistent with requirements of the Clean Air Act. The U.S. EPA has consistently defined startup and shutdown to be part of the normal operation of a source.[1,2] The EPA has also consistently concluded that these emissions should be accounted for in the design and implementation or the operating procedure for the process and control equipment. EPA has concluded that "[w]ithout clear definition and limitations, these automatic exemption provisions [for startups and shutdowns] could effectively shield excess emissions arising from poor operation and maintenance or design, thus precluding attainment." (Bennett 9/28/82.) Accordingly, these emissions should have been considered in the BACT analysis and the related health impacts addressed in conjunction with the environmental review required pursuant to Rule 62-210.200(38), F.A.C. Permits issued by other states include limits on startup and shutdown emissions. Thus, the City believes that a permit condition be included that specifically limits the number, duration, and emissions during startups and shutdowns, to comply with BACT and MACT.

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[1] Letter from Kathleen M. Bennett, Office of Air, Noise and Radiation, to Assistant Administrator for Air, Noise and Radiation Regional Administrators, Regions I-X, Subject: Policy on Excess Emissions During Startup, Shutdown, Maintenance, and Malfunctions, September 28, 1982 (Bennett 9/28/82).

[2] Letter from Kathleen M. Bennett, Assistant Administrator for Air, Noise and Radiation, to Regional Administrators, Regions I-X, Subject: Policy on Excess Emissions During Startup, Shutdown, Maintenance, and Malfunctions, February 15, 1983 (Bennett 2/15/83).

39. Broward County Code Section 27-178 requires pollution prevention planning for hazardous air pollutants, among other considerations. The project is not in compliance with this local regulation because emissions of diesel exhaust, formaldehyde, and other HAPs have not been assessed and mitigated. Therefore, the project is in violation of Rule 62-210.300(4)(d)15.a F.A.C, which requires compliance with the requirements of Broward County.

WHEREFORE, Petitioner CITY, respectfully requests a formal administrative evidentiary hearing, de novo, pursuant to Chapter 120, Florida Statutes, to resolve disputed issues of material fact and law set forth herein be held and that the DEP should not issue Permit No. 0112515-001-AC (PSD-FL-304) or, in the alternative, should prohibit diesel oil from being used at this facility. Additionally, startup/shutdowns should be limited and monitored. At a minimum, the DEP should, prior to issuing the Permit, require that ENRON provide a quantitative cumulative air quality analysis to ensure that the combined emissions from the various industries in the area do not cause a contradiction of applicable air quality standards.

Respectfully submitted this 5th day of June, 2001.

NANCY A. COUSINS
Assistant City Attorney

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that the original has been filed by facsimile, (850) 921-3000 and Federal Express at: Office of General Counsel, Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000 and a true and correct copy of the foregoing has been furnished by regular U.S. Mail to: Debbie Orshefsky, Attorney for Pompano Beach Energy, L.L.C., Greenberg, Traurig, 515 E. Las Olas Boulevard, Suite 1500, Fort Lauderdale, Florida 33301 this 5th day of June, 2001.

CITY OF COCONUT CREEK
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ACA/CM/Electrical Power Plant/Amended Petition for Admin Hearing
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