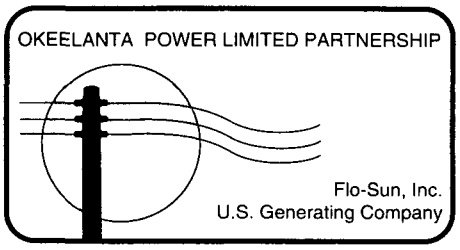

January 23, 1996

State of Florida
Department of Environmental Protection
Twin Towers Office Building
Mail Station 5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

0990332

Attn: Mr. John C. Brown, Jr., P.E.
Section Administrator
Title V Program

Re: Acid Rain Program
Phase II Permit Applications

Dear Mr. Brown:

Okeelanta Power Limited Partnership (OKPLP) is in receipt of your letter dated January 8, 1996 which requests a response to the Department of Environmental Protection (FDEP) letter dated November 30, 1995 that referenced Phase II Permit Applications for the Acid Rain Program. OKPLP did not receive the Department's initial request (11/30/95) and therefore was unable to reply at that time. The current address and General Manager of the facility is listed below and all future correspondence should be directed to same.

Mr. Dennis Space
General Manager
Okeelanta Power Limited Partnership
P. O. Box 8
South Bay, Florida 33493

On February 27, 1995, OKPLP requested an applicability determination from EPA pursuant to 40 CFR 72.6(c) (see attached). EPA's response dated May 2, 1995 (see attached) provided an informal determination which indicated that all three units at Okeelanta will not be affected under the Acid Rain Program. EPA further states that a formal applicability determination letter has been drafted and is in the Agency's process of concurrence.

In light of EPA's determination OKPLP would be exempt from the Acid Rain Provisions.

If you have any questions or require additional information please contact me at (407) 993-1003.

Sincerely,

James M. Meriwether
Environmental, Health
and Safety Representative

cc: Ajaya K. Satyal - HRS/PBCo
David Knowles - FDEP/Ft. Myers
D. Space
D. Schaberg
C. Staley
J. Ketterling
M. Griffin

OKPLP File No. 6.3.1.2

cc M. Griffen
J. Meriwether
K. Mayer
D. Schwarz

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAY - 2 1995

OFFICE OF
AIR AND RADIATION

Curt Staley
Okeelanta Power Limited Partnership
316 Royal Poinciana Plaza
Palm Beach, FL 33480

Dear Mr. Staley:

I am responding to your February 27, 1995 letter requesting an applicability determination for the Okeelanta Cogeneration Facility ("Okeelanta"). Pending an official determination, I am providing this informal determination.

As described in your letter, Okeelanta is planned to consist of three steam boilers headered to a single 74.9 MWe turbine-generator. Some of the steam from the facility will serve a sugar cane processor. Therefore, the boilers will meet the definition of "cogeneration unit" at 40 CFR §72.2. The primary fuel for the facility will be solid waste. In addition, the facility is a qualifying facility.

From the information above, I believe that all three units at Okeelanta will not be affected under the Acid Rain Program. If a unit meets the criteria of any one paragraph under §72.6(b), the unit is not affected. Each unit is treated individually, except for exclusions for qualifying facilities and independent power facilities (§72.6(b)(5) and (6)).

Under §72.6(b)(4), to be affected, a cogeneration unit must supply more than one-third of its potential electrical output capacity and more than 219,000 MWe-hrs to a utility power distribution system for sale. As described in EPA's guidance document "Do the Acid Rain SO_2 Regulation Apply to You?", for multi-headered boilers, EPA will compare an individual boiler's potential electrical output capacity to the generator capacity (and to the electricity sold).

At Okeelanta, all three boilers, as described, will be unaffected as exempt cogeneration units, based on the second criterion, which requires that each boiler's share of the electrical output to exceed 219,000 MWe. At 100 percent capacity (8760 hours per year), the 74.9 MWe generator could generate up to 656,124 MWe-hrs per year. Each boiler's share of that capacity is 218,708 MWe-hrs (656124 divided by 3 equal size boilers). Because 218,708 MWe-hr is less than 219,000 MWe-hr, all three boilers would be unaffected. We understand that some of the electricity will be used for on-site power needs, so each boiler will have a lower electrical output possible, as described in your letter.

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CURT STALEY

You were concerned about the situation when one boiler is not operated as much as the other boilers and if EPA would use the actual heat from each boiler, as opposed to using the potential electrical output capacity. While this issue is not specifically addressed in the regulation or guidance, EPA does not intend to further complicate the cogenerator exclusion. We intend to use potential electrical output capacity to prorate electrical output among multiple boilers. The analysis above is based on proration by potential electrical output capacity.

You are correct in stating that if Okeelanta sells greater than 657,000 MWe-hr (three times 219,000 MWe-hr) to the grid for three years in a row, the facility would become affected by the Acid Rain Program requirements (unless the boilers are unaffected by another provision, such as the solid waste incineration unit provision, discussed below). As stated in §72.6(a)(3)(iv), an exempt cogeneration unit becomes affected if during a three calendar year period after November 15, 1990, it sold an annual average of more than one-third of its potential electrical output capacity and more than 219,000 MWe-hrs. A "compliance timeline" in the guidance document explains the compliance dates if a unit becomes affected. For cogeneration units which become affected under §72.6(a)(3)(iv), all the requirements of the Acid Rain Program become effective to that unit after the end of the three calendar-year period.

Until your request, we had not been asked about how we will calculate the three calendar year period for the first three years of operation when the unit commences operation mid-year. We believe that any decision should be based on a factual situation. Until such a request arises, we expect to defer such a decision.

Your letter also indicated that the facility is likely to derive less than 10% of its heat input from fossil fuel. The remaining source of heat will be various solid wastes. 40 CFR 72.6(b)(7) provides that solid waste incinerators burning less than 20% fossil fuels, on a heat input basis, are unaffected by the Acid Rain Program. Therefore, the Okeelanta boilers could expect to be unaffected under the solid waste incinerator provision, as well as the cogenerator provision.

My preliminary determination that the three boilers at Okeelanta will not be affected by the Acid Rain Program is based solely on the information contained in your letter of February 27, 1995. This letter does not represent final Agency action. A formal applicability determination letter has been drafted and is in the Agency's process of concurrence. If you have further questions on the issues of applicability, please contact me at (202) 233-9074.

Sincerely,

Kathy Barylski
Acid Rain Division

Okeelanta Power Limited Partnership

February 27, 1995

VIA COURIER

Mr. Brian J. McLean
Director, Acid Rain Division
U. S. Environmental Protection Agency
501 Third Street, N.W.
Washington, D.C. 20005

Petition for a Determination of Applicability Under 40 C.F.R. § 72.6(c) for the Okeelanta Cogeneration Facility

Dear Mr. McLean:

As the certifying official for Okeelanta Power Limited Partnership ("the Partnership"), the owner and eventual operator of the units to be built at the Okeelanta Cogeneration Facility ("Okeelanta" or "the Facility") in Palm Beach County, Florida, I write to submit on behalf of the Partnership the following petition for a determination by the United States Environmental Protection Agency ("EPA" or "Agency"), pursuant to 40 C.F.R. § 72.6(c), that these units are not affected units under the Acid Rain Program of Title IV of the Clean Air Act ("the Act").

I. Factual Description of the Facility

The Facility is under construction and has not begun operation. Commercial operation of the Facility is projected to commence sometime during the period from October 1995 to February 1996. A copy of the Facility's PSD permit issued by the state of Florida, Permit Number AC50-219413 PSD-FL-196, is enclosed.

The Facility will consist of three ABB-CE steam boilers that utilize Detroit Hydrograte stokers, each with the same maximum design heat input capacity, that will provide steam through a common header to a single turbine-generator with a maximum total generating capacity of 74.9 MWe. The generator will supply to a utility power distribution system

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("grid") for sale only 70.0 MWe of electricity; 6.5 % of total output will not be supplied to the grid but will instead be devoted to on-site consumption. In addition, some of the steam processed by the turbine will be piped to a neighboring industrial sugar cane milling factory. The Facility is a "qualifying facility" under section 3 of the Federal Power Act. A system diagram of the Facility is enclosed.

Okeelanta's boilers will be fired primarily with biomass fuel. The PSD permit provides that the biomass fuel may be derived from bagasse (i.e., the refuse of sugar cane after the juice has been extracted), processed wood and other wood by-product materials (including clean wood in the form of construction and demolition debris (C&DD), the woody portion of yard waste, land clearing debris), and other clean cellulose and vegetative matter. The PSD permit provides that the biomass fuel will not contain hazardous substances, hazardous wastes, biomedical wastes, or garbage. The biomass fuels (and their sources) that Okeelanta is expected to fire will include but not be limited to the following:

Fuel	Source
Citrus trees	Agricultural businesses
Fuel trees	Commercial tree farms
Wood waste	Urban waste collection
C&DD	Commercial operations
Land clearing debris	Non-residential road clearing and land development

As authorized by the PSD permit, a supplemental combustion fuel for the boilers will be No. 2 fuel oil with a maximum sulfur content of 0.05 percent sulfur. The boilers are also permitted to burn coal with a maximum sulfur content of 0.70 percent. Currently, however, there are no plans to burn coal at Okeelanta, and the Facility does not have coal handling equipment. The permit limits the heat input from oil and coal to less than 25 percent of the total heat input to the Facility as a whole in any calendar quarter.

Although they reserve the right to burn the maximum amount of fossil fuel allowed under the permit, the owners and operators expect to use fuel oil only for start-ups, stabilization, and emergencies. Accordingly, the Facility should derive much less than 10 percent of its annual heat input from oil. Even if 20 percent of the Facility's energy in

a year of operation at maximum permitted heat input is derived from oil, sulfur dioxide emissions from the Facility are estimated to be less than 518 tons per year.[1/] As noted above, each of the three boilers at the Facility will have the same maximum design heat input capacity. As provided in the PSD permit, the maximum design heat input of each boiler is 715 million British thermal units per hour ("MBtu/hr") while burning biomass and 490 MBtu/hr while burning fossil fuel.

One can expect that, from year to year, a given boiler at the Facility will have different total heat input and different percentages of heat input derived from biomass and from fossil fuel. In addition, one can expect that, in any given calendar year (and in any given multi-year period), the total heat input and the respective amounts of heat input from biomass and from fossil fuel will vary -- perhaps considerably -- among the three boilers.

Some of these variations will occur because the Facility is expected to burn (1) bagasse as its primary source of heat input during the sugar cane grinding season (generally, October through March) and (2) other vegetative and woody materials as its primary source of heat input during the remaining months of the year. Another source of variation is boiler design and operation. The Facility is designed such that all three boilers will have to be operated during the sugar cane grinding season to produce the 74.9 MWe of total electric output and the steam for the sugar cane milling factory. During some or all of the months outside the sugar cane grinding season, however, the 74.9 MWe of total electric output can be generated with only two of the boilers operating because of lower overall steam demand during that period, when the sugar cane mill is not operating. It is expected that boiler operation during this period will be rotated among all three boilers so that maintenance can be performed on each boiler every year. It is conceivable, though very unlikely, however, that a given boiler could be temporarily shut down during the non-grinding season year after year to a disproportionate extent (i.e., more -- perhaps much more -- than the other two boilers), rather than having the seasonal shutdown rotated proportionately among the three boilers.

[1/] The PSD permit (FL-196) establishes a maximum total heat input to the entire facility of 11.5 x 10^{12} British thermal units per year ("Btu/yr") and the emission limitations for the various fuels. When biomass generates 80 % of this energy, the SO2 emissions from the biomass would be 460 tons/yr (11.5 x 10^{12} Btu/yr x 80 % x 0.1 lb/MBtu x MBtu/1,000,000 Btu x ton/2000 lbs). When oil generates 20 % of the maximum total heat input, the SO2 emissions from the oil would be 57.5 tons/yr (11.5 x 10^{12} Btu/yr x 20 % x 0.05 lb/MBtu x MBtu/1,000,000 Btu x ton/2000 lbs).

II. Request for Determination

Based on the Clean Air Act, EPA's rules, and EPA's interpretation of the rules, it is the Partnership's understanding that each of the Okeelanta units is not an affected unit under 40 C.F.R. § 72.6(b)(4). Because the maximum amount of actual total electric output from the single generator served by all three of the units is 656,124 MWe-hrs/yr (74.9 MWe x 8,760 hrs/yr) [613,476 MWe-hrs/yr supplied to the grid for sale (74.9 MWe x 0.935 x 8,760 hrs/yr)], the maximum amount of generation that is attributable to each of the units is 218,708 MWe-hrs/yr [204,492 MWe-hrs/yr supplied to the grid for sale]. Both of these figures are less than the 219,000 MWe-hrs/yr threshold in 40 C.F.R. § 72.6(b)(4). This analysis is explicitly based on an equal division of actual annual electric output among the three units, given their identical maximum design heat input capacities, irrespective of the actual amounts of annual heat input at the individual units.[1/]

The Facility is designed for operation associated with total generation of less than 657,000 MWe-hrs/yr of electricity. The Partnership assumes that if, however, the actual electric output supplied to the grid for sale were to exceed that amount on an annual basis averaged over a three-year period, the units would become "affected" under 40 C.F.R. § 72.6(b)(4). Please provide a clarification if that is not correct.

The Partnership understands further that, even if total actual annual electric output supplied to the grid for sale were to exceed 657,000 MWe-hrs in every year of operation, none of the units would be an affected unit under any circumstances until the expiration of a three-year period after commencement of operation.

The Partnership requests that EPA expressly confirm, in an applicability determination under 40 C.F.R. § 72.6(c), the understandings stated above or, if necessary, provide a correction or clarification of those understandings. The Partnership requests that EPA, as part of its determination, state how the first partial calendar year of operation (assuming that operation does not commence at the beginning of a calendar year) will be treated for purposes of calculating (1) when the initial three-calendar-year period will be deemed to begin, (2) when that period will be deemed to end, and (3) the three-year average of actual electric output supplied to the grid for sale.

[2/] The Partnership understands that, to become an affected unit, a cogeneration unit must not only exceed the 219,000 MWe-hr threshold but also the 1/3 of "potential electric output capacity" threshold. Given the potential electric output capacity of these units, they will necessarily exceed the 1/3 "output" threshold before they would exceed the 219,000 MWe-hr threshold. Accordingly, this petition focuses solely on the 219,000 MWe-hr threshold.

If EPA determines that it is necessary or appropriate for it to address additional issues to make its determination under 40 C.F.R. § 72.6(c), the Partnership understands that it will do so. If the Agency needs additional information, it should not hesitate to call Michelle Griffin at 301/718-6973.

The Partnership understands that EPA's response to this petition will be final Agency action and appealable under 40 C.F.R. Part 78.

III. Required Certification

Pursuant to 40 C.F.R. §§ 72.6(c)(1) and 72.21, I state the following:

> I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Very truly yours,

Curt M. Staley

Curt M. Staley
Authorized Representative
Okeelanta Power Limited Partnership

Enclosures (2)

bcc: w/o enclosures
S. Herman
M. Carney
G. Cepero
D. Schaberg
M. Griffin
K. Oberg
C. Allen
D. Dee
M. Teague w/enclosures
K. Mazur
J. Ketterling
H. Sturm
M. Burzinski
Project File w/enclosure