Indiantown Cogeneration, L.P.

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BUREAU OF AIR REGULATION

Indiantown Cogeneration, L.P.
P.O. Box 1799
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Indiantown, FL 34956
Tel: 561.597.6500
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September 26th, 2001

Mike Halpin
Dept. of Environmental Regulations
Bureau of Air Regulations
200 Blair Stone Road
Tallahassee, FL 32399-2400

VIA FEDERAL EXPRESS

Re: ICLP Flue Gas Carbon Dioxide Recovery Plant (PSD-FL-168)

Dear Mike:

On April 20th, 2001 the Department of Environmental Protection issued a letter modifying ICLP's PSD permit (PSD-FL-168) and authorizing ICLP to construct a carbon dioxide recovery plant adjacent to the ICLP's facility. The PSD permit (specific condition 15) now states that a slipstream from ICLP's pulverized coal boiler exhaust "shall be routed to a carbon dioxide recovery plant."

ICLP has not yet built the carbon dioxide recovery plant therefore, it is not possible to route a slipstream from the Cogeneration facility to the carbon dioxide plant.

Due to fluctuation in the price of carbon dioxide and other market conditions, ICLP is reviewing its plans for the carbon dioxide plant. At this time ICLP does not have a construction date for the carbon dioxide plant. Given these uncertainties, ICLP respectfully request the Department to extend the construction permit (PSD-FL-168) by 24 months.

If you have any questions please contact Nick Laryea at 561-597-6500, extension 19.

Sincerely,

George K. "Chip" Allen
General Manager

cc: N. Laryea
B. DeHart
D. Dee
File

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BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

In Re: Indiantown Cogeneration, L.P.)
Indiantown Cogeneration Facility)
Modification of Conditions)
of Certification)
Martin County, Florida)
)

DEP File No. PA90-31C
OGC Case No. 00-0048

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FINAL ORDER MODIFYING CONDITIONS OF CERTIFICATION

On February 7, 1992, the Governor and Cabinet, sitting as the Siting Board, issued a final order approving certification for the Indiantown Cogeneration Project. The site certification order approved the construction and operation of a 330 megawatt (MW) (net) coal fired electrical power plant and associated linear facilities to be located in Martin and Okeechobee Counties, Florida. The conditions of certification were subsequently modified on July 21, 1992, and April 3, 1995.

Pursuant to section 403.516, Florida Statutes, and rule section 62-17.211(4), Florida Administrative Code, the Department proposes to modify the conditions to conform to the revised Industrial Wastewater Facility Permit, permit number FL0183750, issued January 19, 2000, and to conform to a modification of the Prevention of Significant Deterioration (PSD) Permit, permit number PSD-FL-168, issued April 20, 2000. The proposed modifications allow emergency discharge of cooling water and process water, clarify allowable operation rates of auxiliary boilers, allow the addition of a carbon dioxide recovery facility and a chilled water plant, allow an increase in the cooling water storage pond elevation, and allow automatic modifications for conforming conditions of certification to subsequently issued or modified federally delegated or approved permits. Additionally, the Department proposes to update the conditions to reflect the Department's current name and rule citations. Copies of the Department's proposed modifications, Industrial Wastewater Facility Permit, and Prevention of Significant Deterioration permit modification are available for public review.

On January 25, 2000, all parties to the original proceeding were sent a Notice of Receipt of Proposed Modification of Power Plant Certification. On May 10, 2000, all parties to the

original proceeding were furnished copies of the Notice of Intent to Issue Proposed Modification of Power Plant Certification and a copy of the proposed final order. On May 12, 2000, a Notice of Intent to Issue Proposed Modification of Power Plant Certification was published in the *Florida Administrative Weekly*. The notices specified that all parties to the original certification proceeding have 45 days from the issuance of the notice by mail to such party's last address of record in which to object to the requested modification. Failure of any of the parties to file a response constitutes a waiver of objection to the requested modification. The notices further specified that any person who is not already a party to the certification proceeding and whose substantial interest is affected by the requested modification has 30 days from the date of publication of the public notice to object in writing. If no objections are received, then a Final Order approving the modification shall be issued by the Department. If objections are raised and agreement cannot be subsequently reached, then pursuant to § 403.516(1)(c), F.S., the applicant may file a petition for modification seeking approval for those portions of the request for modification to which written objections were timely filed. No written objections to the proposed modifications have been received by the Department. Accordingly, in the absence of any timely objection,

IT IS ORDERED:

The proposed changes to the Indiantown Cogeneration Facility Conditions of Certification as described in the request for modification dated December 30, 1999; to conform to the modification of Industrial Wastewater Facility Permit No. FL0183750, issued January 19, 2000; and to conform to the modification of Permit No. PSD-FL-168, issued April 20, 2000, are APPROVED. Pursuant to Section 403.516(1)(b), F.S., the conditions of certification for the Indiantown Cogeneration Facility are **MODIFIED** as follows:

PART I

ADMINISTRATIVE CONDITIONS

(1) ENTITLEMENT

(1)- (2) NO CHANGE.

(3) JURISDICTIONAL AGENCIES

The following agencies are deemed to have jurisdictional interest in the certification, and thus regulatory authority over the development, construction, operation, and maintenance of the facility:

Department of Environmental Protection ~~Regulation~~ [DEP] ~~[DER]~~

~~Game & Fresh Water~~ Fish and Wildlife Conservation Commission [FWCC] ~~[GFWFC]~~

~~Department of Natural Resources [DNR]~~

Department of Community Affairs [DCA]

Department of Transportation [DOT]

South Florida Water ~~Eater~~ Management District [SFWMD]

Treasure Coast Regional Planning Council [TCRPC]

Martin County [MC]

Central Florida Regional Planning Council [CFRPC]

Okeechobee County [OC]

(4) NO CHANGE.

(5) TRANSFER OF CERTIFICATION

If contractual rights, duties, or obligations are transferred under this Certification, notice of such transfer or assignment shall immediately be submitted to the Florida Department of Environmental Protection ~~Regulation~~ and the Affected Agencies by the previous certification holder (Licensee) and the Assignee. Included in the notice shall be the identification of the entity responsible for compliance with the Certification. Any assignment or transfer shall carry with it the full responsibility for the limitations and conditions of this Certification.

(6) – (7) NO CHANGE.

(8) RIGHT OF ENTRY

The Licensee shall allow during operational or business hours the Secretary of the Florida Department of Environmental Protection ~~Regulation~~ and/or authorized representatives, including personnel of the Affected Agencies, upon the presentation of credentials:

A. – D. No change.

(9) – (11) NO CHANGE.

(12) COMPLIANCE

A. Compliance with Conditions

1. No change.

2. An environmental control program shall be established under the supervision of a qualified Environmental Engineer/Specialist to assure that all construction activities conform to applicable environmental regulations and the applicable Conditions of Certification. If during construction there is detected a violation of standards, harmful effect or irreversible environmental damage not anticipated by the application, the evidence presented at the certification hearing, or a post-certification submittal, the Licensee shall notify the DEP ~~DER~~ Southeast District Office and Siting Coordination Office, as required in B.

3. No change.

4. In the event of a malfunction of the Cogeneration facility boiler's pollution control system resulting in a violation of this certification or DEP ~~DER~~ regulations, that unit shall be promptly shut down.

B. Non-compliance Notification

If, for any reason, the Licensee does not comply with or will be unable to comply with any limitation specified in this certification, the Licensee shall notify the Southeast District Office of the Department of Environmental Protection ~~Regulation~~ by telephone within one working day after said noncompliance occurs and shall confirm this in writing within seventy-two (72) hours of becoming aware of such conditions, and shall supply the following information:

1. and 2. No change.

C. No change.

(13) POST CERTIFICATION REVIEW

Further information may be required by these conditions for site-specific or more detailed review and approval to determine compliance with the conditions of certification. Compliance determinations of the Department and other reviewing agencies are subject to review pursuant to Chapters 120, and 403, Florida Statutes.

A. In order to provide adequate lead time for review, such information, as developed, must be submitted for post-certification review at least 180 days prior to the intended commencement date of construction or operation of the feature undergoing review unless otherwise provided

herein. Notification of the submittal of the information, and any determinations made pursuant to these COC, shall be provided to the DEP ~~DER~~ Siting Coordination Office for record-keeping purposes.

B. and C. No change.

(14) NO CHANGE.

(15) COMMENCEMENT OF CONSTRUCTION

At least 30 days prior to the commencement of construction, the Licensee or Project Engineer shall notify the DEP ~~DER~~ Siting Coordination Office, the DEP ~~DER~~ Southeast District Office, and Affected Agencies of the construction start date. Quarterly construction status reports shall similarly be submitted by the Licensee beginning with the initial construction start date. The report shall be a short narrative describing the progress of construction.

(16) COMMENCEMENT OF OPERATION

At least 30 days prior to the commencement of operation, the Licensee or Project Engineer shall notify the DEP ~~DER~~ Siting Coordination Office and Affected Agencies of the operation start date.

(17) OPERATIONAL CONTINGENCY PLANS

A. Operating Procedures

The Licensee shall develop and furnish the DEP ~~DER~~ Southeast District Office a copy of written operating instructions for all aspects of the operations which are critical to keeping the facility working properly. The instructions shall also include procedures for the handling of suspected hazardous or toxic wastes.

B. Contingency Plans

The Licensee shall develop and furnish the DEP ~~DER~~ Southeast District Office written contingency plans for the continued operation of the system in event of breakdown. Stoppages which compromise the integrity of the operations must have appropriate contingency plans. Such contingency plans shall identify critical spare parts to be readily available.

C. and D. No change.

(18) and (19) NO CHANGE.

(20) ENFORCEMENT

The Department of Environmental Protection ~~Regulation~~, as supported by the applicable Affected Agency, may take any and all lawful actions to enforce any conditions of this Certification. Any agency which deems enforcement to be necessary shall notify the Secretary of DEP ~~DER~~ of the proposed actions. The affected agency may request the Department to initiate modification of this Certification for any change in any activity resulting from enforcement of this Certification which change will have a duration longer than 60 days.

(21) NO CHANGE.

(22) MODIFICATION OF CONDITIONS

A. Pursuant to Subsection 403.516 (1), F.S., the Board hereby delegates the authority to the Secretary to modify any condition of this certification dealing with sampling, monitoring, reporting, specification of control equipment, related time schedules, emission limitations, conservation easements, transfer or assignment of the Certification or related federally delegated permits, or any special studies conducted, as necessary to attain the objectives of Chapter 403, Florida Statutes.

B. Subject to the notice requirements of 403.516(1), F.S., the certification shall be automatically modified to conform to subsequent DEP-issued amendments, modifications, or renewals of any separately-issued Prevention of Significant Deterioration (PSD) permit, Title V Air Operation permit, or National Pollutant Discharge Elimination System (NPDES) permit for the Indiantown Cogeneration Project and the conditions of such permits shall be controlling over these Conditions of Certification.

C. All other modifications to these conditions shall be made in accordance with Section 403.516, Florida Statutes.

(23) FEDERAL ANNUAL OPERATING FEES AND PERMITS

A. DEP ~~DER~~ Responsibilities

The Department of Environmental Protection ~~Regulation~~ shall implement the provisions of Title V of the 1990 Clean Air Act for the Indiantown Cogeneration Project by developing Conditions of Certification requiring submission of annual operating permit information and annual pollutant emission fees in accordance with Federal Law and Federal Regulations. The

terms of such conditions shall be imposed under the modification provisions of Section 403.516(1), F.S., for which the Board specifically delegates the authority to prescribe said terms.

B. and C. No change.

PART II

DEPARTMENT OF ENVIRONMENTAL PROTECTION ~~REGULATION~~

(1) AIR

The construction and operation of the Indiantown Cogeneration Project (ICP) shall be in accordance with all applicable provisions of Chapter 62-204, 62-210, 62-212, 62-296, 62-297, ~~17-2,~~ 62-256, ~~17-256,~~ and 62-702, ~~17-702,~~ Florida Administrative Code, except for SO_2 and NOx during startup, shutdown, and malfunction, then 40CFR60 shall apply.

A. Construction

1. General

a. No change.

b. The permittee shall report any delays in construction and completion of the project which would delay commercial operation by more than 90 days to the DEP ~~DER~~ Southeast District office in West Palm Beach.

2. Equipment Identification

The Licensee shall submit at least four copies of complete information as to the make and model numbers of the selected pulverized coal and auxiliary boilers, all pollution control and continuous emissions monitoring devices, operation and maintenance manuals and calibration procedures, updated process flow diagrams showing mass/energy/heat balances and ammonia injector locations and rates, and related equipment, to the DEP ~~DER~~ Bureau of Air Regulation at least 90 days prior to commencing on-site construction of that particular item.

3. Stack Height and Design

The height of the boiler exhaust stack for ICL shall not be less than 495 ft. above grade. Detailed stack drawings showing sampling locations shall be submitted to the DEP ~~DER~~ Bureau

of Air Regulation al least 90 days prior to commencing on-site construction of the affected equipment or feature.

4. No change.

5. Open Burning

Open burning in connection with initial land clearing shall be in accordance with Chapter 62-256 ~~17-256,~~ F.A.C., Chapter 51-2, F.A.C., Uniform Fire Code Section 33.101 Addendum, and any other applicable regulations of Martin or Okeechobee Counties, as applicable.

No open burning of construction generated material, after initial land clearing, shall be allowed.

B. Operation

1. Boilers

The Pulverized Coal (PC) boiler is permitted to operate at a maximum of 3422 MMBtu/hr heat input (nominal 330 MW). This facility shall be allowed to operate continuously (8,760 hrs/yr). In addition to the PC boiler, the facility will have one or two auxiliary boilers rated at up to a combined total of 342 MMBtu/hr (#2 Fuel Oil) and a combined total of 358 MMBtu/hr (Natural Gas or propane) which operate ~~at the combined total heat input rate a maximum of 5,000 hours with up to 1,000 hrs/yr on #2 Fuel Oil and the balance on natural gas or propane~~ at a combined total of less than 1.79×10^{12} British Thermal Units per year. The auxiliary boilers are each permitted to operate 5,000 full load equivalent hours per calendar year, with no more than 1,000 hours of that period using fuel oil with 0.05% sulfur, by weight, as the primary fuel.

2. CO_2 Recovery Plant

A CO_2 recovery plant is permitted to operate continuously for 8,760 hours per year. A slipstream, consisting of between 5% to 10% of the main boiler (stack) flue gas shall be routed to the CO_2 recovery plant. The flue gas will be cooled and scrubbed with a monoethanolamine (MEA) solution, which captures CO_2. The CO_2 will then be stripped out of the MEA solution, cleaned, compressed and shipped in liquid form. The CO_2 plant will be designed to produce 400 tons per day (TPD) of liquid CO_2. Note: The production is limited in order to ensure that

secondary pollutants are within the ranges provided in the application. Any increase in capacity shall be accompanied by an appropriate review for PSD or MACT applicability.

~~2.~~ 3. Emissions Limitations

a. i. and ii. No change.

iii. VE (Visible Emissions)

VE from the pulverized coal boiler ~~each~~ baghouse exhaust shall not exceed 10 percent opacity (6 minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

VE from ~~each~~ other baghouse exhausts shall not exceed 10% opacity (six minute average).

No VE during lime silo loading operations (i.e., less than 5% opacity).

VE from the ash handling baghouse shall not exceed a particulate limit of 0.010 grains/acf and VE of 5% opacity.

b. The auxiliary boiler or boilers, rated at up to a combined total of 358 MMBtu/hr (Natural Gas and propane) and a combined total of 342 MMBtu/hr (#2 fuel oil), shall be limited to a ~~maximum of 5,000 hours/year at the combined total heat input rates with up to 1,000 hrs/yr firing #2 Fuel Oil with 0.05% sulfur, by weight, and the balance firing natural gas or propane.~~ combined total of less than 1.79×10^{12} British Thermal Units per year. The auxiliary boilers are each permitted to operate 5,000 full load equivalent hours per calendar year, with no more than 1,000 hours of that period using fuel oil with 0.05% sulfur, by weight, as the primary fuel. The maximum total annual emissions from the auxiliary boiler or boilers will be as follows when firing #2 Fuel Oil:

c. through g. No change.

h. No fraction of flue gas shall be allowed to bypass the air pollution control devices (PCD) system to reheat the gases exiting from the PCD system, if the bypass will cause emissions above the limits specified in COC-(1)B.2. The percentage and amount of flue gas bypassing the PCD system shall be documented and records kept for a minimum of two years available for DEP's ~~FDER's~~ inspection.

i. and j. No change.

k. As a requirement of this specific condition, the applicant shall comply with all emissions limits and enforceable restrictions required by the State of Florida Department of Environmental Protection ~~Regulation~~ pursuant to Section 403.511(5), F.S., which may be adopted by regulation and which are more restrictive, that is lower emissions limits or more strict operating requirements and equipment specifications, than the requirements of COC-II (1)B.2. of these conditions.

l. CO_2 Recovery Plant

The CO_2 absorber column shall emit no more than 5 lb./hr VOC in addition to the products of combustion from the PC boiler. (Emissions from the PC boiler are regulated by Condition II.1.C.2.a.) If any batches of CO_2 do not meet product specifications, the off-spec product may also be vented to atmosphere.

~~3.~~ 4. Stack Testing

a. No change.

b. Compliance with emission limitation standards mentioned in Specific Condition No. ~~1~~ (1)B.2. above shall be demonstrated using EPA Methods, as contained in 40 CFR Part 60 (Standards for Performance for New Stationary Sources), or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants), or any other method as approved by the Department, in accordance with F.A.C. Rule 62-297.620 ~~17-2.700~~. ~~A test protocol shall be submitted for approval to the Bureau of Air Regulation at least 90 days prior to testing.~~

EPA Method	For Determination of
1	Selection of sample site and velocity traverses.
2	Stack gas flow rate when converting concentrations to or from mass emissions limits.
3, 3A & 3B	Gas analysis when needed for calculation of molecular weight of or percent O_2.
4	Moisture content when converting stack velocity to dry volumetric flow rate for use in converting concentrations in

	dry gases to or from mass emission limits.
5	Particulate matter concentration and mass emissions.
~~201 or 201A~~	~~PM_{10} emissions~~
6, 6C, or 19	Sulfur dioxide
~~7, 7C, or 19~~ 7E	Nitrogen oxide emissions from stationary sources.
~~8~~	~~Sulfuric acid mist from stationary source.~~
9	Visible emissions determination for opacity.
	(201)-At least three one hour runs to be conducted simultaneously with particulate testing for the emissions from dry scrubber/baghouse, and ash handling building baghouse.
	(202)-At least one lime vehicle unloading into the lime silo (from start to finish).
22	Fugitive emissions from transfer points.
10	Carbon monoxide emissions from stationary sources.
12 or 101A	Lead concentration from stationary sources.
13A or 13B	Fluoride emissions from stationary sources.
18 or 25	Volatile organic compounds concentration.
101A or 108	Mercury emissions.
104	Beryllium emission rate and associated moisture content.

Note: Use EPA draft method or other methods approved by the Department to test for ammonia.

C. Monitoring and Reporting

1. Air Monitoring Program

a. A flue gas oxygen meter shall be installed for each unit to continuously monitor a representative sample of the flue gas. The oxygen monitor shall be used with automatic feedback or manual controls to continuously maintain air/fuel ratio parameters at an optimum. Performance tests shall be conducted and operating procedures established. The document "Use of Flue Gas Oxygen Meter as BACT for Combustion Controls" may be used as a guide. The

permittee shall install and operate continuously monitoring devices for each main boiler exhaust for sulfur dioxide, nitrogen dioxide and opacity, including flue gas O_2 and/or CO_2 content. The monitoring devices shall meet the applicable requirements of Section 62-297, ~~17-2,~~ F.A.C., and 40 CFR 60 a minimum of 95% of the time the source is operating.

b. The permittee shall operate two continuous ambient monitoring devices for sulfur dioxide in accordance with DEP ~~DER~~ quality control procedures and EPA reference methods in 40 CFR, Part 53, and two ambient monitoring devices for suspended particulates, and one continuous NOx monitor. The monitoring devices shall be specifically located at a location approved by the Department's Bureau of Air Regulation. The frequency of operation of the particulate monitors shall be every six days commencing as specified by the Department's Bureau of Air Regulation. During construction and operation, a meteorological station will be operated and data reported with the ambient data.

c. No change.

d. The permittee shall provide stack sampling facilities as required by Rule 62-297.310(6), ~~17-2.700 (4)~~ F.A.C.

e. and f. No change.

g. Prior to the operation of the CO_2 Recovery Plant, the permittee shall submit to the Department's Bureau of Air Regulation a plan or procedure demonstrating that the system used to measure the PC boiler emissions accurately accounts for the exhaust gasses ducted to the CO_2 plant.

h. Within 90 days of initial operation of the CO_2 Recovery Plant, the permittee shall submit to the Department's Bureau of Air Regulation a summary of the actual emissions of the Recovery Plant. This shall include (at a minimum) emissions of all regulated pollutants, MEA, ammonia and methanol based upon a net CO_2 recovery level of 400 TPD of liquid CO_2 as well as the estimated maximum daily throughput of the Recovery Plant (if greater than 400 TPD). An O&M plan shall be submitted to the Department's Southeast District Office, detailing best practices for the minimization of secondary pollutant emissions.

2. Reporting

a. For the ICL, stack monitoring, fuel usage and fuel analysis data shall be reported to the Department's Southeast District Office on a quarterly basis commencing with the start of

commercial operation in accordance with 40 CFR, Part 60, Section 60.7, and 60.49a and in accordance with Sections 62-210.370 and 62-210.700, ~~17-2.08,~~ F.A.C.

b. and c. No change.

D. Malfunction or Shutdown

In the event of a prolonged (thirty days or more) equipment malfunction or shutdown of air pollution control equipment, operation shall be allowed to resume and continue to take place under appropriate Department order, provided that the Licensee demonstrates such operation will be in compliance with all applicable ambient air quality standards and PSD increments and industrial waste rules. During such malfunction or shutdown, the operation of the ICL shall comply with all other requirements of this certification and all applicable state and federal emission standards not affected by the malfunction or shutdown which is the subject of the Order. Operational stoppages exceeding two hours for air pollution control systems or four hours for other systems or operational malfunctions as defined in the operational contingency plans as specified in COC/I-(17) are to be reported as specified in COC/I-(12). Identified operational malfunctions which do not stop operation but may prevent compliance with emission limitations shall be reported to DEP ~~DER~~ as specified in COC/I-(12).

(2) WETLANDS

A. No change.

B. Prior to the submission of any post-certification information to the Department, ICL shall arrange for a site inspection by DEP ~~DER~~ District personnel from the Southeast District office in West Palm Beach or from the Bureau of Submerged Lands and Environmental Resources ~~Wetland Resource Management~~, Jurisdictional Evaluation Section, in Tallahassee to determine the extent of jurisdiction on the site and along the proposed pipeline route. At the time of the request, the Department will determine whether jurisdiction can be determined informally by the District office, or whether a binding jurisdictional declaratory statement, pursuant to Rule 62-340 ~~17-312.040~~, F.A.C., is required. The permittee shall flag the outermost limits of construction for the entire pipeline route and shall provide aerial photographs at a scale determined to be appropriate by the Department prior to the site inspection to enable the District personnel to determine if the proposed pipeline will affect jurisdictional wetland areas.

C. At least 90 days prior to the anticipated start of construction, the permittee shall submit fully dimensioned or scaled drawings on 8.5" by 11" paper, signed and sealed by an engineer registered in the state of Florida, that show limits of jurisdictional wetlands that will be affected by the project. The submittal shall also include calculations showing the acreage of affected wetlands by wetland type, a narrative describing construction techniques to be used for the project at both the power plant site and along the alignment of the pipeline, measures proposed to control erosion and turbidity, and a narrative that provides:

1. a detailed description of each wetland impact area;
2. the acreage, type, and quality of all the jurisdictional wetlands that will be affected.

The drawings shall include plan view and cross-section views for each area of jurisdictional wetlands that will be affected by the project, as identified pursuant to Condition No. (2) B. above. In addition to showing the existing and proposed DEP ~~DER~~ jurisdictional limits, the drawing shall depict existing and proposed ground elevations, the limits of construction for the pipeline, and all existing and proposed locations, sizes and invert elevations of structures that may be located in the jurisdictional wetlands.

D. No change.

E. All clearing and construction activities shall be confined to the limits of construction as shown on the drawings that are accepted by the Department pursuant to Condition No. (2) C. above. Within 30 days of the completion of construction, ICL shall arrange a site visit by DEP ~~DER~~ District personnel from the Southeast Florida District office in West Palm Beach to verify that no wetland damage has occurred outside the construction limits. If wetland damage occurs outside the construction limits during construction, ICL shall submit to the Bureau of Wetland Resource Management for review a plan to restore the wetland area which was damaged and to provide mitigation for the damage. The plan shall be implemented within 30 days of the Department approval of the restoration and mitigation plan. This condition does not preclude the Department from taking enforcement action if unauthorized activities occur.

F. Prior to initiating construction, ICL shall submit a map and aerial photographs showing the location of all staging areas for the project construction to the Bureau of Wetland Resource Management for review and written approval. These areas shall be upland areas which are not

currently providing endangered or threatened species habitat. The staging areas shall not be used prior to receiving DEP ~~DER~~ approval.

G. and H. No change.

I. If determined to be appropriate by the Department, ICL shall provide mitigation to offset the loss and habitat degradation resulting from the construction of this project in jurisdictional wetlands.

The plan for performing the mitigation shall be submitted and approved by the Department prior to construction. The plan shall include the following information, which is to be submitted to the Bureau of Submerged Lands and Environmental Resources ~~Wetland Resource Management~~:

1. through 6. No change.

If the mitigation submittal is deemed by the Department to provide insufficient information for review, additional information requested by the Department shall be submitted.

If the Department, upon review of the proposed mitigation, determines that the proposed mitigation is inadequate to offset water quality degradation, wetland loss, and habitat degradation from this project, the permittee shall propose additional mitigation.

If the proposed mitigation plan is deemed acceptable by the Department, the Department shall establish construction conditions, success criteria and monitoring plans to be carried out for the approved mitigation. These conditions, criteria and monitoring plans shall be incorporated into the certification conditions as a minor modification.

No construction within wetland areas shall commence until the Department approves the mitigation plan, and the mitigation construction conditions, success criteria and monitoring plans are incorporated into the certification conditions.

J. and K. No change.

(3) DISCHARGES TO SURFACE WATERS

A. Stormwater

1. Construction

To control run-off during construction which may reach and thereby pollute Waters of the State, necessary measures shall be utilized to settle, filter, treat or absorb silt-containing or

pollutant-laden stormwater to ensure against spillage or discharge of excavated material that may cause turbidity in excess of 29 Nephelometric Turbidity Units above background in Waters of the State. Control measures may consist of sediment traps, barriers, beams, and vegetation plantings. Exposed or disturbed soil shall be protected and stabilized as soon as possible to minimize silt and sediment laden run-off. The pH of the run-off shall be kept within the range of 6.0 to 8.5. The Permittee shall comply with Florida Administrative Code Chapters ~~17-25,~~ 40E-2~~,~~ and 40E-4. The Permittee shall complete the forms required by ~~17-25.09 (1) and~~ 40D-4 and submit those forms and the required information to the SFWMD for any modifications that might occur.

2. Operation

Any discharges from the site stormwater system via the emergency overflow structure which result from an event LESS than a ten-year, 24-hour storm (as defined by the U.S. Weather Bureau Technical Paper No. 40, or the DOT drainage manual, or similar documents) shall meet applicable State Water Quality Standards, Chapter 62-302 ~~17-302,~~ F.A.C., and the Standards of ~~Chapter 17-25, F.A.C., and~~ Chapter 40-E, F.A.C.

B. No change

C. Wastewater

There shall be no discharge of industrial or domestic wastewaters from the site to the waters of the state, except emergency storm water-related discharges from the cooling water pond and the wastewater storage pond, as a result of extreme rainfall events and as specifically authorized by DEP Industrial Wastewater Permit No. FL0183750, issued on January 19, 2000, or as subsequently amended, and subject to all the terms and conditions provided therein. An extreme rainfall event is defined as a rainfall event exceeding a 100 year/72 hour storm for the wastewater storage pond, but the extreme rainfall event for the cooling water pond is defined as an event exceeding the 25 year/72 hour storm.

D. Tanks

Diesel fuel also will be used to fuel on-site locomotives which move rail cars around the site. Diesel fuel will be delivered by truck and stored in above-ground storage tanks designed, constructed and maintained in accordance with Chapter 62-761 ~~17-792~~, F.A.C., including secondary containment. Stormwater will be collected from the bermed area around the tanks and pumped back to the plant for treatment and use. Any pollutant storage tanks on-site for facility

construction activities must also be above-ground and designed, constructed and maintained in accordance with Chapter 62-761 ~~17-762~~, F.A.C., including secondary containment.

(4) GROUNDWATER

1. Discharges to Groundwaters

Any accidental discharges to groundwater shall be collected and treated as necessary, or otherwise be of high enough quality, to be able to meet the applicable Water Quality Standards of Sections 62-520.400 ~~17-301.402~~ and 62-520.404 ~~17-301.404~~, F.A.C. If monitoring should indicate a violation of the standards, the licensee shall immediately notify the Southeast District office and SFWMD and institute remedial action.

2. Groundwater Monitoring Program

a. A groundwater monitoring plan shall be submitted within 180 days of certification in accordance with Rule 62-522 ~~17-28.700~~ F.A.C., for approval by the Southeast District Office. The groundwater monitoring program shall be reviewed and approved in accordance with COC I.13. The complete groundwater monitoring plan shall be signed, sealed, and dated by a professional engineer or professional geologist demonstrating competency in the field of groundwater monitoring, testing, and analysis. The monitoring plan shall contain the following information:

1. and 2. No change.

3. Monitoring wells shall be constructed in accordance with Rule 62-532 ~~17-532~~, F.A.C., except as follows: The minimum inside diameter shall be two inches. Flush threaded couplings shall be used to join polyvinyl chloride (PVC) pipe.

b. and c. No change.

d. Upon completion of construction of the groundwater monitoring system, but no less than 12 months before the commencement of operation, the Permittee shall sample all groundwater monitoring wells for the Primary and Secondary Drinking Water parameters included in Chapter 62-550 ~~17-550~~, F.A.C., Public Drinking Water Systems. The specific parameters to be sampled are listed in Part II, Quality Standards, Analytical Methods, Sampling, Sections 62-550.310 ~~17-550.310~~ and 62-550.320 ~~17-550.320~~, F.A.C.

e. The field testing, sample collection and preservation and laboratory testing, including quality control procedures, shall be in accordance with Chapters 62-4.246 ~~17-4.246,~~ 62-

160 ~~17-160~~, and 62-550, Part V ~~17-301.401~~, F.A.C. Approved methods as published by the Department or as published in Standard Methods, A.S.T.M. or EPA methods shall be used. Approved methods for chemical analyses are summarized in the Federal Register, December 1, 1976 (41FR52780) except that turbidity shall be measured by the Nephelometric Method.

f. and g. No change.

h. For four quarters commencing at least 12 months before the start of commercial operation all groundwater monitoring wells shall be sampled and the samples analyzed for the parameters on the following list. Thereafter, one down gradient well, as selected by the Department, shall be sampled and analyzed annually for parameters on the following list. Upon demonstration that key indicators such as sulfate, iron, pH or chloride show a significant increase over background levels, all affected wells shall be sampled and analyzed for the following parameters:

(No change to chart.)

Water elevations for all wells shall be measured on a quarterly schedule, and submitted to the Department along with quarterly data and shall be measured in reference to 1929 NGVD for all monitoring wells (1/100 of a foot) and surface waters (1/10 of a foot).

i. No change.

j. All groundwater analysis shall be submitted within 60 days of sampling on DEP ~~DER~~ form 62-522.900(2) ~~17-1.216(2)~~ with a summary of all exceedances of the MCL's per Rule 62-550, F.A.C., ~~17-550~~ to: Florida Department of Environmental Protection ~~Regulation~~, Southeast Florida District Office, 400 North ~~1900 South~~ Congress Avenue, West Palm Beach, Florida 33401 ~~32399-2400~~.

k. No change.

(5) SANITARY WASTES

A. No change.

B. A complete submittal of plans, drawings and specifications for waste pumps, lift stations, sewage collection systems, and wastewater collection systems in accordance with appropriate DEP ~~DER~~ rules shall be furnished to the Southeast District Office for approval at least 180 days prior to start of construction for the particular of such component. In order to obtain approval, the receiving sewage treatment plant shall indicate it has available capacity and

its acceptance of the proposed connection of the wastewater collection system. Also plans and specifications for connections to off-site sewage and wastewater transmission systems shall be furnished to the Southeast District Office for review in accordance with Condition I (13). Department approval shall be obtained prior to the start of construction.

(6) SOLID/HAZARDOUS WASTES

A. Construction

Solid wastes resulting from construction shall be disposed of in accordance with the applicable regulations of Chapter 62-701 ~~17-701~~, F.A.C. Hazardous waste/materials handling contingency plans shall be submitted to the Southeast District Office for review and approval at least 90 days prior to start of construction.

B. Operation

1. No bottom ash, fly ash, spent acid gas control media, wastewater treatment sludges, or other forms of solid waste shall be disposed of in Florida, except in a licensed off-site landfill in accordance with all applicable portions of Chapters 62-701 ~~17-701~~ and 62-702 ~~17-702~~, F.A.C. Plans of solid waste disposal contingency plans for handling hazardous waste/materials, shall be provided to the Southeast District Office and the Division of Waste Management for review and approval at least 90 days prior to start of operation of the ICL Unit. Review shall be performed in accordance with Condition I(13). The final plans for this facility shall include provisions for the isolated temporary handling of suspected hazardous, or toxic wastes. The ICL shall not be operated until an out of state disposal area or a Florida landfill capable of disposing of plant wastes provides a letter or contract indicating acceptance of such wastes.

2. through 5. No change.

(7) OPERATIONAL SAFEGUARDS

The overall design and layout of the facilities shall be such as to mitigate potential adverse effects to humans and the environment. Security control measures shall be utilized to prevent exposure of the public to hazardous conditions. The Federal Occupational Safety and Health Standards will be complied with during construction and operation. The safety standards specified under Section 440.56, Florida Statutes, by the ~~Industrial Safety Section of the~~ Florida Department of Labor and Employment Security, Division of Safety ~~Commerce~~ will be complied with during operation.

(8) and (9) NO CHANGE.

PART III

~~GAME AND FRESH WATER~~ FISH AND WILDLIFE CONSERVATION COMMISSION

(1) No more than 60 days prior to commencement of any clearing activities on the Project Site or in the pipeline right-of-way, respectively, a wildlife survey shall be conducted of the site or the pipeline right-of-way, whichever is applicable, the purpose of which is to update and supplement the survey results presented in the Site Certification Application concerning the presence of listed species (endangered or threatened species, or species of special concern) likely to occur on the site or in the right-of-way based on range and habitat. This survey shall be consistent with methodologies established or accepted by the Florida ~~Game and Fresh Water~~ Fish and Wildlife Conservation Commission (FFWCC) ~~(FGFWFC)~~. Results of said survey(s) shall be submitted to the FFWCC ~~FGFWFC~~ and the United States Fish and Wildlife Service within seven days of completion thereof. If the survey indicates that any listed species will be affected by construction of the Project or pipeline, the Permittee and the FFWCC ~~FGFWFC~~, shall, within 15 days of receipt of the survey by the FFWCC ~~FGFWFC~~, consult and determine the appropriate measures necessary to avoid, minimize, mitigate, or otherwise appropriately address such impacts.

(2) ICL shall place or construct culverts or similar structures to facilitate movement of wildlife across or beneath the perimeter access road to and from upland preserve areas of the Project site. The structures shall be located in reference to the Project's Site layout, as follows:

(a) through (c) No change.

These structures shall be designed to remain dry during a two year storm event and shall be approximately 3 feet high and 5 feet wide.

ICL shall submit detailed designs of the structures and their location to the FFWCC ~~FGFWFC~~ for review and approval 60 days prior to construction of the portions of the access road being culverted.

(3) No change.

(4) At least 60 days before commencement of onsite construction, ICP shall submit an upland preserve and wetland management plan to the Florida ~~Game and Fresh Water~~ Fish and Wildlife

Conservation Commission and to Martin County for review and approval. This plan shall present management practices for the seven wetlands and the PUD planned unit development (industrial) zoning agreement of Martin County, and illustrated on figure 1. At a minimum, this plan shall include a statement of preserve management objectives; a statement of what habitat functions the preserves are expected to provide; a description of how habitat values will be maintained, including measures such as perimeter staking, and vegetation control; if controlled burning is proposed to control vegetation, a schedule of fire management through an certified burn specialist and including, but not limited to burn conditions, burn frequency, and measures taken to avoid spread of wildfire; measures to be taken to remove exotic vegetation from both uplands and wetlands; legal instrument(s) by which preserve areas and wetlands have been reserved from future developmental uses; and the entity responsible for management.

PART ~~Part~~ IV

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

A. LEGAL / ADMINISTRATIVE CONDITIONS

1. GENERAL

a. Responsible Entity

The Permittee shall be responsible for compliance with the Certification Conditions. If contractual rights, duties, or obligations are transferred under this Certification, notice of such transfer or assignment, including the identification of the entity responsible for compliance with the Certification, shall immediately be submitted to the Florida Department of Environmental Protection ~~Regulation~~ and the SFWMD by the previous certification holder (Permittee) and the Assignee. Any assignment or transfer shall carry with it the full responsibility for the limitations and conditions of this Certification. The previous Permittee shall be responsible for informing the Assignee of all authorized facilities and uses and the conditions under which they were authorized.

b. – i. No change.

j. Post Certification Construction Notifications

At least 30 days prior to the commencement of construction, the Permittee or Project Engineer shall notify the SFWMD ~~Field Engineering~~ Environmental Resource Compliance Division (using the appropriate SFWMD Form) of the actual or anticipated construction start date and the expected completion date/duration of construction. Annual construction status reports shall be submitted by the Permittee to the SFWMD ~~Field Engineering~~ Environmental Resource Compliance Division (using the appropriate SFWMD Form) beginning one year after the initial construction start date.

k. Operation Authorization

Operation of the cogeneration facility shall not begin until the Florida Department of Environmental Protection ~~Regulation~~ has received an executed agreement between the Permittee and an entity capable of receiving and disposing of the combustion waste products generated by the proposed facility.

l. No change

2. PROCESSING OF INFORMATIONAL REQUESTS

a. - d. No change

e. Subsequent modifications to the drawings and supporting calculations submitted to the SFWMD which may alter the quantity and/or quality of waters discharges off-site shall be made pursuant to Section 403.516, F.S., and Rule 62-17.211 ~~17-17.211~~, F.A.C. As part of this process, these modifications shall be reviewed by the SFWMD for a determination that the modifications are in compliance with the non-procedural requirements of Chapter 40E-2, 40E-4, and 40E-6, F.A.C., prior to the commencement of construction.

f. No change

B. WATER USE CONDITIONS

1. GENERAL

a. No change

b. Impacts on Existing Legal Uses

~~The Permittee shall be responsible for mitigating to the satisfaction of the SFWMD, any adverse impacts on existing legal uses caused by the surface ground water withdrawals authorized by this Certification. If adverse impacts occur, or are imminent, SFWMD reserves the right to~~

~~curtail withdrawal rates pursuant to the enforcement provisions of Condition IV.A.1.1 of these conditions. The adverse impacts can include:~~

~~(1) A reduction in well water levels that impairs the ability of an adjacent well to produce water (an adjacent well may be a domestic well, lawn irrigation well, public water supply well etc.);~~

~~(2) A significant reduction in water levels in an adjacent water body such as a lake, pond, wetland, or canal system;~~

~~(3) Saline water intrusion or induction of pollutants into the water supply of adjacent water user, resulting in a significant reduction in water quality; and/ or~~

~~(4) A change in water quality that causes impairment or loss of use of a well or water body.~~

The Permittee shall mitigate any adverse impact on existing legal uses caused by the ground water withdrawals authorized by this Certification. When adverse impacts occur or are imminent, the SFWMD reserves the right to curtail future withdrawal rates pursuant to the enforcement provisions of Condition A.1.1 of these conditions. The adverse impacts can include:

(1) A reduction in well water levels that impairs the ability of an adjacent well, including a domestic well, lawn irrigation well, or public water supply well, to produce by 10% or greater;

(2) A significant reduction in water levels in an adjacent water body such as a lake, pond, wetland, or canal system that impairs the ability to produce water by 10% or greater;

(3) Saline water intrusion or induced movement of pollutants into the water supply of an adjacent water user, resulting in a significant reduction in water quality; and/or

(4) A change in water quality caused by the Permittee that results in significant impairment or loss of use of a well or water body.

c. Impact on Existing Off-Site Land Uses

~~The Permittee shall be responsible for mitigating, to the satisfaction of the SFWMD, any adverse impacts on existing off-site land uses as a consequence of the surface or ground water withdrawals authorized by this Certification. If the withdrawals cause an adverse impact on existing land uses, the SFWMD reserves the right to curtail future withdrawals rates pursuant to~~

~~the enforcement provisions of Conditions IV.a1.1 of these conditions. The adverse impacts can include:~~

~~(1) A significant reduction in water levels in an adjacent water body such as a lake, pond, wetland, or canal system;~~

~~(2) Land collapse or subsidence caused by a reduction in water levels;~~

~~(3) Damage to crops and other vegetation, causing financial harm to the landowner; and/or~~

~~(4) Damage to the habitat of rare, endangered or threatened species.~~

The Permittee shall mitigate any adverse impacts on existing off-site land uses that are a consequence of the groundwater withdrawals authorized by this Certification. If increased withdrawals cause an adverse impact on existing land uses, the SFWMD reserves the right to curtail future withdrawal rates pursuant to the enforcement provisions of Condition A.1.1 of these conditions. Adverse impacts can include:

(1) A significant reduction in water levels in an adjacent water body, including impoundments, to the extent that the designed function of the water body is impaired;

(2) Land collapse or subsidence caused by a reduction in water levels; and/or

(3) Damage to crops and other types of vegetation.

d. Impacts to Natural Resources

The Permittee shall mitigate any adverse impacts to natural resources as a consequence of the groundwater withdrawals authorized by this Certification. When adverse impacts occur, or are imminent, the SFWMD reserves the right to curtail future withdrawal rates pursuant to the enforcement provisions of Condition A.1.1 of these conditions. Adverse impacts can include:

(1) A reduction in ground water levels that results in significant lateral movement of the fresh water/salt water interface;

(2) A reduction in water levels that adversely impacts the hydroperiod of protected wetland environments;

(3) A significant reduction in water levels or hydroperiod in a naturally occurring water body such as a lake or pond;

(4) Induced movement or induction of pollutants into the water supply resulting in a significant reduction in water quality; and/or

5) Harm to the natural system including damage to habitat for rare or endangered species.

~~d~~ e. Well System Operations

At any time, if there is an indication that the well casing, valves, or controls associated with the on-site backup well system leak or have become inoperative, the Permittee shall be responsible for making the necessary repairs or replacement to restore the well system to an operating condition acceptable to the SFWMD. Failure to make such repairs shall be cause for requiring that the well(s) be filled and abandoned in accordance with the procedures outlined in Chapter ~~40-E~~ 40E-3 (Water Wells), F.A.C.

2. SITE SPECIFIC DESIGN AUTHORIZATIONS

a. Authorized Withdrawals

Source	**Maximum Annual Allocation (MGY)**	**Maximum Daily ~~Source~~ Allocation (MGD)**
L-63N Canal	~~1484.00~~ 1942.00	~~4.69~~ 5.32
Upper Floridan Aquifer	195.00	2.60
Upper Permeable Zone-Lower Floridian Aquifer	174.0	2.32
Surficial Aquifer	3.0	0.04

b. Limitations on Authorized Withdrawals

(1) Withdrawals from the L-63N Canal shall only occur when the water level in the L-63N Canal is at or above 17.50 feet NGVD~~.~~ , except as provided for in subsection (7) below.

(2) Withdrawals from the Upper and Lower Production Zones of the Upper Floridan aquifer and the Surficial aquifer shall only occur when the water level in the L-63N Canal is below 17.50 feet NVGD~~.~~ or during tests and maintenance on the wells. Maintenance is defined as one hour of operation per week for each well or the minimum operation of the pump necessary to maintain mechanical integrity as specified by the pump manufacturer.

(3) No change

(4) Any withdrawals from the L-63N Canal, ~~or~~ the Upper or Lower Production Zone of the Upper Floridan aquifer or the Surficial aquifer in excess of the amounts specified herein shall require prior SFWMD approval.

(5) No change

(6) The withdrawals from the Upper and Lower Production Zones of the Upper Floridan aquifer and the Surficial Aquifer are authorized for a period not to exceed 75 days at the specified maximum daily allocation or 90 days at an allocation not to exceed the maximum annual allocation. The permittee shall not exceed a total of 90 withdrawal days from the Floridan aquifer during any consecutive 365 day period without prior approval from the SFWMD.

(7) When operation of the SFWMD's S-191 control structure during flood events results in a water elevation of less than 17.50' NGVD in the L-63N Canal, withdrawals from the L-63N Canal may continue subject to the permittee obtaining prior confirmation from the SFWMD's Okeechobee Field Station (7:00 a.m. to 4:00 p.m., Monday through Friday) or the SFWMD's West Palm Beach Operations Control Center that the SFWMD is in a flood control operations mode.

(8) The permittee shall provide documentation of SFWMD approval of withdrawals from the L-63N Canal below 17.50' when the SFWMD is in a flood control operations mode. The documentation shall be in the form of a letter faxed to the SFWMD's West Palm Beach Operations Control Center within 24 hours of the verbal request to continue withdrawals and shall indicate the date and approximate time of approval and the name of the SFWMD employee granting the approval.

c. Authorized Withdrawal Facilities

2 - ~~2,550~~ 3,700 GPM Surface Water Pumps in L 63N

1 - 10" x 1340' ~~Flowing~~ Floridan Aquifer Well cased to 500'
(existing well)

1 - 10" x 1265' ~~Flowing~~ Floridan Aquifer Well cased to 750'

2 - 15" x 1350' ~~Flowing~~ Floridan Aquifer Wells cased to 750'

2 - 15" x 1650' ~~Flowing~~ Floridan Aquifer Wells cased to 1487'

1 - 8" x 118' Surficial Aquifer Well cased to 78'

d. Authorized Surface Water Withdrawal Elevation

The intake for the surface water withdrawal facilities in L-63N shall be designed such that surface water withdrawals shall cease when water levels in the canal fall below 17.50' NVGD ~~(See also Condition E.3.a(5)).~~ , except as provided for in Conditions B.2.b(1), (2), and (7).

e. No change.

f. Modification of Authorized Withdrawals

By January 1, 2005, and every ten years thereafter, unless extended by mutual agreement between the Permittee and SFWMD, the Permittee shall submit to the SFWMD a report on the project's consumptive water use which contains the information required by Chapter 40E-2, F.A.C., as in effect at that time. Within 90 days after receipt of the report, SFWMD shall evaluate the information and issue a written notification to DEP ~~DER~~ and the Permittee as to whether the maximum annual withdrawals of water for consumptive use authorized by this certification remain in compliance with the provisions of Chapter 373, F.S., and Chapter 40E-2, F.A.C., as in effect at that time. If the notification indicates that the withdrawals are not in compliance with those provisions, SFWMD shall recommend possible alternatives for bringing the withdrawals into compliance or otherwise meeting the minimum consumptive water use needs of the certified project. If mutual agreement cannot be reached within 180 days after issuance of the written notification on whether the maximum annual withdrawals of water for consumptive use remains in compliance, then the written notification shall be immediately referred to the Division of Administrative Hearings (DOAH) for resolution in accordance with the procedural provisions of Section 403.516(1)(c) and 120.57, F.S. In any proceeding conducted pursuant to this Condition of Certification, SFWMD shall demonstrate that the authorized water uses are no longer consistent with SFWMD's non-procedural criteria. The Permittee shall then demonstrate its entitlement to maintaining the authorized water uses by showing that the authorized water use

is consistent with the non-procedural criteria of SFWMD for such water uses or that a variance or other relief is warranted. The hearing officer shall submit a recommended order to the Siting Board whether the authorized water uses should be modified. The Siting Board shall then enter a final order on the matter, which order will constitute final agency action.

3. ADDITIONAL INFORMATION REQUIREMENTS

a. Floridan Aquifer Withdrawals

The authorized withdrawals from the Floridan aquifer are subject to the submittal of the following tests and analyses, a SFWMD evaluation of the results for a determination of compliance with the non-procedural requirements of Chapter 40E-2, F.A.C., and SFWMD's written approval to initiate withdrawals. The following information shall be submitted:

(1) The results of the Aquifer Performance Test (APT) to be conducted at the project site once the on-site water storage pond has been constructed or an alternate disposal method is approved by ~~DER~~ FDEP and SFWMD. The test shall be designed to determine the transmissivity and storage of the Upper and Lower production zones of the Upper Floridan aquifer and the leakance between the zones. A plan which details the APT shall be submitted to the SFWMD for approval at least 30 days prior to the commencement of the test.

(2) and (3) No change

b. - e. No change.

f. Water Conservation Plan

Within two (2) years of issuance of the modified Certification Order, the Permittee shall submit a Water Conservation Plan required by Chapter 40E-2, F.A.C., in effect at that time, for review and approval by SFWMD staff. The plan shall, at a minimum, incorporate the following components:

(1) An audit of the amount of water needed in the Permittee's operational processes. The following measures shall be implemented within one year of audit completion if found to be cost effective in the audit:

(a) Implementation of a leak detection and repair program;

(b) Implementation of a recovery/recycling or other program providing for technological, procedural or programmatic improvements to the Permittee's facilities; and

(c) Use of processes to decrease water consumption.

(2) Development and implementation of an employee awareness program concerning water conservation.

C. SURFACE WATER MANAGEMENT CONDITIONS

1. GENERAL CONDITIONS

a. Professional Engineer Certificate

The operation of the surface water management system authorized under this Certification shall not become effective until a Florida Registered Professional engineer certifies, upon completion of each phase, that these facilities have been constructed in accordance with the design approved by the SFWMD. Within 30 days after completion of construction of the surface water management system, the Permittee or authorized agent shall submit the engineer's certification and notify the SFWMD ~~Field Engineer~~ Environmental Resource Compliance Division that the facilities are ready for inspection and approval. Such notification shall include as-built drawings of the site which shall include elevations, locations, and dimensions of components of the surface water management system.

b. - k. No change.

2. SITE SPECIFIC DESIGN AUTHORIZATIONS

a. No change.

b. Authorized Discharge Facilities

BASIN 2:	1-0.25' diameter circular orifice with the invert at elevation 33.5' NGVD 1-2□ V-notch with the invert at elevation 35.5' NGVD. 1-4.0' wide weir with the crest at elevation 36.5' NGVD and a length of 18" diameter culvert discharging into 20' of rip-rapped spreader swale.
BASIN 3:	1-0.25' diameter circular orifice with the invert at elevation 32.7' NGVD 1-2□ V-notch with the invert at elevation 34.6' NGVD 1-4.0' wide weir with the crest at elevation 36.0' NGVD and a length of 18" diameter culvert discharging into a 20' of rip-rapped spreader

	swale.
BASIN 6:	1-12' wide weir consisting of a 3 sided drop inlet with the crest at ~~37.5'~~ 38.5' NGVD.

c. - e. No change.

3. ADDITIONAL INFORMATION REQUIREMENTS

a. - d. No change.

e. Surface Water Quality Sampling and Monitoring ~~Program for Surface Water Discharges~~

~~Within six months of issuance of this certification, the Permittee shall develop and implement a monitoring program for surface water discharges. Within three months of issuance of this Certification, the Permittee shall submit a preliminary surface water quality monitoring program to the District for a determination of compliance with the non-procedural requirements of Chapter 40E-4, F.A.C. At a minimum, the program shall monitor all off-site discharges from the surface water management system and all surface water management system discharges into the on-site wetlands, specifically where Basin No. 2 discharges into Wetland No. 6 and Basin No. 3 discharges into Wetland No. 4.~~

~~(1) While the program may incorporate additional monitoring requirements and parameters required by the other agencies, at a minimum, it shall include the following parameters and time frames.~~

~~MONITOR TYPE AND SCHEDULE~~	~~PARAMETERS~~
~~A. GENERAL (EVERY OTHER MONTH)~~	~~TOTAL ORGANIC CARBON, DISSOLVED OXYGEN, pH, TURBIDITY, SPECIFIC CONDUCTANCE, CHEMICAL OXYGEN DEMAND, TOTAL SUSPENDED SOLIDS, ALKALINITY.~~
~~B. ORGANIC (SEMI-ANNUAL)~~	~~OIL AND GREASE, DETERGENTS, EPA METHODS 601 AND 602.~~
~~C. METALS (SEMI-ANNUAL)~~	~~ALUMINUM, ANTIMONY, ARSENIC,~~

	~~BERYLLIUM, CADMIUM, COPPER, CYANIDE, IRON, LEAD, MERCURY, NICKEL, SELENIUM, SILVER, ZINC.~~

~~(2) Water quality samples shall be taken at the above noted locations in accordance with the above schedule during periods of discharge. A laboratory certified by the State of Florida shall be responsible for all water quality analyses under (1)B and (1)C above. Reports shall be submitted to the SFWMD on a semi-annual basis. Initial sampling results shall be reported to the SFWMD no later than six months following the issuance of this Certification.~~

Surface water quality sampling and monitoring data shall be collected and analyzed in accordance with applicable FDEP and EPA criteria. The monitoring results shall be reported to the SFWMD at the intervals specified in the applicable FDEP Conditions of Certification.

~~(3) The SFWMD will evaluate the monitoring results to determine whether the discharge degrades receiving waters and conforms to State water quality standards as defined in Chapter 17-302, F.A.C. If water quality problems develop, the SFWMD reserves the right to require more frequent sampling and more thorough analyses in order to provide assurances that the discharges will not cause additional off-site water quality impacts.~~

f. No change.

D. NO CHANGE.

E. LAND MANAGEMENT CONDITIONS

1. NO CHANGE.

2. GENERAL DESIGN CONDITIONS

a. through d. No change.

e. All excavations shall be in accordance with FDEP ~~DER~~ requirements and silt booms shall be employed where necessary.

f. – n. No change.

3. ADDITIONAL INFORMATION SUBMITTALS

a. Construction Plans for Authorized Uses in SFWMD Right of Way

Prior to the commencement of construction of any portion of the withdrawal facilities and associated piping to be located within the SFWMD ROW, the Permittee shall submit

complete detailed construction drawings showing the proposed facilities to the SFWMD for a determination of compliance with the non-procedural requirements of Chapter 40E-6, F.A.C. The drawings shall be identical to the plans to be provided to the Permittee's contractor, shall depict the proposed facilities in both plan and profile views and shall show at a minimum:

(1) - (4) No change.

(5) Design details which demonstrate that withdrawals from the canal cannot occur below elevation 17.50 NGVD (see also Conditions IV.B.2.b.(1) and 7 and IV.B.2.d.);

(6) - (9) No change.

b. No change.

PART V

TREASURE COAST REGIONAL PLANNING COUNCIL

1. – 4. No change.

5. At least 60 days prior to construction, ICP shall submit and upland preserve and wetland management plan to the Florida ~~Game and Fresh Water~~ Fish and Wildlife Conservation Commission and to Martin County for review and approval. This plan shall present management practices for the seven wetlands and the upland preserve areas, as designated in the Application and the PUD planned unit development (industrial) zoning agreement of Martin County, and illustrated on Figure 1. At a minimum, this plan shall include a statement of preserve management objectives; a statement of what habitat functions the preserves are expected to provide; a description of how habitat values will be maintained, including measures such as perimeter staking, and vegetation control if controlled burning is proposed to control vegetation, a schedule of fire management through a certified burn specialist and including, but not limited to, burn conditions, burn frequency, and measures taken to avoid spread of wildfire; measures taken to remove exotic vegetation from both uplands and wetlands; legal instrument by which preserve areas and wetlands have been reserved from future developmental uses; and the entity responsible for management.

6. No change.

PART VI

DEPARTMENT OF TRANSPORTATION

1.-8. No change.

9. No new access to the State Highway System is proposed in the site certification modification proposed for calendar year 2000. If new access or modification of current access to the State Highway System is proposed at a later date, such as related to the borrow pit sites when they are identified, access will be subject to the requirements of Rule Chapters 14-96, State Highway System Connection Permits, Administrative Process, and 14-97, State Highway System Access Management Classification System and Standards, Florida Administrative Code, will be required.

10. If any overweight or overdimensional vehicles are operated by the applicant, permitting requirements of Chapter 316, Florida Statutes, and Rule Chapter 14-26, Safety Regulations and Permit Fees for Overweight and Overdimensional Vehicles, Florida Administrative Code, must be adhered to.

11. No new use of State of Florida right of way or transportation facilities, including any new or relocated transmission lines, is proposed via the calendar year 2000 modification. If any use of State of Florida right of way or transportation facilities is later proposed, such usage will be subject to the requirements of the Department of Transportation's Utility Accommodation Manual and Rule Chapter 14-46.001, Utilities Installation or Adjustment, Florida Administrative Code.

PART VII

NO CHANGE.

PART VIII

DEPARTMENT OF COMMUNITY AFFAIRS

1. – 5. No change.

6. At least 60 days prior to construction, ICP shall submit an upland preserve and wetland management plan to the Florida ~~Game and Fresh Water~~ Fish and Wildlife Conservation Commission and to Martin County for review and approval. This plan shall present management practices for the seven wetlands and the upland preserve areas, as designated in the Application and the PUD planned unit development (industrial) zoning agreement of Martin County, and illustrated on Figure 1. At a minimum, this plan shall include a statement of preserve management objectives; a statement of what habitat functions the preserves are expected to provide; a description of how habitat values will be maintained, including measures such as perimeter staking and vegetation control; if controlled burning is proposed to control vegetation; a schedule of fire management through a certified burn specialist and including, but not limited to, burn conditions, burn frequency, and measures taken to avoid spread of wildfire; measures taken to remove exotic vegetation from both uplands and wetlands; legal instrument by which preserve areas and wetlands have been reserved from future development uses; and the entity responsible for management.

PART IX

NO CHANGE.

PART X

TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND

1. In the event that the facilities, pipeline or improvements constructed or maintained by ICL under this certification are placed on, under, over, or across lands owned by the Board of Trustees of the Internal Improvement Trust Fund, ICL shall first obtain the consent of the Trustees for the use of such lands prior to the construction of those facilities. Such requests for consent shall be made and granted pursuant to Chapter 253, F.S., and Chapter 18-21, F.A.C. The issuance of such consent shall be based upon the information provided during the certification proceeding and such other information necessary to demonstrate compliance with Chapter 253, F.S., and Chapter 18-21, F.A.C.

Any party to this Notice has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Protection, M.S.35, Office of General Counsel, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, and by filing a copy of the Notice of Appeal accompanied by the applicable filing fee with the appropriate district court of appeal. The Notice of Appeal must be filed within 30 days from the date that this Final Order is filed with the Department of Environmental Protection.

DONE AND ENTERED this 26th day of July 2000, in Tallahassee, Florida.

STATE OF FLORIDA, DEPARTMENT OF ENVIRONMENTAL PROTECTION

Kirby B. Green III

KIRBY B. GREEN, III
DEPUTY SECRETARY
3900 Commonwealth Boulevard
Tallahassee, FL 32399-3000
Telephone: (850) 488-7131

FILING IS ACKNOWLEDGED ON THIS DATE, PURSUANT TO §120.52, FLORIDA STATUTES, WITH THE DESIGNATED DEPARTMENT CLERK, RECEIPT OF WHICH IS HEREBY ACKNOWLEDGED.

Beverly Reardon
Deputy Clerk

7/26/00
Date

CERTIFICATE OF SERVICE

I CERTIFY that a true and correct copy of the foregoing Final Order Modifying Conditions of Certification was mailed to the following on this 26 day of July 2000.

SCOTT A. GOORLAND
Senior Assistant General Counsel
Florida Bar No. 0066834

John Fumero
General Counsel
South Florida Water Management District
Post Office Box 24680
West Palm Beach, Florida 33416-4680

Roger G. Saberson, Esquire
70 Southeast 4th Avenue
Delray Beach, Florida 33483-4514

Norman White, Esquire
Post Office Box 1260
Lake Wales, Florida 33859-1260

Gary K. Oldehoff
County Attorney
Martin County
2401 Southeast Monterey Road
Stuart ,Florida 34996

R. Douglas Leonard
Executive Director
Central Florida Regional Planning Council
Post Office Box 2089
Bartow, Florida 33831

Michael Busha
Executive Director
Treasure Coast Regional Planning Council
301 East Ocean Boulevard
Suite 300
Stuart, Florida 34994

*** Via Interagency Mail**
Cari Roth, General Counsel
Department Of Community Affairs
2555 Shumard Oak Boulevard
Tallahassee, Florida 32399-2100

George Long
County Administrator
Okeechobee County
304 Northwest 2nd Street
Okeechobee, Florida 34972

*** Via Interagency Mail**
Sheauching Yu, Assistant General Counsel
Department of Transportation
Haydon Burns Building, MS 58
605 Suwannee Street
Tallahassee, Florida 32399-0450

*** Via Interagency Mail**
Sandra Whitmire
Intergovernmental Coordination & Review Coordinator
Department of Transportation
605 Suwannee Street, MS 28
Tallahassee, Florida 32399-0450

Michelle Golden
PG & E Generating
7500 Old Georgetown Road
Bethesda, Maryland 20814

David Burrage
Indiantown Cogeneration, L. P.
Post Office Box 1799
Indiantown, Florida 34956

*** Via Interagency Mail**
Michael Palecki
Division of Legal Services
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

*** Via Interagency Mail**
James Antista, General Counsel
Florida Fish And Wildlife Conservation Commiss
Bryant Building
620 South Meridian Street
Tallahassee, Florida 32399-1600

David S. Dee
Attorney At Law
Landers & Parsons, P.A.
Post Office Box 271
Tallahassee, Florida 32302-0271

Andrew Jablonowski, P. E.
George Lipka, P. E.
Earth Tech
196 Baker Avenue
Concord, Massachusetts 01742-2167

Indiantown Cogeneration, L.P.

Indiantown Cogeneration, L.P.
P.O. Box 1799
19140 SW Warfield Blvd.
Indiantown, FL 34956
Tel: 561.597.6500
Fax: 561.597.6210

RECEIVED
APR 10 2000
BUREAU OF AIR REGULATION

April 6, 2000

RECEIVED
APR 10 2000
BUREAU OF AIR REGULATION

C. H. Fancy, P.E. Chief
Bureau of Air Regulations
Department of Environmental Protection
Marjory Stoneman Douglas Building
3900 Commonwealth Blvd.
Tallahassee, Florida 32399-3000

VIA FEDERAL EXPRESS

Re: DEP File No. PA 90-31, PSD-FL-168
Indiantown Cogeneration Facility CO2 Recovery Project
Public Notice of Intent to Issue PSD Permit Modification

Dear Mr. Fancy:

Pursuant to your written request of March 24, 2000, and the requirements of Chapter 50 Florida Statutes, please find attached proof of publication of Public Notice of Intent to Issue PSD Permit Modification, State of Florida Department of Environmental Protection DEP File No. PA 90-31, PSD-FL-168, Indiantown Cogeneration, L.P., Indiantown Cogeneration Plant, Martin County, printed April 2, 2000 in the Palm Beach Post and Stuart News. Please contact David Burrage at 561-597-6500, extension 19, if you have any questions.

Sincerely,

Stephen A. Sorrentino
General Manager

Enclosure 9817

cc: Mike Halpin, DEP
Buck Oven, DEP
A.J. Jablonowski

SCRIPPS HOWARD

STUART NEWS
PORT ST. LUCIE NEWS

(an edition of the Stuart News)

Martin County and St. Lucie County, Florida

1939 S. Federal Highway, Stuart, FL 34994

AFFIDAVIT OF PUBLICATION

STATE OF FLORIDA
COUNTY OF MARTIN; COUNTY OF ST. LUCIE

Before the undersigned authority personally appeared, Mary T. Byrne, who on oath says that she is Classified Legal Advertising Representative of the Stuart News and the Port St. Lucie News, a daily newspaper published at Stuart in Martin County, Florida: that the attached copy of advertisement was published in the Stuart/Port St. Lucie News in the following issues below. Affiant further says that the said Stuart/Port St. Lucie News is a newspaper published in Stuart in said Martin County, Florida, with offices and paid circulation in Martin County and St. Lucie County, Florida, and that said newspapers have heretofore been continuously published in said Martin County, Florida, daily and distributed in Martin and St. Lucie County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that she has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the securing this advertisement for publication in the said newspaper. The Stuart News has been entered as second class matter at the Post Offices in Stuart, Martin County, Florida and Ft. Pierce, St. Lucie County, Florida and has been for a period of one year next preceding the first publication of the attached copy of advertisement.

Ad #	Date	Copyline	PO #
1875778	04/02/2000	DEP PERMIT	

Subscribed and sworn to me before this date:

04/03/2000

Mary T. Byrne

Catherine Hudson
Notary Public

CATHERINE HUDSON
Notary Public - State of Florida
My Commission Expires Apr 19, 2000
Commission # CC546552

SEAL

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PUBLIC NOTICE OF INTENT TO ISSUE
PSD PERMIT MODIFICATION
STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DEP File No.: PA 90-31, PSL-FL-168
Indiontown Cogeneration, L.P.
Indiantown Cogeneration Plant
Martin County

The Department of Environmental Protection (Department) gives notice of its intent to issue a modification of the permit for the Prevention of Significant Deterioration of Air Quality (PSD permit) to Indiantown Cogeneration, L.P. The permit modification is to install a slipstream carbon dioxide recovery plant and to clarify allowable operation rates of auxiliary boilers at the Indiantown Cogeneration Plant located at 19140 Southwest Warfield Blvd., Indiantown, Martin County. A Best Available Control Technology (BACT) determination was not required pursuant to Rule 62-212.400, F.A.C. and 40 CFR 52.21, Prevention of Significant Deterioration. The applicant's mailing address is: Stephen Sorrentino, General Manager, Indiantown Cogeneration Plant, Post Office Box 1799, Indiantown, Florida 34956.

The existing facility is a coal-fired electrical and steam co-generation plant. Emissions are controlled by baghouses, spray driers and selective catalytic reduction. The slipstream plant will sequester carbon dioxide (CO_2), a combustion product, and convert it to bottled (liquid) CO_2 for resale purposes. Other changes are minor and are for the purposes of clarifying permit conditions.

This project is not subject to review under Section 403.506, F.S. (Power Plant Siting Act), because it provides for no expansion in steam generating capacity.

An air quality impact analysis was not conducted. Emissions from this project are largely beneficial and will not consume PSD increment and will not significantly contribute to or cause a violation of any state or federal ambient air quality standards.

The Department will issue the Final permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed permit issuance action for a period of 14 days from the date of publication of this Public Notice of Intent to Issue PSD Permit Modification. Written comments should be provided to the Department's Bureau of Air Regulation, at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57, F.S. before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below. Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in

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THE PALM BEACH POST

Published Daily and Sunday
West Palm Beach, Palm Beach County, Florida

PROOF OF PUBLICATION

STATE OF FLORIDA
COUNTY OF PALM BEACH

Before the undersigned authority personally appeared **Peter W. Ortado** who on oath says that he is **Classified Advertising Supervisor** of The Palm Beach Post, a daily and Sunday newspaper published at West Palm Beach in Palm Beach County, Florida; that the attached copy of advertising, being a **Notice** in the matter of **Intent to Issue PSD Permit Modification** in the --- Court, was published in said newspaper in the issues of **April 2, 2000.**

Affiant further says that the said The Post is a newspaper published at West Palm Beach , in said Palm Beach County, Florida, and that the said newspaper has heretofore been continuously published in said Palm Beach County, Florida, daily and Sunday and has been entered as second class mail matter at the post office in West Palm Beach, in said Palm Beach County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that she/he has neither paid nor promised any person, firm or corporation any discount rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Sworn to and subscribed before this **3** day of **April** A.D. 2000.

Personally known **XX** or Produced Identification _____
Type of Identification Produced _____

Karen McLinton
Notary Public, State of Florida
Commission No. CC 591337
My Commission Exp. 11/15/2000
1-800-3-NOTARY Fla. Notary Service & Bonding Co.

NO. 653220
PUBLIC NOTICE OF INTEN TO ISSUE PSD PERMIT MODIFICATION
STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
DEP File No. PA 90-31, PSD-FL-168
Indiantown Cogeneration, L.P.
Indiantown Cogeneration Plant
Martin County

The Department of Environmental Protection (Department) gives notice of its intent to issue a modification of the permit for the Prevention of Significant Deterioration of Air Quality (PSD permit) to Indiantown Cogeneration, L.P. The permit modification is to install a slipstream carbon dioxide recovery plant and to clarify allowable operation rates of auxiliary boilers at the Indiantown Cogeneration Plant located at 19140 Southwest Warfield Blvd., Indiantown, Martin County. A Best Available Control Technology (BACT) determination was not required pursuant to Rule 62-212.400, F.A.C. and 40 CFR 52.21, Prevention of Significant Deterioration. The applicant's mailing address is: Stephen Sorrentino, General Manager, Indiantown Cogeneration Plant, Post Office Box 1799, Indiantown, Florida 34956.

The existing facility is a coal-fired electrical and steam cogeneration plant. Emissions are controlled by baghouses, spray driers and selective catalytic reduction. The slipstream plant will sequester carbon dioxide (CO_2), a combustion product, and convert it to bottled (liquid) CO_2 for resale purposes. Other changes are minor and are for the purposes of clarifying permit conditions.

This project is not subject to review under Section 403.506 F.S. (Power Plant Siting Act), because it provides for no expansion in steam generating capacity.

An air quality impact analysis was not conducted. Emissions from this project are largely beneficial and will not consume PSD increment and will not significantly contribute to or cause a violation of any state or federal ambient air quality standards.

The Department will issue the Final permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed permit issuance action for a period of 14 days from the date of publication of this Public Notice of Intent to Issue PSD Permit Modification. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below. Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in

Protection
Southeast District
400 North Congre
West Palm Bea
33401
Telephone: 561/6
Fax: 561/681-67
The complete pr
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permit, and the
submitted by the
official, exclusive
tial records un
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trator, New So
Section, at 111 S
lia Drive, Suite 4,
Florida 32301,
850/488-0114, f
information.
PUB: The Palm B
April 2, 2000

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or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by rule 28-106.301.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Protection
Bureau of Air Regulation
Suite 4, 111 S. Magnolia Drive
Tallahassee, Florida, 32301
Telephone: 850/488-0114
Fax: 850/922-6979

Department of Environmental

Department of
Environmental Protection

Jeb Bush
Governor

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

David B. Struhs
Secretary

March 24, 2000

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Stephen Sorrentino
General Manager
Indiantown Cogeneration, L.P.
P.O. Box 1799
Indiantown, Florida 34956

Re: DEP File No. PA 90--31, PSD-FL-168
Indiantown Cogeneration Facility
CO_2 Recovery Project

Dear Mr. Sorrentino:

Enclosed is one copy of the Draft PSD Permit Modification for the Indiantown Cogeneration Plant located at 19140 SW Warfield Blvd, Martin County. The Department's Intent to Issue PSD Permit Modification and the Public Notice of Intent to Issue PSD Permit Modification are also included.

The Public Notice of Intent to Issue PSD Permit Modification must be published one time only, as soon as possible, in the legal advertisement section of a newspaper of general circulation in the area affected, pursuant to the requirements Chapter 50, Florida Statutes. Proof of publication, i.e., newspaper affidavit, must be provided to the Department's Bureau of Air Regulation office within seven days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit.

Please submit any written comments you wish to have considered concerning the Department's proposed action to A. A. Linero, P.E., Administrator, New Source Review Section at the above letterhead address. If you have any other questions, please contact Michael P. Halpin at 850/921-9530.

Sincerely,

C. H. Fancy, P.E., Chief,
Bureau of Air Regulation

CHF/mph

Enclosures

In the Matter of an
Application for Permit by:

Stephen Sorrentino, General Manager
Indiantown Cogeneration, L.P.
P.O. Box 1799
Indiantown, Florida 34956

DEP File No. PA-90-31, PSD-FL-168
Indiantown Cogeneration Plant
CO_2 Plant and Permit Modifications
Martin County

/

INTENT TO ISSUE PSD PERMIT MODIFICATION

The Department of Environmental Protection (Department) gives notice of its intent to issue a PSD Permit Modification (copy of Draft permit attached) for the proposed project, detailed in the application specified above, for the reasons stated below.

The applicant, Stephen Sorrentino, General Manager, Indiantown Cogeneration, L.P., applied on December 30, 1999, to the Department for a PSD Permit Modification for its Indiantown Cogeneration Plant located at 19140 Southwest Warfield Blvd., Indiantown, Martin County. The permit is to install a slipstream CO_2 recovery plant and to clarify allowable operation rates of auxiliary boilers.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-212. The above actions are not exempt from permitting procedures. The Department has determined that a PSD Permit Modification is required to install a slipstream CO_2 recovery plant and to clarify allowable operation rates of auxiliary boilers.

The Department intends to issue this PSD Permit Modification based on the belief that reasonable assurances have been provided to indicate that operation of these emission units will not adversely impact air quality, and the emission units will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C.

Pursuant to Section 403.815, F.S., and Rule 62-110.106(7)(a)1., F.A.C., you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue PSD Permit Modification. The notice shall be published one time only in the legal advertisement section of a newspaper of general circulation in the area affected. Rule 62-110.106(7)(b), F.A.C., requires that the applicant cause the notice to be published as soon as possible after notification by the Department of its intended action. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Department at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-0114; Fax 850/ 922-6979). You must provide proof of publication within seven days of publication, pursuant to Rule 62-110.106(5), F.A.C. No permitting action for which published notice is required shall be granted until proof of publication of notice is made by furnishing a uniform affidavit in substantially the form prescribed in section 50.051, F.S. to the office of the Department issuing the permit. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rules 62-110.106(9) & (11), F.A.C.

The Department will issue the final permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed permit issuance action for a period of 14 days from the date of publication of Public Notice of Intent to Issue PSD Permit Modification. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation is not available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542 F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information: (a) The name, address, and telephone number of the petitioner; (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any; (c) Each

rule or portion of a rule from which a variance or waiver is requested; (d) The citation to the statute underlying (implemented by) the rule identified in (c) above; (e) The type of action requested; (f) The specific facts that would justify a variance or waiver for the petitioner; (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2) F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

Executed in Tallahassee, Florida.

C. H. Fancy, P.E., Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Intent to Issue PSD Permit Modification (including the Public Notice of Intent to Issue PSD Permit Modification and the Draft permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 3-23-00 to the person(s) listed:

Mr. Stephen Sorrentino, General Manager *
Mr. Isidore Goldman, SED
Mr. Hamilton S. Oven
Mr. David S. Dee
Mr. A.J. Jablonski, Earthtech
Mr. Gregg Worley, EPA
Mr. John Bunyak, NPS

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

(Clerk) 3-23-00 (Date)

PUBLIC NOTICE OF INTENT TO ISSUE PSD PERMIT MODIFICATION

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP File No. PA 90-31, PSD-FL-168

Indiantown Cogeneration, L.P.
Indiantown Cogeneration Plant
Martin County

The Department of Environmental Protection (Department) gives notice of its intent to issue a modification of the permit for the Prevention of Significant Deterioration of Air Quality (PSD permit) to Indiantown Cogeneration, L.P. The permit modification is to install a slipstream carbon dioxide recovery plant and to clarify allowable operation rates of auxiliary boilers at the Indiantown Cogeneration Plant located at 19140 Southwest Warfield Blvd., Indiantown, Martin County. A Best Available Control Technology (BACT) determination was not required pursuant to Rule 62-212.400, F.A.C. and 40 CFR 52.21, Prevention of Significant Deterioration. The applicant's mailing address is: Stephen Sorrentino, General Manager, Indiantown Cogeneration Plant, Post Office Box 1799, Indiantown, Florida 34956.

The existing facility is a coal-fired electrical and steam co-generation plant. Emissions are controlled by baghouses, spray driers and selective catalytic reduction. The slipstream plant will sequester carbon dioxide (CO_2), a combustion product, and convert it to bottled (liquid) CO_2 for resale purposes. Other changes are minor and are for the purposes of clarifying permit conditions.

This project is not subject to review under Section 403.506 F.S. (Power Plant Siting Act), because it provides for no expansion in steam generating capacity.

An air quality impact analysis was not conducted. Emissions from this project are largely beneficial and will not consume PSD increment and will not significantly contribute to or cause a violation of any state or federal ambient air quality standards.

The Department will issue the Final permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed permit issuance action for a period of 14 days from the date of publication of this Public Notice of Intent to Issue PSD Permit Modification. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below. Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to

written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by rule 28-106.301

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Protection
Bureau of Air Regulation
Suite 4, 111 S. Magnolia Drive
Tallahassee, Florida, 32301
Telephone: 850/488-0114
Fax: 850/922-6979

Department of Environmental Protection
Southeast District
400 North Congress Avenue
West Palm Beach, Florida 33401
Telephone: 561/681-6600
Fax: 561/681-6755

The complete project file includes the application, Draft permit, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Administrator, New Source Review Section, at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114, for additional information.

NOTICE TO BE PUBLISHED IN THE NEWSPAPER

March xx, 2000

Mr. Stephen Sorrentino
General Manager
Indiantown Cogeneration, L.P.
P.O. Box 1799
Indiantown, Florida 34956

Re: DEP File No. PA 90-31; Modification of Permit No. PSD-FL-168
Indiantown Cogeneration Facility / Martin County

The applicant, Indiantown Cogeneration, L.P., applied on December 30, 1999, to the Department for a modification to PSD permit number PSD-FL-168 for its Indiantown Cogeneration Plant located at 19140 Southwest Warfield Blvd., Indiantown, Martin County. The modification is to allow install a slipstream CO_2 recovery plant and to clarify allowable operation rates of auxiliary boilers. The Department has reviewed the modification request. The referenced permit is hereby modified as follows:

Project Description:

The proposed facility includes one main boiler and one steam generator, and one or two 50% capacity auxiliary boilers operated during lightoff and startup of the main boiler or if the main boiler is down and process steam is required for Caulkins Citrus processing. A CO_2 recovery plant installed via a flue gas slipstream is also authorized. The primary source of air emissions will be the main boiler, firing coal. Secondary air emission sources include the auxiliary boilers firing natural gas, propane or No. 2 fuel oil, the CO_2 absorber column and the material handling systems. The operation of these units will result in significant net emissions increases of regulated air pollutants over the current emission levels and thus, is subject to review by the Department under the prevention of significant deterioration (PSD) regulations (Rule ~~17-2.500~~ 62-212.400, Florida Administrative Code).

Specific Condition No. 4.:

The PC boiler shall be allowed to operate continuously (8760 hrs/yr). A CO_2 recovery plant is permitted to operate continuously for 8,760 hours per year. ~~The auxiliary boiler or boilers shall operate a maximum of 5000 hrs at the combined total heat input rates with up to 1000 hrs/yr on No. 2 fuel oil with 0.05% sulfur, by weight, and the balance on natural gas or propane.~~ Fuel consumption must be continuously measured and recorded by fuel type (coal, natural gas, propane or No. 2 fuel oil) for both the PC boiler and auxiliary boilers.

Specific Condition No. 9:

The auxiliary boiler or auxiliary boilers rated at a combined total of up to 358 MMBtu/hr (Natural gas and propane) and 342 MMBtu/hr (No.2 fuel oil), shall be limited to ~~a maximum of 5000 hours/year at the combined total heat input rates with up to 1000 hrs/yr firing No. 2 fuel oil with 0.05% sulfur, by weight, and the balance firing natural gas or propane.~~ a combined total of less than 1.79×10^{12} British Thermal Units per year. The auxiliary boilers are each permitted to operate 5000 full load equivalent hours per calendar year, with no more than 1000 hours of that period using fuel oil with 0.05% sulfur, by weight, as the primary fuel. The maximum total annual emissions from the auxiliary boiler or boilers will be as follows when firing No.2 fuel oil for 1000 hrs/yr:

EMISSION LIMITATION

POLLUTANT	LBS/HR	TONS/YEAR
NOX	68.0	34
SO2	18.0	9
PM	1.4	0.70
PM10	1.4	0.70
CO	48.0	24
VOC	0.620	0.31
Be	4.0 E-5	2.0 E-5
Hg	5.2 E-4	2.6 E-4
Pb	3.6 E-2	1.8 E-2
As	6.8 E-3	3.4 E-3

Specific Condition No. 15.:

A. No fraction of flue gas shall be allowed to bypass the air pollution control devices (PCD) system to reheat the gases exiting from the PCD system, if the bypass will cause emissions above the limits specified. The percentage and amount of flue gas bypassing the PCD system shall be documented and records kept for a minimum of two years and must be available for FDER's inspection.

B. A slipstream, consisting of between 5% to 10% of the main boiler (stack) flue gas shall be routed to the CO_2 recovery plant. The flue gas will be cooled and scrubbed with a monoethanolamine (MEA) solution, which captures CO_2. The CO_2 will then be stripped out of the MEA solution, cleaned, compressed and shipped in liquid form. The CO_2 plant will be designed to produce 400 tons per day (TPD) of liquid CO_2. Note: The production is limited in order to ensure that secondary pollutants are within the ranges provided in the application. Any increase in capacity shall be accompanied by an appropriate review for PSD or MACT applicability.

1. The CO_2 absorber column shall emit no more than 5 lb./hr VOC in addition to the products of combustion from the PC boiler. If any batches of CO_2 do not meet product specifications, the off-spec product may also be vented to atmosphere.
2. Prior to the operation of the CO_2 Recovery Plant, the permittee shall submit to the Department's Bureau of Air Regulation a plan or procedure demonstrating that the system used to measure the PC boiler emissions accurately accounts for the exhaust gasses ducted to the CO_2 plant.
3. Within 90 days of initial operation of the CO_2 Recovery Plant, the permittee shall submit to the Department's Bureau of Air Regulation a summary of the actual emissions of the Recovery Plant. This shall include (at a minimum) emissions of all regulated pollutants, MEA, ammonia and methanol based upon a net CO_2 recovery level of 400 TPD of liquid CO_2 as well as the estimated maximum daily throughput of the Recovery Plant (if greater than 400 TPD). An O&M plan shall be submitted to the District Office, detailing best practices for the minimization of secondary pollutant emissions.

A copy of this letter shall be filed with the referenced permit and shall become part of the permit. This permit modification is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order (permit modification) has the right to seek judicial review of it under Section 120.68, F.S., by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.

Howard L. Rhodes, Director
Division of Air Resources
Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this permit modification was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on _____ to the person(s) listed:

Mr. Stephen Sorrentino, General Manager *
Mr. Isidore Goldman, SED
Mr. Hamilton S. Oven
Mr. David S. Dee
Mr. A.J. Jablonski, Earthtech
Mr. Gregg Worley, EPA
Mr. John Bunyak, NPS

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

_____ _____
(Clerk) (Date)



196 Baker Avenue, Concord, Massachusetts 01742

Telephone
978.371.4000
Facsimile
978.371.2468

26109/l-halpin.doc

March 13, 2000

Mr. Michael Halpin
Florida Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Subject: **Indiantown Cogeneration, L.P. Air Permit Modifications**
Permit No.: PSD-FL-168, 0850102-001-AV

Dear Mr. Halpin:

On behalf of Indiantown Cogeneration, L.P., I am writing to request that you to proceed with review and permitting of the proposed CO_2 recovery plant and that you hold review of the proposed MW increase in abeyance

We understand through your conversations with us and with David Dee of Landers and Parsons that the submittal regarding the CO2 plant is sufficient, so FDEP can proceed with it, but the submittal regarding the MW increase is not sufficient and will delay everything else, unless the MW issues are set aside for now. Please do set aside the MW increase issues for now; we do not wish to delay other portions of the submittals.

ICLP is conducting an internal review of the feasibility of the proposed MW increase. Depending on the results of that review, we will supply you with further information to continue your review of that portion of the project.

We also ask that the review and approval process continue for the other air quality portions of the proposed Modification and the proposed Amendments.

Thank you for your time and consideration. If you have any questions or comments, please feel free to contact me at 978-371-4339, David Burrage of ICLP at 561-597-6500 extension 19, or David Dee of Landers and Parsons at 850-681-0311.

Very truly yours,

Earth Tech

Andrew Jablonowski, P.E.
Senior Engineer

cc: D. Burrage, S. Sorrentino, D. Bullock, Indiantown Cogeneration LP
Michelle Golden, PG&E Generating
David Dee, Landers & Parsons

Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

RECEIVED
FEB 01 2000
BUREAU OF AIR REGULATION

January 31, 2000

Mr. Stephen Sorrentino
General Manager
Indiantown Cogeneration, L.P.
P.O. Box 1799
Indiantown, Florida 34956

Re: Indiantown Cogeneration Project, PA 90-31

Dear Mr. Sorrentino:

The Department and the South Florida Water Management District have reviewed your request for amendments and modifications to the Conditions of Certification for the Indiantown Cogeneration Project. In order to complete the processing of your requests the following information needs to be provided:

The Bureau of Air Regulation requests that you please update the original BACT Determination based upon current technology. This should include an evaluation of ammonia slip.

1. The Department notes that the (currently permitted) pollutant emissions use only lb/hr (on a 24-hour block average) rather than lb/MMBtu for compliance purposes. According to EPA guidance (New Source Review Workshop Manual) "...express the emission limits in two different ways, (e.g., lbs/hr) and...(e.g., lbs/MMBtu).... The source must comply with both values to demonstrate compliance." The proposed BACT should address recommended compliance averaging times as well as measurement units.
2. The Department presumes that limestone, coal and ash-handling related emissions will increase (PTE vs. actual) as a result of the requested heat input increase. Please quantify these increases and include appropriately within the modeling as well as BACT proposal.
3. Please provide information from the boiler, steam turbine and generator manufacturers, indicating the continuous and peak ratings. Additionally provide information on the limiting factors for coal handling capacity. Where ratings are time (or otherwise) limited, please provide those limits as well. The Department is interested in nameplate models and related data, where available.
4. Please submit the required PSD modeling analyses for both the Class I and Class II areas.

The Department will provide the U.S. Park Service and EPA comments as soon as they are available. You may contact Mike Halpin at 850/921-9530 regarding the above questions. Additionally, Cleve Holladay can be contacted at 921-8986 concerning any modeling questions.

A copy of the South Florida Water Management District request for information is attached

Sincerely,

Hamilton S. Oven

Hamilton S. Oven, P.E.

Attach:

cc: Mike Halpin, BAR
James Golden, SFWMD
Scott Goorland, Esq.
David Dee, Esq.

South Florida Water Management District

LAN 04-06

January 31, 2000

Mr. Hamilton S. Oven, Jr., P.E.
Administrator, Siting Coordination Office
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Dear ~~Mr. Oven~~:

Subject: Indiantown Cogeneration Project, PA 90-31
Proposed Modification & Amendments to Site Certification

South Florida Water Management District (SFWMD) staff has reviewed the applications submitted by Indiantown Cogeneration, L.P. (ICLP), outlining the proposed modifications and amendments to the above-referenced project, as required by Sections 403.501-539, F.S., and Chapter 62-17, F.A.C.

As a result of that review, we have identified a number of outstanding issues and sufficiency questions which must be addressed in order for the SFWMD to complete its review of this project. Please include the following questions/comments in your sufficiency letter on this project.

PROPOSED MODIFICATIONS

Addition of Carbon Dioxide Recovery Plant

Under the existing Site Certification for this project, the Floridan Aquifer is the approved backup water supply source for this project. The Floridan Aquifer must be used when water is unavailable from Taylor Creek/Nubbin Slough/L-63N due to drought conditions. During the 1999 dry season, the water levels in L-63N approached 17.5' NGVD. The 17.5' NGVD elevation was established by the SFWMD as the lowest acceptable stage at which water withdrawals could occur without adversely impacting the SFWMD's ability to maintain minimum flows in the canal and adversely impacting any existing legal users or wetlands in the vicinity of the withdrawal facilities. During the 1999 drought, ICLP had concerns that the poor quality of the Floridan Aquifer wells would prevent their effective use as a backup water supply source. At that time, ICLP advised SFWMD staff that they would evaluate other options for future drought events. Please submit a detailed evaluation of alternative backup water supply sources.

Governing Board:
Michael Collins, *Chairman*
Michael D. Minton, *Vice Chairman*
Mitchell W. Berger
Vera M. Carter
Gerardo B. Fernandez
Patrick J. Gleason
Nicolas J. Gutierrez, Jr.
Harkley R. Thornton
Trudi K. Williams
Frank R. Finch, P.E., *Executive Director*
Michael Slayton, *Deputy Executive Director*
Trevor Campbell, *Deputy Executive Director*

The applicant indicates that detailed construction plans for the recovery plant are unavailable at this time. Please note that the applicant must submit detailed paving/grading/drainage plans and supporting calculations signed and sealed by a Florida registered engineer prior to the SFWMD issuing a letter authorizing construction of any proposed new facilities, pursuant to the existing applicable Conditions of Certification.

Addition of Chilled Water Plant

The applicant indicates that detailed construction plans for the chilled water plant are unavailable at this time. Please note that the applicant must submit detailed paving/grading/drainage plans and supporting calculations signed and sealed by a Florida registered engineer prior to the SFWMD issuing a letter authorizing construction of any proposed new facilities, pursuant to the existing applicable Conditions of Certification.

Changes in Plant Output Rating

The proposed modifications are non-jurisdictional to the SFWMD. Consequently, we have no objections to approval of the proposed modifications.

Changes in Cooling Water Storage Pond Elevation

Section 1.2.2 of Appendix 6 of the District's Basis of Review (BOR) defines a minor impoundment as one where "depths above the surrounding ground level would be generally limited to four feet." If it is the desire of the applicant to have the cooling water storage pond treated as something other than a minor impoundment, additional topographic information in the vicinity of the pond will be required to demonstrate that the water elevations within the pond are generally limited to the elevation of the surrounding topography.

Section 2.2.2.2 of Appendix 6 of the SFWMD's Basis of Review (BOR) requires that minor impoundments provide freeboard "equal to the maximum water depth dimension but not less than 2 feet, nor more than 3 feet." Based on the information provided, it appears that the subject impoundment would require a minimum of 3.0' of freeboard. What new elevation is proposed for the working level of both the north and south sections of the pond? How much freeboard is proposed between this elevation and the emergency overflow elevation where discharge will occur? What will the design storm elevation be and how much will the pond discharge during the design storm? In addition, please explain how the proposed changes will meet the intent of Section 2.2.2.2 of the BOR.

Clarification of Auxiliary Boiler Operating Requirement

The proposed modifications are non-jurisdictional to the SFWMD. Consequently, we have no objections to approval of the proposed modifications.

Modifications to Reflect Revised Water Allocation Plan with the SFWMD

The SFWMD has previously reviewed and approved these changes, as outlined in the correspondence in Attachment G.

Modifications of Groundwater Monitoring Requirements

We have no objections to approval of the proposed modifications.

Consistency Among PSD, Title V, NPDES, and COC Conditions

We have no objections to approval of the proposed modifications.

NPDES Discharges

We have no objections to approval of the proposed modifications.

Changes to Air Permit Requirements

The proposed modifications are non-jurisdictional to the SFWMD. Consequently, we have no objections to approval of the proposed modifications.

PROPOSED AMENDMENTS

Additional Steam Use by Steam Host

Please be advised that a Modification to Caulkins Citrus surface water management permit will likely be required prior to construction if the chilled water plant and related equipment is ultimately located on their property.

Water Treatment System Operating Flexibility

The proposed modifications are non-jurisdictional to the SFWMD. Consequently, we have no objections to approval of the proposed modifications.

Site Plan Changes Reflecting As-Built Conditions

Staff is having difficulty locating the additional pavement near the lime storage system, around the power block, and in the area between the baghouse and the existing roadway. Please submit a copy of the as-built drawing in which these areas have been highlighted to identify the new areas of pavement. What is the total area of this pavement?

Section 2.3.4 of the application indicates that the paving near the open shed area is 240 square feet. Is this the total of the areas described in the above question? If not, please highlight this area as well.

Although the submitted calculations appear to address the increase in runoff associated with the site plan revisions, they do not address the loss in-site storage also associated with the site plan revisions. Please submit detailed paving/grading/drainage plans and supporting calculations signed and sealed by a Florida registered engineer for staff's review and approval, pursuant to the existing applicable Conditions of Certification.

Alternative Cover For Emergency Coal Pile

The proposed modifications are non-jurisdictional to the SFWMD. Consequently, we have no objections to approval of the proposed modifications.

Completion of Ambient Air Quality Monitoring

The proposed modifications are non-jurisdictional to the SFWMD. Consequently, we have no objections to approval of the proposed modifications.

Continuous Emissions Monitor Span Range

The proposed modifications are non-jurisdictional to the SFWMD. Consequently, we have no objections to approval of the proposed modifications.

Hazardous Waste Storage Retention Time

The proposed modifications are non-jurisdictional to the SFWMD. Consequently, we have no objections to approval of the proposed modifications.

In addition to the above, the SFWMD's review of the 1999 Dam Inspection Program Report for this project indicates that there was an increase in elevation for the wastewater

storage pond. However, it is not clear whether the increase is associated with the water elevation or the elevation of the spillway. The increase in elevation may be an issue that needs to be addressed in this application or a future application.

We appreciate this opportunity to comment. Please give me a call at (561) 682-6862 if any of the above requires additional clarification.

Sincerely,

James J. Golden, AICP
Senior Planner
Environmental Resource Regulation

/jjg

c: Steve Sorrentino, ICLP
David Burrage, ICLP

bc: Terrie Bates (4210)
Tony Waterhouse (4220)
Maria Clemente (4220)
John Shaffer (4220)
Rob Robbins (4250)
Don Medellin (4250)
Brent Nicholas (4250)
Ken Ammon (4310)
Scott Burns (4320)
Jeff Rosenfeld (4320)
Lisa Ullman (4320)
Claudia Kugler (4210)
Bob Brown (4230)
Ken Todd (4230)
Jeff Gronborg (4230)
Terry Clark (4350)
Mark Elsner (4350)
Tommy Strowd (5610)
Doug MacLaughlin (1430)
Luna Ergas (1430)
Paul Millar (2147)

Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

January 6, 2000

Mr. Gregg Worley, Chief
Air, Radiation Technology Branch
Preconstruction/HAP Section
U.S. EPA – Region IV
61 Forsyth Street
Atlanta, Georgia 30303

Re: Indiantown Site Certification Modification, PA 90-31

Dear Mr. Worley:

Enclosed for your review and comment is an application for the above-mentioned project. It consists of a request to add a carbon dioxide recovery and chilled water plant, an increase to the heat input and additional miscellaneous changes.

We request your review and opinion of the project, particularly related to the revisitation of BACT for each specific pollutant. Your comments can be forwarded to my attention at the letterhead address or faxed to me at (850) 922-6979. If you have any questions, please contact Mike Halpin at (850) 921-9530.

Sincerely,

MPHalpin for AAL

A. A. Linero, P.E.Administrator
New Source Review Section

AAL/mph/kt

Enclosures

cc: Mike Halpin, BAR

Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

January 6, 2000

Mr. John Bunyak, Chief
Policy, Planning & Permit Review Branch
NPS-Air Quality Division
Post Office Box 25287
Denver, CO 80225

Re: Indiantown Cogeneration Site Certification Modification, PA 90-31

Dear Mr. Bunyak:

Enclosed for your review and comment is an application for the above-mentioned project. It consists of a request to add a carbon dioxide recovery and chilled water plant, an increase to the heat input and additional miscellaneous changes.

We request your review and opinion of the project, particularly related to the revisitation of BACT for each specific pollutant. Your comments can be forwarded to my attention at the letterhead address or faxed to me at (850) 922-6979. If you have any questions, please contact Mike Halpin at (850) 921-9530.

Sincerely,

for AAL

A. A. Linero, P.E.
Administrator
New Source Review Section

AAL/mph/kt

Enclosures

cc: Mike Halpin, BAR

Indiantown Cogeneration, L.P.

Indiantown Cogeneration, L.P.
P.O. Box 1799
19140 SW Warfield Blvd.
Indiantown, FL 34956

Tel: 561.597.6500
Fax: 561.597.6210

December 22, 1999

Hamilton S. Oven, P.E.
Administrator, Siting Coordination Office
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RECEIVED
DEC 30 1999
BUREAU OF AIR REGULATION

RE: ICLP's Amendments and Request for Modifications

Dear Mr. Oven:

Indiantown Cogeneration L.P. (ICLP) hereby submits the following two documents for review and approval by the Florida Department of Environmental Protection (DEP):

- Amendments to the Site Certification Application for the Indiantown Cogeneration Facility (Facility); and
- Application for Modifications of the Site Certificate for the Indiantown Cogeneration Facility.

The Amendments to the Site Certification Application (the Amendments) are being provided to inform the Department of certain changes to the Facility's design and operation. The Amendments do not require changes to the Conditions of Certification for the Facility. The Amendments also do not involve any significant, additional adverse environmental impacts that would require new environmental permits or approvals.

ICLP's Application for Modifications of the Site Certificate (the Modifications) describes several other proposed changes to the Facility's design and operations. The Modifications will require changes to the Conditions of Certification, in accordance with Section 403.516(1)(b), Florida Statutes.

Copies of the Amendments and Modifications also are being sent to the people identified in the attached Distribution List.

Attached to this letter is ICLP's check in the amount of $10,000, payable to the Florida Permit Fee Trust Fund. This check is being submitted to pay DEP's fee for a modification, in accordance with DEP Rule 62-17.293(1)(c), F.A.C.

ICLP would like to meet with you at your earliest convenience to discuss the Amendments and Modifications for ICLP's Facility. In the interim, please call me or David Burrage at 561-597-6500 if you have any questions regarding these submissions.

Thank you for your assistance with this issue.

Sincerely,

Stephen Sorrentino
General Manager

Distribution List for Amendments to the
Site Certification Application for the Indiantown Cogeneration Facility
and the Application for Modification of the Site Certificate for the
Indiantown Cogeneration Facility

Hamilton S. "Buck" Oven, Jr., P.E. Administrator Office of Siting Coordination Department of Environmental Protection 2600 Blair Stone Road, MS: 48 Tallahassee, Florida 32399-3000 **(3 copies)**	John Fumero **(3 copies)** General Counsel South Florida Water Management District P.O. Box 24680 West Palm Beach, Florida 33416-4680
Cathy Carter Agency Clerk Office of General Counsel Department of Environmental Protection 3900 Commonwealth Blvd., MS: 35 Tallahassee, Florida 32399-3000	Michael Busha Executive Director Treasure Coast Regional Planning Council 301 E. Ocean Blvd., Suite 300 Stuart, Florida 34994
Scott Goorland Assistant General Counsel Office of General Counsel Department of Environmental Protection 3900 Commonwealth Blvd., MS: 35 Tallahassee, Florida 32399-3000	Gary K. Oldehoff County Attorney Martin County 2401 Southeast Monterey Road Stuart, Florida 34996
Clair Fancy Bureau Chief Bureau of Air Regulation Department of Environmental Protection 2400 Blair Stone Road, MS: 5505 Tallahassee, Florida 32399-2400	R. Douglas Leonard Executive Director Central Florida Regional Planning Council P.O. Box 2089 Bartow, Florida 33831
Cari Roth General Counsel Office of General Counsel Department of Community Affairs 2555 Shumard Oak Blvd. Tallahassee, Florida 32399	George Long County Administrator Okeechobee County 304 N.W. 2nd Street Okeechobee, Florida 34972
Pam Leslie General Counsel Department of Transportation 605 Suwannee Street, MS: 58 Tallahassee, Florida 32399-0458	Cathy Beddell Acting General Counsel Public Service Commission 2540 Shumard Oak Blvd. Tallahassee, Florida 32399

Sandra Whitmire Intergovernmental Coordination & Review Coordinator Department of Transportation 605 Suwannee Street, MS: 28 Tallahassee, Florida 32399-0450	Jim Antista General Counsel Florida Fish and Wildlife Conservation Commission 620 S. Meridian Street Tallahassee, Florida 32399-1600
Melissa L. Meeker **(3 copies)** Director District Management Department of Environmental Protection Southeast District Office 400 North Congress Avenue West Palm Beach, Florida 33401	Michelle Golden **(2 copies)** PG&E Generating 7500 Old Georgetown Road Bethesda, Maryland 20814
David S. Dee **(2 copies)** Attorney at Law Landers & Parsons, P.A. P.O. Box 271 Tallahassee, Florida 32302-0271 (Counsel for Applicant)	David Burrage **(2 copies)** Indiantown Cogeneration, L.P. P.O. Box 1799 Indiantown, Florida 34956
Andrew Jablonowski, P.E. George Lipka, P.E. Earth Tech 196 Baker Avenue Concord, Massachusetts 01742-2167 (Consultant for Applicant)	

Department of Environmental Protection

Lawton Chiles
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

April 9, 1998

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Steve Sorrentino, Plant Director
Indiantown Cogeneration, L.P.
19140 Southwest Warfield Blvd.
Indiantown, Florida 34956

Re: Final Permit Amendment to PSD-FL-168
Indiantown Coal Fired Boiler
Opacity Limits

Dear Mr. Sorrentino

The Department has reviewed your February 27, 1998 letter requesting that an exception of 27% opacity for one six minute period per hour is authorized in the New Source Performance Standard Subpart Da applicable to the Indiantown Cogeneration coal fired boiler. Specific Condition No. 8 of the permit is hereby amended as follows:

Visible Emissions (VE) from each baghouse exhaust shall not exceed 10% opacity (six minute average) except for one six minute period per hour of not more than 27 percent opacity. No VE during lime silo loading operations (i.e., less than 5% opacity). VE from the ash handling baghouse shall not exceed a particulate limit of 0.010 grains/acf and VE of 5% opacity.

A person whose substantial interests are affected by this permit amendment may petition for an administrative hearing in accordance with Sections 120.569 and 120.57 F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, telephone: 850/488-9730, fax: 850/487-4938. Petitions must be filed within fourteen days of receipt of this permit amendment. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-5.207 of the Florida Administrative Code. Mediation is not available for this action.

A petition must contain the following information: (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action; (d) A statement of the material facts disputed by petitioner, if any; (e) A statement of the facts that the petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement identifying the rules or statutes that the petitioner contends require reversal or modification of the Department's action or proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the Department to take with respect to the action or proposed action.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this permit amendment. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542 F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this permit amendment.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information: (a) The name, address, and telephone number of the petitioner; (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any; (c) Each rule or portion of a rule from which a variance or waiver is requested; (d) The citation to the statute underlying (implemented by) the rule identified in (c) above; (e) The type of action requested; (f) The specific facts that would justify a variance or waiver for the petitioner; (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2) F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

This permit amendment is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 62-103.070, F.A.C. Upon timely filing of a petition or a request for an extension of time this permit amendment will not be effective until further order of the Department.

When the Order (Permit Amendment) is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Legal Office; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of appeal must be filed within 30 (thirty) days from the date this Notice is filed with the Clerk of the Department.

A copy of this letter shall be filed with the referenced permit and shall become part of the permit.

Executed in Tallahassee, Florida.

Howard L. Rhodes, Director
Division of Air Resources Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this FINAL PERMIT AMENDMENT was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 4-13-98 to the person(s) listed:

Mr. Steve Sorrentino *
Mr. Isidore Goldman, SED
Mr. Brian Beals, EPA
Mr. A.J. Jablonowski, Earthtech
Mr. Buck Oven, DEP

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Lynn Tober 4-13-98
(Clerk) (Date)

Department of Environmental Protection

Lawton Chiles
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

March 11, 1998

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Byron Veech
Environmental, Safety & Health Coordinator
Indiantown Cogeneration, L.P.
Post Office Box 1799
19140 Southwest Warfield Blvd.
Indiantown, Florida 34956

Dear Mr. Veech:

RE: Amendment Fee - Indiantown Cogen Facility

The Bureau of Air Regulation received your March 11 letter concerning the above referenced faciltiy. Since this request is being reviewed under site certification, no further processing fee is required for the Permit to Construct amendment. Enclosed is your check number 0745 for $250 which was submitted with your request.

If you have any questions, please call Kim Tober at (850)921-9533.

Sincerely,

A. A. Linero, P.E.
Administrator
New Source Review Section

AAL/kt

cc: M. Costello, BAR

Indiantown Cogeneration, L.P.

sent check back 11 Mar. '98

March 10, 1998

RECEIVED
MAR 11 1998
BUREAU OF
AIR REGULATION

Mr. Al Linero
Florida Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

VIA FACSIMILE/FEDERAL EXPRESS OTHERWISE DELETE

Re: Amendment Fee

Dear Mr. Linero:

Enclosed is the $250.00 fee for the Permit to Construct Amendment. The Permit to Construct Amendment paperwork has been forwarded to you previously.

Sincerely,

Byron Veech
Environmental, Safety and Health Coordinator

Enclosure: 1

Indiantown Cogeneration, L.P.

RECEIVED
MAR 10 1998
BUREAU OF
AIR REGULATION

February 27, 1998

Mr. Al Linero
Florida Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

VIA FEDERAL EXPRESS

Re: *Indiantown Cogeneration, L.P. Preconstructioin Permit Amendment*

Dear Mr. Linero:

Enclosed is Indiantown Cogeneration, L.P.'s application to amend their preconstruction permit, PSD-FL-168. Indiantown Cogeneration is operating under this permit while the Title V Operating Permit Application is under review.

This amendment is to correct an oversight in the visible emissions' limitation for the pulverized coal fired main boiler. The permit limits the visible emissions from this source to 10% opacity during normal operation, but does not provide for exceptional circumstances. To be consistent with the federal New Source Performance Standards (NSPS) for this source, we are requesting one 6-minute period per hour of opacity up to 27%. This would allow for maintenance of the system (bag changes, etc.).

No pollutant emission rates are affected. Page 44 of the application shows the new requested allowable opacity. The other information in the enclosed application is identical to that listed in the Title V Operating Permit Application currently under review by Tom Cascio, (FDEP) and is consistent with the current permit. We have discussed this application with Tom, and our goal is to obtain approval of this application in time to have the change incorporated into the Title V Operating Permit.

No attachments are provided in this application because they are available as part of the Title V Operating Permit application. If you need any additional data, or copies of the data submitted with the Title V Operating permit application, please contact us.

"Doing Business in Florida as Indiantown Cogeneration, L.P. Limited Partnership"
P.O. Box 1799 • 19140 SW Warfield Blvd. • Indiantown, Florida 34956 • 561-597-6500 • Fax 561-597-6210

Printed on 100% recycled paper

We have also included a check for $250. Based on our review of the permit fee schedule in Rule 62-4, this is our best interpretation of the appropriate fee for a permit modification of this type. If a different fee (or no fee) should be submitted, please contact us.

If you have any questions, please contact myself at (561) 597-6500 or A.J. Jablonowski, consultant with Earthtech at (978) 371-4339.

Sincerely,

Steve Sorrentino
Plant Director

Enclosure: 1

bc: V. Zambito
B. Veech
M. Golden
V. Gill
cc: Hamilton "Buck" Owen, FDEP, Tallahassee
Tom Tittle, FDEP, SE District
Doc. Control No.: 980522
Project File: 6.3.1.5

cc: J. Cascio, BAR

561 597 6520 Fax

HUNTSMAN

MATERIAL SAFETY DATA SHEET

READ AND UNDERSTAND MATERIAL SAFETY DATA SHEET BEFORE HANDLING OR DISPOSING OF PRODUCT

PRODUCT CODE AND NAME	:	***MEA MONOETHANOLAMINE, MEA***
DATE ISSUED	:	**7/30/97**
DATE PRINTED	:	**2/4/99**

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MATERIAL IDENTITY

PRODUCT CODE AND NAME

MEA MONOETHANOLAMINE, MEA

→ Not ⓒ Listed Haz Waste
ⓑ ~~Flam~~ Ignitable < 140°F
Above 5000 Btu/LL

Chemical Name and/or Family or Description:

Alkanolamine

COMPANY INFORMATION

Huntsman Petrochemical Corporation
P.O. Box 27707
Houston, TX 77227-7707

TELEPHONE NUMBERS
Transportation Emergency
Company: (409) 727-0831
CHEMTREC: (800) 424-9300
Medical Emergency: (409) 722-9673 (24 Hour)
General MSDS Assistance: (713) 235-6432
Technical Information: (512) 459-6543

2. COMPOSITION AND INFORMATION ON INGREDIENTS

THE CRITERIA FOR LISTING COMPONENTS IN THE COMPOSITION SECTION ARE AS FOLLOWS: CARCINOGENS ARE LISTED WHEN PRESENT AT 0.1 % OR GREATER; COMPONENTS WHICH ARE OTHERWISE HAZARDOUS ACCORDING TO OSHA ARE LISTED WHEN PRESENT AT 1.0 % OR GREATER; NON-HAZARDOUS COMPONENTS ARE LISTED AT 3.0 % OR GREATER. THIS IS NOT INTENDED TO BE COMPLETE COMPOSITIONAL DISCLOSURE. REFER TO SECTION 14 FOR APPLICABLE STATES' RIGHT TO KNOW AND OTHER REGULATORY INFORMATION.

Product and/or Component(s) Carcinogenic According to:

OSHA IARC NTP OTHER NONE X

Composition:

Chemical Name	CAS Number	Exposure Limits	Range in %
Ethanol, 2-amino-	141-43-5	6 ppm STEL-ACGIH 3 ppm TWA-OSHA 6 ppm STEL-OSHA 3 ppm TWA-ACGIH	100

THIS PRODUCT IS CONSIDERED HAZARDOUS ACCORDING TO OSHA (1910.1200).

PRODUCT CODE AND NAME	:	***MEA MONOETHANOLAMINE, MEA***
DATE ISSUED	:	***7/30/97***
DATE PRINTED	:	***2/4/99***
COMPANY	:	***HUNTSMAN***

3. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW

Appearance:

Clear liquid

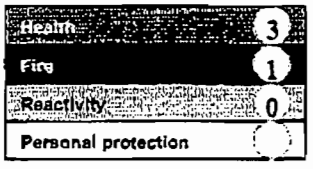
Odor:

Ammonia-like odor

WARNING STATEMENT

DANGER ! CORROSIVE - CAUSES EYE AND SKIN BURNS
HARMFUL OR FATAL IF SWALLOWED
MAY CAUSE DIZZINESS AND DROWSINESS
CAUSES RESPIRATORY TRACT IRRITATION AND CAN CAUSE DAMAGE
ASPIRATION HAZARD IF SWALLOWED -
CAN ENTER LUNGS AND CAUSE DAMAGE
MAY CAUSE LIVER AND KIDNEY DAMAGE BASED ON ANIMAL DATA

Hazardous Material Information System (United States)



National Fire Protection Association NFPA (United States)



POTENTIAL HEALTH EFFECTS

Primary Route of Exposure

Eye X Skin X Inhalation X Ingestion

Effects of Overexposure

Acute:

Eyes: Causes irritation, experienced as pain, with excess blinking and tear production, and seen as extreme redness and swelling of the eye and chemical burns of the eye. Severe eye damage may cause blindness.

Skin: Causes severe irritation with pain, severe excess redness and swelling with chemical burns, blister formation, and possible tissue destruction. Other than the potential skin irritation effects noted above, acute (short term) adverse effects are not expected from brief skin contact; see other effects, below, and Section 11 for information regarding potential long term effects.

Inhalation: Vapors or mist, especially as generated from heating the material or as from exposure in poorly ventilated areas or confined spaces, are irritating and cause nasal discharge, coughing, and discomfort in nose and throat. Prolonged or repeated overexposure may result in lung damage. Inhalation may cause dizziness, drowsiness, euphoria, loss of coordination, disorientation, headache, nausea, and vomiting. In poorly ventilated areas or confined spaces, unconsciousness and asphyxiation may result. Prolonged or repeated overexposure may result in the absorption of potentially harmful amounts of material.

Ingestion: Causes burning of mouth, throat, and stomach with abdominal and chest pain, nausea, vomiting, diarrhea, thirst, weakness, and collapse. Aspiration may occur during swallowing or vomiting, resulting in lung damage.

Sensitization Properties: Unknown

Chronic:

Repeated skin contact may cause a persistent irritation or dermatitis. Repeated inhalation may cause lung damage.

Medical Conditions Aggravated by Exposure:

PRODUCT CODE AND NAME	:	***MEA MONOETHANOLAMINE, MEA***
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Skin contact may aggravate an existing dermatitis (skin condition). Overexposure to vapor, dust or mist may aggravate existing respiratory conditions, such as asthma, bronchitis, and inflammatory or fibrotic respiratory disease. Repeated overexposure may aggravate existing liver or kidney disease.

Other Remarks:

This product contains one or more amines which may produce temporary and reversible hazy or blurred vision. Symptoms disappear when exposure is terminated.

4. FIRST AID MEASURES

Eyes:

Immediately flush eyes with large amounts of running water for at least 15 minutes. Hold eyelids apart while flushing to rinse entire surface of eye and lids with water. Do not attempt to neutralize with chemical agents. Obtain medical attention immediately. Continue flushing for an additional 15 minutes if medical attention is not immediately available.

Skin:

Immediately remove contaminated clothing and shoes. Under a safety shower, flush skin thoroughly with large amounts of running water for at least 15 minutes. Do not attempt to neutralize with chemical agents. Get medical attention immediately. Discard or decontaminate clothing and shoes before reuse.

Ingestion:

If person is conscious and can swallow, immediately give two glasses of water (16 oz.) but do not induce vomiting. This material is corrosive. If vomiting occurs, give fluids again. Have a physician determine if condition of patient will permit induction of vomiting or evacuation of stomach. Do not give anything by mouth to an unconscious or convulsing person.

Inhalation:

If inhaled, remove to fresh air. If not breathing or in respiratory distress, clear person's airway and start artificial respiration. With a physician's advice, give supplemental oxygen using a bag-valve mask or manually triggered oxygen supply.

Other Instructions:

Swallowing of this corrosive material may result in severe ulceration, inflammation, and possible perforation of the upper alimentary tract, with hemorrhage and fluid loss. Aspiration of this product during induced emesis can result in severe lung injury. If evacuation of stomach is necessary, use method least likely to cause aspiration, such as gastric lavage after endotracheal intubation. Contact a Poison Control Center for additional treatment information.

5. FIRE-FIGHTING MEASURES

Ignition Temperature - AIT (degrees C):

Not determined.

Flash Point (degrees C):

95.5 (204 F) (PMCC)

Flammable Limits % (Lower-Upper):

Lower: 5
Upper: 17

Recommended Fire Extinguishing Agents And Special Procedures:

Use water spray, dry chemical, foam, or carbon dioxide to extinguish flames. Use water spray to cool fire-exposed containers. Water or foam may cause frothing.

Unusual or Explosive Hazards:

None

Special Protective Equipment for Firefighters:

Wear special chemical protective clothing and positive pressure self-contained breathing apparatus. Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. Decontaminate or discard any clothing that may contain chemical residues.

PRODUCT CODE AND NAME	:	**MEA MONOETHANOLAMINE, MEA**
DATE ISSUED	:	**7/30/97**
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COMPANY	:	**HUNTSMAN**

6. ACCIDENTAL RELEASE MEASURES (Transportation Spills: CHEMTREC (800)424-9300)

Procedures in Case of Accidental Release, Breakage or Leakage:

Ventilate area. Avoid breathing vapor. Wear appropriate personal protective equipment, including appropriate respiratory protection. Contain spill if possible. Wipe up or absorb on suitable material and shovel up. Prevent entry into sewers and waterways. Avoid contact with skin, eyes or clothing.

7. HANDLING AND STORAGE

Precautions to be Taken in

Handling:

Minimum feasible handling temperatures should be maintained. Eye wash and safety shower should be available nearby when this product is handled or used.

Storage:

Periods of exposure to high temperatures should be minimized. Water contamination should be avoided.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Protective Equipment (Type)

Eye/Face Protection:

Avoid eye contact. Chemical type goggles with face shield must be worn. Do not wear contact lenses.

Skin Protection:

Protective clothing such as coveralls or lab coats must be worn. Launder or dry-clean when soiled. Gloves resistant to chemicals and petroleum distillates required. When handling large quantities, impervious suits, gloves, and rubber boots must be worn.

Remove and dry-clean or launder clothing soaked or soiled with this material before reuse. Dry cleaning of contaminated clothing may be more effective than normal laundering. Inform individuals responsible for cleaning of potential hazards associated with handling contaminated clothing.

Respiratory Protection:

Airborne concentrations should be kept to lowest levels possible. If vapor, mist or dust is generated and the occupational exposure limit of the product, or any component of the product, is exceeded, use appropriate NIOSH or MSHA approved air purifying or air supplied respirator after determining the airborne concentration of the contaminant. Air supplied respirators should always be worn when airborne concentration of the contaminant or oxygen content is unknown.

Ventilation:

Adequate to meet occupational exposure limits (see below).

Exposure Limit for the Total Product:

Monoethanolamine (ethanolamine): OSHA PEL-TWA 3.0 ppm; STEL 6.0 ppm ACGIH TLV-TWA 3.0 ppm; STEL 6.0 ppm

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Clear liquid

Odor:

Ammonia-like odor

Boiling Point (degrees C):

170.5 (339 F)

PRODUCT CODE AND NAME	:	***MEA MONOETHANOLAMINE, MEA***
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Melting/Freezing Point (degrees C):

10.5 (51 F)

Specific Gravity (water=1):

1.02

pH:

11.8

Vapor Pressure:

.2 mmHg at 20 C (68 F)

Viscosity:

23.6 cSt at 20 C (68 F)

VOC Content:

98% by ASTM D 2369

Vapor Density (Air=1):

2.1

Solubility in Water (%):

>10

Other:

None

10. STABILITY AND REACTIVITY

This Material Reacts Violently With:

Air Water Heat Strong Oxidizers Others X None of these

Comments:

This material reacts violently with acids.

Products Evolved When Subjected to Heat or Combustion:

Toxic levels of ammonia, combustion products of nitrogen, carbon monoxide, carbon dioxide, irritating aldehydes and ketones may be formed on burning in a limited air supply.

Hazardous Polymerizations:

DO NOT OCCUR

11. TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION (ANIMAL TOXICITY DATA)

Oral:
LD50 Believed to be > 1.00 - 2.00 g/kg (rat) moderately toxic
Inhalation:
Not determined.
Dermal:
LD50 1.00 g/kg (rabbit) slightly toxic

IRRITATION INDEX, ESTIMATION OF IRRITATION (SPECIES)

Skin:
(Draize) Believed to be > 6.50 - 8.00 /8.0 (rabbit) corrosive
Eyes:
(Draize) Believed to be > 80.00 - 110.00 /110 (rabbit) extremely irritating
Sensitization:
Not determined.

Other:

PRODUCT CODE AND NAME	:	***MEA MONOETHANOLAMINE, MEA***
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Prolonged and repeated ingestion of monoethanolamine has caused kidney and liver damage in laboratory animals. In addition, a developmental toxicity study, using unconventional statistical treatment of the data, demonstrated developmental toxicity in rats. The true significance of the study data is not clear, since a full re-interpretation of this data is not possible at this time. Additional or repeat studies are planned or underway to better define the toxic potential of this product, or to verify the results obtained from previous animal studies.

12. DISPOSAL CONSIDERATIONS:

Waste Disposal Methods:

This product has been evaluated for RCRA characteristics and does not meet the criteria of a hazardous waste if discarded in its purchased form. Under RCRA, it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. This is because product uses, transformations, mixtures, processes, etc. may render the resulting materials hazardous.

Remarks:

None

13. TRANSPORT INFORMATION

Transportation

DOT:

Proper Shipping Name:
Ethanolamine

Hazard Class:
8

Identification Number:
UN 2491

Packing Group:
III

Label Required:
Corrosive

IMDG

Proper Shipping Name:
Not evaluated

ICAO

Proper Shipping Name:
Not evaluated

TDG

Proper Shipping Name:
Ethanolamine

Hazard Class:
8

Identification Number:
UN 2491

Label Required:
Corrosive

PRODUCT CODE AND NAME	:	***MEA MONOETHANOLAMINE, MEA***
DATE ISSUED	:	**7/30/97**
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COMPANY	:	**HUNTSMAN**

14. REGULATORY INFORMATION

Federal Regulations:

SARA Title III:

Section 302/304 Extremely Hazardous Substances

Chemical Name	CAS Number	Range in %	TPQ	RQ
None.				

Section 311 Hazardous Categorization:

Acute X Chronic X Fire Pressure Reactive N/A

Section 313 Toxic Chemical

Chemical Name	CAS Number	Concentration
None.		

CERCLA 102(a)/DOT Hazardous Substances:

Chemical Name	CAS Number	Range in %	RQ
None.			

States Right-to-Know Regulations:

Chemical Name	State Right-to-know
Ethanol, 2-amino-	CT, FL, IL, MA, NJ, PA, RI

State list: CT (Connecticut), FL (Florida), IL (Illinois), MI (Michigan), LA (Louisiana), MA (Massachusetts), NJ (New Jersey), PA (Pennsylvania), RI (Rhode Island)

California Prop. 65:
The following detectable components of this product are substances, or belong to classes of substances, known to the State of California to cause cancer and/or reproductive toxicity.

Chemical Name	CAS Number
None.	

INTERNATIONAL REGULATIONS:

TSCA Inventory Status:

This product, or its components, are listed on or are exempt from the the Toxic Substance Control Act (TSCA) Chemical Substance Inventory.

WHMIS Classification:

Class E: Corrosive

Canadian Inventory Status:

This product, or its components, are listed on or are exempt from the Canadian Domestic Substance List (DSL).

EINECS Inventory Status:

This product, or its components, are listed on or are exempt from the European Inventory of Existing Chemical Substances (EINECS) or the European List of Notified Chemical Substances (ELINCS).

Australian Inventory Status:

This product, or its components, are listed on or are exempt from the Australian Inventory of Chemical Substances (AICS).

Japan Inventory Status:

This product, or its components, are listed on or are exempt from the Japan Ministry of International Trade and Industry (MITI) inventory.

PRODUCT CODE AND NAME	:	***MEA MONOETHANOLAMINE, MEA***
DATE ISSUED	:	**7/30/97**
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COMPANY	:	**HUNTSMAN**

15. ENVIRONMENTAL INFORMATION

Aquatic Toxicity:

LC50-96hr Aquatic toxicity rating is > 100.00 - 1000.00 ppm practically non-toxic

Mobility:

This product is expected to be mobile in soil and not be expected to adsorb to suspended solids or sediments in water.

Persistence and Biodegradability:

This product undergoes moderate biodegradation and is not expected to be persistent in the environment.

Potential to Bioaccumulate:

This product is not expected to bioaccumulate. K_{ow} = -1.31

Remarks:

None

16. OTHER INFORMATION 7/30/97

None

THE INFORMATION CONTAINED HEREIN IS BELIEVED TO BE ACCURATE. IT IS PROVIDED INDEPENDENTLY OF ANY SALE OF THE PRODUCT FOR PURPOSE OF HAZARD COMMUNICATION AS PART OF HUNTSMAN'S PRODUCT SAFETY PROGRAM. IT IS NOT INTENDED TO CONSTITUTE PERFORMANCE INFORMATION CONCERNING THE PRODUCT. NO EXPRESS WARRANTY, OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS MADE WITH RESPECT TO THE PRODUCT OR THE INFORMATION CONTAINED HEREIN. DATA SHEETS ARE AVAILABLE FOR ALL HUNTSMAN PRODUCTS. YOU ARE URGED TO OBTAIN DATA SHEEETS FOR ALL HUNTSMAN PRODUCTS YOU BUY, PROCESS, USE OR DISTRIBUTE AND YOU ARE ENCOURAGED AND REQUESTED TO ADVISE THOSE WHO MAY COME IN CONTACT WITH SUCH PRODUCTS OF THE INFORMATION CONTAINED HEREIN.

TO DETERMINE APPLICABILITY OR EFFECTS OF ANY LAW OR REGULATION WITH RESPECT TO THE PRODUCT, USER SHOULD CONSULT HIS LEGAL ADVISOR OR THE APPROPRIATE GOVERNMENT AGENCY. HUNTSMAN DOES NOT UNDERTAKE TO FURNISH ADVICE ON SUCH MATTERS.

Supercedes: 2/26/97

The following section has been revised: 4, 8

Date Issued: 7/30/97.

Verified by Phillip B. Valkovich.

Inquiries regarding MSDS should be directed to:

HUNTSMAN
Coordinator, Product Safety
P.O. Box 27707
Houston, TX 77227-7707

Department of Environmental Protection

Lawton Chiles
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

November 13, 1996

Mr. Stephen A. Sorrentino
Indiantown Cogeneration, L.P.
Post Office Box 1799
Indiantown, Florida 34956

Re: Indiantown Cogeneration Project, PA 90-31

Dear Mr. Sorrentino:

I have reviewed your November 2, 1996, letter to Mr. Clair Fancy concerning the deletion of EPA Method 8 for stack testing. While such a deletion from PSD-FL 168 may be approvable by the Division of Air Resources Management, the corresponding deletion from the Conditions of Certification requires a modification process. If you wish to proceed with a modification on this matter, you may wish to also include the following modification as well that will make amendments to a PSD permit automatically modify the corresponding Conditions of Certification:

> This certification shall be automatically modified to conform to any subsequent amendments, modifications, or renewals made by DEP under a federally delegated or approved program to any separately issued Prevention of Significant Deterioration (PSD) permit, Title V Air Permit, or National Pollutant Discharge elimination System (NPDES) permit for the certified facility. ICL shall send each party to the original certification proceedings (at the party's last known address as shown in the record of such proceeding) notice of requests submitted by ICL for modifications or renewals of the above listed permits if the request involves a relief mechanism (e.g., mixing zone, variance, etc.) from state standards, a relaxation of conditions included in the permit due to state permitting requirements, or the inclusion of less restrictive air emission limitations in the air permits. DEP shall notify all parties to the certification proceeding of any intent to modify conditions under this section prior to taking final agency action.

Please confirm that you would like to proceed with the Method 8 modification and the generic federal permit modification.

Sincerely,

Hamilton S. Oven

Hamilton S. Oven, PE.
Administrator, Siting
Coordination Office

November 2, 1996

Mr. Clair Fancy
Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blairstone Road
Tallahassee, FL 32399-2400

VIA FEDERAL EXPRESS

Re: Administrative Modification to Permit PSD-FL 168 & PA 90-31

Dear Mr. Fancy

Indiantown Cogeneration L.P.(ICLP), has identified the need to modify our existing PSD permit. Based on conversations with Martin Costello of the Bureau of Air Regulation, we have determined that PSD Specific Condition 19, requiring ICLP to perform Sulfuric Acid Mist testing, is not applicable.

Background

As you will recall, this facility was designed to burn a medium to low sulfur coal with a dry scrubber unit producing a reduction in SO_2 significantly greater than 70 % . During the initial performance testing of the plant in December 1995, ICLP made several attempts using EPA Method 8 as required by Specific Condition 19. After three runs with erratic results it was determined that due to flue gas conditions and probable interferences from ammonia and chlorides in the flue gas, the standard Method 8 approach would not produce valid results. The testing contractor Clean Air Engineering (CAE) had experience with these types of interferences and recommended an alternate approach using a Modified Method 8. ICLP requested that CAE run a Modified Method 8 at that time to attempt to achieve a valid result, which was reported along with the test results from the initial testing using the reference method.

In discussions with the FDEP Southeast District Office, it was determined that since the modified method was not approved and no audit samples were run, the test was not accepted. The SE District has suggested that ICLP request approval of the Modified Method 8 procedure and run the test during the scheduled 4th quarter 1996, performance testing.

Upon submitting the Amendment to Standard Procedure (ASP) for the modified method, Byron Veech was contacted by Martin Costello to discuss the application. After reviewing the issues, test results and the design of the plant with Mr. Costello, it was determined that the original requirement for ($H_2 SO_4$) acid mist testing should not have been included in the PSD permit.

Request:
ICLP is thereby requesting that the ASP application for a Modified Method 8 be withdrawn and that a minor amendment be made to the Indiantown Cogeneration L. P. permit, PSD-FL-168. Specifically, we are requesting that the PSD permit be modified to remove Specific Condition 19 for $H_2 SO_4$ acid mist testing from the list of required emission limitation standards. ICLP is enclosing a check for $250.00 for this modification as required by 62-4.050(4)(r)(5).

Rationale:
ICLP has based this request on the fact that EPA Method 8 was developed for sulfuric acid plants at which the flue gas is dry and free of interference. The use of this method at a coal fired plant with high flue gas moisture content, low backend temperature and interference such as ammonia and chlorides does not provide valid results. Additionally, since the plant performance in terms of SO_2 reduction is more than adequate because of the low sulfur content and the high level of emissions control, the expected level of this pollutant is well below required levels.

If you have any questions regarding this request please contact, Byron Veech or me at (561) 597-6500.

Sincerely,

Stephen A. Sorrentino
Project Director

BWV

Enclosure - $250.00 for minor modification fee.

cc: Hamilton "Buck" Oven FDEP
M. Harley FDEP BAR
M. Costello FDEP BAR
T. Tittle FDEP SE. District Office
R. Neginsky FDEP SE District Office

RECEIVED
NOV 12 1996
BUREAU OF
AIR REGULATION

Marty

Indiantown Cogeneration, L.P.

October 29, 1996

Ms. Raisa Neginsky
Department of Environmental Protection
PO Box 15425
400 South Congress Avenue
West Palm Beach, FL 33416

VIA FEDERAL EXPRESS

RE: Indiantown Generating Plant
COM's Initial Certification
Permit Nos.: PSD-FL-168 & PA 90-31

Dear Raisa:

This letter is in response to your letter of September 5, 1996 regarding the PC Boiler Continuous Emissions Monitoring System (COMS) Certification. As allowed in 40 CFR 60.13(c) a Continuous Opacity Monitors performance evaluation shall be completed before the performance testing is done as described in 40 CFR 60.8. At the time the Relative Accuracy Test Audits (RATA) was performed in December 1995, no additional certification of the COMs was performed. The performance evaluation, including the "Calibration Error Test", which requires the use of certified test filters, was completed by the manufacturer during the factory acceptance testing on December 23, 1995. This testing was attended by US Generating personnel.

The three neutral density test filters that were used in the testing were filter serial numbers; L - (Low), M- (medium) & H - (high). These filters were certified as documented in the RATA report, attached is the certification doc, note that the certification was completed on July 24,1994. Since the filter certification is good for one year, we submit that the opacity meter is indeed certifiable by your department.

Attached to this letter are the results of the four manufacturers Calibration Error Tests. All Filter Certifications were performed on July 21, 1996. Enclosed in the original RATA report were the following documents:

- Opacity Factory Certification
- Neutral Density Filter Certification Report for L Filter
- Neutral Density Filter Certification Report for M Filter
- Neutral Density Filter Certification Report for H Filter

"Doing Business in Florida as Indiantown Cogeneration, L.P. Limited Partnership"
P.O. Box 1799 • 19140 SW Warfield Blvd. • Indiantown, Florida 34956 • 561-597-6500 • Fax 561-597-6210
Printed on 100% recycled paper

RECEIVED
NOV 4 1996
BUREAU OF
AIR REGULATION

Identification	Range	Value
Neutral Density Filter - L	Low Range Filter	7.98 % Opacity
Neutral Density Filter - M	Mid Range Filter	25.03 % Opacity
Neutral Density Filter - H	High Range Filter	65.01 % Opacity

Please contact me at (407) 597-6500 extension 19 if you have any questions..

Sincerely,

B W Veech
ES & H Coordinator

Enclosure (4)

cc: Tom Tittle, FDEP SE District
Martin Costello FDEP BAM

File

Department of Environmental Protection

Lawton Chiles
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

July 11, 1995

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Ms. Michelle Griffin
Indiantown Cogeneration Facility
Post Office Box 1620
Indiantown, Florida 34956

RE: Indiantown Cogeneration, L. P.
PSD-Fl-168; Permit Modification

Dear Ms Griffin:

The Department received your letter on June 9, 1995, requesting to revise Specific Conditions No. 19 to use EPA Reference Methods 3, 3A, 5, 7E, 18, and 25A instead of EPA Reference Methods 3, 7, 7C, 19, 201, 201A, 18 and 25.

The Department evaluated your request and will allow you to change all proposed Reference Methods except for EPA VOC Reference Methods 18 and 25A. Please refer to the attached FDEP Guidance Memo dated March 17, 1994, and submit a request for an Alternate Standard Procedure (ASP) addressed to Mike Harley of the DEP Emission Monitoring Section.

As indicated above Specific Condition No. 19 will be changed as follows:

SPECIFIC CONDITION No. 19

FROM:

Compliance with emission limitations standards shall be demonstrated using EPA Methods, as contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources), or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants), or any other method approved by the Department and EPA, in accordance with F.A.C. Rule 17-2.700.

EPA Method	For Determination of
1	Selection of sample site and velocity traverses
2	Stack gas flow rate when converting concentrations to or from mass emission limits.
3	Gas analysis when needed for calculation of molecular weight or percent O_2.
4	Moisture content when converting stack velocity to dry volumetric flow rate for use in converting concentrations in dry gases to or from mass emission limits.
5	Particulate matter concentration and mass emissions.
201 or 201A	PM_{10} emissions.
6, 6C, or 19	Sulfur dioxide emissions from stationary sources.
7, 7C, or 19	Nitrogen oxide emissions from stationary sources.
8	Sulfuric acid mist from stationary source.
9	Visible emission determination of opacity.
	- At least three one hour runs to be conducted simultaneously with particulate testing for the emissions from dry scrubber/baghouse, and ash handling building baghouse.
	- At least one lime vehicle unloading into the lime silo (from start to finish).
22	Fugitive emissions from transfer points.
10	Carbon monoxide emissions from stationary sources.
12 or 101A	Lead Concentration from stationary sources.

13A or 13B	Fluoride emissions from stationary sources.
18 or 25	Volatile organic compounds concentration.
101A or 108	Mercury emissions.
104	Beryllium emission rate and associated moisture content.

Note: Use EPA draft method or other methods approved by Department to test for ammonia.

TO:

Compliance with emission limitations standards shall be demonstrated using EPA Methods, as contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources), or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants), or any other method approved by the Department and EPA, in accordance with F.A.C. Chapter 62.297.

EPA Method	For Determination of
1	Selection of sample site and velocity traverses
2	Stack gas flow rate when converting concentrations to or from mass emission limits.
3 & 3A	Gas analysis when needed for calculation of molecular weight or percent O_2.
4	Moisture content when converting stack velocity to dry volumetric flow rate for use in converting concentrations in dry gases to or from mass emission limits.
5	Particulate matter concentration and mass emissions.
6, 6C, or 19	Sulfur dioxide emissions from stationary sources.
7E	Nitrogen oxide emissions from stationary sources.

8	Sulfuric acid mist from stationary source.
9	Visible emission determination of opacity.
	- At least three one hour runs to be conducted simultaneously with particulate testing for the emissions from dry scrubber/baghouse, and ash handling building baghouse.
	- At least one lime vehicle unloading into the lime silo (from start to finish).
22	Fugitive emissions from transfer points.
10	Carbon monoxide emissions from stationary sources.
12 or 101A	Lead Concentration from stationary sources.
13A or 13B	Fluoride emissions from stationary sources.
18 and 25	Volatile organic compounds concentration.
101A or 108	Mercury emissions.
104	Beryllium emission rate and associated moisture content.

Note: Use EPA draft method or other methods approved by Department to test for ammonia.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the applicant of the amendment request/application and the parties listed below must be filed within 14 days of receipt of this amendment. Petitions filed by other persons must be filed within 14 days of the amendment issuance or within 14 days of their receipt of this amendment, whichever occurs first. Petitioner

shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information:

(a) The name, address and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
(d) A statement of the material facts disputed by Petitioner, if any;
(e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and,
(g) A statement of the relief sought by petitioner, stating precisely the action the petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this amendment. Persons whose substantial interests will be affected by any decision of the Department with regard to the amendment request/application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this amendment in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, Florida Administrative Code.

A copy of this amendment letter shall be attached to and shall become a part of Air Construction Permit PSD-FL-168.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

for

Howard L. Rhodes, Director
Division of Air Resources
Management

CERTIFICATE OF SERVICE

This is to certify that this Permit Amendment and all copies were mailed to the listed persons before the close of business on _____.

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to Chapter 120.52(9), Florida Statutes, with the designated Deputy Clerk, receipt of which is hereby acknowledged.

(Clerk) (Date)

Enclosure: Ms Griffin's letter received on June 9,1995

Copies furnished to:

John Bunyak, NPS
Jewell A. Harper, EPA
Isidore Goldman, SED
Mike Harley, DARM

Is your RETURN ADDRESS completed on the reverse side?

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Ms. Michelle Griffin
Indiantown Cogeneration Facility
Post Office Box 1620
Indiantown, Florida 34956

4a. Article Number

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
7-24-95

5. Signature (Addressee)
Stephanie Waksman

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)

PS Form **3811**, December 1991 ☆U.S. GPO: 1993—352-714 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

Z 392 979 058

Receipt for Certified Mail
No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

UNITED STATES POSTAL SERVICE

PS Form **3800**, March 1993

Sent to Ms. Michelle Griffin	
Street and No. PO Box 1620	
P.O., State and ZIP Code Indian Town, Florida 34956	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date Sent 7/14/95 ~~Revised~~ PSD FL-168	

6-21-95.

TO Marty

DATE 6/21 TIME 10:10

WHILE YOU WERE OUT

M Michelle Griffin

of

PHONE 407/597-6500

AREA CODE NUMBER EXTENSION

TELEPHONED		~~PLEASE CALL~~	~~WILL CALL AGAIN~~
RETURNED YOUR CALL		CALL IMMEDIATELY	
CAME TO SEE YOU		WANTS TO SEE YOU	

Called Back 6/21/95

MESSAGE

letter 3/95 to Bruce -

Amendment Request

By

TO: Teresa

thru AL.

6/19 Marty
I think we might have discussed this. Pls advise. Clm

U.S. Generating Company

Indiantown Generating Plant

RECEIVED
JUN 15 1995
Bureau of
Air Regulation

Martin Costello
Department of Environmental Protection
Bureau of Air Regulation
Blair Stone Road
Tallahassee, FL

Re: Indiantown Generating Facility
PSD-FL-168
PA 90-31

Dear Mr. Costello:

Indiantown Cogeneration, L.P. (ICL) has previously submitted emissions test as protocol to FDEP on April 17, 1995. The protocol outlines the test methods to be used for demonstration of compliance in accordance with Special Condition 19 of the PSD permit (Condition of Certification II (1) A.3.b).

As we have discussed, the protocol contains several minor deviations from the list provided at Special Condition 19. The attached table presents the permit requirement versus the proposed method with an explanation for the deviation.

As we discussed previously, these are minor changes and the Method 25A change will improve the accuracy of the compliance test. As a minor change to the permit, a $250.00 application fee is required. A check in this amount is enclosed.

First coal fire is anticipated to occur June 19, 1995 starting the 180 day clock for completing compliance testing. ICL expects to reach full load, shortly thereafter, starting the 60 day clock. Thus, we need approval to complete our compliance tests by mid August in order to maintain compliance with the requirements of Special Condition 18, Condition of Certification II (1)A3a, and 40 CFR 60.8. I look forward to working with you to obtain approval of these methods and the emission test protocol.

In addition to the EPA guidance document and application fee, I have enclosed revised tables from the protocol to more accurately reflect our testing program. Enclosed please find revised tables 1-1 and 3-1. Please call me at (301) 718-6973 if you have any questions or concerns.

Sincerely,

Michelle Griffin

cc: H. S. Oven, Jr., FDEP
C. H. Fancy, FDEP

Indiantown Generating Facility
Emissions Test Method Changes

Permit	Protocol	Explanation
7, 7C or 19	7E	We believe that this is a typographical error in the permit and that FDEP intended to approve 7E. 7C is not usual for coal fired facilities.
3	3 & 3A	Because of the methods approved, method 3A is more appropriate for use during SO_2, NO_x & VOC tests
201 or 201A	5	Because the permit limit for PM_{10} is the same, ICL proposes to use the Methods results for PM and PM_{10}.
18 or 25	18 and 25A	Method 18 will be used for methane. Method 25A will be used for total hydro carbons. Recent guidance from EPA recommends use of 25A for sources emitting less than 50 ppm VOC as carbon. EPA recommends Method 18 in conjunction with Method 25. (Guidance document enclosed).

BEST AVAILABLE COPY

Clean Air Engineering

Parkway West Industrial Park • 1601 Parkway View Drive • Pittsburgh, PA 15205

Phone 412/787-9130 • Fax 412/787-9138

Mr. William D. Harper, P.E.
Bechtel Power Corporation
9801 Washingtonian Boulevard
Gaithersburg, Maryland 20878-5356

PROTOCOL FOR COMPLIANCE TESTING

To be performed for:
BECHTEL POWER CORPORATION

Conducted at:
INDIANTOWN GENERATING PLANT
MARTIN COUNTY, FLORIDA

Client Reference No: 22019-TSC-007
CAE Project No: 7454-2P
Revision 0: March 31, 1995
Revision 1: April 14, 1995
Revision 2: May 11, 1995

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1. PROJECT OVERVIEW (CONTINUED)

1.2 Scope (continued)

The air sampling program is summarized below:

Table 1-1: PC Boiler Stack Test Program Scope

Parameter	Methodology	Test Duration	Replicates
oxygen [1]	EPA 3		
carbon dioxide [1]	EPA 3		
oxygen	EPA 3A	60 min.	3
carbon dioxide	EPA 3A	60 min.	3
total particulate (PM and PM_{10})	EPA 5	120 min.	3
sulfur dioxide	EPA 6C	60 min.	3
nitrogen oxides	EPA 7E	60 min.	3
sulfuric acid mist	EPA 8	60 min.	3
opacity	EPA 9	60 min.	3
carbon monoxide	EPA 10	60 min.	3
lead	EPA 12	120 min.	3
fluoride	EPA 13B	60 min.	3
non-methane hydrocarbons	EPA 18 and 25A	60 min.	3
mercury	EPA 101A	120 min.	3
beryllium	EPA 104	120 min.	3
arsenic	EPA 108	120 min.	3
ammonia	EPA Ammonia (Draft)	120 min.	3

[1] EPA Method 3 will be conducted simultaneously with EPA Methods 5, 8, 12, 13B, 101A, and 108.

Table 1-2: Coal, Limestone and Flyash Test Program Scope

Parameter	Methodology [1]	Test Duration	Replicates
opacity	EPA 9	60 min.	3
fugitive emissions	EPA 22	15 min.	5

[1] Each source may not require both visible and fugitive emissions to demonstrate compliance.

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3. SCHEDULE OF ACTIVITIES

The following schedule is proposed for the compliance testing program:

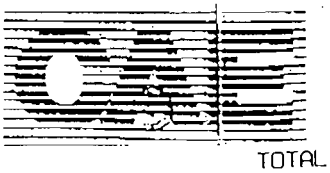
Table 3-1: Schedule of Activities

Day	Location	Activity	Test Method	Runs	Duration	Sample Volume
1-2		Mobilize to Project site Set up test equipment				
3	Stack	Beryllium [1]	EPA 104	3	120 min.	60 dscf
		Arsenic [1]	EPA 108	3	120 min.	60 dscf
	Bag Filters [1]	Opacity	EPA 9	3	60 min.	NA
		Fugitive Emissions	EPA 22	5	15 min.	NA
4	Stack	Oxygen	EPA 3A	3	60 min.	continuous
		Carbon Dioxide	EPA 3A	3	60 min.	continuous
		Sulfur Dioxide [2]	EPA 6C	3	60 min.	continuous
		Nitrogen Oxide [2]	EPA 7E	3	60 min.	continuous
		Carbon Monoxide [2]	EPA 10	3	60 min.	continuous
		Methane [2]	EPA 18	3	60 min.	3 liter
		Total Hydrocarbons [2]	EPA 25A	3	60 min.	continuous
		Lead [1]	EPA 12	3	120 min	60 dscf
		Fluorides [1]	EPA 13B	3	60 min.	30 dscf
5	Stack	Particulate/Ammonia [3]	EPA 5/NH_3 (draft)	3	120 min	60 dscf
		Sulfuric Acid Mist [3]	EPA 8	3	60 min.	30 dscf
		Opacity	EPA 9	3	60 min.	N/A
6		Dismantle test equipment Return to basing point				

[1] Coal, limestone and flyash handling bag filters visible emissions will be determined while each specific process is operating at required conditions.

[2] Pounds per hour emission rates for instrumental methods will be calculated using the volumetric flow determined from EPA Method 12 and EPA Method 13B.

[3] EPA Method 3 samples will be collected and analyzer with an Orsat® analyzer to determine the molecular weight of the flue gas.



EMISSION MEASUREMENT TECHNICAL INFORMATION CENTER
GUIDELINE DOCUMENT

Applicability of Methods 25 and 25A

SUMMARY

State regulations sometimes require testers to measure VOC emissions from sources where the concentration of VOC is less than 50 ppm as carbon. We recommend that Method 25A be used to measure the concentration of VOC emissions from these kind of sources.

DISCUSSION

There are three EPA test methods that are appropriate for measuring total VOC emissions. These are Methods 25, 25A, and 25B. Method 25 is designed to measure the destruction efficiency of incinerators used to control VOC emissions from coating sources. While it would be generally applicable to any source, it has a relatively high minimum detectable level of 50 ppm, as carbon. This would limit its usefulness at sources where VOC emissions are less than 50 ppm.

We recommend that testers use Method 25A for measuring VOC emissions from sources that have VOC emissions that are below the minimum detectable level of Method 25. This approach is not without problems. When Method 25A is used to measure unknown VOC emissions, there is a potential negative bias in the results. In addition, if methane is present in the source emissions, a separate method would be required to measure the methane and subtract it from total organic emissions measured by Method 25A to determine VOC. Despite these problems, Method 25A is the only EPA procedure that can measure total VOC at the levels present at some sources.

Prepared by Gary McAlister, Emission Measurement Branch
Technical Support Division, OAQPS, EPA

EMTIC GD-011
January 25, 1991

EMISSION MEASUREMENT TECHNICAL INFORMATION CENTER
GUIDELINE DOCUMENT

MEMORANDUM

SUBJECT: EPA's VOC Test Methods 25 and 25A

FROM: John B. Rasnic, Director
Stationary Source Compliance Division
Office of Air Quality Planning and Standards

TO: Air, Pesticides, and Toxics Management Division Directors
Regions I and IV

Air and Waste Management Division Director
Region II

Air, Radiation, and Toxics Division Director
Region III

Air and Radiation Division Director
Region V

Air, Pesticides, and Toxics Division Director
Region VI

Air and Toxics Division Directors
Regions VII, VIII, IX and X

As a result of requests from industry, Regional Offices and State programs, we have reviewed our guidance regarding the use of Methods 25 and 25A for measuring gas stream volatile organic compounds (VOC) concentration. Information obtained during this review has resulted in the following revised guidance, which is effective immediately and which supersedes all previous guidance on this matter. This revision has been coordinated with the other divisions within the Office of Air Quality Planning and Standards.

The EPA has decided to add an option 3 to permit further the use of Method 25A in lieu of Method 25 under certain conditions. Therefore, our new guidance is as follows. The EPA mandates the use of Method 25 for measuring gas stream VOC concentration when determining the destruction efficiency (DE) of afterburners. it also allows the use of Method 25A, in lieu of Method 25, under any of the following circumstances: 1) when the applicable regulation limits the exhaust VOC concentration to less than 50 ppm; 2) when the VOC concentration at the inlet of the control system and the required level of control are such to result in exhaust VOC concentrations of 50 ppm or less; or 3) if, because of the high efficiency of the control device, the anticipated VOC concentration at the control system exhaust is 50 ppm or less, regardless of the inlet concentration.

BEST AVAILABLE COPY

Further, if a source elects to use Method 25A under option 3, above, the exhaust VOC concentration must be 50. ppm or less and the required DE must be met for the source to have demonstrated compliance. If the Method 25A test results show that the required DE apparently has been met, but the exhaust concentration is above 50 ppm, this is an indicator that Method 25A is not the appropriate test method and that Method 25 should be used.

Prepared by Vishnu S. Katari
(202) 564-4004
Emissions Measurement Center, OAQPS

EMTIC GD-32

April 4, 1995

BACKGROUND

The primary industry impacted by this policy is the printing industry, which has consistently claimed that the Method 25 test procedure is too expensive and cumbersome to be used as a compliance demonstration tool. They have stated that current state-of-the-art technology afterburners routinely achieve 98-99 percent destruction efficiency, generally significantly greater than is required by regulations. As a result, control system outlet VOC concentrations are commonly less than 50 ppm, regardless of the inlet concentration.

Regulations which specify performance requirements for the subject control systems have typically been based on older technology, which was less efficient than current technology. We agree with the printing industry's claim that VOC destruction technology currently available can perform at greater levels than as specified by the regulations. It is therefore appropriate to revise our guidance on the usage of these compliance demonstration methods.

This guidance specifies the circumstances under which Method 25 and Method 25A are to be used. It will reduce the administrative burden on a significant number of regulated industrial sources but will not reduce the stringency of any currently applicable regulatory requirements.

cc: OAQPS Division Directors

I N T E R O F F I C E M E M O R A N D U M

Date: 14-Jun-1995 11:38am EST
From: Alvaro Linero TAL
LINERO_A
Dept: Air Resources Management
Tel No: 904/921-9532
SUNCOM: 291-9532

TO: Teresa Heron TAL (HERON_T)

CC: Mike Harley TAL (HARLEY_M)

Subject: Indiantown Generating Facility, PSD-FL-168

Teresa. We received a request from Indiantown Generating to change some of the compliance test methods required in their PSD and AC Permits. They look straightforward and are all Department-approved methods and are not specifically precluded for use on the particular source.

However, according to Guidance DARM-EM-02, combustion sources are to use Method 25. This seems to apply to incinerators of VOCs but I can't tell if it applies to power plants. We often just require CO emissions limits and good combustion practices at power plants. An ASP can be obtained by presentation of data from tests conducted using both methods. Method 25A is requested by the applicant because Method 25 is not accurate below 50 ppm. The VOC restriction on the source is so low that it may indicate the source is in compliance whether or not it really is. This reminds me of the Sugar Industry case with Method 3 (Orsat) used in conjunction with a very low and non-detectable emission rate. They back up their case with Guidelines prepared by EPA in 1991 and 1995.

Please consult with Mike Harley before telling them an ASP is required or before you make any changes in the VOC test method for Indiantown. I'll send him a copy of the materials we received.

Florida Department of
Memorandum **Environmental Protection**

DARM-EM-02

TO: District Air Program Administrators
County Air Program Administrators
Bureau of Air Regulation Engineers

FROM: Howard L. Rhodes, Director
Division of Air Resources Management

DATE: March 17, 1994

SUBJECT: Guidance on The Use of EPA Methods 18, 25 and 25A for Measuring Gas Stream Volatile Organic Compounds (VOC) Concentration

This memo is to provide guidance concerning the appropriate EPA methods for use in the measurement of VOC concentrations. The commonly used methods are EPA Methods 25 and 25A, and occasionally EPA Method 18. This memo does not preclude the requirement for obtaining an Alternate Standard or Procedure (ASP) per 17-297.620, F.A.C.

Method 25 is the recommended method for the measurement of total gaseous nonmethane organic emissions from most air pollution sources - especially combustion sources. The lower limit of detection for EPA Method 25 is 50 ppmv as carbon. The presence of water vapor and carbon dioxide may positively bias (observed emissions higher than true emissions) the results of the method. Pursuant to 40 CFR 60 Appendix A, the bias is not considered to be significant if the product of the volumetric concentrations of water vapor and carbon dioxide is not greater than 100. For example, the bias is not significant for a source having 10 percent CO_2 and 10 percent water vapor, but it would be significant for a source near the detection limit having 10 percent CO_2 and 20 percent water vapor. EPA Method 25 shall be the required VOC measurement technique whenever it is required by Chapter 17-296, F.A.C., or 17-297, F.A.C., or an applicable federal NSPS or NESHAP. It shall also be the required VOC measurement technique for combustion sources, sources controlled by VOC incinerators (afterburners), and sources that emit an unknown mix of organic compounds. Any owner who wants to use another measurement technique (i.e., EPA Method 25A) in lieu of EPA Method 25 must apply for and obtain approval of an ASP.

Method 25A is the recommended method for measurement of compounds consisting of only carbon and hydrogen, or a single organic solvent if the analyzer used during the testing is calibrated for this solvent. EPA EMTIC Guideline Document EMTIC GD-011 and the attached EPA memo dated October 25, 1993, recommends the use of EPA Method 25A if the VOC concentration at the outlet of an incinerator is less than 50 ppmv as carbon. However, the presence of partially oxidized organic compounds in a combustion source or VOC incinerator (afterburner) may cause the results

obtained with Method 25A to be biased low. EPA Method 25A shall be the required VOC measurement technique whenever it is required by Chapter 17-296, F.A.C., or 17-297, F.A.C., or an applicable federal NSPS or NESHAP. Any owner who wants to use another measurement technique in lieu of EPA 25A must apply for and obtain approval of an ASP.

EPA Method 18 applies to the analysis of approximately 90 percent of the total gaseous organic compounds emitted from an industrial source. It is an extremely flexible procedure and is primarily used for the measurement of emissions from sources in the synthetic organic chemical manufacturing industry. EPA Method 18 shall be the required VOC measurement technique whenever it is required by Chapter 17-296, F.A.C., or 17-297, F.A.C., or an applicable federal NSPS or NESHAP. Any owner who wants to use another measurement technique in lieu of EPA Method 18 must apply for and obtain approval of an ASP.

If the estimated concentration of VOC emissions from the exhaust of a combustion source (incinerator/afterburner) are estimated to be less than 50 ppmv as carbon, the owner may request approval to use EPA Method 25A in lieu of EPA Method 25. The request must be accompanied by the results of simultaneous EPA Method 25 and EPA Method 25A compliance tests which meet all applicable audit requirements. In order to be acceptable the tests must be conducted at 90 to 100% of the maximum permitted capacity, and the EPA Method 25 must pass the required audit, produce EPA Method 25A results that are less than 50 ppmv, and also produce EPA Method 25 results that are not greater than 75 ppmv as carbon. The use of EPA Method 25A for subsequent compliance tests may be approved through the process for alternate standards or procedures under those circumstances.

If it is deemed desirable to subtract methane from the total hydrocarbons measured by EPA Method 25A, EPA Method 18 should be required to identify and measure most (~90%) of the hydrocarbons. EPA Method 18 will determine the degree of negative bias due to partially oxidized/chlorinated organic compounds.

The approval of alternate test methods is handled by the Emissions Monitoring Section. Any questions on the ASP process should be referred to Mike Harley at SC 278-1344 or (904)488-1344.

HLR/sa/cjh

Florida Department of
Memorandum — Environmental Protection

DARM-EM-01

TO: District Air Program Administrators
County Air Program Administrators

FROM: Howard L. Rhodes, Director
Division of Air Resource Management

DATE: March 2, 1994

SUBJECT: Guidance Regarding EPA Method 25

The following applies to EPA Method 25 in Florida:

- Rules 17-297.330 and 297.310(1), F.A.C., (Florida Administrative Code) requires that three runs at least one hour in duration be conducted as a minimum for each test measuring mass emissions, except for specific situations which are covered in that section of the rule. To perform four runs for the purpose of being able to reject one of them is not acceptable. There must be a reason for rejection at the time of the run such as sample train failure, etc.

- Rule 17-297.330(1)(a), F.A.C., requires each run to be from one-to-four hours in duration. The entire test (all three runs) must be done within a consecutive five day period.

- The owner must notify the Department at least 15 days before a compliance test is conducted. If that test (usually an annual compliance test) is completed and the results show a failure to meet the applicable standard or permit conditions, the Department shall initiate appropriate enforcement action.

- If the compliance test results are inconclusive, the Department requires a retest within a short period of time, usually about 30 days.

- The use of EPA audit gases to verify the ability of the laboratory to obtain proper results is required.

- EPA has instructed the Department that the audit gas concentration is not to be revealed to the source's test team.

- Rule 17-297.620, F.A.C., can be used on a source-by-source basis to obtain approval of alternate sampling methods. The Department will review and make a

determination about any proposed deviations from the test method. The applicant is responsible for demonstrating that such alternate procedures are adequate to demonstrate compliance. Such requests should be submitted to the Department at least three months before the desired test date since any major changes in the method require EPA review and approval.

If split samples are analyzed by more than one laboratory, the Department will normally consider the test inconclusive if some results indicate failure and some indicate compliance. The Department will review conflicting test results on a case-by-case basis to determine compliance. For consistency, those tests must be reviewed by the Emissions Monitoring Section in the Bureau of Air Regulation before final acceptance or rejection is determined.

Audit cylinder gases for Method 25 are available to regulatory agencies by calling Louis Nichols at Suncom 278-1344. He must be notified at least 45 days prior to the compliance test to provide enough time to have the cylinder shipped to the District or County office. The use of the audit gas is required by EPA Method 25.

HLR:cjh

BEST AVAILABLE COPY

Indiantown Cogeneration, L.P.

Document Control No. 3628
File No. 6.3.1

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MAY 24 1995
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May 19, 1995

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Winston A. Smith, Director
Air Pesticides and Toxic Substance Management Division
Region IV
Environmental Protection Agency
345 Courtland Street, N.E.
Atlanta, GA 30365

Re: Initial Firing of Main Boilers
PSD-FL-168 (Second Notice)

Dear Mr. Smith:

On April 17, 1995 Indiantown Cogeneration L.P. (ICL) notified you that the main boiler at this facility was anticipated to fire coal for the first time on or after May 22, 1995. The notification was intended to fulfill the requirements of 40 CFR 60.7(a)(2), notification of the anticipated date of initial startup not more than 60 days and not less than 30 days prior to that date. We now anticipated first fire of coal on June 19, 1995 which is more than 60 days from our original notice. ICL hereby provides a second notice of initial startup to comply with the referenced requirements.

Please call me at (301) 718-6973 if you have any questions.

Sincerely,

Michelle Griffin
Environmental Specialist

MG/tmk

cc: Clair Fancy (FDEP)
Thomas Tittle, FDEP-WPB

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Indiantown Cogeneration, L.P.

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February 3, 1995

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Winston A. Smith, Director
Air Pesticides and Toxic Substance Management Division
Region IV
Environmental Protection Agency
345 Courtland Street, N.E.
Atlanta, GA 30365

Re: Initial Firing of Auxiliary Boilers
PSD-FL-168

Dear Mr. Smith:

Indiantown Cogeneration L.P. (ICL) hereby notifies you that both auxiliary boilers were fired for the first time on January 19, 1995. The boilers were fueled with propane.

This notification fulfills the requirements of 40 CFR 60.7(a)(3), notification of the actual date of initial startup. These boilers are subject to the requirements of 40 CFR Part 60, Subpart Db.

Please call me at (301) 718-6973 if you have any questions.

Sincerely,

Michelle Griffin
Environmental Specialist

MG/tmk

cc: Clair Fancy, FDEP
Thomas Tittle, FDEP-WPB

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Job 10/19
Bm 10/21/94

Indiantown Cogeneration, L.P.

October 17, 1994

Mr. Winston A. Smith, Director
Air Pesticides and Toxic Substance Management Division
Region IV
United States Environmental Protection Agency
345 Courtland Street, N.E.
Atlanta, Georgia 30365

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OCT 18 1994
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Air Regulation

File #: 66.7.2

RE: Anticipated Date of Initial Startup of Two Auxiliary Boilers

Dear Mr. Smith:

As required by 40 CFR 60.7(a)(2), we are pleased to notify your office that the anticipated date of initial startup of the two natural gas or propane-fired boilers at the Indiantown Cogeneration Project near Indiantown, Florida is November 16, 1994.

These boilers are subject to the requirements of 40 CFR Part 60, Subpart Db. Should you or your staff have questions, please contact me at (301) 718-6937.

Sincerely,

Barrett Parker
Environmental Specialist

cc: Clair Fancy, FDEP
Thomas Tittle, FDEP

Doing business in Florida as Indiantown Cogeneration, L.P. Limited Partnership
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

OCT 12 1994

4APT-AEB

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OCT 17 1994
Bureau of
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Mr. Clair Fancy
Chief
Bureau of Air Regulation
Air Resources Management Division
Florida Department of Environmental
Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

SUBJ: SO_2 Monitoring Alternative Proposed for Indiantown Cogeneration, L.P (ICLP), Indiantown, Florida

Dear Mr. Fancy:

The purpose of this letter is to provide you with comments on the referenced alternative that was sent jointly to the U.S. Environmental Protection Agency (EPA) Region IV and the Florida Department of Environmental Regulation on August 2, 1994. The boiler at ICLP will be subject to 40 C.F.R. Part 60, Subpart Da (Standards of Performance for Electric Utility Steam Generating Units for Which Construction Is Commenced After September 18, 1978), and comments are being provided to you since authority to implement Subpart Da has been delegated to your agency. After reviewing the proposed alternative, it has been determined that it is not acceptable because provisions in it are less stringent than those in a similar proposal that was approved for a source in EPA Region II earlier this year.

The boiler at ICLP is subject to a 70 percent SO_2 removal efficiency requirement under Subpart Da, and the proposed alternative involves the method used to calculate the control device removal efficiency. According to 40 C.F.R. §60.47a(b), SO_2 removal efficiency is determined by measuring the SO_2 emission rate at the inlet and outlet of the control device. Under these provisions, emission rates at the outlet of the control device are measured with a continuous emission monitor (CEM), and emission rates at the inlet to the control device are measured with either a CEM or with fuel sampling and analysis. Compliance is determined continuously on a 30-day rolling average basis.

ICLP is seeking approval for an alternative SO_2 removal efficiency measurement procedure because the SO_2 emission limit for the boiler and the design of the boiler control system will result in an SO_2 removal efficiency much higher than that required in Subpart Db. Under the alternative proposed by ICLP, the SO_2 emission rate at the inlet to the control device would be

determined with either EPA Method 6B or EPA Method 19 for the initial 30-day compliance test. Following the initial compliance test, coal supplier information on sulfur content would be used to determine the SO_2 emission rate at the control device inlet. The proposal also contains provisions for analyzing coal samples on a semi-annual basis as a quality assurance check on coal supplier data and revocation of the alternative if the demonstrated efficiency of the control device ever drops below 80 percent on a 30-day rolling average basis.

After reviewing the ICLP proposal, and a similar proposal that was approved for Chambers Cogeneration Limited Partnership (CCLP) in Carneys Point, New Jersey, it has been determined that the ICLP alternative cannot be approved because it is less stringent that the alternative approved for CCLP. Concerns regarding the stringency of the ICLP proposal involve two primary areas--the frequency of independent testing used to supplement coal supplier sulfur analyses and the procedures used to calculate control device efficiency.

The quarterly QA testing used to verify coal supplier analyses under the ICLP proposal is not adequate because it involves less frequent testing than the approved CCLP alternative. Under the CCLP alternative, the company must use EPA Method 19 analysis of as-fired coal samples, EPA Method 6B, or a CEM to measure the SO_2 emission rate at the control device inlet on the first operating day of each month. Therefore, in order to be approved, the ICLP alternative must include monthly testing to supplement sulfur content information provided by coal suppliers.

A second concern regarding the ICLP proposal involves a major difference between how SO_2 removal efficiency is calculated under the ICLP and CCLP alternatives. Under the ICLP alternative, the SO_2 removal efficiency following the initial compliance test would be determined based upon inlet emission rates calculated from coal supplier data and outlet emission rates measured with a CEM. Under the approved alternative for CCLP, SO_2 removal efficiency is calculated from the lowest inlet emission rate ever measured by any of four methods (SO_2 CEM, analysis of as-fired coal samples, EPA Method 6B, or coal supplier data) and outlet emission rates measured with a CEM.

The CCLP method for calculating control device efficiency is more conservative than the approach proposed by ICLP, since the CCLP alternative uses the lowest inlet emission rate ever measured in the efficiency calculations. The conservatism of CCLP approach, however, is considered fundamental to its acceptance. The review of the CCLP alternative had to be coordinated with several EPA program offices, and some offices were opposed to its acceptance. Because of the opposition that some offices had to the CCLP alternative, it could not have been

approved if it had used a less conservative approach for calculating SO_2 removal efficiencies. Therefore, the ICLP proposal cannot be approved unless it uses SO_2 removal efficiency calculation procedures that are at least as conservative as those in the CCLP alternative.

In summary, the ICLP alternative monitoring procedure cannot be approved as it is currently drafted. If ICLP revises the proposal in response to the comments in this letter, a copy of the revised proposal should be provided to EPA for review.

If you have any questions about the determination provided in this letter, please contact Mr. David McNeal of my staff at 404/347-3555, voice mailbox 4158.

Sincerely yours,

Jewell A. Harper
Chief
Air Enforcement Branch
Air, Pesticides and Toxics
Management Division

cc: Mr. Michael Harley, Florida DEP
Mr. Martin Costello, Florida DEP

Ms. Michelle Griffin
Indiantown Cogeneration L.P.
U.S. Generating Company
7500 Old Georgetown Road
Bethesda, Maryland 20814-6161

Florida Department of
Environmental Protection

Lawton Chiles
Governor

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Virginia B. Wetherell
Secretary

September 16, 1994

Michelle Griffin
Indiantown Cogeneration, L.P.
7500 Old Georgetown Road
Bethesda, Maryland 20814-6161

RE: Proposed Amendments to PSD-FL-168, Emission Limits/Stack Height Increase

Dear Ms Griffin:

Your letter dated August 25, 1994 requested changing the PSD permit emission limits to conform to the limitations in the Site Certification. We have determined the cause for the inconsistency in fluoride emission limits between the Site Certification and the PSD permit. In volume 2, page 5.6.1-11 of your Site Certification application, you list the maximum hourly emission rate for fluorides as 5.08 lbs/hr. Then, in your April 1, 1991 submittal of sufficiency responses, volume 1 page FDER-40, the emission rate is listed as 7.26 lbs/hr, although the TPY value is listed as 22.26 in both documents. Since your company provided the Department with both emission rates, please inform the Department which emission rate is correct.

The emission limit differences are small for all but the fluoride limits. The Site Certification value (7.26 Lbs/hr) is 42% higher than the PSD limit (5.08 Lbs/hr). The TPY limits for Fluorides are not significantly different. When you divide the TPY limits (22.26) by 8760 hrs/yr the answer is 5.08 lbs/hr. The Bureau of Air Regulation's Technical Evaluation and Preliminary Determination was based on an emission rate of 5.08 lbs/hr for fluorides. Industrial Source Complex modeling results based on 5.08 Lbs/hr showed fluoride concentrations would be two orders of magnitude less than the "no-threat" levels. Changing the fluoride limit to 7.26 lbs/hr should not change these modeling results. Since the Technical Evaluation was based on the emission rates established in the PSD permit these should remain unless there are good technical reasons to change them. I recommend that you withdraw your request to amend the PSD permit and submit a request to change the Siting Certification emission limits to conform to the values in the PSD permit. If the main boiler is not capable of meeting the lower limit for fluoride, you should inform the Bureau of Air Regulation of this fact and provide the reasons why as well as

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a technical evaluation of the impacts associated with the increased fluoride emissions.

Tom Rogers, DEP Office of Policy Analysis and Program Management, has determined that the increase in height for the auxiliary boilers stack will not cause additional adverse air quality impacts. No changes to the text of the PSD permit will be needed for this change.

If you have questions on any of these items, please contact Martin Costello (904) 488-1344.

Sincerely,

Hamilton S. Oven

Hamilton S. Oven, P.E.
Administrator, Siting
Coordination Office

cc: Martin Costello

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Marty C. has file

Indiantown Cogeneration, L.P.

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AUG 15 1994

Bureau of
Air Regulation

August 9, 1994

Mr. Hamilton S. Oven, Jr.
Administrator, Office of Siting Coordination
Department of Environmental Protection
3900 Commonwealth Blvd., MS 48
Tallahassee, FL 32399-3000

Dear Mr. Oven:

As required by Condition of Certification II (1.)A.2(c), this letter transmits the eighth quarterly report for the Indiantown Cogeneration Project for the period ending June 30, 1994. I have enclosed a color photo copy of an aerial photo of the site illustrating progress as of July 1994.

During the second quarter of 1994, construction was focused on erection of the boiler, air preheater and baghouse building structural steel as well as the installation of the mechanical and electrical bulk commodities in the boiler and turbine buildings. Hydrostatic testing of the raw water pipeline was successfully accomplished and the pipeline is completed. The intake structure at Taylor Creek/Nubbin Slough has essentially been completed; the intake screens were installed in May. Other construction accomplishments during this period include the start of construction of the Spray Dryer Absorbers, he erection of the cooling tower and foundation construction for installation of the boiler induced draft (ID) fans. Erection of the turbine generator has commenced upon receipt from GE of the major casings and rotating assemblies for the turbine. The last major component, the generator, is expected to arrive on-site in the next quarter. Boiler erection continues with major emphasis on the installation of superheater and reheater tube assemblies and continued erection of water well tubes.

The sanitary system has been accepted by the Southeast District office of FDEP, completing the permit process for that system. Release of the potable water system by FDEP is anticipated early in the third quarter. The ambient air monitoring system was approved and monitoring initiated in May, one year prior to the anticipated firing of coal in the boiler. The Visitor Center has been relocated to an area adjacent to the plant administration building.

Engineering for the project is approximately 78% complete. Civil and mechanical engineering are essentially complete with on-going efforts related to the preparation of system descriptions and vendor drawing reviews. Instrumentation engineering has focused on the factory testing of

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the plant DCS system and preparation of operating programs and software for the system. Electrical engineering has continued with the design conduit, cable routing and electrical connection drawings for the project. Design engineering has completed most small bore piping design and continues to complete large and small bore piping supports.

Major vendors continue to provide regular shipments of materials to the site. Foster Wheeler continues to supply boiler components to support erection activities. General Electric initiated delivery of turbine-generator components including the high pressure and low pressure motors. Procurement activities for most components are now complete, with emphasis being placed on expediting deliveries to the site. The plant continues emission monitoring (CEM) system was awarded this quarter to Enviroplan. CEM system design details will be forwarded during the next quarter.

As of June 30, 1994, 76 non manual employees and 656 direct hire craftsmen are employed at the site. We continue to provide environmental awareness training to all on-site personnel as they join the project.

You are welcome to come visit the site to review progress first hand. If you would like to schedule a visit or if you have any questions, please call me at (301) 718-6973.

Sincerely,

Michelle Griffin
Environmental Compliance Specialist

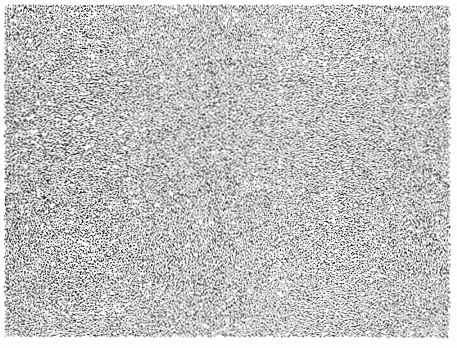
Enclosure: 1 photo

cc: Preston Lewis, w/photo
Richard Donelan, w/photo
Susan Coughanour, w/photo
Q. Harper, EPA
L. Goldman, SEDist.

bcc: B. Applewhite, w/enclosures
S. Sorrentino
C. Allen
M. Surabian
P. Carr
C. Carlton
B. Mourer
T. Keller
V. Ibrahim, w/enclosures
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First Ammonia-Based Selective





Workman prepares to attach the catalyst unit to the catalyst basket which will be used to lift the catalyst unit into place.

Carneys Point SCR System Description

An overall arrangement of the Carneys Point steam generator with its SCR unit is shown in the Figure 1 schematic. The SCR unit, which is placed between the economizer and the air heater, consists of a partial economizer bypass duct, an ammonia injection grid, flow-turning vanes, a flow rectifier, an SCR reactor or catalyst layers, steam sootblowers, and associated ducting. The flue-gas conditions at the SCR inlet and outlet are presented in Table 1 (Pg. 5).

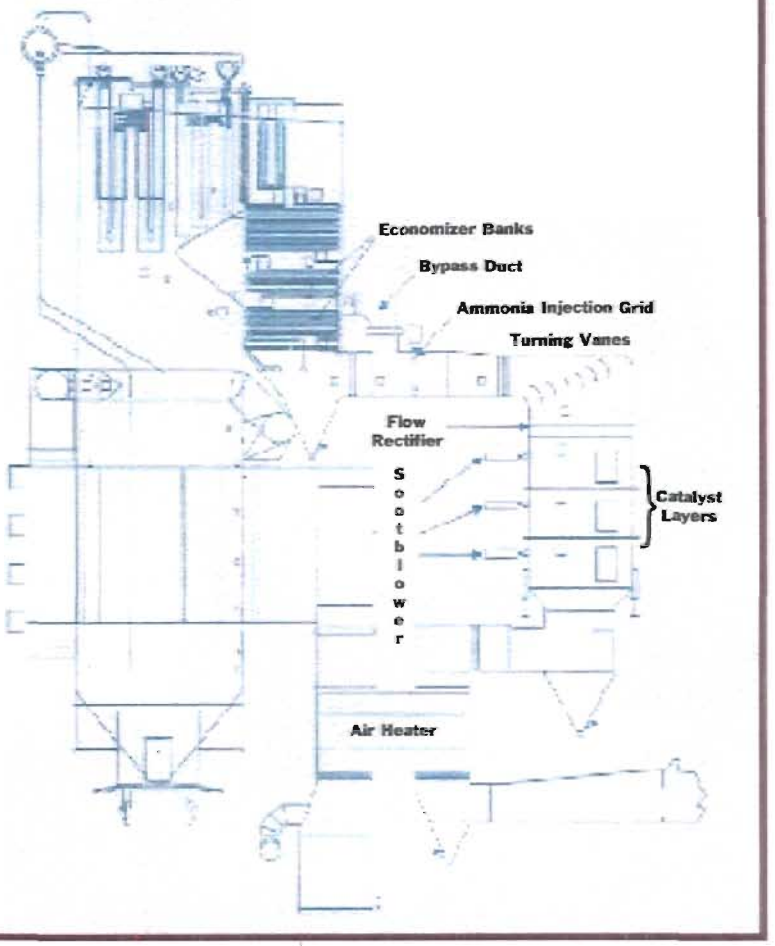
Economizer Bypass Duct: The steam generator burns a 2%- sulfur coal, producing SO_2 and a small quantity of SO_3. A small fraction of SO_2 in the flue gas is also converted to SO_3 in the SCR reactor.

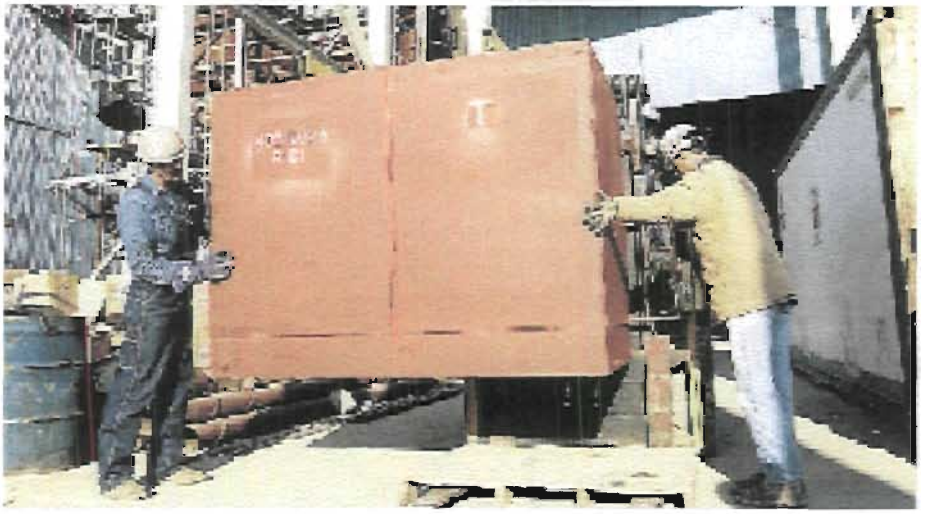
When combined with ammonia and water vapor, SO_3 may form ammonium sulfate/bisulfate and this probability increases with decreasing flue-gas temperature. When the plant load decreases from full load operation, the flue-gas temperature leaving the economizer also decreases. Consequently, there is a potential, in the range of 35% to 50% of full load, for the formation of ammonium sulfate/bisulfate in the catalyst. Therefore, for operation at 35%-to-50% full load, part of the flue gas is bypassed around a portion of the economizer to maintain the flue-gas temperature above approximately 610°F. This is the minimum gas temperature for the Carneys Point conditions below which ammonium sulfate/bisulfate could be formed in the catalyst.

A damper in the bypass duct and a damper at the economizer outlet duct are, in unison, automatically temperature-controlled between 610°F and 710°F to open or close the bypass flow. It may also be noted that the ammonia slip downstream of the SCR reactor is kept at very low values to help protect the downstream equipment from the effects of possible formation of ammonium sulfate/bisulfate.

Ammonia Injection Grid: The injection of the ammonia gas (in a carrier air stream) into the flue-gas stream is made

Figure 1: Overall arrangement of Carneys Point steam generator and SCR unit





Installers move a catalyst element into position before it is hoisted into the reactor unit. The catalyst was specifically designed for the type of coal burned at the plant.

via a network of injection pipes. The injection plane is divided into 12 zones which are individually controllable in either the horizontal or vertical plane.

Each zone is fed with ammonia through a common supply manifold and controlled using a flow meter and a control valve. Individual injection pipes, branching from the common supply manifold, contain circular injection holes on the side of the pipe for ammonia injection into the flue gas. During initial operation, these zones were fine-tuned to provide a proper distribution of the ammonia flow which is compatible with the flue-gas and NO_x distributions across the SCR duct.

Turning Vanes: A set of turning vanes is installed at the 90-degree duct bend to provide good flow distribution while minimizing gas-side pressure drop. The exact locations, number and geometric shapes of these vanes were determined based on the results of a scale model flow test.

Flow Rectifier: Because of high dust loading associated with coal firing, the linear velocity of the gas stream is limited to approximately 20 ft/sec for catalyst erosion consideration, and the gas flow entering the catalyst layer is straightened by a flow rectifier made of square tubes. The inlet velocity vector that is in line with the catalyst flow path decreases the erosion potential and this is accomplished with the use of the flow rectifier.

Catalyst Reactor: The Carneys Point SCR catalyst is supplied by Ishikawajima-Harima Heavy Industries Company (IHI) of Japan. It is the homogeneous honeycomb type that is made entirely of extruded ceramic material. The major components of the catalyst are vanadium pentoxide (V_2O_5), titanium dioxide (TiO_2) and tungsten trioxide (WO_3).

The catalyst is specifically designed for the type of coal burned at this plant. Design considerations for the catalyst pitch to prevent plugging, strength of the material to prevent erosion, and a low SO_2-to-SO_3 conversion rate to prevent the formation of ammonium sulfate/bisulfate played an important role in the catalyst design.

The SCR reactor can accommodate three separate layers of catalyst. Initially, the top two layers are loaded with catalyst, with the third layer reserved for a spare charge, if required, to meet the denitrification performance for the first ten-year period of operation.

Sootblowers: Sootblowers are installed upstream of the catalyst layers and are utilized to re-entrain the dust particles into the flue-gas stream using superheated dry steam. The sootblowers are sequentially

(continued on page 6)

Table 1: Carneys Point SCR Conditions

Flue-Gas Flow Rate per Unit	1,350,000 lb/hr
Flue-Gas Temperature	740 °F
Sulfur Content in Performance Coal	2.0%
NO_x Level at SCR Outlet	Not greater than 0.17 lb/MM Btu
Reagent	Aqueous Ammonia (27% Ammonia Content)
Ammonia Slip at SCR Outlet	5 ppmvd at 7% O_2
Operating Load Range	35 to 100% MCR
Catalyst Warranty Period	10 Years



Catalyst elements were hoisted individually to the reactor unit placed between the economizer and the air heater. Foster Wheeler selected a homogeneous honeycomb catalyst made entirely of extruded ceramic material for the installation.

operated from top to bottom of the successive layers, thereby reducing the steam consumption rate.

(Details of the Carneys Point SCR design were reported in "Design of a Selective Catalytic Reduction System for NO_x Abatement in a Coal-Fired Cogeneration Plant" by S.M. Cho and S.Z. Dubow, which appeared on pages 717-722 of the 1992 Proceedings of the American Power Conference.)

Ammonia System and Flow Control

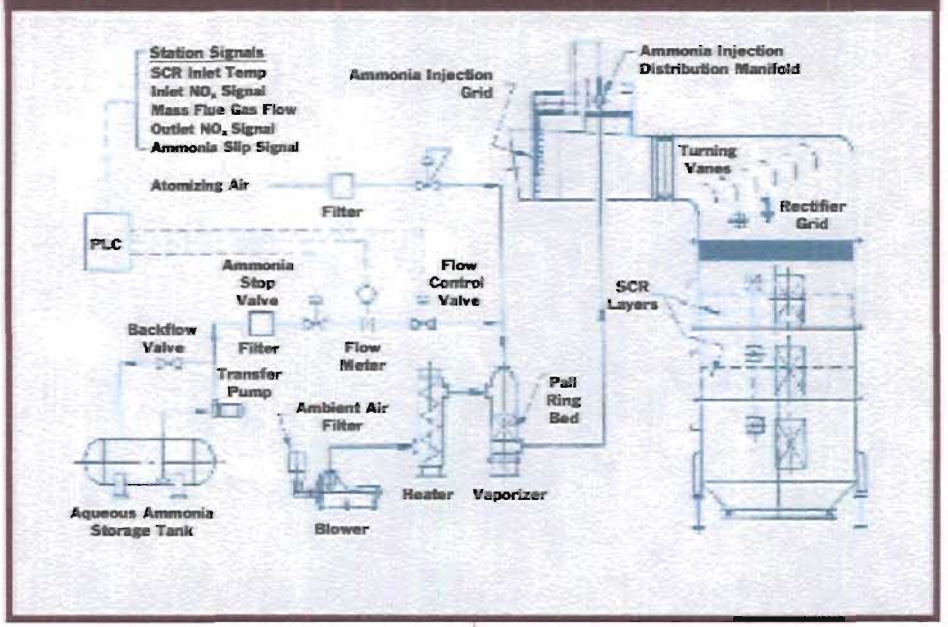
The Carneys Point Generating Plant employs two steam generators, each with its own SCR unit that uses aqueous ammonia with an ammonia content of approximately 27%. The ammonia system is comprised of two 100%-capacity vaporization/dilution trains serving each steam generator independently. A third 100%-capacity redundant train, which is common to both steam generators, is available for use during maintenance or system upsets.

Aqueous ammonia that is stored in a tank is pumped, metered and sprayed, via air-atomizing nozzles, into the vaporizer (Figure 2). Ambient air, drawn by a blower, is heated by an electric heater and enters the same vaporizer. In the vaporizer, aqueous ammonia mixes with hot air and is vaporized. The resultant vapor mixture from the vaporizer is routed to the injection grid via a distribution manifold system.

The ammonia-injection process is regulated by the plant's distributed control system (DCS). The DCS regulates a flow-control valve which adjusts the aqueous ammonia flow rate. The control scheme utilizes a feed-forward/feed-back control algorithm. The base ammonia injection rate is set by a feed-forward signal representing inlet NO_x load and flue-gas temperature. Fine tuning of the ammonia injection rate was accomplished via a feed-back signal coming from SCR outlet NO_x concentration and ammonia slip measurements.

A programmable controller automatically regulates the crossover between the dedicated vaporizer train and the standby redundant vaporizer train. Process control is maintained utilizing inlet NO_x continuous emission monitoring (CEM) analyzers, outlet CEM analyzers for NO_x and O_2, a differential pressure transmitter across the SCR reactor, and a three-point thermocouple grid at the SCR inlet.

Figure 2: Ammonia Injection System for Carneys Point SCR System



Operating Experience

The construction of the Carneys Point Generating Plant was completed in the fourth quarter of 1993, followed by prestart-up activities including steam blowing. The upper two layers of the catalyst were loaded in October 1993 and the ammonia system checkout was

(continued on page 8)



The SCR reactor (right) is shown loaded with two layers of catalyst. If required, a third layer of catalyst may be added during the first 10 years of operation to meet denitrification performance.

conducted. First coal firing was done in December 1993 and first electricity supply to Atlantic Electric Company took place in early January 1994. Commercial operation began officially the week of March 13, 1994, and the final 100-hour acceptance tests were successfully completed in May 1994.

In order to monitor the denitrification performance of the SCR unit, an array of sampling points were strategically located throughout the SCR system as described below. At the SCR inlet prior to the ammonia injection grid, a 12-point array monitored $NO_x/O_2/CO$ levels, temperature, and flow velocity at locations which directly correspond to the 12 ammonia injection zones. These data were used to set the initial adjustments of the ammonia balancing system.

At the SCR outlet, a 36-point array monitored NO_x, O_2, and NH_3 levels at locations which directly correspond to the center of each catalyst module. These data were utilized for the fine-tuning adjustments made to the ammonia injection zones.

Table 2 and Table 3 (Pg. 9) present the actual SCR operating data taken during the final 100-hour acceptance tests at 100% MCR load for Boiler Units No. 1 and No. 2, respectively. From these tables, the following observations were made:

Table 2: Carneys Point SCR Operating Data — Boiler Unit No. 1

Data No.	1	2	3	4	5	6	7
Date	5/18/94	5/19/94	5/20/94	5/21/94	5/22/94	5/23/94	5/24/94
Boiler Load % of MCR	100	100	100	100	100	100	100
Flue-Gas Flow, MMlb/hr	1.36	1.37	1.34	1.32	1.32	1.38	1.39
Gas Temp. at SCR °F	709	700	690	707	707	701	709
Outlet NO_x** – lb/MMBtu – ppmvd*	0.128 64.6	0.130 71.8	0.153 90.1	0.122 69.4	0.110 62.7	0.098 55.5	0.126 71.6
Ammonia Slip**, ppmvd*	0.255	0.264	0.262	0.245	0.237	0.227	0.047
SCR Pressure Drop***, Inches of H_2O	2.54	2.48	2.44	2.20	2.42	2.59	2.58

* Referenced at 7% O_2 Level

**Air Permit Limits: Outlet NO_x = 0.17 lb/MMBtu or 99 ppmvd
Ammonia Slip = 5.0 ppmvd at 7% O_2

***With 2 layers of catalyst. Design limit is 4 inches of H_2O with 3 layers of catalyst

1) All the data points lie below the specified NO_x emission rate of 0.17 lb/MMBtu or 99 ppmvd, with less than 5 ppmvd of ammonia slip, thus meeting the air permit's emission criteria.

2) Data No. 6 and Data No. 12 indicate that the NO_x emission rate reached as low as 0.1 lb/MMBtu, or approximately 57 ppmvd.

3) The design ammonia slip at the SCR outlet is 5 ppmvd, but actual operating data show extremely low values on the order of 0.26 ppmvd or less. This is indicative of the SCR performance far exceeding the design conditions. (An independent verification of the SCR denitrification performance was conducted by an environmental testing laboratory. This analysis confirmed that the SCR performance exceeded the design criteria as indicated by the extremely low values for the ammonia slip.)

During the test period, the ammonia slip remained extremely low and at approximately a constant level.



The Carneys Point pulverized-coal cogeneration plant (shown here during the construction phase) was the first plant of its kind in the U. S. to employ an ammonia-based SCR system. Foster Wheeler's pioneering work in design and installation of the system helped limit the stack NO_x to 0.17 lb/10^6 Btu.

Post-test inspections revealed no fouling, plugging or poisoning of the catalyst, and no adverse effects on the downstream components. The latter may be attributed to the extremely low levels of ammonia slip obtained by the SCR system.

4) The flue-gas pressure drop through the SCR system is also shown in the tables. With the two layers of catalyst loaded at the present time, the gas pressure drop is in the range of 2.20 to 2.70 inches of water for the gas flow range of 1.32 to 1.42 million lb/hr as shown. The corresponding predicted pressure drop is in the range of 2.60 to 2.81 inches of water for the specified gas conditions. This comparison indicates that the actual pressure drop is less than the prediction by approximately 10% on the average.

The ammonia slip tends to increase with time as the NO_x-removal capability of catalyst tends to decrease with time. The current catalyst management strategy is the addition of catalyst in the third layer of the SCR reactor when the ammonia slip reaches the air permit's limit value of 5 ppmvd referenced at 7% O_2.

To this end, several catalyst sampling cells were installed in the reactor and these cells can be removed from the reactor at regular intervals in order to assess the conditions of the catalyst at any given point in time, thereby helping in the planning of catalyst management strategy. Testing activities also include denitrification activity test, SO_2-to-SO_3 conversion test, and crushing strength test.

Summary and Conclusions

The Carneys Point Generating Plant is the first U.S. pulverized-coal-fired steam generating plant equipped with ammonia-based SCR units. The plant was started up in late 1993 and the final acceptance tests were completed in May 1994.

SCR operating data to date reveal that the NO_x emission rate has met the air permit's limit value (0.17 lb/MMBtu), and reached as low a value as 0.1 lb/MMBtu, with low ammonia-slip values on the order of 0.26 ppmvd. The gas-side pressure drop has also been within the specified design-limit value. ■

Acknowledgment

The authors would like to thank the members of the Carneys Point Project Team at U.S. Generating Company, Bechtel Corporation and Foster Wheeler Energy Corporation for their cooperation in the preparation of this report.

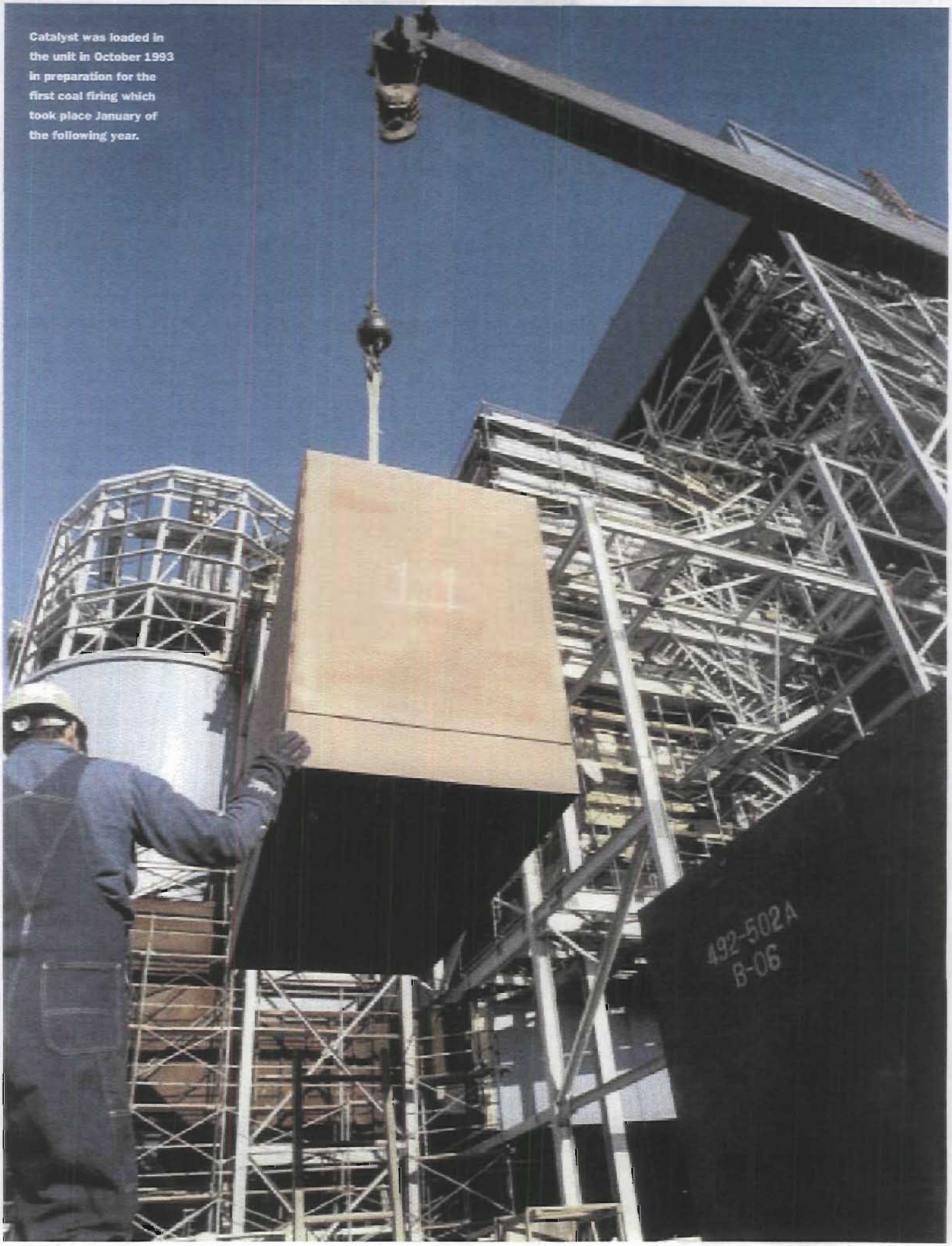
Table 3: Carneys Point Operating Data — Boiler Unit No. 2

Data No.	8	9	10	11	12	13
Date	5/18/94	5/19/94	5/20/94	5/22/94	5/23/94	5/24/94
Boiler Load % of MCR	100	100	100	100	100	100
Flue-Gas Flow, MMlb/hr	1.36	1.37	1.37	1.36	1.33	1.42
Gas Temp. at SCR, °F	721	709	706	718	708	714
Outlet NO_x** – lb/MMBtu – ppmvd*	0.138 73.4	0.127 72.2	0.120 68.3	0.111 61.4	0.105 59.9	0.136 74.5
Ammonia Slip**, ppmvd*	0.182	0.170	0.170	0.180	0.200	0.010
SCR Pressure Drop***, Inches of H_2O	2.67	2.57	2.63	2.70	2.46	2.70

* Referenced at 7% O_2 Level

**Air Permit Limits: Outlet NO_x = 0.17 lb/MMBtu or 99 ppmvd
Ammonia Slip = 5.0 ppmvd at 7% O_2

***With 2 layers of catalyst. Design limit is 4 inches of H_2O with 3 layers of catalyst



Catalyst was loaded in the unit in October 1993 in preparation for the first coal firing which took place January of the following year.



Foster Wheeler equipped U. S. Generating Company's Carneys Point Generating Plant (shown here) with an ammonia-based selective catalytic reduction (SCR) system designed to help the plant meet requirements of a New Jersey Air Permit.

Indiantown Cogeneration, L.P.

RECEIVED
AUG 11 1994
Bureau of
Air Regulation

August 2, 1994

Mr. Claire H. Fancy
Chief, Bureau of Air Regulations
Department of Environmental Protection
2400 Blair Stone Road
Tallahassee, Florida 32399-2400

Mr. Winston A. Smith
Air, Pesticides and Toxics Management Division
U.S. EPA Region IV
345 Courtland Street, NE
Atlanta, Georgia 30365

Re: Application for Alternative Monitoring Requirements

Dear Messrs. Fancy and Smith:

Pursuant to 40 CFR § 60.13(i), Indiantown Cogeneration, L.P. (ICL) respectfully requests approval of the alternative monitoring requirements to those in 40 CFR Part 60, Subpart Da, specifically to those at 40 CFR §60.47a(b)(1) and (3) pertaining to the monitoring of sulfur dioxide at the inlet to the sulfur dioxide control devices at Indiantown. The Indiantown Generating Facility is located in Indiantown, Martin County, Florida and consists of one pulverized coal boiler equipped with state-of-the-art spray dryer absorber units for sulfur dioxide control.

This project and other projects of ours across the country have set new standards for Best Available Control Technology. Recent approval of the alternative monitoring requirements for the Chambers Cogeneration Limited Partnership, another U.S. Generating Company affiliate, was the first step in establishing reliable and cost effective monitoring to determine compliance. through approval of the alternative monitoring requirements for this facility, we will continue to establish reliable and cost effective monitoring for determining compliance.

The basis for granting the alternative monitoring requirements is that the Indiantown Generating Facility's pulverized coal boiler and sulfur dioxide control devices meet the "unusual circumstances" and "procedures that are consistent with...current practices" conditions of the preamble to the Section 60.13(i) since Indiantown, under the federally enforceable Prevention of Significant Deterioration (PSD) permit, must meet a more stringent SO_2 emission limitation than is required by Subpart Da.

7500 Old Georgetown Road • Bethesda, Maryland 20814-6161 • 301-718-6800 • Fax 301-718-6900
An affiliate of U.S. Generating Company
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As discussed in the enclosed application for Alternative Monitoring Requirements, the sulfur dioxide emission limitation in the PSD permit is significantly less in both magnitude and averaging time than the sulfur dioxide emission standard in subpart Da. Never the less, monitoring to determine compliance with the Subpart Da standards is required since waiving or granting alternative emission standards is not practical.

The alternative monitoring requirements will result in an accurate determination of compliance with the Subpart Da sulfur dioxide percent reduction requirements, reduce paperwork and personnel effort while maintaining the same level of enforceability required by your Agencies.

If you or your staff have any questions or require additional information, please contact Paul Reinermann at (301) 718-6963 or me at (301) 718-6973.

Yours truly,

Michelle Griffin
Environmental Specialist

PR/mm

Enclosures

cc: w/encl.
John Rasnic, U.S. EPA
Preston, Lewis, FDEP
Stephen Sorrentino, ICL

Application for Alternative Monitoring Requirements to Determine Sulfur Dioxide Emissions at the Inlet to the Sulfur Dioxide Control Device

INDIANTOWN COGENERATION, L.P.

INDIANTOWN, FLORIDA

APPLICATION FOR

ALTERNATIVE MONITORING REQUIREMENTS

TO DETERMINE

SULFUR DIOXIDE EMISSIONS

AT THE INLET TO

THE SULFUR DIOXIDE CONTROL DEVICE

Submitted to

Winston A. Smith, Director
Air, Pesticides and Toxics Management Division
U.S. EPA, Region IV

and

Clair H. Fancy, Chief
Bureau of Air Regulation,
Florida Department of Environmental Protection

Prepared by

Paul Reinermann, III, Environmental Specialist
Indiantown Cogeneration, L.P.

Table of Contents

Section I	Background and Description
Section II	PSD Permit
Section III	Coal Purchase Agreement
Section IV	Coal Vendor Information
Section V	U.S. EPA, Chambers Cogeneration Approval

BACKGROUND

The Indiantown Cogeneration, L.P. is constructing in Indiantown, Florida, a pulverized coal boiler rated at a net 330 MW while providing up to 175,000 lbs per hour of steam to a neighboring industrial complex. The boiler is equipped with a selective catalytic reduction (SCR) unit for nitrogen oxides control, spray dryer absorbers (SDA) for sulfur dioxide control and a baghouse for particulate matter control. Construction of the facility began in October 21, 1992 and initial coal firing is scheduled for May 1995.

The boiler is subject to a federally enforceable Prevention of Significant Deterioration (PSD) permit (Florida Permit No. PSD-FL-168) and to 40 CFR Part 60, Subpart Da - Standards of Performance for Electrical Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978. The sulfur dioxide (SO_2) emission limitation in the PSD permit (see excerpt in Section II) is based upon achieving 0.170 lbs SO_2 per mmBTU on a 24 hour basis which is significantly more stringent than the Subpart Da standard of 0.60 lbs SO_2 per mmBTU on a 30 day rolling average. In addition, the SDAs are designed to reduce SO_2 by up to 95% compared to the Subpart Da standard of 70% reduction.

Since the SDA were designed to reduce SO_2 by significantly more than the Subpart Da standard and since the anticipated sulfur content of the coal to be fired will require the SO_2 percent reduction to be greater than 80% at all times, alternative monitoring requirements as allowed by § 60.13(i) to those at 60.47a(b) pertaining to inlet SO_2 monitoring are requested. The Indiantown Cogeneration, L.P. pulverized coal boiler meets the "unusual circumstances" and "procedures that are consistent with .... current practices" conditions of the preamble to the § 60.13(i) since Indiantown, under the federally enforceable PSD permit, must meet a more stringent SO_2 emission limitation than is required by Subpart Da. This is consistent with the determination made by U.S. EPA for the Chambers Cogeneration Facility on April 21, 1994 (see Section V).

COAL QUALITY AGREEMENT, FORECAST AND HANDLING

The purchase agreement with Costain Coal Inc. (Section III) is for 30 years with an option for additional years. The coal is anticipated to originate from the Appalachian coal region and must be analyzed for the sulfur content prior to shipment in accordance with the American Society of Testing and Materials (ASTM) procedures. These ASTM procedures are specified in Method 19 of 40 CFR Part 60, Appendix A which is referenced in Subpart Da for inlet SO_2 emission monitoring. According to the purchase agreement, the maximum monthly weighted average of the coal to be burned at Indiantown will have a SO2 monthly weighted average of 1.6 lbs per mmBTU.

The majority of the initial coal shipments will be used to build the 90,000 ton (30 day) inactive storage pile. The active coal pile will be established in a building capable of storing approximately 32,000 tons (10 days). Each shipment of coal will be placed into the building and reclaimed to the coal storage silos prior to combustion in the boiler. An inventory log of the shipments placed into both the active and inactive piles will be maintained.

ALTERNATIVE MONITORING REQUIREMENTS

In lieu of performing SO_2 monitoring at the inlet to the spray dryers according to § 60.47a(b), the alternative monitoring requirements for the Indiantown Cogeneration, L.P. Subpart Da boiler will utilize the coal sampling and analysis performed by the coal vendor on a shipment basis and verified quarterly by an independent analysis. The alternative monitoring requirements will result in an accurate determination of SO_2 percent reduction since the calculation of SO_2 percent reduction will be based upon the blended average sulfur content of the coal received during the most recent shipment for the active coal storage pile, and the average sulfur content for all coal placed in the inactive coal storage pile. Sampling and analytical procedures will adhere to the ASTM procedures referenced in Method 19.

As allowed by §60.13(i), the Indiantown Cogeneration, L.P., is applying for the following alternative monitoring requirements to those in §60.47a(b) pertaining to inlet SO_2 monitoring for the Subpart Da boiler being built by the Indiantown Cogeneration, L.P.:

1. Conduct the Subpart Da 30-day initial performance test by using one of the following methods:

   Daily as-fired coal sampling and analysis according to Part 60, Appendix A, Method 19

   Part 60, Appendix A, Method 6B

2. Report in the initial performance test report, the daily inlet SO2 emissions for each day of the 30-day period

3. Determine the daily inlet SO2 emissions after the 30-day initial performance test by one of the following methods:

   For coal from the active coal pile, utilize the average sulfur in coal content of the coal in the active coal pile based upon coal supplier analysis of the coal deposited into the storage building and actual usage rates

For coal from the inactive pile, utilize the average sulfur in coal content analysis provided by the coal supplier of the all coal placed into the inactive pile.

4. Calculate, record and report the spray dryer reduction efficiency every boiler operating day to determine every 30-day rolling period.

5. Semiannually, quality assure the coal supplier analysis by analyzing, in accordance with the procedures of Method 19, a coal sample from the coal supplier which was obtained in accordance with the procedures of Method 19.

6. If the percent reduction for any 30-day rolling period is determined to be less than 80%, compliance with all Subpart Da monitoring requirments will be initiated.

Florida Department of Environmental Regulation
Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400
Lawton Chiles, Governor
Carol M. Browner, Secretary

July 16, 1992

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Stephen A. Sorrentino
Indiantown Cogeneration, L.P.
7475 Wisconsin Avenue
Bethesda, MD 20814-3422

Re: Martin County - A.P.
Indiantown Cogeneration, L.P.
PSD-FL-168; Permit Modification

Dear Mr. Sorrentino:

The Department has received a request from Mr. Douglas Roberts on May 28, 1992, for minor modifications to the recently issued permit for the above referenced project. The Department concurs with your request and will allow you to split the auxiliary boiler into two boilers, use propane fuel, and change the lead (Pb) standards.

The Department grants the following amendments to the above referenced permit:

Project Description, 3rd Paragraph, Page 1 of 13

FROM:

The proposed facility includes one main boiler and one steam generator, and an auxiliary boiler operated during lightoff and startup of the main boiler or if the main boiler is down and process steam is required for Caulkins Citrus Processing. The primary source of air emissions will be the main boiler, firing coal. Secondary air emission sources include the auxiliary boiler firing natural gas or No. 2 fuel oil, and the material handling systems. The operation of these units will result in significant net emissions increases of regulated air pollutants over the current emissions levels and thus, is subject to review by the Department under the prevention of significant deterioration (PSD) regulations (Rule 17-2.500, Florida Administration Code).

TO:

The proposed facility includes one main boiler and one steam generator, and one or two 50% capacity auxiliary boilers operated during lightoff and startup of the main boiler or if the main

boiler is down and process steam is required for Caulkins Citrus Processing. The primary source of air emissions will be the main boiler, firing coal. Secondary air emission sources include the auxiliary boilers firing natural gas, propane or No. 2 fuel oil, and the material handling systems. The operation of these units will result in significant net emissions increases of regulated air pollutants over the current emissions levels and thus, is subject to review by the Department under the prevention of significant deterioration (PSD) regulations (Rule 17-2.500, Florida Administration Code).

Specific Condition No. 2:

FROM: Only coal, natural gas or No. 2 fuel oil shall be fired in the pulverized coal (PC) boiler and auxiliary boiler.

TO: Only coal, natural gas, propane or No. 2 fuel oil shall be fired in the pulverized coal (PC) boiler and auxiliary boilers.

Specific Condition No. 3:

FROM: The maximum heat input to the PC boiler shall not exceed 3422 MMBtu/hr while firing coal. The auxiliary boiler shall not exceed 342 MMBtu/hr while firing No. 2 fuel oil and 358 MMBtu/hr firing natural gas or propane.

TO: The maximum heat input to the PC boiler shall not exceed 3422 MMBtu/hr while firing coal. The one or two auxiliary boilers shall not exceed a combined total of 342 MMBtu/hr while firing No. 2 fuel oil and a combined total of 358 MMBtu/hr firing natural gas or propane.

Specific Condition No. 4:

FROM: The PC boiler shall be allowed to operate continuously (8760 hrs/yr). The auxiliary boiler shall operate a maximum of 5000 hrs with up to 1000 hrs/yr on No. 2 fuel oil with 0.05% sulfur, by weight, and the balance on natural gas or propane. Fuel consumption must be continuously measured and recorded by fuel type (coal, natural gas or No. 2 fuel oil) for both the PC boiler and auxiliary boiler.

TO: The PC boiler shall be allowed to operate continuously (8760 hrs/yr). The auxiliary boiler or boilers shall operate a maximum of 5000 hrs at the combined total heat input rates with up to 1000 hrs/yr on No. 2 fuel oil with 0.05% sulfur, by weight, and the balance on natural gas or propane. Fuel consumption must be

continuously measured and recorded by fuel type (coal, natural gas, propane or No. 2 fuel oil) for both the PC boiler and auxiliary boilers.

Specific Condition No. 5:

FROM: Based on a permitted heat input of 3422 MMBtu/hr, the stack emissions from the main boiler shall not exceed any of the following limitations:

Pollutant	Basis lb/MMBtu	Emission Limitation lb/hr	TPY
SO_2	0.170*	582*	2549
NOx	0.170*	582*	2549
PM	0.018	61.6	270
PM_{10}	0.018	61.6	270
CO	0.110	376*	1649
VOC	0.0036	12.32	54.0
H_2SO_4	0.0004	1.45	6.51
Beryllium	0.0000027	0.0094	0.041
Mercury	0.0000114	0.039	0.17
Lead	0.00001	0.034	0.15
Fluorides	0.0015	5.08	22.3
Arsenic	0.000051	0.18	0.77

*24 hour daily block average (midnight to midnight)

TO: Based on a permitted heat input of 3422 MMBtu/hr, the stack emissions from the main boiler shall not exceed any of the following limitations:

Pollutant	Basis lb/MMBtu	Emission Limitation lb/hr	TPY
SO_2	0.170*	582*	2549
NOx	0.170*	582*	2549

PM	0.018	61.6	270
PM_{10}	0.018	61.6	270
CO	0.110	376*	1649
VOC	0.0036	12.32	54.0
H_2SO_4	0.0004	1.45	6.51
Beryllium	0.0000027	0.0094	0.041
Mercury	0.0000114	0.039	0.17
Lead	0.0000187	0.064	0.280
Fluorides	0.0015	5.08	22.3
Arsenic	0.000051	0.18	0.77

*24 hour daily block average (midnight to midnight)

Specific Condition No. 9

FROM: The auxiliary boiler, rated at up to 358 MMBtu/hr (Natural Gas and propane) and 342 MMBtu/hr (No. 2 fuel oil), shall be limited to a maximum of 5000 hours/year with up to 1000 hrs/yr firing No. 2 fuel oil with 0.05% sulfur, by weight, and the balance firing natural gas or propane. The maximum annual emissions will be as follows when firing No. 2 fuel oil for 1000 hrs/yr:

EMISSION LIMITATION

Pollutant	lbs/hr	tons/year
NO_x	68.0	34
SO_2	18.0	9
PM	1.4	0.70
PM_{10}	1.4	0.70
CO	48.0	24
VOC	0.620	0.31
Be	4.0×10^{-5}	2.0×10^{-5}
Hg	5.2×10^{-4}	2.6×10^{-4}
Pb	3.6×10^{-2}	1.8×10^{-2}
As	6.8×10^{-3}	3.4×10^{-3}

TO: The auxiliary boiler or auxiliary boilers rated at a combined total of up to 358 MMBtu/hr (Natural gas and propane) and 342

MMBtu/hr (No. 2 fuel oil), shall be limited to a maximum of 5000 hours/year at the combined total heat input rates with up to 1000 hrs/yr firing No. 2 fuel oil with 0.05% sulfur, by weight, and the balance firing natural gas or propane. The maximum total annual emissions from the auxiliary boiler or boilers will be as follows when firing No. 2 fuel oil for 1000 hrs/yr:

EMISSION LIMITATION

Pollutant	lbs/hr	tons/year
NO_x	68.0	34
SO_2	18.0	9
PM	1.4	0.70
PM_{10}	1.4	0.70
CO	48.0	24
VOC	0.620	0.31
Be	4.0×10^{-5}	2.0×10^{-5}
Hg	5.2×10^{-4}	2.6×10^{-4}
Pb	3.6×10^{-2}	1.8×10^{-2}
As	6.8×10^{-3}	3.4×10^{-3}

All other conditions remain as issued. This letter must be attached to the PSD-FL-168 permit and shall become a part of the permit.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant and the parties listed below must be filed within 14 days of receipt of this intent. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of their receipt of this intent, whichever first occurs. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information:

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File

Number and the county in which the project is proposed;
(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
(d) A statement of the material facts disputed by Petitioner, if any;
(e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and
(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this intent. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this intent in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

Sincerely,

Carol M. Browner
Secretary

CMB/MB/plm

cc: Jewell A. Harper, EPA
Isidore Goldman, SED
James W. Coleman, Jr., NPS
Steve Jelinek, ENSR

received

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMIT

In the matter of an
Application for Permit by:

DER File No. PSD-FL-168
Martin County

Mr. Stephen A. Sorrentino
Indiantown Cogeneration, L.P.
7475 Wisconsin Ave.
Bethesda, MD 20814-3422

/

Enclosed is Permit Number PSD-FL-168 to construct a cogeneration project, issued pursuant to Section(s) 403, Florida Statutes.

Any party to this Order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

for Barry D. Andrews

C. H. Fancy, P.E., Chief
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400
904-488-1344

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of business on 3/26/92 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED,
on this date, pursuant to
§120.52(11), Florida Statutes,
with the designated Department
Clerk, receipt of which is hereby
acknowledged.

Clerk Harper 3/26/92
(Clerk) (Date)

Copies furnished to:
Jewell A. Harper, EPA
Isidore Goldman, SED
James W. Coleman, Jr., NPS
Steve Jelinek, ENSR

Final Determination

The Indiantown Cogeneration, L.P. (ICL) PSD permit application (part of the Power Plant Siting application) has been reviewed by the Division of Air Resources Management. Comments received from EPA Region IV dated February 25, 1992 (see attachment 1) and United States Department of the Interior, National Park Service (NPS), Southeast Regional Office dated February 21, 1992 (see attachment 2) are addressed below.

Best Available Control Technology (BACT): The EPA agreed that FDER's BACT was consistent with the most recent determinations for pulverized coal (PC) boilers for particulate, SO_2, and NO_x. However, EPA recommended that the permit include a new specific condition to follow in the event that the selective noncatalytic reduction (SNCR) system was incapable of achieving the 0.17 lb/MMBtu (24-hour avg.) NO_x level. FDER has written Specific Condition No. 6 addressing EPA's concern. We are also requesting an opportunity to review the plans and specifications to assure that an appropriate design basis exists.

The NPS also expressed agreement with FDER's determination for particulate and SO_2 emission limitations and the method of control. However, they recommended that the source be required to install selective catalytic reduction (SCR) for NO_x control since it is being required for similar projects in New Jersey and Virginia. In the case of New Jersey, it is our understanding that the facilities are in ozone nonattainment areas. However, the ICL project is in an attainment area for all pollutants. Over the past two years FDER has required sources to achieve lower and lower NO_x levels as the technology advances . The NO_x level required for the Indiantown Cogeneration facility meets FDER's goals and time table. As indicated above, the source will be required to achieve the specified NO_x limit using whatever technologies are necessary.

Modeling: The NPS expressed concern about the impact of SO_2, NO_x, and VOC emissions on Class I areas. FDER is also concerned about the emissions of these pollutants even though the source is more than 100 km from any national park. However, the EPA ISCST model run for the ICL project indicated that the emissions were well below levels of concern for Class I areas.

The final action of the Department will be to issue construction permit PSD-FL-168 as proposed in the Technical Evaluation and Preliminary Determination.

Attachments are listed below:

1. Power Plant Site Certification Package PA 90-31 and its associated attachments, dated September 6, 1991.
2. DER's Technical Evaluation and Preliminary Determination dated December 26, 1991.
3. Letter from National Park Service dated February 20, 1992.
4. Letter from EPA dated February 25, 1992.

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

GENERAL CONDITIONS:

as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

(x) Determination of Best Available Control Technology (BACT)
(x) Determination of Prevention of Significant Deterioration (PSD)
(x) Compliance with New Source Performance Standards (NSPS)

14. The permittee shall comply with the following:

a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement,

SPECIFIC CONDITIONS:

weight, and the balance on natural gas or propane. Fuel consumption must be continuously measured and recorded by fuel type (coal, natural gas or No. 2 fuel oil) for both the PC boiler and auxiliary boiler.

5. Based on a permitted heat input of 3422 MMBtu/hr, the stack emissions from the main boiler shall not exceed any of the following limitations:

Pollutant	Basis lb/MMBtu	Emission Limitation lb/hr	TPY
SO_2	0.170*	582*	2549
NOx	0.170*	582*	2549
PM	0.018	61.6	270
PM_{10}	0.018	61.6	270
CO	0.110	376*	1649
VOC	0.0036	12.32	54.0
H_2SO_4	0.0004	1.45	6.51
Beryllium	0.0000027	0.0094	0.041
Mercury	0.0000114	0.039	0.17
Lead	0.00001	0.034	0.15
Fluorides	0.0015	5.08	22.3
Arsenic	0.000051	0.18	0.77

*24 hour daily block average (midnight to midnight)

6. The 0.170 lb/MMBtu NO_x emission rate is the basis for the above maximum emission limitation. The permittee is allowed to use any technology (e.g. SNCR, SCR, or combustion controls) to achieve the NO_x limitation. Should a technology be chosen which does not meet the specified NO_x limits, the permittee must apply whatever technologies deemed necessary to ensure that the NO_x limitation is met. Plans and specifications must be submitted to DER's Bureau of Air Regulation in Tallahassee for review within 90 days after they become available.

SPECIFIC CONDITIONS:

be totally enclosed and vented (including pneumatic system exhaust) through fabric filters.

Submit for approval to the Department, Bureau of Air Regulation in Tallahassee within thirty (30) days after it becomes available, copies of technical data pertaining to the selected particulate emissions control for the coal, and lime handling facilities. These data shall include, but not be limited to guaranteed efficiency and emission rates, and major design parameters such as air/cloth ratio and flow rate. The Department shall issue a response within 30 days of receipt of the technical data.

11. Particulate emissions from bag filter exhausts from the coal, lime and flyash handling systems shall be limited to 0.010 gr/acf. A visible emission reading of 5% opacity or less may be used to establish compliance with this emission limit. A visible emission reading greater than 5% opacity will not create a presumption that the 0.010 gr/acf emission limit is being violated. However, a visible emission reading greater than 5% opacity will require the permittee to perform a stack test. Verification and recording of the above requirements for particulate emissions shall be done at least annually.

12. Emissions shall not be visible more than 2 minutes in any 15 minute period. Compliance with fugitive emissions limitations from all transfer points will be determined by EPA/DER referenced Method 22 and opacity Method 9 (Appendix A, 40 CFR 60).

13. Coal shall not be burned in the unit unless the spray dryer scrubber, fabric filter baghouse and other air pollution control devices are operating properly except as provided under 40 CFR Part 60, Subpart Da. Any malfunctions of these air pollution control devices are to be recorded; including duration, cause, and description of repair.

14. The fuel oil to be fired in the PC boiler and the auxiliary boiler shall be "new oil" which means an oil which has been refined from crude oil and has not been used. The quality of the No. 2 fuel oil used by the auxiliary boiler shall not contain more than 0.05% sulfur, by weight, based on each shipment analysis report.

15. No fraction of flue gas shall be allowed to bypass the air pollution control devices (PCD) system to reheat the gases exiting from the PCD system, if the bypass will cause emissions above the limits specified. The percentage and amount of flue gas bypassing

SPECIFIC CONDITIONS:

5	Particulate matter concentration and mass emissions.
201 or 201A	PM_{10} emissions.
6, 6C, or 19	Sulfur dioxide emissions from stationary sources.
7, 7C, or 19	Nitrogen oxide emissions from stationary sources.
8	Sulfuric acid mist from stationary source.
9	Visible emission determination of opacity. - At least three one hour runs to be conducted simultaneously with particulate testing for the emissions from dry scrubber/baghouse, and ash handling building baghouse. - At least one lime vehicle unloading into the lime silo (from start to finish).
22	Fugitive emissions from transfer points.
10	Carbon monoxide emissions from stationary sources.
12 or 101A	Lead concentration from stationary sources.
13A or 13B	Fluoride emissions from stationary sources.
18 or 25,	Volatile organic compounds concentration.
101A or 108	Mercury emissions.
104	Beryllium emission rate and associated moisture content.

NOTE: Use EPA draft method or other methods approved by Department to test for ammonia.

20. Performance tests shall be conducted under such conditions as the Department shall specify based on representative performance of the facility. The permittee shall make available to the Department

SPECIFIC CONDITIONS:

that will allow the permittee to monitor emission control equipment efficiency and enable the permittee to return malfunctioning equipment to proper operation as expeditiously as possible.

28. Stack monitoring, fuel usage and fuel analysis data shall be reported to the Department's Southeast District Office on a quarterly basis commencing with the start of commercial operation in accordance with 40 CFR, Part 60, Section 60.7, and 60.49a and in accordance with Section 17-2.08, FAC.

29. Utilizing the Aerometric Information and Retrieval System (AIRS) or other format approved in writing by the Department, ambient air monitoring data shall be reported to the Bureau of Air Monitoring and Assessment of the Department quarterly. Upon commencement of ambient air monitoring, such reports shall be due within 45 days of the end of the quarterly reporting period. Reporting and monitoring shall be in conformance with 40 CFR Parts 53 and 58.

30. Beginning one month after certification, the permittee shall submit to the Department a quarterly status report briefly outlining progress made on engineering design and purchase of major pieces of air pollution control equipment. All reports and information required to be submitted under this condition shall be submitted to the Siting Coordination Office, Department of Environmental Regulation, 2600 Blair Stone Road, Tallahassee, Florida, 32301.

31. In the event of a prolonged (thirty days or more) equipment malfunction or shutdown of air pollution control equipment, operation shall be allowed to resume and continue to take place under appropriate Department order, provided that the Permittee demonstrates such operation will be in compliance with all applicable ambient air quality standards and PSD increments. During such malfunction or shutdown, operation of the facility shall comply with all other requirements of this permit and all applicable state and federal emission standards not affected by the malfunction or shutdown which is the subject of the Order. Operational stoppages exceeding two hours for air pollution control systems are to be reported to the Southeast District office. Operational malfunctions which do not stop operation but may prevent compliance with emission limitations must also be reported to the Southeast District office.

Attachment 1

Attachment 2

As you know, EPA-Region 4 recently revised the PSD permit for Orlando Utilities Stanton Unit 2. The permit now requires Orlando Utilities to install a Selective Catalytic Reduction (SCR) system on Unit 2 to reduce NO_x emissions. The SCR system is to be designed to achieve a NO_x emission rate of less than 0.10 lb/MMBtu. Similarly, in December 1990, the New Jersey Department of Environmental Protection granted a permit to Chambers Cogeneration that requires a SCR system designed to meet a 0.10 lb/MMBtu limit. Finally, the Virginia Department of Air Pollution Control recently issued draft permits for two coal-fired cogeneration facilities that require SCR to control NO_x emissions (Hadson Power and Cogentrix-Dinwiddie). Given the recent developments in the SCR technology and the fact that other permitting authorities are now requiring SCR for coal-fired boilers, we ask that you require Indiantown to reconsider SCR for their proposed boiler as well.

Indiantown used the EPA ISCST model for the cumulative Class I increment analysis and included a total of 23 increment-consuming sources. The results of this analysis show that once in 1983 and once again in 1984, the 3-hour and 24-hour Class I SO_2 increments were exceeded (highest concentrations of 30.5 micrograms per cubic meter (ug/m^3) and 6.0 ug/m^3, respectively). However, the high second-high concentrations during these episodes were below the allowable increment. Therefore, the class I increments for both the 3-hour and 24-hour averaging periods are exceeded, but not yet violated. The high second-high concentration for 1983 data was 4.8 ug/m^3, which is 96 percent of the class I increment of 5 ug/m^3. As you may know, if a proposed source will cause or contribute to a Class I increment violation, the applicant will need to ask us to certify that there will be no adverse impacts to Class I area resources before the project can be permitted.

Indiantown only reported the high and high-second-high concentrations per year for our review. In the future, if the applicant is modeling with the ISCST model, we ask that they provide us with the "Max 50" table so that we can know more about the location and magnitude of impacts at other receptors in the park. In addition, Indiantown's total ambient analysis was overly conservative because they modeled all PSD and existing sources, and then added those concentrations to monitored ambient background levels. A more realistic total ambient impacts analysis for Class I areas is performed by modeling the proposed source and any newly permitted, but not yet operating, source and adding these impacts to the ambient background concentrations.

Indiantown performed a visibility analysis using the EPA model VISCREEN. The proposed project passed the Level I VISCREEN test, indicating that the proposed emissions would have low potential for visibility impairment due to plume impacts in Everglades NP.

determine if current ozone levels in Everglades NP induce the same degree of growth reductions as were observed in the chambers.

Lichens and bryophytes are common in the park, and due to their unique morphology, are particularly sensitive to air pollutants such as sulfur dioxide. The nitrates in acid rain may also be harmful to bryophytes, particularly to tank bryophytes which accumulate rainwater in a cup-shaped basin formed by overlapping leaves. Two species of epiphytes found in the park, Tillandsia flexuosa, a bromeliad, and Epidendrum nocturnum, an orchid, are considered threatened under the Preservation of Native Flora of Florida Act. The sensitivity of these two threatened species to air pollutants is not known at this time.

Nitrogen oxide and sulfur dioxide emissions may lead to the acidification of the huge wetland system that comprises much of the park. Acidification leads to changes in the flora and fauna of an aquatic ecosystem.

Finally, we are concerned about the high levels of mercury that have been found in the federally endangered Florida panther and other animals in the park. It is not known at this time what the source of the mercury is, but we encourage you to limit mercury emissions in the vicinity of the park until the source can be identified and remedial action taken.

If you have any questions regarding this matter, please contact Dee Morse of our Air Quality Division in Denver at 303-969-2071.

Sincerely,

FOR James W. Coleman, Jr.
Regional Director
Southeast Region

cc:
[illegible]
[illegible]
[illegible]
J. [illegible], SE Dist.
L. [illegible], PG&E/Tiedtke
E. [illegible]

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, NEW YORK 10278-0012

MAY 12 1994

RECEIVED
MAY 16 1994

Paul Reinermann, III
Environmental Specialist
Chambers Cogeneration Limited Partnership
7500 Old Georgetown Road
Bethesda, Maryland 20814-6161

Re: Chambers Cogeneration Alternative Monitoring Plan Proposal

Dear Mr. Reinermann:

The U.S. Environmental Protection Agency (EPA), has carefully reviewed Chambers Cogeneration Limited Partnership's (CCLP) request for approval of an alternative monitoring plan (AMP) at the Chambers Cogeneration Facility, located in Carneys Point, New Jersey. The proposed alternative method would utilize coal sampling and analysis performed by the coal vendor to monitor SO_2 at the inlet of the SO_2 control device. The AMP is proposed as an alternative to utilizing a continuous emission monitoring system (CEMS) or by "as fired" coal sampling and analysis at the inlet of the SO_2 control device (Subpart Da at §60.47a(b)). As reflected in the attached April 21, 1994 memorandum from John Rasnic to me, the agency has concluded that the CCLP proposed AMP is acceptable and is hereby approved in accordance with the conditions set forth in the enclosed memorandum.

If you should have any questions concerning the approval of the AMP please contact Aarti Reddy of my staff at (212) 264-6715.

Sincerely,

Conrad Simon, Director
Air and Waste Management
Division

Enclosures

cc: Dr. Iclal Atay
New Jersey Department of
Environmental Protection and Energy

Donald Patterson
New Jersey Department of
Environmental Protection and Energy

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

APR 21 1994

OFFICE OF
AIR AND RADIATION

MEMORANDUM

SUBJECT: Chambers Cogeneration Facility - Alternative Monitoring Method Request

FROM: John B. Rasnic, Director
Stationary Source Compliance Division
Office of Air Quality Planning and Standards

TO: Conrad Simon, Director
Air and Waste Management Division
Region II

In response to your request of March 15, 1994, for approval of the alternative monitoring method proposed by Chambers Cogeneration Limited Partnership (Chambers), SSCD has determined that the proposed plan must be upgraded prior to approval.

Chambers operates the Chamber Cogeneration Facility located in Carneys Point, New Jersey. The facility consists of two pulverized coal-fired boilers rated at 224 MWe while providing 550,000 lb/hr of steam. The boilers are equipped with spray dryers for sulfur dioxide (SO_2) control. Both boilers started operations in the end of 1993.

The boilers are subject to a federally enforceable Prevention of Significant Deterioration (PSD) permit and to 40 CFR Part 60, Subpart Da Standards of Performance for Electrical Utility Steam Generating Units for which Construction is Commenced after September 18, 1978. The PSD permit requires Chambers to comply with the SO_2 emission limitation of 0.22 lb/mmBtu on a 1-hour average while Subpart Da requires compliance with 0.6 lb/mmBtu on a 30-day rolling average. Subpart Da, § 60.47a(b), also requires that SO_2 be monitored at the inlet and outlet of the SO_2 control device to demonstrate a 70 percent SO_2 reduction rate. To meet the PSD emission limitation of 0.22 lb/mmBtu, Chambers must reduce SO_2 concentrations by more than 89 percent (from the presently lowest SO_2 uncontrolled emission rate of 2.02 lb/mmBtu to 0.22 lb/mmBtu). This reduction rate is 19 percent higher than the required 70 percent NSPS rate.

According to Subpart Da, to monitor the uncontrolled SO_2 at the inlet, the facility can use either an SO_2 continuous emission

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monitoring system (CEMS) or daily as-fired coal sampling and analysis (CSA). The PSD permit requires only SO_2 monitoring, using an SO_2 CEMS at the outlet and does not have any emission reduction requirement.

Chambers has asked EPA to approve an alternative monitoring method at the inlet of the spray dryer. In lieu of either installing a CEMS or performing the as-fired CSA, Chambers proposed using the lowest ever coal sulfur content determined by the coal supplier in the as-delivered coal as a basis for calculating the emission rate of uncontrolled SO_2 at the spray dryer inlet. This proposed alternative monitoring method, although an interesting concept, is not satisfactory since the as-delivered CSA may not provide adequate information and may result in enforcement problems. We cannot verify the coal supplier's CSA approach and we do not know the variability of coal sulfur. However, U.S. EPA could approve the proposed concept if Chambers meets the following additional conditions:

- Conduct the Subpart Da 30-day initial performance test using the SO_2 CEMS to determine the outlet emission rate and using one of the following methods to determine the inlet SO_2 emission rate:
  - daily as-fired CSA according to Part 60, Appendix A, Method 19 (lot size defined as the amount of coal burned on one day)
  - SO_2 CEMS per Subpart Da
  - Part 60, Appendix A, Method 6B to determine daily SO_2 inlet emissions
- Report the daily SO_2 emissions for the inlet and outlet during the test period as well as the 30-day average.
- Upon a successful demonstration of compliance, determine the daily inlet SO_2 emission rate (using the same method as during the 30-day compliance test) on the first operating day of each month.
- Calculate and record the spray dryer reduction efficiency every day to determine the 30-day rolling average.
- For calculating the reduction efficiency, use the daily average outlet SO_2 emission rate indicated by the SO_2 CEMS and the lowest inlet SO_2 emission rate ever recorded (including the daily analyses during the 30-day performance test, the first operating day analyses, and coal shipment analyses performed by the coal supplier).

- Demonstrate a minimum SO_2 reduction efficiency of 80 percent on a 30-day rolling average.

- Upon a violation of the 80 percent reduction efficiency condition, consider this alternative monitoring procedure revoked and immediately comply with all requirements of Subpart Da and continue complying with Subpart Da as long as the facility operates.

This narrow determination applies only to Chambers and cannot be used for any other regulated facility without EPA's prior approval. We believe that Chambers meets the "unusual circumstances" and "procedures that are consistent with...[the operator's] current practices" conditions of the preamble to Part 60.13(i) since Chambers, under the federally enforceable PSD permit, must meet a more stringent emission limitation than is required by the NSPS Subpart Da. To violate the 80 percent SO_2 reduction requirement of this approval while complying with the 0.22 lb/mmBtu PSD rate, Chambers would have to fire coal with sulfur content resulting in uncontrolled SO_2 emissions (at the dryer inlet) lower than 1.1 lb/mmBtu while the presently predicted lowest SO_2 emission would not be less than 2.02 lb/mmBtu.

If you have any question, please call either me at 703-308-8600 or Zofia Kosim of my staff at 703-308-8733.

Memo from

COSTAIN COAL INC.
BOX 170 TOLLAGE CREEK ROAD ■ PIKEVILLE, KY 41501
TELEPHONE: 606/432-0307

Date October 28, 1991 **From** Mike Francisco

To Peter Schmidt **Subject** East Kentucky Quality Control Lab

Attached is the information that was requested during our visit from John Smith and Gary Weidinger representing Bechtel on Thursday, October 17.

Please let me know if there is any additional information which is necessary.

files1\bechtel.mem

COSTAIN COAL INC.

TRANSCONTINENTAL COAL PROCESSING, INC.

QUALITY CONTROL SUMMARY

SAMPLING PROCEDURES

All of the (2 x 0) coals which are loaded into rail cars at the Transcontinental Coal Processing facility for shipment to customers is presently sampled by means of a two-stage Hebden-Schilbe-Smith automatic mechanical sampler. The sampler is adjusted to the proper lot sizes according to ASTM guidelines. The sampler is inspected each morning prior to startup by designated personnel using a predetermined set of criteria developed by the Supervisor of Sampling and Analysis for the East Kentucky Operations. This facility has been bias tested under the supervision of Commercial Testing, Inc. The results of this bias test are available if requested.

COAL LABORATORY

All analysis of both incoming coal and shipments are performed by Costain Coal's East Kentucky Laboratory. This lab is fully equipped to perform the required daily analysis and is staffed by four qualified personnel. All laboratory analyses are performed in strict compliance with ASTM guidelines and procedures.

Upon completion of the loading of a particular order, an 8 mesh save sample is obtained from the mechanical sampler. This 8 mesh samle is weighed, riffled, and then reduced to a 60 mesh product for analytical lab testing. Reserve samples are kept for all coals for a period of 60 days after the date of testing. The laboratory performs short proximate analysis, (moisture, ash, BTU and sulfur), on most all samples.

The procedure followed in a normal testing routine is to take approximately 2,000 grams of the 8 mesh coal sample, and to air dry it for approximately 8 hours in a Despatch oven. After this period, the sample is weighed to obtain the total moisture values. The sample is then subjected to the 4 hour ashing procedure utilizing Lindberg furnaces and controllers. BTU evaluations are conducted on a Parr 1261 isoperibol bomb calorimeter. These are performed in the dynamic mode with a run time of approximately 4 - 5 minutes per sample. Sulfur contents are obtained by utilizing a Leco SC132 machine, with a run time of 90 seconds per sample.

Calibrations and maintenance are performed on all equipment on a routine basis, according to manufacturers specifications or ASTM guidelines.

To ensure that the East Kentucky Laboratory results remain at a level of excellence, the Laboratory participates in a "round-robin" testing program, managed by Commercial Testing Company, Inc. Results have always placed the Costain Laboratory at the top of this program. Attached are the results of this year's program.

Further detail and/or site visits are available and can be arranged if necessary to view first-hand the practices and procedures in place and ongoing at the Costain East Kentucky Laboratory.

BEST AVAILABLE COPY

January 1991

★ PROX DRY VALUES

OTHER PARAMETERS

COMMERCIAL TESTING & ENGINEERING CO.

ROUND ROBIN REPORT - TABLE II - STATISTICAL SUMMARY

8-Mesh Proximate Analysis

RR #: 831 - LAB #: 032825

	NO. OF RESULTS	MEAN VALUE	LAB VALUE	DIFF.	STANDARD DEVIATION	QUALITY SCORE	REPRODUCIBILITY ACTUAL	REPRODUCIBILITY ASTM
OTAL MOISTURE	78	3.61	3.54	-0.07	0.1622	43	0.46	0.50
RY ASH	79	9.44	9.43	-0.01	0.1829	6	0.52	0.40
RY VOLATILE	55	37.18	*******	*******	0.5225	*******	1.48	1.40
RY SULFUR	77	1.34	1.33	-0.01	0.0389	26	0.11	0.13
S RECEIVED BTU	76	12959	12980	21	49.9617	42	141	100
RY BTU	77	13445	13456	11	46.9574	23	133	100
AF BTU	77	14846	14857	11	32.6058	34	92	100
Q MOISTURE	7	3.65	*******	*******	0.2128	*******	0.60	2.00
A2O	-------	-------	-------	-------	----------	-------	-------	-------

****** - VALUES NOT REPORTED ------- - PARAMETERS NOT TESTED

March 1991

★ PROX DRY VALUES

COMMERCIAL TESTING & ENGINEERING CO.

ROUND ROBIN REPORT - TABLE II - STATISTICAL SUMMARY — OTHER PARAMETERS

8-Mesh Proximate Analysis

RR #: 839 - LAB #: 032825

	NO. OF RESULTS	MEAN VALUE	LAB VALUE	DIFF.	STANDARD DEVIATION	QUALITY SCORE	REPRODUCIBILITY ACTUAL	REPRODUCIBILITY ASTM
TOTAL MOISTURE	70	5.22	5.11	-0.11	0.1605	69	0.45	0.50
DRY ASH	70	8.18	8.12	-0.06	0.1178	51	0.33	0.40
DRY VOLATILE	47	19.04	*******	*******	0.3258	*******	0.92	1.40
DRY SULFUR	69	0.52	0.52	0.00	0.0273	0	0.08	0.08
AS RECEIVED BTU	69	13543	13555	12	46.2745	26	131	100
DRY BTU	69	14286	14285	-1	40.1683	3	114	100
MAF BTU	69	15557	15547	-10	39.9566	25	113	100
EQ MOISTURE	5	2.06	*******	*******	0.0435	*******	0.12	2.00
NA2O	-------	-------	-------	-------	----------	-------	-------	-------

******* - VALUES NOT REPORTED ------- - PARAMETERS NOT TESTED

BEST AVAILABLE COPY APRIL 91

PROX DRY VALUES

COMMERCIAL TESTING & ENGINEERING CO.

ROUND ROBIN REPORT - TABLE II - STATISTICAL SUMMARY

OTHER PARAMETERS

8-Mesh Proximate Analysis

RR #: 843 - LAB #: 032825

	NO. OF RESULTS	MEAN VALUE	LAB VALUE	DIFF.	STANDARD DEVIATION	QUALITY SCORE	REPRODUCIBILITY ACTUAL	REPRODUCIBILITY ASTM
TOTAL MOISTURE	83	15.18	15.27	0.09	0.2873	31	0.81	0.50
DRY ASH	86	10.13	10.37	0.24	0.1222	196	0.35	0.40
DRY VOLATILE	61	42.81	*******	*******	1.1145	*******	3.15	1.40
DRY SULFUR	85	4.33	4.30	-0.03	0.1105	27	0.31	0.31
AS RECEIVED BTU	81	10793	10781	-12	49.6379	24	140	100
DRY BTU	84	12722	12724	2	37.2876	5	105	100
MAF BTU	84	14157	14196	39	47.5673	82	135	100
EQ MOISTURE	7	13.87	*******	*******	0.1398	*******	0.40	2.00
NA2O	-------	-------	13.73	-------	----------	-------	-------	-------

******* - VALUES NOT REPORTED ------- - PARAMETERS NOT TESTED

BEST AVAILABLE COPY

MAY 1991

★ PROX DRY VALUES

COMMERCIAL TESTING & ENGINEERING CO.

ROUND ROBIN REPORT - TABLE II - STATISTICAL SUMMARY — OTHER PARAMETERS

8-Mesh Proximate Analysis

RR #: 847 - LAB #: 032825

	NO. OF RESULTS	MEAN VALUE	LAB VALUE	DIFF.	STANDARD DEVIATION	QUALITY SCORE	REPRODUCIBILITY ACTUAL	REPRODUCIBILITY ASTM
TOTAL MOISTURE	72	6.05	6.10	0.05	0.1824	27	0.52	0.50
DRY ASH	74	6.53	6.54	0.01	0.1132	9	0.32	0.40
DRY VOLATILE	51	35.66	*******	*******	0.6491	*******	1.84	1.40
DRY SULFUR	73	0.69	0.68	-0.01	0.0269	37	0.08	0.09
AS RECEIVED BTU	69	13331	13303	-28	37.6324	74	106	100
DRY BTU	71	14183	14167	-16	46.6577	34	132	100
MAF BTU	71	15176	15158	-18	46.1426	39	131	100
EQ MOISTURE	7	2.76	*******	*******	0.3791	*******	1.07	2.00
NA2O	-------	-------	-------	-------	----------	-------	-------	-------

******* - VALUES NOT REPORTED ------- - PARAMETERS NOT TESTED

BEST AVAILABLE COPY

Oct 1977

PROX DRY VALUES

COMMERCIAL TESTING & ENGINEERING CO.

ROUND ROBIN REPORT - TABLE II - STATISTICAL SUMMARY

OTHER PARAMETERS

8-Mesh Proximate Analysis

RR #: 859 - LAB #: 032825

	NO. OF RESULTS	MEAN VALUE	LAB VALUE	DIFF.	STANDARD DEVIATION	QUALITY SCORE	REPRODUCIBILITY ACTUAL	REPRODUCIBILITY ASTM
)TAL MOISTURE	70	7.57	7.52	-0.05	0.1979	25	0.56	0.50
RY ASH	70	6.14	6.24	0.10	0.0654	153	0.18	0.40
RY VOLATILE	52	36.39	*******	*******	0.9868	*******	2.79	1.40
RY SULFUR	69	1.50	1.52	0.02	0.0463	43	0.13	0.14
; RECEIVED BTU	68	12686	12676	-10	49.0671	20	139	100
RY BTU	68	13724	13707	-17	38.4199	44	109	100
AF BTU	68	14621	14619	-2	41.7173	5	118	100
) MOISTURE	4	8.23	*******	*******	0.5508	*******	1.56	2.00
A2O	-------	-------	-------	-------	----------	-------	-------	-------

:***** - VALUES NOT REPORTED ------- - PARAMETERS NOT TESTED

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Aug. 1991

PROX DRY VALUES

OTHER PARAMETERS

COMMERCIAL TESTING & ENGINEERING CO.

ROUND ROBIN REPORT - TABLE II - STATISTICAL SUMMARY

8-Mesh Proximate Analysis

RR #: 863 - LAB #: 032825

	NO. OF RESULTS	MEAN VALUE	LAB VALUE	DIFF.	STANDARD DEVIATION	QUALITY SCORE	REPRODUCIBILITY ACTUAL	REPRODUCIBILITY ASTM
TOTAL MOISTURE	70	8.06	8.17	0.11	0.2634	42	0.74	0.50
DRY ASH	70	7.76	7.55	-0.21	0.1982	106	0.56	0.40
DRY VOLATILE	51	45.43	*******	*******	0.6142	*******	1.74	1.40
DRY SULFUR	67	0.52	0.53	0.01	0.0247	40	0.07	0.08
AS RECEIVED BTU	68	11895	11881	-14	61.8961	23	175	100
DRY BTU	68	12937	12938	1	49.7373	2	141	100
MAF BTU	68	14031	13995	-36	45.5610	79	129	100
EQ MOISTURE	6	6.97	*******	*******	0.0499	*******	0.14	2.00
NA2O	-------	-------	-------	-------	----------	-------	-------	-------

******* - VALUES NOT REPORTED ------- - PARAMETERS NOT TESTED

September 1991

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★ PROX DRY VALUES

COMMERCIAL TESTING & ENGINEERING CO.

ROUND ROBIN REPORT - TABLE II - STATISTICAL SUMMARY

OTHER PARAMETERS

8-Mesh Proximate Analysis

RR #: 867 - LAB #: 032825

	NO. OF RESULTS	MEAN VALUE	LAB VALUE	DIFF.	STANDARD DEVIATION	QUALITY SCORE	REPRODUCIBILITY ACTUAL	REPRODUCIBILITY ASTM
TOTAL MOISTURE	85	8.24	8.32	0.08	0.2157	37	0.61	0.50
DRY ASH	85	8.38	8.17	-0.21	0.2353	89	0.67	0.40
DRY VOLATILE	63	45.13	*******	*******	0.8665	*******	2.45	1.40
DRY SULFUR	82	0.51	0.52	0.01	0.0197	51	0.06	0.08
AS RECEIVED BTU	83	11828	11828	0	50.6881	0	143	100
DRY BTU	83	12893	12901	8	48.4014	17	137	100
MAF BTU	83	14075	14049	-26	42.9704	61	122	100
EQ MOISTURE	6	6.77	*******	*******	0.2074	*******	0.59	2.00
NA2O	-------	-------	-------	-------	----------	-------	-------	-------

******* - VALUES NOT REPORTED ------- - PARAMETERS NOT TESTED

COSTAIN

EXHIBIT 6.2

Characteristic	Monthly Weighted Average	Rejection Limit Per Shipment
Btus per lb.	12,500	12,000
Moisture (%)	8	9
Ash (%)	9	12
SO_2 (lbs. per million Btus)	1.6	2.0
Volatile Matter	33-36	-----
Fixed Carbon	53	-----
Ash Fusion (ID-reducing) (degrees F)	2,600	-----
Grindability (HGI)	40	-----
Fines (minus 1/4 inch)(%)	50	-----

Indiantown Cogeneration, L.P.

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JUL 13 1994
Bureau of
Air Regulation

July 8, 1994

Preston Lewis
Permitting and Standards Section
Florida Department of Environmental Protection
Twin Towers Office Bldg.
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: SCR Engineering Details

Dear Mr. Lewis:

As we discussed , the SCR (Selective Catalytic Reduction) system information provided previously was very detailed. Enclosed please find simplified schematics from the Foster Wheeler brochure in response to your request.

If you have any questions or require additional information please call me at (301) 718-6973.

Sincerely,

Michelle Griffin
Environmental Compliance Specialist

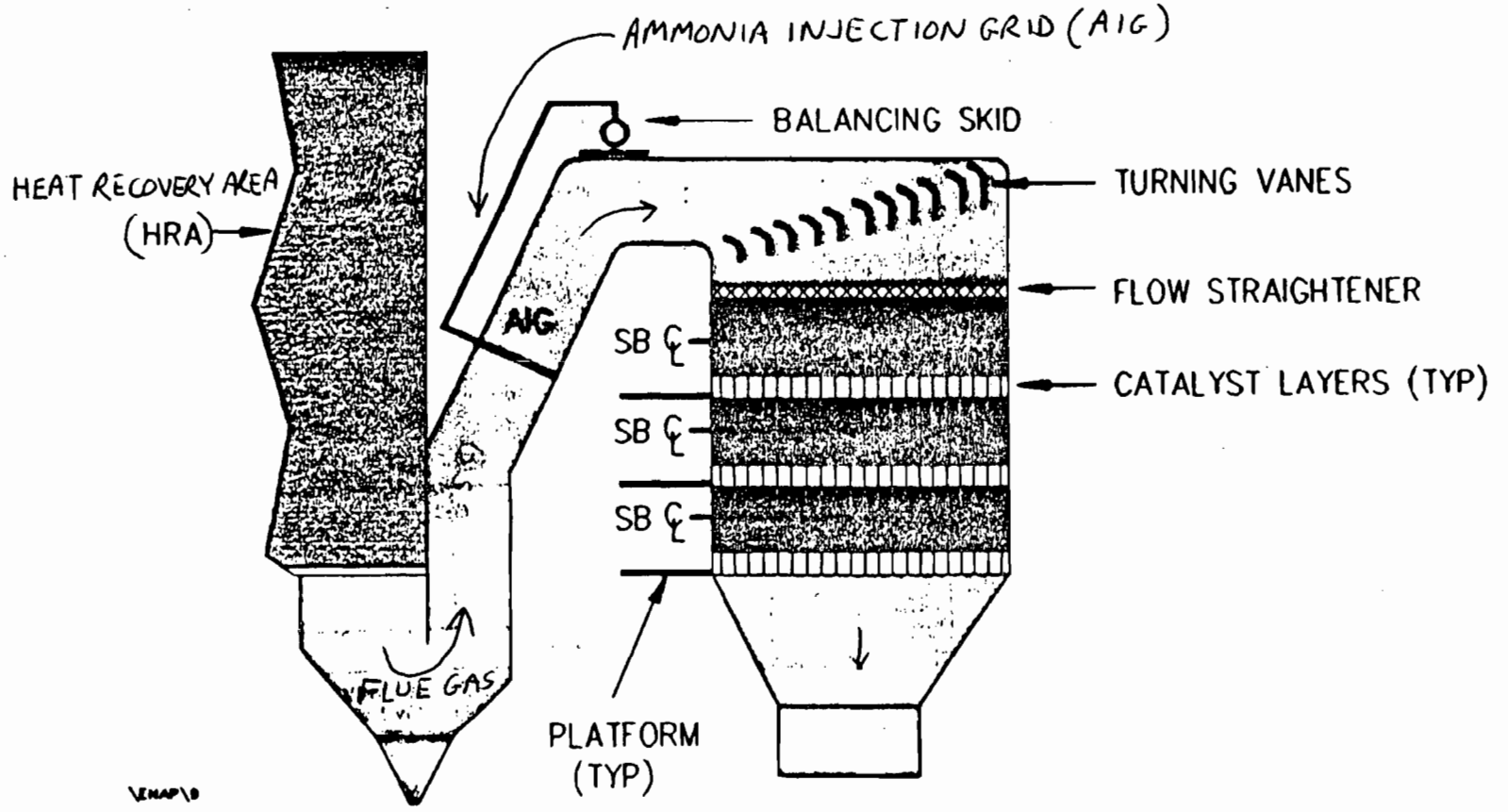
Enclosures

cc: (with enclosure)
H. S. Oven, Jr. FDEP

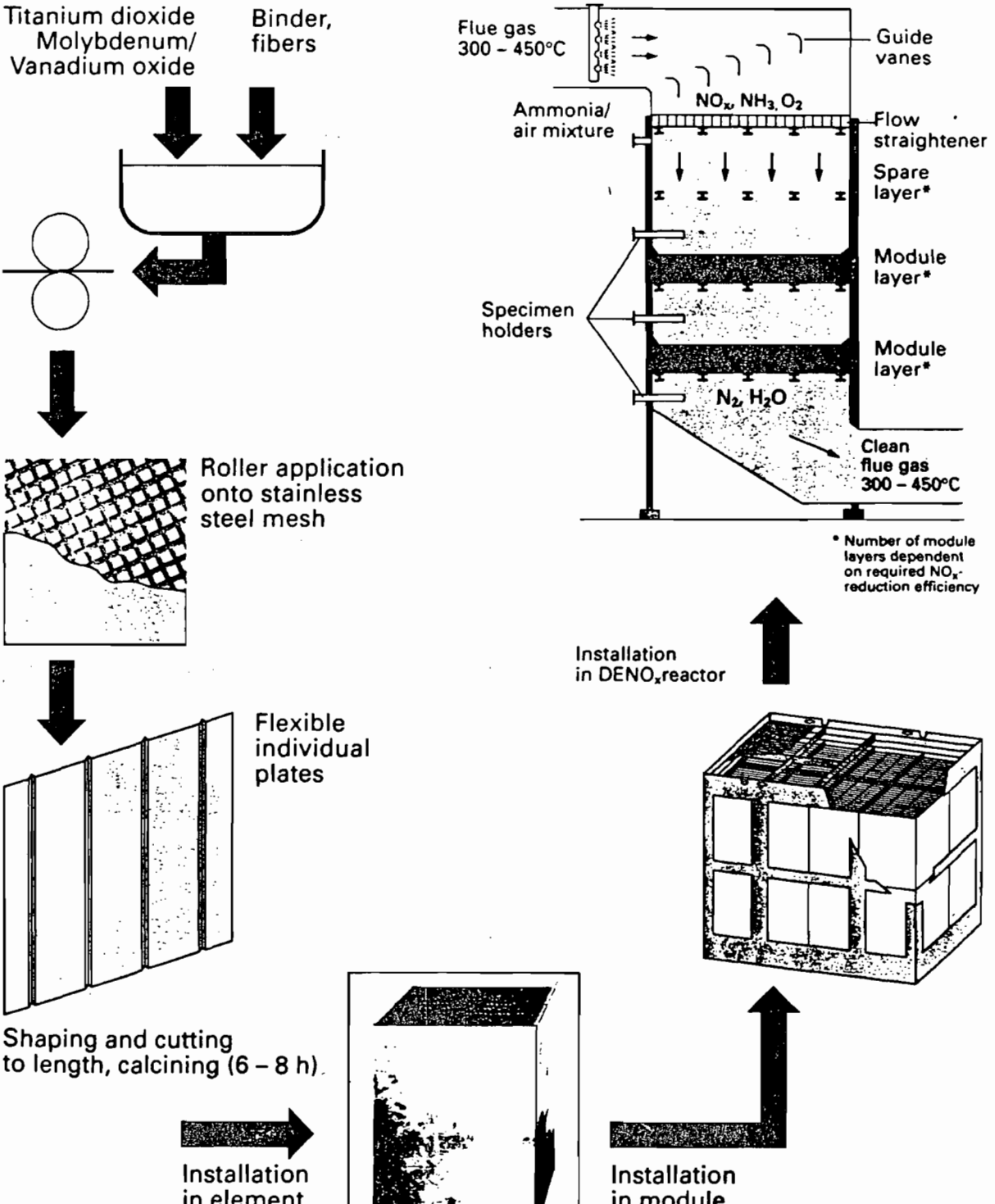
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FOSTER WHEELER ENERGY CORPORATION

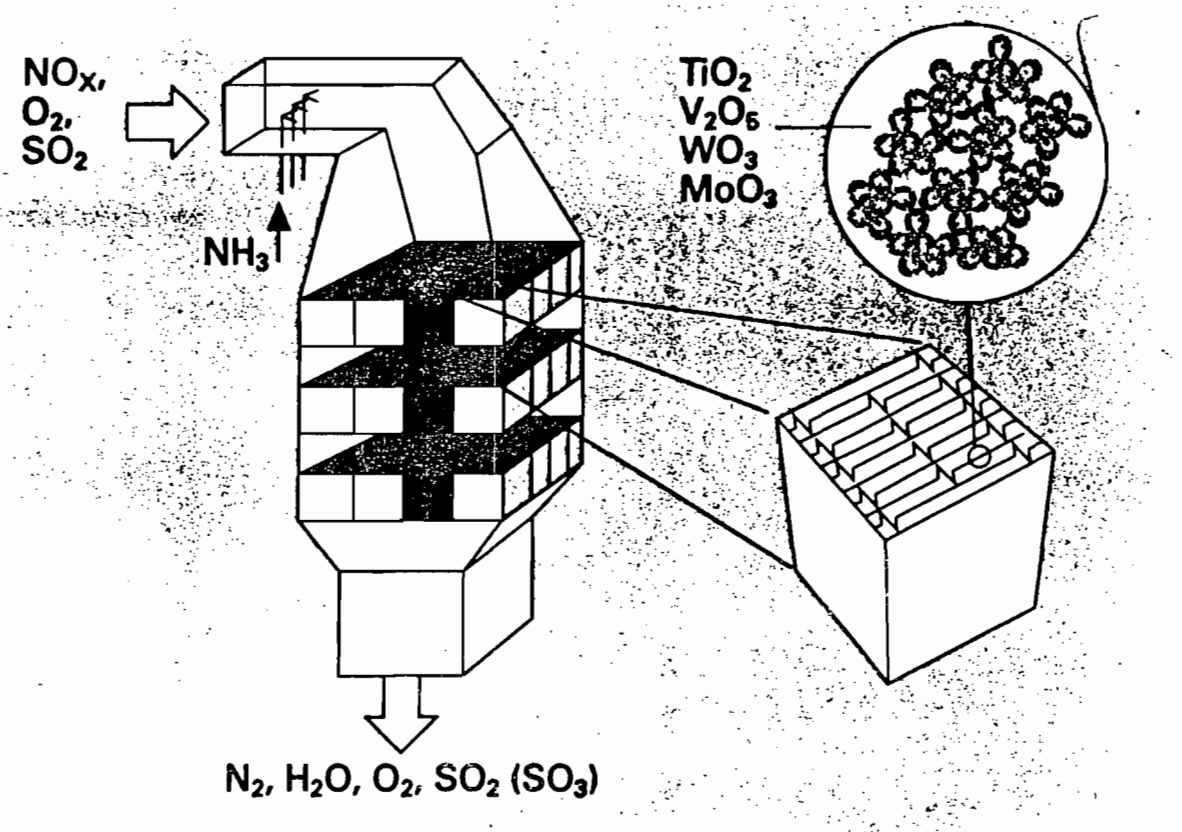
SCR FOR COAL FIRED BOILER



Fabrication Process and Installation



No_x Abatement with SCR Process



Selective

undesired minimized

$2\ NH_3 + 1/2\ O_2 \rightarrow N_2 + 3H_2O$

$(SO_2 + 1/2\ O_2 \rightarrow SO_3)$

Catalytic

$TiO_2/V_2O_5/WO_3/MoO_3$
Fe/Cr-Oxide
Zeolite

Reduction

NO_X with $NH_3 \rightarrow N_2, H_2O$

Advantages of SCR Process

- High efficiency (up to > 90 %)
- Final products N_2 and H_2O
- Compatible with FGD
- Simple process
- Simple construction

Patty - file

Indiantown Cogeneration, L.P.

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MAY 10 1994

Bureau of
Air Regulation

Control #:
Reference Code: ICLDEP
File: 6.3

May 5, 1994

Mr. Hamilton S. Oven, Jr.
Administrator, Office of Siting Coordination
Department of Environmental Protection
3900 Commonwealth Blvd., MS 48
Tallahassee, FL 32399-3000

Dear Mr. Oven:

As required by Condition of Certification II (1.)A.2(c), this letter transmits the eighth quarterly report for the Indiantown Cogeneration Project for the period ending March 31, 1994. I have enclosed a color photo copy of an aerial photo of the site illustrating progress as of March 21, 1994. In addition, I am enclosing information required by Condition of Certification II1.A.2. Operations and maintenance manuals for the main boiler and auxiliary boilers and flue gas cleaning systems included are as follows:

Auxiliary Boilers:	Operation and Instruction Manuals (Nebraska Boilers)
Main Boiler:	Instructions for the Care and Operation of Natural Circulation Reheat Steam Generator and Auxiliaries (Foster Wheeler)
Flue Gas Cleaning System:	Operation and Maintenance Manual (ABB Environmental Systems)

During the first quarter of 1994, construction was focused on erection of the boiler, air preheater and baghouse building structural steel as well as the installation of the mechanical and electrical bulk commodities in the boiler and turbine buildings. Installation of the raw water piping was essentially completed with the exception of the above grade crossings at streams and other obstructions. Major underground structures for the makeup water pumphouse at Taylor Creek/Nubbin Slough have been completed. Installation of the intake screens should take place during the next quarter. Other construction accomplishments during this period include; installation of the coal silos, completion of the brick stack liner, and the installation of water treatment equipment and associated buildings.

The sanitary system permit process continued through the first quarter with the necessary public notices. The permit was issued on March 25, 1994. Review and approval of the ambient air monitoring locations by DEP was completed and installation of the monitors initiated. The monitors will be activated during the second quarter. The Visitor's Center permit applications have been revised to reflect a new location. Approval has been granted by SFWMD and is expected from Martin County and DEP-WPB during the second quarter.

Engineering efforts are now centered on electrical and instrumentation design. Electrical engineering is continuing with design activities related to conduit placement, cable and raceway routing, electrical connection diagrams and the preparation of electrical schematics. Instrumentation work was focused around Distributed Control System (DCS) programming activities related to preparation of control logics, input/output lists and review of vendor technical submittals. Civil work is essentially complete and the mechanical engineering efforts were to review vendor data and start the preparation of plant system operation specifications.

Major vendors continue to provide regular, on schedule shipments of materials to the site. Foster Wheeler continues to supply boiler pressure parts to support erection activities by Bechtel Construction. General Electric continues shop fabrication of turbine-generator components in support of a third quarter 1994 shipment commitment. ABB Flakt continues to supply steel to support construction fabrication of the baghouse and the commencement of FGD reactor erection activities.

As of March 31, 1994, 73 non-manual employees and 638 direct hire craftsmen are employed at the site. We continue to provide environmental awareness training to all on-site personnel as they join the project.

You are welcome to come visit the site to review progress first hand. If you would like to schedule a visit or if you have any questions, please call me at 301/718-6973.

Sincerely,

Michelle Griffin
Environmental Compliance Specialist

Enclosure: 1 photo, 4 copies of 3 manuals

cc: Preston Lewis, w/photo
Richard Donelan, w/photo
Susan Coughanour, w/photo



Florida Department of
Environmental Protection

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Lawton Chiles
Governor

Virginia B. Wetherell
Secretary

April 11, 1994

Mr. Paul Reinermann
Environmental Specialist
Indiantown Cogeneration, L.P.
7500 Old Georgetown Road
Bethesda, Maryland 20814-6161

Dear Mr. Reinermann,

We have received the Hard Copy Information Reports you submitted April 1 for the PSD monitoring sites required under the Power Plant Siting Conditions of Certification for the Indiantown Cogeneration Project permit. The two sites meet siting requirements and are acceptable for PSD monitoring.

SAROAD numbers were issued for these sites. The monitoring site at Caulking Indiantown Citrus Company, labeled "Site #1 - Caulking Plant Site," is SAROAD #10-1930-003-J02. The monitoring site on State Road 710, labeled "Site #2 - FL Martin Site," about five miles northwest of Indiantown, is SAROAD #10-1930-001-J02.

Thank you for your prompt and thorough response. If you need further information or assistance, please call Ms. Tammy Eagan at 904/488-6140.

Sincerely,

Dotty Diltz

Dotty Diltz, Chief
Bureau of Air Monitoring
and Mobile Sources

DD/te

cc: Micheal D. Mazaika
Tammy Eagan
Clair Fancy

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STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

ROUTING AND TRANSMITTAL SLIP

TO: (NAME, OFFICE, LOCATION)

1. Clair Fancy
2. [illegible]
3. [illegible]
4. Patty Adams - file

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APR 12 1994
Bureau of
Air Regulation

Clair Fancy

FROM:
Jeremy Eagan

DATE 4/12/94
PHONE

08-18-93

Indiantown Cogeneration, L.P.

April 1, 1994

Doc. Ctrl. 2657
Ref. No. ICLDEP
File No. 6.3.1.2

Ms. Tammy Eagan
Florida Dept. of Environmental Protection
Division of Air Resources Management
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RECEIVED
APR 0 4 1994
Bureau of Air Monitoring
& Mobile Sources

Subject: ICP Air Quality Monitoring Program -
SAROAD Hard Copy Information Reports

Dear Ms. Eagan:

This letter documents transmittal of one (1) copy each of the completed Hard Copy Information Reports (HCIRs) requested by your agency to support the evaluation of site acceptability and the issuance of SAROAD identification codes for the two ambient air quality monitoring stations required to be operated under the Conditions of Certification and Prevention of Significant Deterioration (PSD) permit issued for the Indiantown Cogeneration Project (ICP).

Input to these reports is based primarily on information contained in the Site Certification Application (SCA), the PSD air quality impact analysis report, the air quality monitor siting impact analysis (see the letter from M. Mazaika of Bechtel Power Corporation (BPC) to you, dated January 24, 1994), the summary report on proposed monitoring site locations (see the letter from M. Mazaika (BPC) to you, dated February 10, 1994), and subsequent telephone conversations between Mr. Mazaika and you regarding identification of the two candidate sites and clarification of the guidance on completing the HCIRs.

As a result of those discussions, taking into account regulatory, modeling and logistical considerations, you agreed that Site #1 will be located on property owned by the Caulkins citrus processing facility, the steam host for this project, just north of the ICP site. This station will be equipped for making automated, continuous SO_2 and NO_2 measurements, as well as integrated 24-hour PM-10 sampling. Two PM-10 samplers (primary and collocated) will be operated at this site for data reporting and quality assurance purposes, respectively. A meteorological tower will also be installed to measure wind speed and wind direction at a height of 10 meters above ground.

Site #2 will be located about 4.4 km west-northwest of the Indiantown plant on property owned by the Florida Power & Light Company (FPL) as part of the Martin power plant site. Ambient SO_2 and PM-10 measurements will be made at this station.

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Status report for Indiantown

Charles Please review and comment on any design or brief note Preston

Greg Copy for Patty admin file Please do

Indiantown Cogeneration, L.P.

January 26, 1994

Control #: 1750
Reference Code: ICLDEP
File: 6.3

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FEB 02 1994
Bureau of
Air Regulation

Mr. Hamilton S. Oven, Jr.
Administrator, Office of Siting Coordination
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL

Dear Mr. Oven:

As required by Condition of Certification II (1.)A.2(c), this letter transmits the eighth quarterly report for the Indiantown Cogeneration Project for the period ending December 31, 1993. I have enclosed a color photo copy of an aerial photo of the site illustrating progress as of December 17, 1993. In addition, I am enclosing information required by Conditions of Certification II1.A.2 and II1.B.2.c(vi). The data sheets are provided for the Flue Gas Cleaning System Lime Silo Vent Filter, the Softener System Lime Silo Vent Filter and the Softener System Soda Ash Silo Vent Filter.

During the fourth quarter of 1993, construction was focused on erection of the boiler, turbine building structural steel and the installation of the mechanical and electrical bulk commodities in the boiler and turbine buildings. Significant accomplishments this period include the placement of the condenser and several of the baghouse hopper sections, installation of the first boiler pressure parts, assembly of the coal pulverizers and the commencement of the installation of the brick liner by the stack subcontractor.

Sanitary system review continued through the fourth quarter. We expect Department of Environmental Protection in West Palm Beach (DEP-WPB) to issue a permit during January. Approval of a minor modification to the basin liner design was requested and approved. Work has been initiated on the ambient air monitoring program. Enviroplan has been selected to provided the equipment and services necessary to implement the program, which we expect to be operational early in the second quarter. The review of the Visitor Center permit applications continued. We expect to receive approvals from Martin County, SFWMD and DEP-WPB by the end of the first quarter. FAA approved aircraft warning devices have been installed on the stack and are operational.

Engineering efforts during the fourth quarter continue to be concentrated on detail design aspects of the project. Major civil engineering efforts have been completed. Design of the Taylor Creek intake structure/pump house foundations and the intake screen supports commenced. Additional work related to the design of sleeper foundations for the export steam lines and condensate return system was initiated. Electrical design efforts continue to focus on conduit design for the boiler

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and turbine buildings. Cable routing and cable termination design were active during the quarter. Instrument and control engineering issued for bids the continuous emission monitoring (CEM) system, flue gas analyzers on the main control panels. Logic diagrams for the auxiliary boiler control system, flue gas cleaning system and the distributed control system (DCS) were issued for final review. Preparation of instrument installation details is under way as well as the location of instrumentation and electrical raceway drawings. Mechanical and plant design engineering completed hanger design efforts for various plant systems including the condensate and feedwater. Stress analysis and pipe support design for he export steam piping have commenced.

Construction has completed initial civil activities related to the installation of the make-up water pump house at Taylor Creek/Nubbin Slough. Make-up water pipeline fabrication activities are continuing and approximately 80% of the pipe has been fabricated. Installation of the raw water pipeline has commenced along the CSX right-of-way.

All major vendors continue to submit engineering details related to their areas of responsibility. Foster Wheeler (FW) continues to ship boiler pressure parts to the site with emphasis on boiler support tubes and headers. General Electric (GE) continues to fabricate turbine components at their shop sites. Scheduled ship dates are May 13, 1994, for the turbine and July 8, 1994, for the generator. ABB Flakt continues shipments of baghouse structural components to the site. It is anticipated that the reactor vessels will be received during the next quarter.

On-site procurement of minor equipment and supplies to support construction activities continues to grow to support site activities. As of December 31, 1993, 63 non-manual employees and 554 direct hire craftsmen are employed at the site. We continue to provide environmental awareness training to all on-site personnel as they join the project.

You are welcome to come visit the site to review progress first hand. If you would like to schedule a visit or if you have any questions, please call me at 301/718-6973.

Sincerely,

Michelle Griffin /GLR

Michelle Griffin
Environmental Compliance Specialist

Enclosure

cc: Preston Lewis, W/encl.
Richard Donelan, W/encl.
Susan Coughanour, W/encl.

EQUIPMENT IDENTIFICATION DATA SHEET

DEPT. OF ENVIR. REG. CONDITIONS OF CERTIFICATION, PART II

EQUIPMENT NAME: Flue Gas Cleaning System Lime Silo Vent Filter

EQUIPMENT MODEL NUMBER: DCE, Inc. Model # UMA 250H-G5

FLOW RATES: 1,200 CFM at 6" WG

OTHER DESCRIPTIVE INFORMATION 0.01 grains/actual cubic ft., opacity less than 5%, 250 sq. ft. woven poly cloth

EQUIPMENT IDENTIFICATION DATA SHEET

DEPT. OF ENVIR. REG. CONDITIONS OF CERTIFICATION, PART II

EQUIPMENT NAME: Softener System Lime Silo Vent Filter

EQUIPMENT MODEL NUMBER: Research-Cotrell Flex Kleen 84-BVB5-16

FLOW RATES: 750 cfm

OTHER DESCRIPTIVE INFORMATION: 0.01 grains/actual cubic ft., opacity less than 5%, 170 sq. ft. polyester cloth

EQUIPMENT IDENTIFICATION DATA SHEET

DEPT. OF ENVIR. REG. CONDITIONS OF CERTIFICATION, PART II

EQUIPMENT NAME: Softener System Soda Ash Silo Vent Filter

EQUIPMENT MODEL NUMBER: Research-Cotrell Flex Kleen 84-BVB5-16

FLOW RATES: 750 cfm

OTHER DESCRIPTIVE INFORMATION: 0.01 grains/actual cubic ft., opacity less than 5%, 170 sq. ft. polyester cloth





INDIANTOWN 11/30/93



Indiantown Cogeneration, L.P.

November 22 1993

Control #: 1599
Reference Code: ICLDEP
File: 6.3

Mr. Hamilton S. Oven, Jr.
Administrator, Office of Siting Coordination
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL

Dear Mr. Oven:

As required by Condition of Certification II (1.)A. 2(c), this letter transmits the seventh quarterly report for the Indiantown Cogeneration Project for the period ending September 30, 1993. I have also enclosed a color photo copy of an aerial photo of the site illustrating progress as of September 30, 1993.

During the third quarter of 1993, construction commenced on the conveyor galleries for the coal handling systems. Construction of the coal unloading building continued with installation of interior columns and foundations. Rail construction continued with loop track installation south of the power block area. The coal storage building erection commenced with siding and roof panel installation as the main activities in this area.

Post certification review of the raw water intake structure and 19 mile pipeline took place during the third quarter. SFWMD's approval was issued early in the fourth quarter. FDOT approved temporary access roads for pipeline construction as well as the permanent access road to the intake structure. Applications for potable water and sanitary systems were filed with DEP in West Palm Beach (DEP-WPB). Approval for the potable system has been issued. Applications for the Visitor Center were filed with Martin County, SFWMD and DEP-WPB.

Engineering efforts by Bechtel have peaked and the remaining efforts will be concentrated in detailed designs of the electrical and plant instrumentation systems. Cable tray design has commenced for the upper elevations of the boiler building, turbine building, and water treatment areas. Cableand conduit routing are presently active areas of design. Instrumentation and controls commenced software development of the distributed control system as well as inter-related sub-systems. Specifications for procurement of control values, flow transmitters, level indicators, etc., continue to support engineering schedules. The mechanical design effort has continued in piping design and layout. Secondary system designs for auxiliary steam, closed cycle cooling water, potable water, and sanitary systems remain active. Large bore piping design has been essentially completed and released for fabrication from vendor sub-suppliers. Civil engineering efforts have been primarily focused on final site grading details and hanger support structures within the facility.

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Construction has mobilized and commenced civil activities for the installation of the make-up water pumphouse at Taylor Creek/Nubbin Slough. Pile installation and underground excavation of the pumphouse are the primary focus of these efforts. Make-up water pipe continuous to be received at the site and staged at various fabrication areas along the pipeline route. Installation of the pipeline is scheduled to start during the fourth quarter of this year.

All major vendors continue to submit engineering details related to their areas of responsibility. Foster Wheeler (FW) has commenced shipment of boiler pressure parts to the site. Of significance was the delivery and installation of the boiler steam drum in September. Fabrication of these shipping modules has started on-site to support construction boiler erection schedule. General Electric (GE) continues to fabricate turbine components at their shop sites. Delivery of the first turbine parts is anticipated in the third quarter of 1994. ABB Flakt has started shipments of baghouse structural components. Steel erection has commenced for the baghouse at the site.

Procurement efforts have been focused on orders for electrical cable and equipment and instrumentation. Expediting of all vendors to insure compliance with delivery dates and equipment quality are major focuses at this time. Delivery and installation of the main transformer and start-up transformer took place in September. On site procurement of minor equipment and supplies to support construction activities continuous to grow to support site manpower that presently exceeds 500 craft personnel. We presently anticipate a site work force of approximately 800 people during the first quarter of 1994.

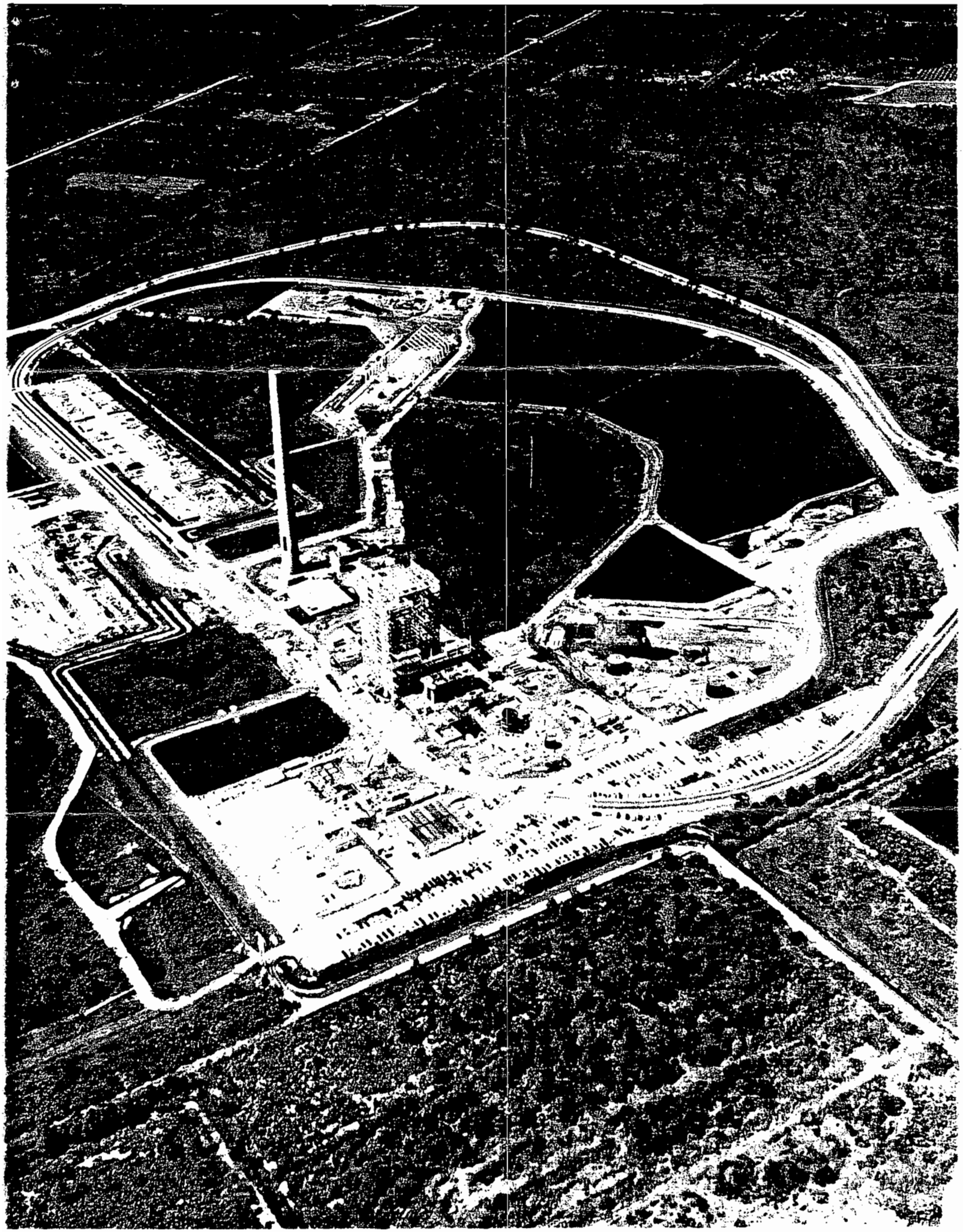
You are welcome to come visit the site to review progress first hand. If you would like to schedule a visit or if you have any questions, please call me at 301/718-6973.

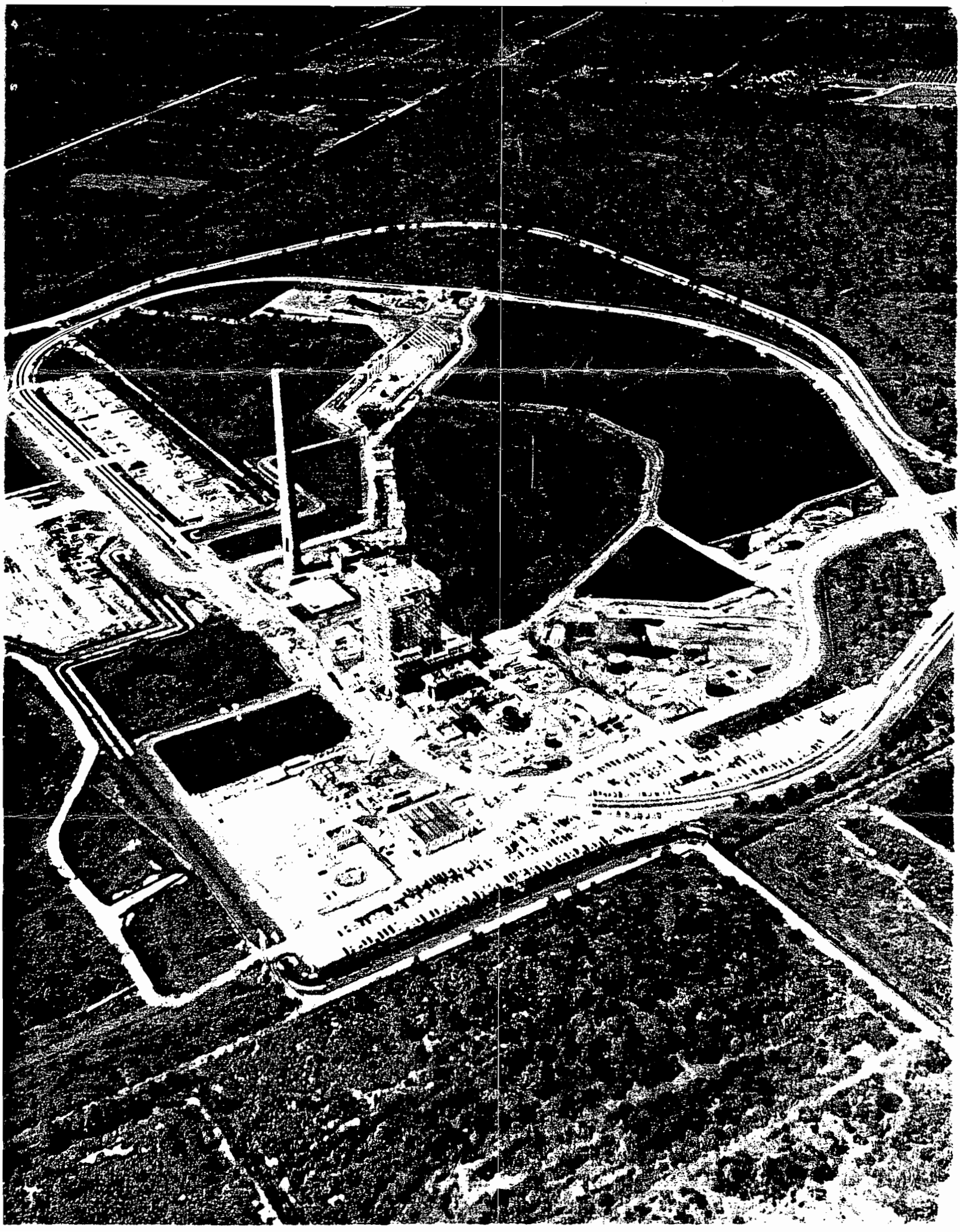
Sincerely,

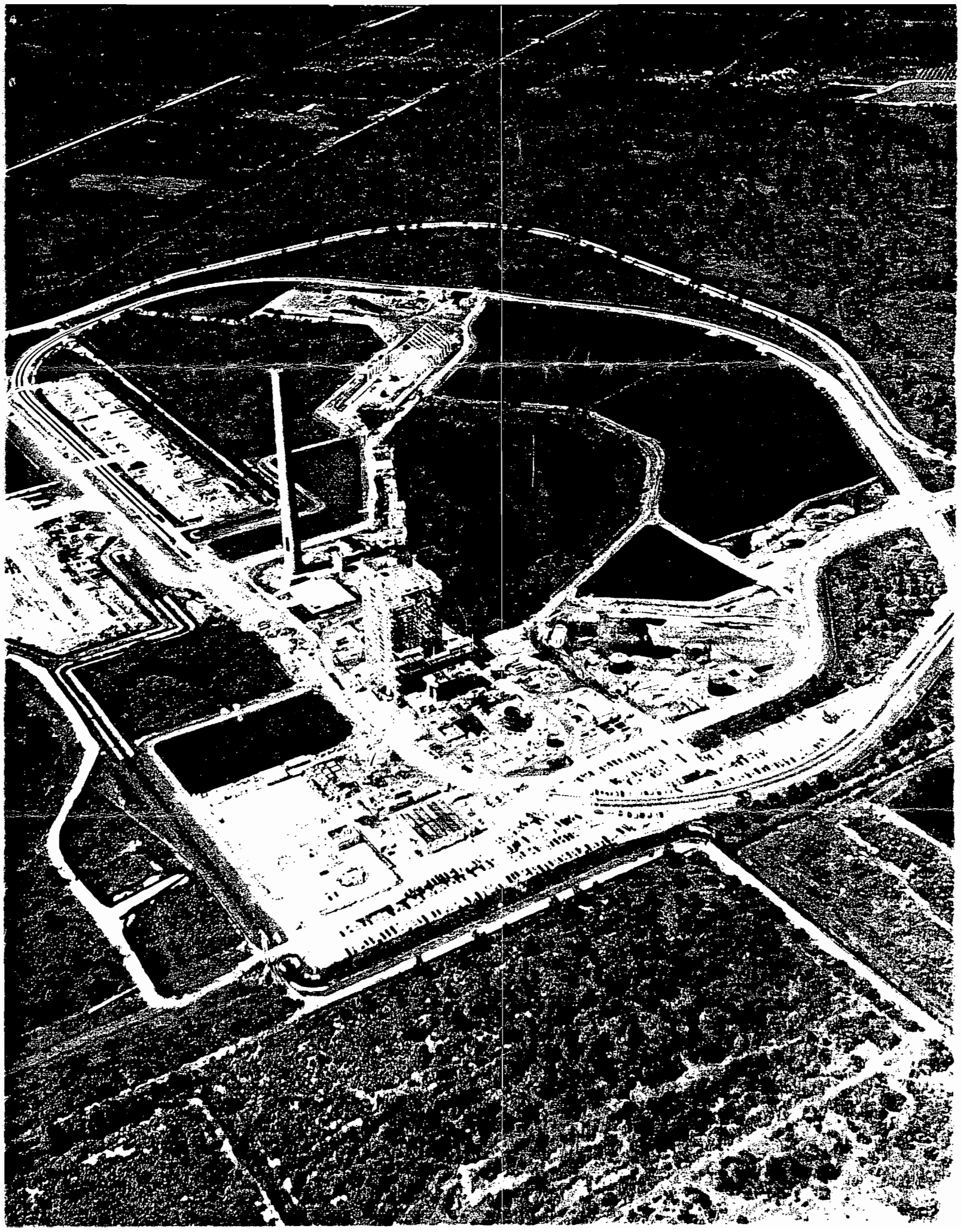
Michelle Griffin
Environmental Compliance Specialist

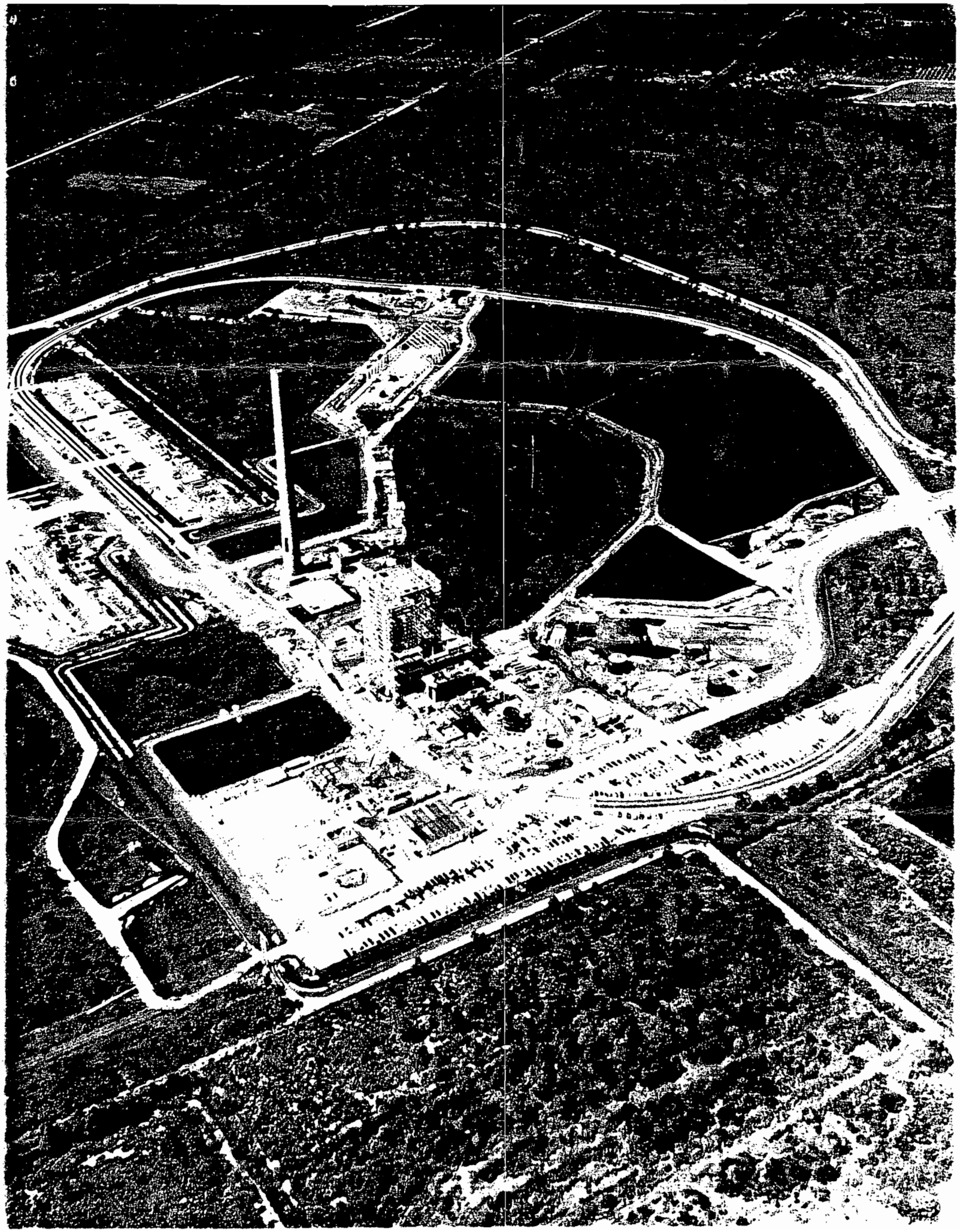
Enclosure

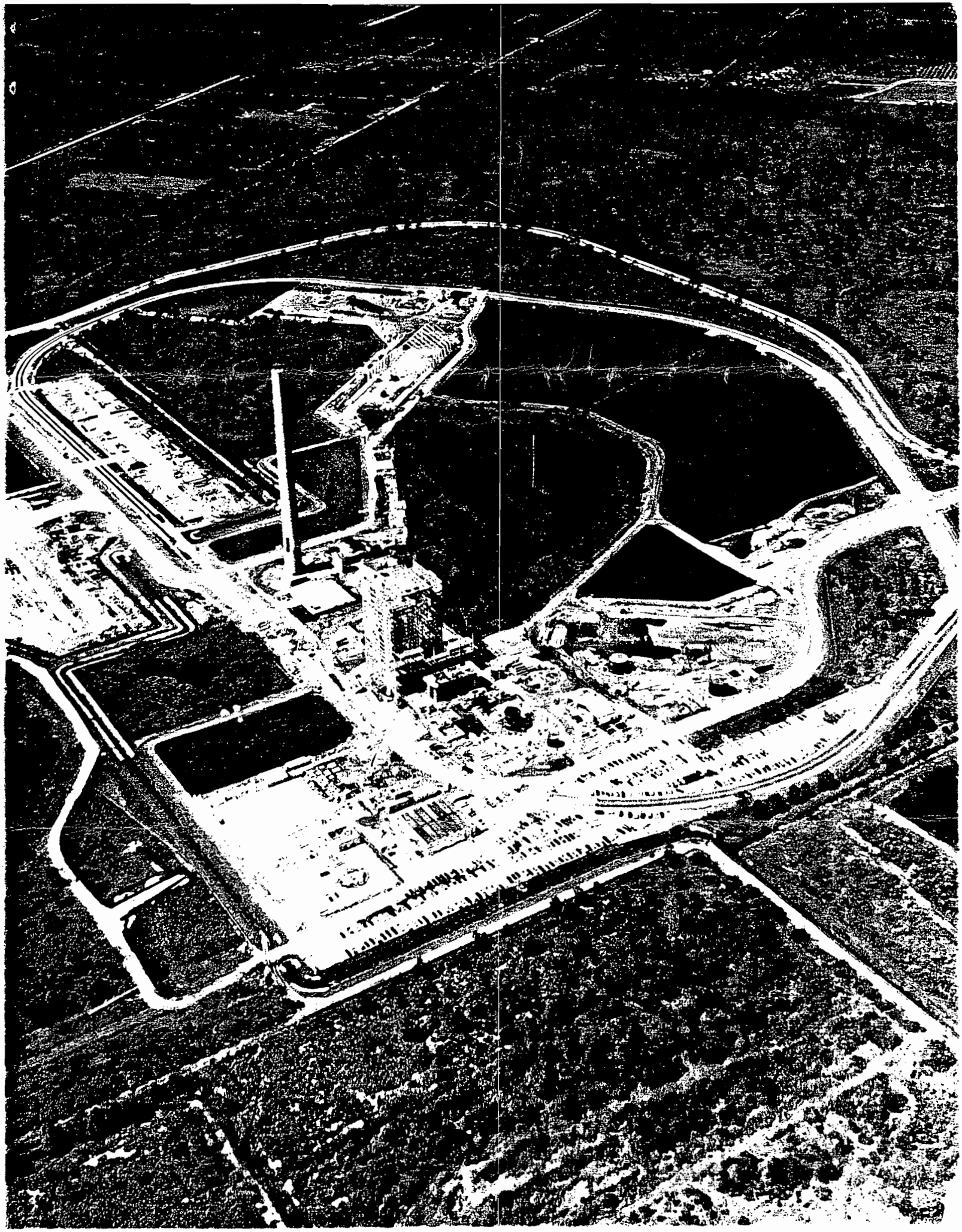
cc: Preston Lewis, W/encl.
Richard Donelan, W/encl.
Susan Coughanour, W/encl.











Indiantown Cogeneration, L.P.

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AUG 26 1993

Division of Air Resources Management

August 16, 1993

File

Control #: 0975
Reference Code:
File #: 6.3.3.2

Mr. Hamilton S. Oven, Jr.
Administrator, Office of Siting Coordinator
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Dear Mr. Oven:

As required by Condition of Certification II1.A.2(c), this letter transmits the sixth quarterly report for the Indiantown Cogeneration Project for the period ending June 30, 1993.

During the second quarter of 1993, construction activities continued to emphasize foundation construction and installation of underground piping and duct banks. Work continued on the turbine foundation and installation commenced on the turbine pedestal legs. First structural steel delivery and erection for the boiler building occurred on May 13, 1993. Installation of boiler structural steel continues in preparation for the commencement of boiler erection in the third quarter of 1993. Installation of the stack shell has continued this quarter and is approximately 75% complete. Installation of piling and dewatering for the coal unloading building and the circulatory water pumphouse has commenced. The liner for the 35 acre cooling water storage pond was completed during this period and installation of the sand cover is currently underway. Work on the coal pile runoff basin liner was initiated during this quarter.

The railroad bridge over the hydrologic connection between wetland #5 and the offsite wetland has been completed. The wetland vegetation of the connection has been restored. The sheet piling at the railroad spur near Tampa Farms Road was also completed. Work has commenced on the railroad track with installation of ties and ballast. Makeup water pipeline material delivery has been initiated and we continue to pursue post-certification approvals with the South Florida Water Management District.

Bechtel Engineering continued detailed design efforts on the 19-mile makeup water pipeline and Taylor Creek Intake Structure. Design efforts are proceeding on piping layouts for the boiler and turbine buildings. The first piping isometrics for the mainsteam, cold reheat and hot reheat systems were issued for construction. Electrical design for underground conduit continues as well as cable tray design for the upper elevations of the boiler building and turbine building. Structural design for this period was focused on foundation design for the coal unloading areas,





7475 Wisconsin Avenue • Bethesda, Maryland 20814 • 301-718-6800 • Fax 301-718-6910
An affiliate of U.S. Generating Company
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Patty

INDIANTOWN

U.S. Generating Company

is pleased to announce that effective

August 30, 1993

USGen will relocate its headquarters office to

7500 Old Georgetown Road
Bethesda, Maryland 20814-6161

The main phone number remains
301-718-6800
The main fax number will be
301-718-6900

the circulating water system, and the water treatment areas. The Bechtel control systems group has started the preparation of the system logic diagrams that detail the control schemes for the various plant systems. Initial efforts have been on the major plant systems such as mainsteam and feedwater systems.

Major equipment purchased during this period included the plant severe service control valves, plant sewage lift stations, 480 volt metal clad switchgear, 230 KV circuit breakers, shop fabricated tanks, switchyard steel structures, protective relay panels, the plant distributed control system and various horizontal centrifugal pumps.

The boiler supplier, Foster Wheeler, has continued to supply drawings, data and schedules in support of Bechtel engineering activities. Critical delivery of the first key boiler components such as the steam drum are scheduled during the next quarter. General Electric (GE) has also continued to supply design data. Delivery of major turbine generator components is presently scheduled for April, 1994. ABB Flakt, the flue gas cleaning vendor has begun supplying design information related to their scope of work.

Enclosed for your review are the first set of equipment data sheets related to components that have been purchased for the Indiantown facility. Additional information to support the Conditions of Certification will be forthcoming in subsequent quarterly reports. Responses to questions and additional drawing details have been submitted to DER on the plant stack design. Post-certification submittals to various agencies have continued in accordance with the requirements of the Conditions of Certification.

Please call me at 301/718-6973 if you have any questions.

Sincerely,

Michelle Griffin (by mm)

Michelle Griffin
Environmental Compliance Specialist

MG/mm

Enclosures: Two (2) Copies

cc: Mr. Preston Lewis, w/out encl.
Mr. Richard Donelan, w/out encl.
Ms. Susan Coughanour, w/out encl.

Patty

INDIANTOWN COGENERATION, L.P.

May 12, 1993

Mr. Hamilton S. Oven, Jr.
Administrator, Office of Siting Coordination
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Control #: 0773
Ref. Code: ICLFDER
File #: 6.3.3.2

Dear Mr. Oven:

As required by Condition of Certification (COC) II.1.A.2(c), this letter transmits the fifth quarterly report for the Indiantown Cogeneration Project for the period ending March 31, 1993.

During the first quarter of 1993, site preparation activities shifted from the initial site preparation to foundation construction and installation of underground piping and duct work. The boiler foundation concrete placement was completed during this period. Work continues on the turbine building foundation. The stack foundation was completed and slip form of the outer shell was initiated. Grading for the lined cooling water storage pond and coal pile runoff basin was completed in preparation for liner installation in the second quarter of 1993.

Foster Wheeler, the selected boiler vendor, continues to supply detailed engineering design for the steam generator and related systems. Based on the current schedule of submittals by Foster Wheeler, these details will be provided in our next quarterly report.

Our negotiations were completed and a letter of intent issued to ABB Flakt for the design and supply of the FGD dry scrubbing system. We continue to expect to submit data sheets and additional design details for this system during the second quarter.

The bottom ash and fly ash handling systems bids were evaluated and a purchase order has been awarded to RV Industries. Specification have been developed for the supply and installation of geosynthetic basin liners, railroad track work and the auxiliary boilers.

Bechtel Engineering has issued for construction the Piping and Instrument Diagrams (P&IDs) for the condensate, feedwater and process steam systems. Other related systems, including the main turbine, circulating water, raw water, fire protection, instrument and service air and wastewater systems, continue to be developed. Civil engineering continues to develop structural steel design for the boiler and turbine buildings as well as for the foundations for the fly ash silo and FGD system. Initial engineering has commenced on the 19 mile makeup water pipeline from Taylor Creek to the Indiantown site.

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Post-certification submittals to various agencies have continued in accordance with the requirements set forth in the Conditions of Certification. Stack drawings were submitted for DER review on January 7, 1993. We requested approval from several agencies for a design modification of the rail spur to eliminate an unsightly structure.

Please call me at 301/718-6973 if you have any questions.

Sincerely,

Michelle Griffin

Michelle Griffin
Environmental Compliance Specialist

MAG/mm

cc: Mr. Preston Lewis
Mr. Richard Donelan
Ms. Susan Coughanour
Chuck Collins, Dist.
Jewell Harper EPA

HOPPING BOYD GREEN & SAMS
ATTORNEYS AND COUNSELORS
123 SOUTH CALHOUN STREET
POST OFFICE BOX 6526
TALLAHASSEE, FLORIDA 32314
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KRISTIN C. RUBIN
CECELIA C. SMITH

OF COUNSEL
W. ROBERT FOKES

September 15, 1992

Preston Lewis
Division of Air Resources Management
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399

RE: Indiantown Cogeneration Project, PSD Permit PSD-FL-168

Dear Preston:

A newspaper notice of the recent amendment to the above-referenced PSD permit has been published in the Stuart News. A copy of the proof of publication of that notice is enclosed for your reference and files. This proof of publication is submitted pursuant to Rule 17-103.150(5), FAC.

No further action by the Department is required at this time. Should you have any questions, please do not hesitate to call be.

Sincerely

Douglas S. Roberts

cc: Buck Oven
Jean Hopkins
Sandy Hartman
Steve Sorrentino

RECEIVED
SEP 15 1992
Division of Air Resources Management

RECEIVED
SEP 1
Division of Air Resources Management

The Stuart News and The Port St. Lucie News
(an edition of The Stuart News)

STATE OF FLORIDA
COUNTY OF MARTIN: COUNTY OF ST. LUCIE:

Before the undersigned authority appeared KATHLEEN N. PRITCHARD who on oath says that he/she ACCOUNTS REC MANAGER of The Stuart News, and The Port St. Lucie News, a daily newspaper Published at Stuart in Martin County, Florida, that the attached copy of advertisement, being a DEPARTMENT OF ENVIRONMENTAL REGULATION INDIANTOWN COGENERATION PROJECT NOTICE OF AMENDMENT OF PSD PERMIT in the matter of

in the Court, was Published in The Stuart News and The Port St. Lucie News in the issues of SEPT. 3, 1992

Affiant further says that the said The Stuart News and The Port St. Lucie News is a newspaper published at Stuart, in said Martin County, Florida with offices and paid circulation in Martin County, Florida, and St. Lucie County, Florida and that the said newspapers have heretofore been continuously published in said Martin County, Florida and distributed in Martin County, Florida and St. Lucie County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he/she has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper. The Stuart News has been entered as second class matter at the post office in Stuart, Martin County, Florida, and Ft. Pierce, St. Lucie County, Florida and has been for a period of one year next preceding the first publication of the attached copy of advertisement.

Kathleen N. Pritchard

Sworn to and subscribed before me

this 9th day of September

A.D. 1992

Catherine Hudson
(Seal)

CATHERINE HUDSON
Notary Public, State of Fla.
My Comm. Exp. April 19, 1996
Comm. No. CC 184498

Notary Public

INDIANTOWN COGENERATION PROJECT
NOTICE OF AMENDMENT OF PSD PERMIT
DER NO. PSD-FL-168

The Department of Environmental Regulation gives notice of its amendment of a prevention of significant deterioration (PSD) permit to Indiantown Cogeneration, L.P. (ICL), U.S. Generating Company, 7475 Wisconsin Avenue, Bethesda, MD 34956. The Department previously issued a PSD permit for the operation of the Indiantown Cogeneration Project to be located near Indiantown, Florida. The amended PSD permit will allow ICL to construct and operate two fifty percent capacity auxiliary boilers in the place of the original single auxiliary boiler, to use propane as a fuel and to conform the emission standards for the plant to the standards contained in the recent site certification for the Project.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within 14 days of publication of this notice. The Petitioner shall mail a copy of the petition to the applicant, ICL c/o Douglas S. Roberts at Hopping Boyd Green & Sams, P.A., Post Office Box 6526, Tallahassee, Florida 32314, at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative (hearing) under Section 120.57.

The petition shall contain the following information: (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department's permit file number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action; (d) A statement of the material facts disputed by petitioner, if any; (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action; (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action; and (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of the publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

The application for amendment of the permit is available for public inspection during normal business hours, 8:00 AM to 5:00 PM, Monday through Friday, except legal holidays at:

Department of Environmental Regulation
Division of Air Resource
2600 Blair Stone Road
Tallahassee, FL 32399-2600
G. Preston Lewis

Department of Environmental Regulation
Southeast Division, Air Section
1900 S. Congress Avenue
Suite A
West Palm Beach, FL 33406
Stephanie Brooks

Pub.: Sect. 3, 1992

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ATTORNEYS AND COUNSELORS
123 SOUTH CALHOUN STREET
POST OFFICE BOX 6526
TALLAHASSEE, FLORIDA 32314
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CECELIA C. SMITH

OF COUNSEL
W. ROBERT FOKES

M E M O R A N D U M

TO: Preston Lewis
Stephanie Brooks

FROM: Doug Roberts DR

RE: Notice of Indiantown PSD Permit

DATE: September 3, 1992

==========

The attached text of the newspaper notice for the recent amendment of the PSD permit for the Indiantown Cogeneration Project was omitted from the package of material I sent you yesterday. Please include with yesterday's letter.

We have confirmed the notice was published today.

DEPARTMENT OF ENVIRONMENTAL REGULATION
INDIANTOWN COGENERATION PROJECT
NOTICE OF AMENDMENT OF PSD PERMIT
DER NO. PSD-FL-168

The Department of Environmental Regulation gives notice of its amendment of a prevention of significant deterioration (PSD) permit to Indiantown Cogeneration L.P. (ICL), U.S. Generating Company, 7475 Wisconsin Avenue, Bethesda, MD 34956. The Department previously issued a PSD permit for the operation of the Indiantown Cogeneration Project to be located near Indiantown, Florida. The amended PSD permit will allow ICL to construct and operate two fifty percent capacity auxiliary boilers in the place of the original single auxiliary boiler, to use propane as a fuel and to conform the emission standards for the plant to the standards contained in the recent site certification for the Project.

A person whose substantial interests are affected by the Department's permitting decision may petition for an administrative determination (hearing) in accordance with Section 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 within 14 days of publication of this notice. The Petitioner shall mail a copy of the petition to the applicant, ICL c/o Douglas S. Roberts at Hopping Boyd Green & Sams, P.A., Post Office Box 6526, Tallahassee, Florida 32314, at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative hearing under Section 120.57, F.S.

The Petition shall contain the following information: (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department's permit file number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action; (d) A statement of the material facts disputed by petitioner, if any; (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action; (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action; and (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this

Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of the publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer pursuant to Rule 28-5.207, F.A.C.

The application for amendment of the permit is available for public inspection during normal business hours, 8:00 AM to 5:00 PM, Monday through Friday, except legal holidays at

Department of Environmental Regulation
Division of Air Resource
2600 Blair Stone Road
Tallahassee, FL 32399-2600
G. Preston Lewis

Department of Environmental Regulation
Southeast Division, Air Section
1900 S. Congress Avenue
Suite A
West Palm Beach, FL 33406
Stephanie Brooks

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OF COUNSEL
W. ROBERT FOKES

September 2, 1992

RECEIVED
SEP 2 1992
Division of Air
Resources Management

BY HAND DELIVERY

Preston Lewis
Division of Air Resources Management
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2600

RE: Newspaper Notice of ICL PSD Permit Modification

Dear Preston,

As we discussed on the telephone, Indiantown Cogeneration, L.P., intends to publish a newspaper notice of the Department's recent amendment of the PSD permit for the Indiantown Cogeneration Project. This notice is being published pursuant to Rule 17-103.150(5)(a), F.A.C. to insure finality of the permitting decision. A copy of the notice is attached for your reference.

The notice indicates the permit amendment material is available for public inspection in your offices and in the offices of Stephanie Brooks in the DER Southeast District office, as you suggested. By copy of this letter, I am sending Ms. Brooks copies of the PSD permit, the amendment request and the DER's permit amendment.

The notice should be published on September 3rd and provides a 14 day period for filing challenges to the DER's decision. However, I do not expect any such challenges.

Your cooperation in this matter is appreciated.

Sincerely,

Douglas S. Roberts

cc: Stephanie Brooks, DER SE. District (w/encls)
Richard T. Donelan (w/out encls)
Hamilton S. Oven (w/out encls)

NOTICE OF CERTIFICATION HEARING ON AN APPLICATION TO CONSTRUCT AND OPERATE A COAL-FIRED COGENERATION FACILITY TO BE LOCATED NEAR INDIANTOWN, FLORIDA

1. Application number PA 90-81 for certification to authorize construction and operation of a coal-fired cogeneration facility northwest of Indiantown, Florida, is now pending before the State of Florida, Department of Environmental Regulation pursuant to the Florida Electrical Power Plant Siting Act, Chapter 403, Part II, Florida Statutes.

2. The project is known as the Indiantown Cogeneration Project. The proposed 220 acre project site is located in the western portion of Martin County, approximately 3 miles northwest of Indiantown, Florida. The site is located 9 miles east of Lake Okeechobee. The site lies to the southwest of State Road 710 and the CSX Railroad and adjacent to the Caulkins Citrus Processing Facility.

The Project consists of a cogeneration facility which will use low-sulfur pulverized coal as its fuel. The facility will produce process steam for use in the adjacent citrus processing plant and will generate up to 330 Mw of electricity for sale to Florida Power & Light Co.

3. The facility consists of a single, pulverized coal-fired, natural-circulation type boiler and an extraction-condensing turbine electrical generator. The Project will connect to an existing FPL transmission line adjacent to the Project site; no off-site electrical transmission facilities will be required as part of the Project. The site also will contain a cooling water storage pond, covered coal storage areas, cooling towers and on-site rail facilities. Coal and lime will be delivered by rail. Ash from coal combustion will be removed from the site by rail for disposal at the coal mines or other acceptable disposal locations. Water will be withdrawn from Taylor Creek/Nubbin Slough in Okeechobee County and will be pumped to the Project site via a 19-mile long water pipeline to provide cooling and process water for the Project. This pipeline will be located within the existing CSX Railroad right-of-way paralleling State Road 710. During extreme drought conditions, cooling water will be obtained from the brackish lower Floridan aquifer when cooling water is not available from Taylor Creek/Nubbin Slough. The Project will treat and recycle its wastewater internally and will not discharge wastewater.

4. The Department of Environmental Regulation and other state, regional and local agencies are evaluating the application for the proposed power plant cogeneration plant. The Department of Environmental Regulation is preparing a report on the project. That report is expected to be available after September 9, 1991 at the locations listed below. Certification of the plant by the Governor and Cabinet sitting as the Power Plant Siting Board would allow its construction and operation subject to the Conditions of Certification set forth in the final certification order. The application is available for public inspection at the addresses listed below:

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION
Office of Siting Coordination
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
(904) 488-1344

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION
Southeast District Office
1900 S. Congress Avenue, Suite A
West Palm Beach, Florida 33406

MARTIN COUNTY PUBLIC LIBRARY
701 E. Ocean Boulevard
Stuart, Florida 34994

INDIANTOWN TELEPHONE SYSTEM
15925 S.W. Warfield Blvd.
Indiantown, Florida 34956
Attn: Mary Ann Holt

BECHTEL CORP.
North Corp. Center
3950 RCA Boulevard, Suite 5001
Palm Beach Gardens, Florida 33401
Attn: Tom Habermas
(407) 694-8400

OKEECHOBEE COUNTY LIBRARY
S.E. 2nd Avenue
Okeechobee, Florida 34974

The business address of the applicant for the project is:

Indiantown Cogeneration L.P.
Attn: Stephen A. Sorrentino
PG&E/Bechtel Generating Company
7475 Wisconsin Avenue
Bethesda, MD 20814-3422

5. Pursuant to Section 403.508, Florida Statutes, the certification hearing will be held by the Division of Administrative Hearings beginning on October 21, 1991, at 12:00 noon, at the Family Worship Center, 15285 Indian Mound Drive, Indiantown, Florida in order to take written and oral testimony and other evidence on the effects of the proposed coal-fired cogeneration facility or any other matter appropriate to the consideration of the site. Need for the facility has been predetermined by the Florida Public Service Commission at a separate hearing.

6. Members of the public may offer comments on the Project during the hearing beginning at 6:00 p.m. on October 21, 1991 at the Family Worship Center.

7. Pursuant to Section 403.508(4), Florida Statutes,

(a) Parties to the proceeding shall include: the applicant; the Public Service Commission; the Department of Community Affairs; the Department of Natural Resources; the Game and Fresh Water Fish Commission; the water management district as defined in Chapter 373, in the jurisdiction of which the proposed coal-fired cogeneration facility is to be located; the Department; the regional planning council; and the local government.

(b) Any party listed in paragraph (a) other than the department or the applicant may waive its right to participate in these proceedings. If such listed party fails to file a notice of its intent to be a party on or before the 90th day prior to the certification hearing, such party shall be deemed to have waived its right to be a party.

(c) Upon the filing with the hearing officer of a notice of intent to be a party at least 15 days prior to the date set for the land use hearing, the following shall also be parties to the proceeding:

1. Any agency not listed in paragraph (a) as to matters within its jurisdiction.

2. Any domestic non-profit corporation or association formed in whole or in part to promote conservation or natural beauty; to protect the environment, personal health, or other biological values; to preserve historical sites; to promote consumer interests; to represent labor, commercial or industrial groups; or to promote comprehensive planning or orderly development of the area in which the proposed electrical power plant is to be located.

(d) Notwithstanding paragraph (e), failure of an agency described in subparagraph (c)1. to file a notice of intent to be a party within the time provided herein shall constitute a waiver of the right of the agency to participate as a party in the proceeding.

(e) Other parties may include any person, including those persons enumerated in paragraph (c) who have failed to timely file a notice of intent to be a party, whose substantial interests are affected and being determined by the proceeding and who timely file a motion to intervene pursuant to Chapter 120 and applicable rules. Intervention pursuant to this paragraph may be granted at the discretion of the designated hearing officer and upon such conditions as she may prescribe any time prior to 30 days before the commencement of the certification hearing.

(f) Any agency, including those whose properties or works are being affected pursuant to s. 403.509(4), shall be made a party upon the request of the department or the applicant.

8. When appropriate, any person may be given an opportunity to present oral or written communications to the designated hearing officer, if the designated hearing officer proposes to consider such communication, then all parties shall be given an opportunity to cross-examine or challenge or rebut such communications. Those wishing to intervene in these proceedings must be presented by an attorney of other person who can be determined

9. Notices of petitions made prior to the hearing should be made in writing to:

Ms. Diane K. Kiesling
Hearing Officer
Division of Administrative Hearings
The DeSoto Building
1230 Apalachee Parkway
Tallahassee, Florida 32399-1550

Copies of such submittals should be forwarded by mail to existing parties, including the Department of Environmental Regulation. The Division of Administrative Hearings Case No. is 90-6072-EPP.

10. This public notice is also provided in compliance with the federal Coastal Zone Management Act, as specified in 15 CFR Part 930, Subpart D. Public comments on the applicant's federal consistency certification should be directed to the Federal Consistency Coordinator, Division of Environmental Permitting, Department of Environmental Regulation, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

11. On December 21, 1990, PG&E/Bechtel Generating Company applied to the DER to construct the aforementioned coal-fired cogeneration facility. The application is also subject to U.S. Environmental Protection Agency (EPA) regulations for Prevention of Significant Deterioration of air quality (PSD), codified at 40 CFR 52.21, and Florida Administrative Code Chapter 17-2.04. These regulations require that, before construction on a source of air pollution subject to PSD may begin, a permit must be obtained from DER. Such permit can only be issued if the new construction has been determined by DER to comply with the requirements of the PSD regulations, which are described in 40 CFR 52.21 and 17-2.04, F.A.C. These requirements include a restriction on incremental increases in air quality due to the new source and application of best available control technology (BACT).

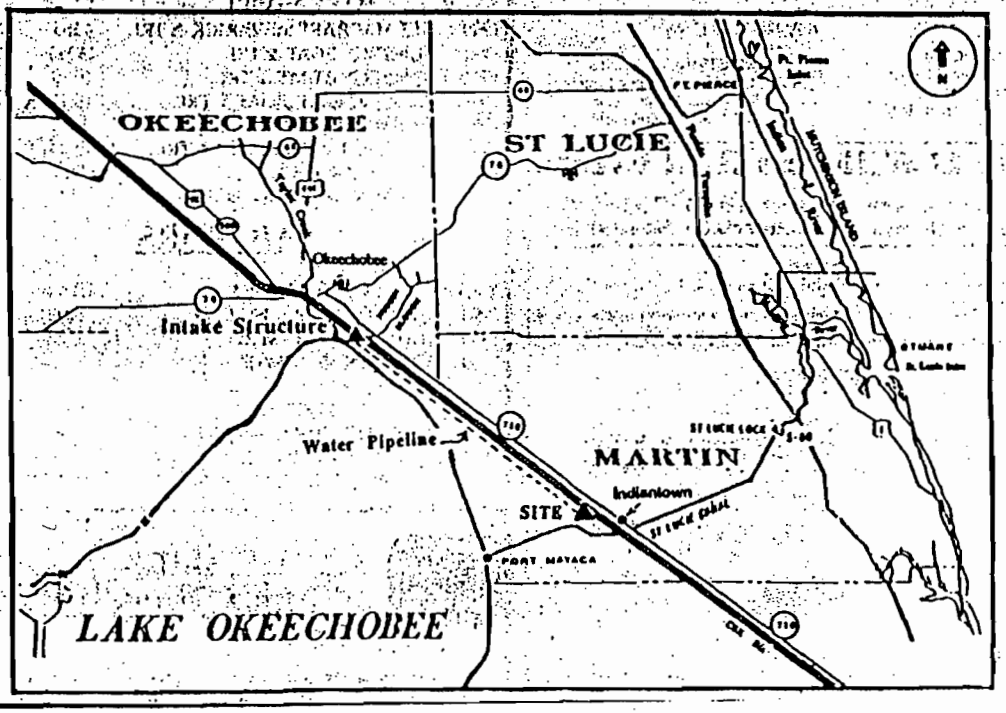
The DER has been granted a delegation by EPA to carry out the PSD review of this source. Acting under that delegation, the DER is preparing a draft permit which will be included in the DER's staff analysis report. That draft permit will contain a preliminary determination of whether the proposed construction will comply with all applicable PSD regulations. The degree of Class II increment consumption expected to result from the construction is:

Pollutant	Annual Average	24-Hr. Average	3-Hr. Average
Particulate*	1%	9%	–
Sulfur Dioxide	>1%	>1%	3%
Nitrogen Dioxide	18%	–	–

*Determined not to be significant.

The source is located approximately 145 kilometers from the nearest Class I area.

Persons wishing to comment on this issue may do so at the hearing or by submitting comments in writing within 30 days of this notice.



NOTICE OF CERTIFICATION HEARING ON AN APPLICATION TO CONSTRUCT AND OPERATE A COAL-FIRED COGENERATION FACILITY TO BE LOCATED NEAR INDIANTOWN, FLORIDA

1. Application number PA 90-31 for certification to authorize construction and operation of a coal-fired cogeneration facility northwest of Indiantown, Florida, is now pending before the State of Florida, Department of Environmental Regulation pursuant to the Florida Electrical Power Plant Siting Act, Chapter 403, Part II, Florida Statutes.

2. The project is known as the Indiantown Cogeneration Project. The proposed 330 acre project site is located in the western portion of Martin County, approximately 3 miles northwest of Indiantown, Florida. The site is located 9 miles east of Lake Okeechobee. The site lies to the southwest of State Road 710 and the CSX Railroad and adjacent to the Cauldron Cirrus Processing Facility.

The Project consists of a nominal 330 MW coal-fired facility which will use low-sulfur pulverized coal as its fuel. The facility will produce process steam for use in the adjacent citrus processing plant and will generate up to 330 MW of electricity for sale to Florida Power & Light Co.

3. The facility consists of a single, pulverized coal-fired, natural-circulation type boiler and an extraction/condensing turbine/electrical generator. The Project will connect to an existing FPL transmission line adjacent to the project site. An off-site electrical transmission facility will be required as part of the Project. The site also will contain a coal/ash water storage pond, unwetted coal storage areas, coal/ash conveyor rail facilities, coal and ash flow will be delivered by rail. Ash from coal combustion will be removed from the site by rail for disposal at one of three (3) potential locations. Makeup water will be withdrawn from Taylor Creek/Nubbin Slough in Okeechobee County and will be pumped to the Project site via a 17-mile long water pipeline to provide cooling and process water for the Project. This pipeline will be located within the existing C&SF Federal right-of-way paralleling State Road 710. During extreme drought conditions, cooling water will be obtained from the Indiantown Lateral Facilities backup cooling water is not available from Taylor Creek/Nubbin Slough. The Project will treat and recycle its wastewater internally and will not discharge wastewater.

4. The Department of Environmental Regulation and other state, regional and local agencies are evaluating the application for the proposed cogeneration plant. The Department of Environmental Regulation is preparing a report on the project. That report is expected to be available after September 10, 1991 at the locations listed below. Certification of the plant by the Governor and Cabinet sitting as the Power Plant Siting Board would allow its construction and operation subject to the Conditions of Certification set forth in the final certification order. The application is available for public inspection at the addresses listed below:

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION
Office of Siting Coordination
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
(904) 488-1344

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION
Southeast District Office
1900 South Congress Avenue, Suite A
West Palm Beach, Florida 33406

MARTIN COUNTY PUBLIC LIBRARY
701 E. Ocean Boulevard
Stuart, Florida 34994

INDIANTOWN TELEPHONE SYSTEM
15925 S.W. Warfield Blvd.
Indiantown, Florida 34956
Attn: Mary Ann Holt

BECHTEL CORP.
Work Corp. Center
3950 RCA Boulevard
Suite 5001
Palm Beach Gardens, Florida 33410
Attn: Tom Kennedy
(407) 624-6450

OKEECHOBEE COUNTY LIBRARY
S.E. 2nd Avenue
Okeechobee, Florida 34974

5. The business address of the applicant for the project is:

IndianTown Cogeneration L.P.
c/o Thomas A. Barrett/Jim Welch
Pilot/Bechtel Generating Company
7675 Dinsmore Avenue
Orlando, FL 32822-5432

6. Pursuant to Section 403.508, Florida Statutes, the certification hearing will be held by the Division of Administrative Hearings beginning on October 21, 1991, at 10:00 a.m. at the Family Worship Center, 15201 Indian Mound Drive, Indiantown, Florida, in order to hear written and oral testimony and other evidence on the effects of the proposed coal-fired cogeneration facility or any other matter appropriate to the consideration of the site. Once the facility has been characterized by the Florida Land and Water Adjudicatory Commission at a separate hearing.

7. Members of the public may offer comments on the Project during the hearing beginning at 6:00 p.m. on October 21, 1991 at the Family Worship Center.

8. Pursuant to 403.508(4), F.S., "(a) Parties to the proceeding shall include: the applicant; the Public Service Commission; the Department of Community Affairs; the Department of Natural Resources; the Game and Fresh Water Fish Commission; the water management district as defined in Chapter 373, in the jurisdiction of the proposed coal-fired cogeneration facility is to be located; the Department; the regional planning council; and the local government.

(b) Any party listed in paragraph (a) other than the department or the applicant may waive its right to participate at the hearing. If such a listed party fails or files a notice of its intent to be a party on or before the 30th day prior to the certification hearing, such party shall be deemed to have waived its right to be a party.

(c) Upon the filing with the hearing officer of a notice of intent to be a party no less than 15 days prior to the date of the land use hearing, the following shall also be parties to the proceeding:

1. Any agency not listed in paragraph (a) or (b) of matters within its jurisdiction.

2. Any domestic non-profit corporation or association formed in whole or in part to promote conservation of natural beauty; to protect the environment, personal health, or other biological values; to pursue environmental objects; to promote consumer interests; or to represent labor, commercial or industrial groups in the area in which the proposed cogeneration facility is to be located.

(d) Notwithstanding paragraph (b), failure of the agency described in subparagraph (a)1. to file a notice of intent to be a party within the time provided herein shall constitute a waiver of the right of that agency to participate as a party in the proceeding.

(e) Other parties may include any person, including those persons enumerated in paragraph (a) who have failed to timely file a notice of intent to be a party, whose substantial interests are affected and being determined by the proceeding and who timely file a motion to intervene pursuant to Chapter 120 and applicable rules. Intervention pursuant to this subparagraph may be granted at the discretion of the designated hearing officer and upon such conditions as she may prescribe any time prior to 30 days before the commencement of the certification hearing.

(f) Any governmental agency or person substantially affected by any action taken pursuant to s. 403.507(2) shall be made a party upon the request of the department or the applicant.

9. Where appropriate, any person may be given an opportunity to present oral or written communication to the designated hearing officer. If the designated hearing officer proposes to consider such communication, then all parties shall be given an opportunity to cross-examine or challenge or rebut such communications. Those wishing to intervene in these proceedings must be represented by an attorney or other person who may be determined to be qualified to appear in administrative proceedings pursuant to Chapter 120, Florida Statutes, or Section 17-103.020, Florida Administrative Code.

10. Petitions or petitions made prior to the hearing should be made in writing to:

Mr. Diane K. Kiesling
Hearing Officer
Division of Administrative Hearings
The DeSoto Building
1230 Apalachee Parkway
Tallahassee, Florida 32399-1550

Copies of such submittals should be forwarded by mail to existing parties, including the Department of Environmental Regulation. The Division of Administrative Hearings case number is 90-0031EPP.

11. This public notice is also provided in compliance with the Federal Coastal Zone Management Act, as specified in 15 CFR Part 930, Subpart D. Public comments on the applicant's Federal consistency certification should be directed to the Federal Consistency Coordinator, Division of Environmental Permitting, Department of Environmental Regulation, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

12. On December 21, 1990, PCRS/Bechtel Generating Company applied to the DER to construct the aforementioned coal-fired cogeneration facility. The application is also subject to U.S. Environmental Protection Agency (EPA) regulations for Prevention of Significant Deterioration of Air Quality (PSD), codified at 40 CFR 52.21, and Florida Administrative Code Chapter 17-2.500. These regulations require that, before construction on a source of air pollution subject to PSD may begin, a permit must be obtained from DER. Such permit can only be issued if the new construction has been determined by DER to comply with the requirements of the PSD regulations, which are described in 40 CFR 52.21 and 17-2.500, F.A.C. These requirements include a restriction on incremental increases in air quality due to the new source and application of best available control technology (BACT).

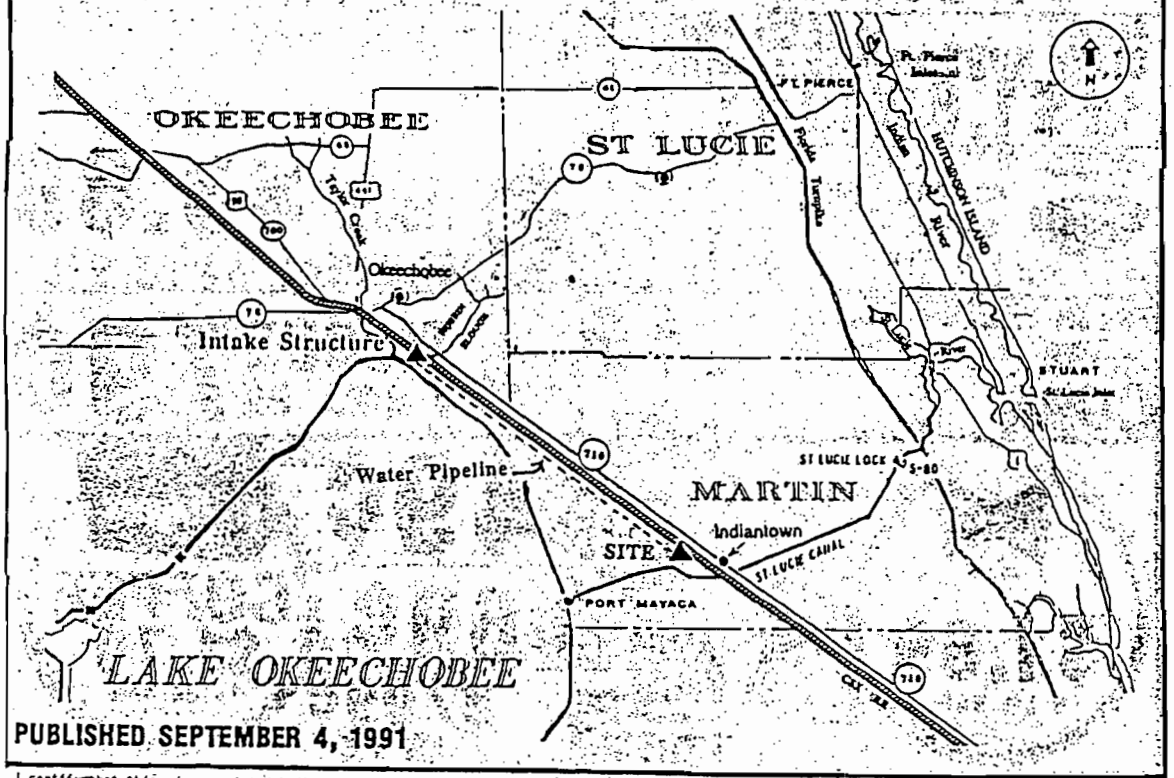
13. The DER has not granted a exemption to EPA to carry out the PSD portion of this program. Acting under that delegation, the DER is preparing a draft permit which will be included in the DER's staff analysis report. That draft permit will contain a preliminary determination of whether the proposed construction will comply with applicable PSD regulations. The Bureau of Class II Abbreviated consumption reported as result from the construction is:

Pollutant	Annual Average	24-Hr. Average	3-Hr. Average
Particulates	1.0	5.1	
Sulfur Dioxide	3.1	5.1	25
Nitrogen Dioxide	1.01		

* Determined not to be significant

The project is located approximately 9½ kilometers from the nearest Class I area.

Persons wishing to comment on this issue may do so at the meeting or by submitting comments in writing within 30 days of this notice.



PUBLISHED SEPTEMBER 4, 1991

I certify that this ad was printed & distributed on Sept. 4, 1991
Lonnie O. Counts
Lonnie O. Counts, Publisher

SWORN TO AND SUBSCRIBED BEFORE ME
THIS 6TH DAY OF SEPTEMBER.
Marylin Hall
NOTARY PUBLIC, STATE OF FLORIDA.
MY COMMISSION EXPIRES: April 22, 1995
BONDED THRU NOTARY PUBLIC UNDERWRITERS

AUCTION COMPANY, INC. AU #020 • AB #586 • Lic. RE Bkr/Auctioneers Jupiter, FL • 10% Buyer's Premium

"Hearing Tests Always FREE at Sears. ©1991 SEARS, ROEBUCK AND CO. 466-6000 Saturday 9am-5pm

NOTICE OF CERTIFICATION HEARING ON AN APPLICATION TO CONSTRUCT AND OPERATE A COAL-FIRED COGENERATION FACILITY TO BE LOCATED NEAR INDIANTOWN, FLORIDA

1. Application number PA 90-31 for certification to authorize construction and operation of a coal-fired cogeneration facility northwest of Indiantown, Florida, is now pending before the State of Florida, Department of Environmental Regulation pursuant to the Florida Electrical Power Plant Siting Act, Chapter 403, Part II Florida Statutes.

2. The project is known as the Indiantown Cogeneration Project. The proposed 220 acre project site is located in the western portion of Martin County, approximately 3 miles northwest of Indiantown, Florida. The site is located 9 miles east of Lake Okeechobee. The site lies to the southwest of State Road 710 and the CSX Railroad and adjacent to the Caulkins Citrus Processing Facility.

The Project consists of a cogeneration facility which will use low-sulfur pulverized coal as its fuel. The facility will produce process steam for use in the adjacent citrus processing plant and will generate up to 330 Mw of electricity for sale to Florida Power & Light Co.

3. The facility consists of a single, pulverized coal-fired, natural-circulation type boiler and an extraction-condensing turbine electrical generator. The Project will connect to an existing FPL transmission line adjacent to the Project site; no off-site electrical transmission facilities will be required as part of the Project. The site also will contain a cooling water storage pond, covered coal storage areas, cooling towers and on-site rail facilities. Coal and lime will be delivered by rail. Ash from coal combustion will be removed from the site by rail for disposal at the coal mines or other acceptable disposal locations. Water will be withdrawn from Taylor Creek/Nubbin Slough in Okeechobee County and will be pumped to the Project site via a 19-mile long water pipeline to provide cooling and process water for the Project. This pipeline will be located within the existing CSX Railroad right-of-way paralleling State Road 710. During extreme drought conditions, cooling water will be obtained from the brackish lower Floridan aquifer when cooling water is not available from Taylor Creek/Nubbin Slough. The Project will treat and recycle its wastewater internally and will not discharge wastewater.

4. The Department of Environmental Regulation and other state, regional and local agencies are evaluating the application for the proposed cogeneration plant. The Department of Environmental Regulation is preparing a report on the Project. That report is expected to be available after September 9, 1991 at the locations listed below. Certification of the plant by the Governor and Cabinet sitting as the Power Plant Siting Board would allow its construction and operation subject to the Conditions of Certification set forth in the final certification order. The application is available for public inspection at the addresses listed below:

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION
Office of Siting Coordination
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
(904) 488-1344

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION
Southeast District Office
1900 South Congress Avenue, Suite A
West Palm Beach, Florida 33406

MARTIN COUNTY PUBLIC LIBRARY
701 E. Ocean Boulevard
Stuart, Florida 34994

INDIANTOWN TELEPHONE SYSTEM
15925 S.W. Warfield Blvd.
Indiantown, Florida 34956
Attn: Mary Ann Holt

BECHTEL CORP.
North Corp. Center
3950 RCA Boulevard
Suite 5001
Palm Beach Gardens, Florida 33401
Attn: Tom Habermas
(407) 694-8400

OKEECHOBEE COUNTY LIBRARY
S.E. 2nd Avenue
Okeechobee, Florida 34974

The business address of the applicant for the project is:
Indiantown Cogeneration L.P.
Attn: Stephen A. Sorrentino
PG&E/Bechtel Generating Company
7475 Wisconsin Avenue
Bethesda, MD 20814-3422

5. Pursuant to Section 403.508, Florida Statutes, the certification hearing will be held by the Division of Administrative Hearings beginning on October 21, 1991, at 12:00 noon, at the Family Worship Center, 15285 Indian Mound Drive, Indiantown, Florida, in order to take written and oral testimony and other evidence on the effects of the proposed coal-fired cogeneration facility or any other matter appropriate to the consideration of the site. Need for the facility has been predetermined by the Florida Public Service Commission at a separate hearing.

6. Members of the public may offer comments on the Project during the hearing beginning at 6:00 p.m. on October 21, 1991 at the Family Worship Center.

7. Pursuant to 403.508(4), F.S.: (a) Parties to the proceeding shall include: the applicant; the Public Service Commission; the Department of Community Affairs; the Department of Natural Resources; the Game and Fresh Water Fish Commission; the water management district as defined in Chapter 373, in the jurisdiction of which the proposed coal-fired cogeneration facility is to be located; the Department; the regional planning council; and the local government.

(b) Any party listed in paragraph (a) other than the department or the applicant may waive its right to participate in these proceedings. If such listed party fails to file a notice of its intent to be a party on or before the 90th day prior to the certification hearing, such party shall be deemed to have waived its right to be a party.

(c) Upon the filing with the hearing officer of a notice of intent to be a party at least 15 days prior to the date of the land use hearing, the following shall also be parties to the proceeding:

1. Any agency not listed in paragraph (a) as to matters within its jurisdiction.

2. Any domestic non-profit corporation or association formed in whole or in part, to promote conservation or natural beauty; to protect the environment, personal health, or other biological values; to preserve historical sites; to promote consumer interests; to represent labor, commercial or industrial groups; or to promote comprehensive planning or orderly development of the area in which the proposed cogeneration facility is to be located.

(d) Notwithstanding paragraph (e), failure of an agency described in subparagraph (c)1. to file a notice of intent to be a party within the time provided herein shall constitute a waiver of the right of that agency to participate as a party in the proceeding.

(e) Other parties may include any person, including those persons enumerated in paragraph (c) who have failed to timely file a notice of intent to be party, whose substantial interests are affected and being determined by the proceeding and who timely file a motion to intervene pursuant to Chapter 120 and applicable rules. Intervention pursuant to this subparagraph may be granted at the discretion of the designated hearing officer and upon such conditions as she may prescribe any time prior to 30 days before the commencement of the certification hearing.

(f) Any agency, including those whose properties or works are being affected pursuant to s. 403.509(4), shall be made a party upon the request of the department or the applicant."

8. When appropriate, any person may be given an opportunity to present oral or written communication to the designated hearing officer. If the designated hearing officer proposes to consider such communication, then all parties shall be given an opportunity to cross-examine or challenge or rebut such communications. Those wishing to intervene in these proceedings must be represented by an attorney or other person who must be determined to be qualified to appear in administrative proceedings pursuant to Chapter 120, Florida Statutes, or Section 17-103.020, Florida Administrative Code.

9. Notices or petitions made prior to the hearing should be made in writing to:
Ms. Diane K. Kiesling
Hearing Officer
Division of Administrative Hearings
The DeSoto Building
1230 Apalachee Parkway
Tallahassee, Florida 32399-1550

Copies of such submittals should be forwarded by mail to existing parties, including the Department of Environmental Regulation. The Division of Administrative Hearings case number is 90-6072-EPP.

10. This public notice is also provided in compliance with the federal Coastal Zone Management Act, as specified in 15 CFR Part 930, Subpart D. Public comments on the applicant's federal consistency certification should be directed to the Federal Consistency Coordinator, Division of Environmental Permitting, Department of Environmental Regulation, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

11. On December 21, 1990, PG&E/ Bechtel Generating Company applied to the DER to construct the aforementioned coal-fired cogeneration facility. The applicant is also subject to U.S. Environmental Protection Agency (EPA) regulations for Prevention of Significant Deterioration of air quality (PSD), codified at 40 CFR 52.21, and Florida Administrative Code Chapter 17-2.04. These regulations require that, before construction on a source of air pollution subject to PSD may begin, a permit must be obtained from DER. Such permit can only be issued if the new construction has been determined by DER to comply with the requirements of the PSD regulations, which are described in 40 CFR 52.21 and 17-2.04, F. A. C. These requirements include a restriction on incremental increases in air quality due to the new source and application of best available control technology (BACT).

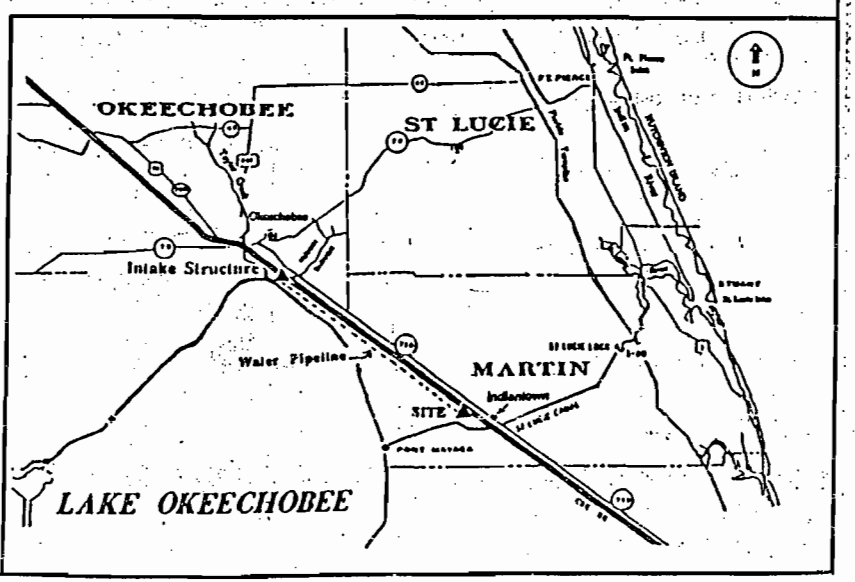
The DER has been granted a delegation by EPA to carry out the PSD review of this source. Acting under that delegation, the DER is preparing a draft permit which will be included in the DER's staff analysis report. That draft permit will contain a preliminary determination of whether the proposed construction will comply with all applicable PSD regulations. The degree of Class II increment consumption expected to result from the construction is:

Pollutant	Annual Average	24-Hr. Average	3-Hr. Average
Particulate	1%	9%	–
Sulfur Dioxide	1%	1%	3%
Nitrogen Dioxide	18%	–	–

* Determined not be significant

The source is located approximately 145 kilometers from the nearest Class I area.

Persons wishing to comment on this issue may do so at the hearing or by submitting comments in writing within 30 days of this notice.



7475 Wisconsin Avenue
Bethesda, Maryland 20814
301-718-6800
Fax 301-718-6910

U.S. Generating Company

RECEIVED
AUG 10 1992
Division of Air
Resources Management

August 3, 1992

Mr. Hamilton S. Oven, Jr.
Administrator, Office of Siting Coordination
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Dear Buck,

This letter transmits the second quarterly report for the Indiantown Cogeneration Project, responding to Conditions of Certification II.1.C.2(c), as well as equipment identification information requested in COC II.1.A.2. Financial closing is currently scheduled for August 31, with construction activities slated to commence immediately thereafter. Enclosed is a copy of our milestone construction schedule, illustrating timelines for major project activities.

An Engineering, Procurement and Construction (EPC) contract was signed between Indiantown Cogeneration, L.P. and Bechtel Power Corporation in July. Foster Wheeler has been selected as the boiler supplier responsible for the design and fabrication of the PC boiler system, including the NO_X control system. This consists of low NO_X burners to reduce NO_X formation in the combustion zone, and the SCR system for removal of NO_X from the flue gas. Negotiations are continuing with both Joy and Flakt for the design and supply of the FGD dry scrubbing system. We expect final selection of the vendor will be made by October 1.

Since the boiler system, the NO_X controls and FGD system are being custom-designed for the Indiantown plant, no make and model numbers are available. In the absence of this information, I have enclosed copies of technical data sheets for your review.

Bechtel has issued design and supply specifications of the material handling system for bidding, along with the main electrical transformers for the plant's internal electrical system. Bid analysis will occur within the next quarter with final vendor selection targeted for September 30.

Printed on recycled paper

Hamilton S. Oven, Jr.
August 3, 1992
Page Two

We are continuing to make post-certification submittals to various agencies, in compliance with the Conditions of Certification. Dialogue continues with the agencies to insure that all concerns are addressed.

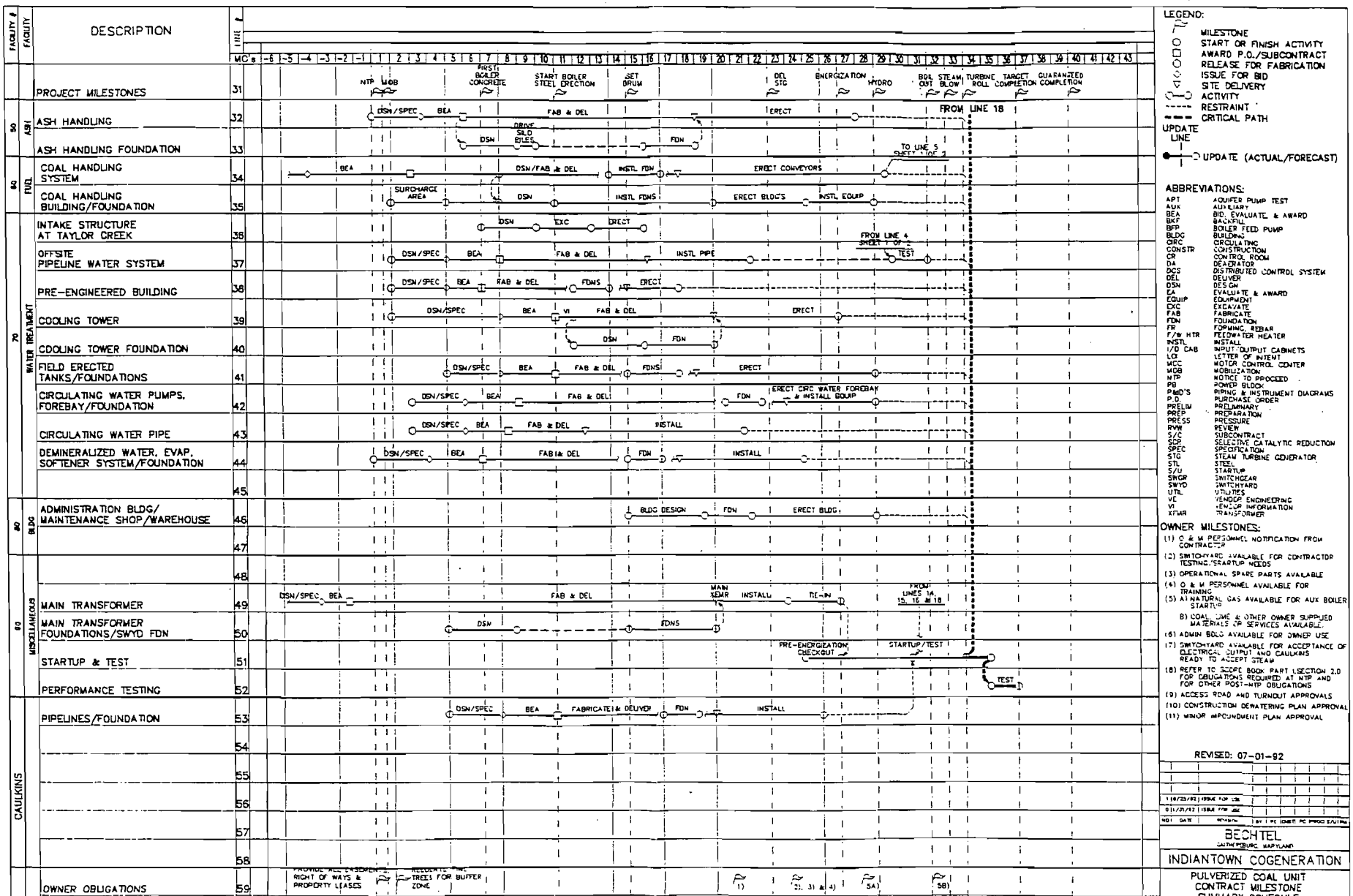
Please don't hesitate to contact me if you require any additional information.

Sincerely,

Jean Hopkins/GLO

Jean Hopkins
Manager, Environmental Permitting

cc: Preston Lewis
Richard Donelan
Susan Coughanour



ABBREVIATIONS:

APT	AQUIFER PUMP TEST
AUX	AUXILIARY
BEA	BID, EVALUATE & AWARD
BKF	BACKFILL
BFP	BOILER FEED PUMP
BLDG	BUILDING
CIRC	CIRCULATING
CONSTR	CONSTRUCTION
CR	CONTROL ROOM
DA	DEAERATOR
DCS	DISTRIBUTED CONTROL SYSTEM
DEL	DELIVER
DSN	DESIGN
EA	EVALUATE & AWARD
EQUIP	EQUIPMENT
EXC	EXCAVATE
FAB	FABRICATE
FDN	FOUNDATION
FR	FORMING, REBAR
F/W HTR	FEEDWATER HEATER
INSTL	INSTALL
I/O CAB	INPUT/OUTPUT CABINETS
LOI	LETTER OF INTENT
MCC	MOTOR CONTROL CENTER
MOB	MOBILIZATION
NTP	NOTICE TO PROCEED
PB	POWER BLOCK
P&ID'S	PIPING & INSTRUMENT DIAGRAMS
P.O.	PURCHASE ORDER
PRELIM	PRELIMINARY
PREP	PREPARATION
PRESS	PRESSURE
RVW	REVIEW
S/C	SUBCONTRACT
SCR	SELECTIVE CATALYTIC REDUCTION
SPEC	SPECIFICATION
STG	STEAM TURBINE GENERATOR
STL	STEEL
S/U	STARTUP
SWGR	SWITCHGEAR
SWYD	SWITCHYARD
UTIL	UTILITIES
VE	VENDOR ENGINEERING
VI	VENDOR INFORMATION
XFMR	TRANSFORMER

OWNER MILESTONES:

(1) O & M PERSONNEL NOTIFICATION FROM CONTRACTOR

(2) SWITCHYARD AVAILABLE FOR CONTRACTOR TESTING/STARTUP NEEDS

(3) OPERATIONAL SPARE PARTS AVAILABLE

(4) O & M PERSONNEL AVAILABLE FOR TRAINING

(5) A) NATURAL GAS AVAILABLE FOR AUX BOILER STARTUP

B) COAL, LIME & OTHER OWNER SUPPLIED MATERIALS OR SERVICES AVAILABLE.

(6) ADMIN BLDG AVAILABLE FOR OWNER USE

(7) SWITCHYARD AVAILABLE FOR ACCEPTANCE OF ELECTRICAL OUTPUT AND CAULKINS READY TO ACCEPT STEAM

(8) REFER TO SCOPE BOOK PART I SECTION 2.0 FOR OBLIGATIONS REQUIRED AT NTP AND FOR OTHER POST-NTP OBLIGATIONS

(9) ACCESS ROAD AND TURNOUT APPROVALS

(10) CONSTRUCTION DEWATERING PLAN APPROVAL

(11) MINOR IMPOUNDMENT PLAN APPROVAL

REVISED: 07-01-92

NO.	DATE	REMARKS	BY	PE SCHEET PE PROJ EAITING
1	10/23/92	ISSUE FOR USE		
0	01/31/92	ISSUE FOR USE		

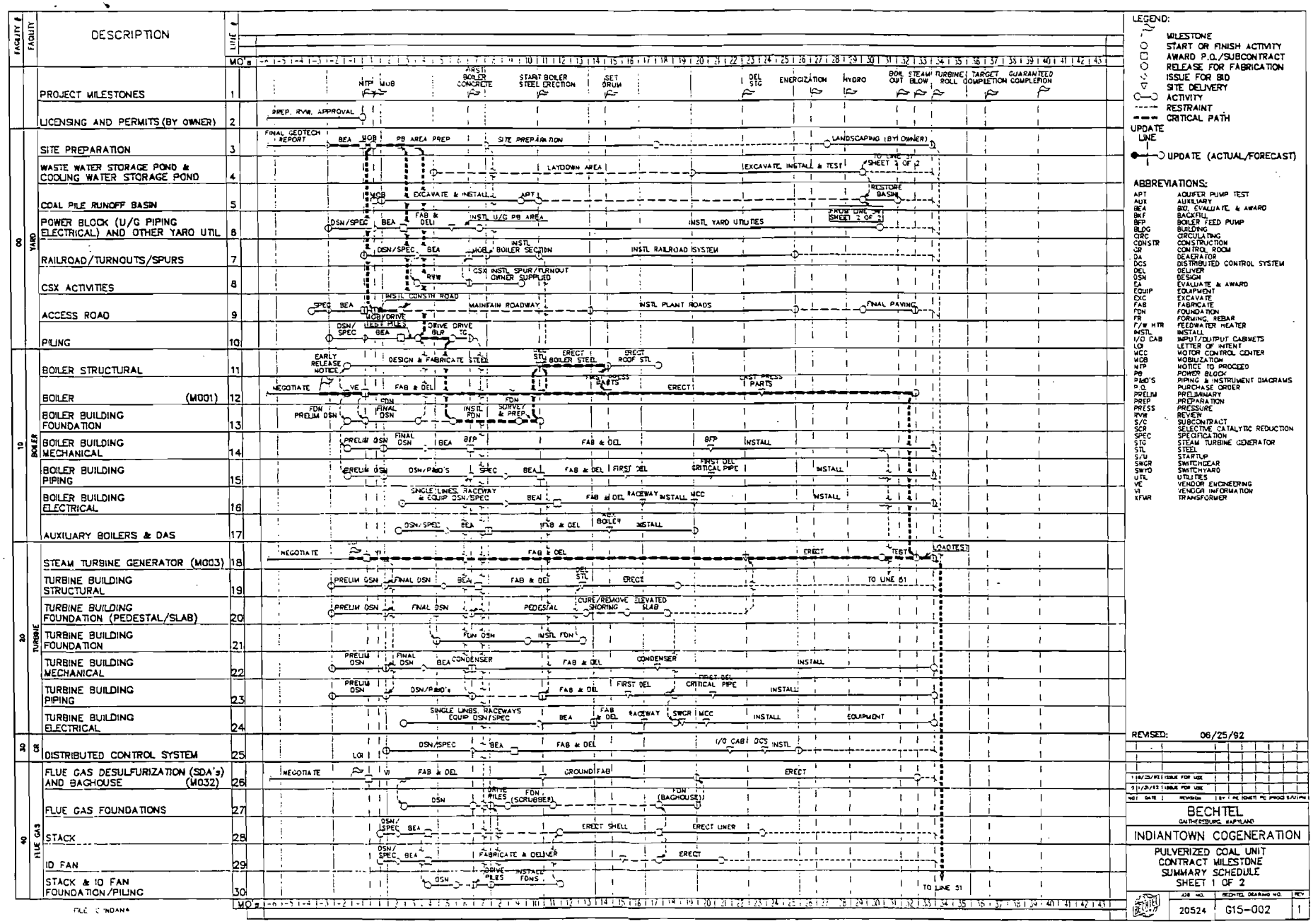
BECHTEL
GAITHERSBURG, MARYLAND

INDIANTOWN COGENERATION

PULVERIZED COAL UNIT
CONTRACT MILESTONE
SUMMARY SCHEDULE
SHEET 2 OF 2

JOB NO.	BECHTEL DRAWING NO.	REV.
20524	G15-002	1

FILE C:\INDIANA



LEGEND:

- MILESTONE
- START OR FINISH ACTIVITY
- AWARD P.O./SUBCONTRACT
- RELEASE FOR FABRICATION
- ISSUE FOR BID
- SITE DELIVERY
- ACTIVITY
- RESTRAINT
- CRITICAL PATH
- UPDATE LINE
- UPDATE (ACTUAL/FORECAST)

ABBREVIATIONS:

APT	AQUIFER PUMP TEST
AUX	AUXILIARY
BEA	BID, EVALUATE & AWARD
BKF	BACKFILL
BFP	BOILER FEED PUMP
BLDG	BUILDING
CIRC	CIRCULATING
CONSTR	CONSTRUCTION
CR	CONTROL ROOM
DA	DEAERATOR
DCS	DISTRIBUTED CONTROL SYSTEM
DEL	DELIVER
DSN	DESIGN
EA	EVALUATE & AWARD
EQUIP	EQUIPMENT
EXC	EXCAVATE
FAB	FABRICATE
FDN	FOUNDATION
FR	FORMING, REBAR
F/W HTR	FEEDWATER HEATER
INSTL	INSTALL
I/O CAB	INPUT/OUTPUT CABINETS
LOI	LETTER OF INTENT
MCC	MOTOR CONTROL CENTER
MOB	MOBILIZATION
NTP	NOTICE TO PROCEED
PB	POWER BLOCK
P&ID'S	PIPING & INSTRUMENT DIAGRAMS
P.O.	PURCHASE ORDER
PRELIM	PRELIMINARY
PREP	PREPARATION
PRESS	PRESSURE
RVW	REVIEW
S/C	SUBCONTRACT
SCR	SELECTIVE CATALYTIC REDUCTION
SPEC	SPECIFICATION
STG	STEAM TURBINE GENERATOR
STL	STEEL
S/U	STARTUP
SWGR	SWITCHGEAR
SWYD	SWITCHYARD
UTIL	UTILITIES
VE	VENDOR ENGINEERING
VI	VENDOR INFORMATION
XFMR	TRANSFORMER

REVISED: 06/25/92

NO	DATE	REVISION	BY
1	10/23/92	ISSUE FOR USE	
0	11/29/91	ISSUE FOR USE	

BECHTEL
GAITHERSBURG, MARYLAND

INDIANTOWN COGENERATION

PULVERIZED COAL UNIT
CONTRACT MILESTONE
SUMMARY SCHEDULE
SHEET 1 OF 2

JOB NO.	BECHTEL DRAWING NO.	REV
20524	G15-002	1

FILE: INDIANA

FOSTER WHEELER ENERGY CORPORATION

PERRYVILLE CORPORATE PARK • CLINTON, NEW JERSEY 08809-4000 • PHONE 201-730-4000

April 3, 1992

Bechtel Power Corporation
9801 Washingtonian Boulevard
Gaithersburg, MD 20878-5356

Attention: Mr. Frank Parks

Subject: Indiantown Project
330 MWe P.C. Fired Steam Generator
FWEC Proposal No. 0-2-79478

REF: Bechtel Job No. 20524
Bid Request 20524-M-001
File: M-001

Gentlemen:

As required by Bechtel FWEC submits two (2) set of Appendix E of specification M-001.1 pages E-1 through E-36 of Technical forms of Proposal. These pages reflect the changes or revisions made to the steam generator and the auxiliaries as of March 27, 1992.

Also transmitted FWEC proposal drawings nos. PD-915-267 Rev. F and PD-915-268 Rev. F. These drawings are revised to show the hoist ways, additional platforms, the terminal points relocated as required by Bechtel.

We hope these will meet your requirements.

Very truly yours,

JGFoster/SMG

Jack G. Foster
Vice President Regional Sales

JGF/kjn

TECHNICAL FORMS OF PROPOSAL

Bidder Foster Wheeler Energy Corporatio
Proposal No. O-2-79478
October 7, 1991

1.0 PERFORMANCE DATA

The Seller shall complete the following items for the indicated operating loads and submit with his proposal for performance fuel as listed in Appendix A of Specification 20524-M-001.1:

Number of Pulverizers Operating	Minimum Load (Without Supplementary Fuel Firing) %	Temp. Control Load (70%)	100% MCR Load 4	100% MCR Load 3
Superheater outlet flow, M lb/hr			2500	2500
Blowdown, M lb/hr			0	0
Soot blowing steam flow, M lb/hr			0	0
Total feed flow, M lb/hr			2250	2250
Superheater spray water flow, M lb/hr			250	250
Temperature at superheater outlet, °F			1005	1005
Temperature at primary superheater outlet (before spray), °F			764	764
Temperature at secondary superheater inlet (after spray), °F			724	724
Temperature at secondary superheater outlet (before spray), °F			850	850
Temperature at tertiary superheater inlet (after spray), °F			825	825

	Minimum Load (Without Supplementary Fuel Firing) %	Temp. Control Load (70%)	100% MCR Load
Pressure at superheater outlet terminal point, psig	2,520	2,520	2,520
Pressure at primary superheater outlet, psig			2630
Drum pressure, psig			2735
Total superheater pressure drop excluding valves, psi			215
Reheater outlet flow, M lb/hr			2300
Reheater inlet temp., °F			635
Reheater inlet pressure, psig			592
Reheater outlet temp., °F			1005
Reheater outlet pressure, psig			561
Reheater attemperator spray water flow, M lb/hr			0
Reheater pressure drop, psi			31
Feedwater temp., °F			486
Feedwater temp. leaving economizer, °F			536
Economizer pressure drop, friction only, psi			40
Total pressure drop including valves from feedwater inlet terminal point to superheater outlet terminal point, friction only, psi			265
Ambient air temp., °F			80

	Minimum Load (Without Supplementary Fuel Firing) %	Temp. Control Load (70%)	100% MCR Load	100% MCR Load
Number of Pulverizers Operating			4	3
Air temp. entering primary air steam coil air heater, °F	NOT APPLICABLE			
Air temp. entering secondary air steam coil air heater, °F			85	85
Air temp. entering primary air heater, °F	NOT APPLICABLE			
Air temp. entering secondary air heater, °F			85	85
Air temp. leaving primary air heater, °F	NOT APPLICABLE			
Air temp. leaving secondary air heater, °F			596	588
Primary air at pulverizer inlet, °F			305	340
Temperature at pulverizer outlet, °F			150	150
Airflows (x 1,000 lb/hr)				
Forced draft fan outlet			3153	3146
Air preheater, in			2818	2910
Air preheater, out			2658	2750
Air leakage to flue gas side			160	160
Tempering air to primary air fan			335	236
Total primary air			584	481
Maximum guaranteed air preheater leakage			177	177

	Minimum Load (Without Supplementary Fuel Firing) %	Temp. Control Load (70%)	100% MCR Load	100% MCR Load
No. of Pulverizers Operating			4	3
Excess air at economizer outlet, percent weight			20	20
Gas Flows (x 1,000 lb/hr)				
Economizer outlet			3231	3228
Air heater outlet (Uncorrected)			3237	3234
Air heater outlet (Corrected)			3397	3394
Gas Temperature (°F)				
Furnace exit			2101	Same
Superheater in			2101	AS
Superheater out			879	IN
Reheater in			1744	(4) Mill
Reheater out			825	OPERATION
Economizer in			879	
Economizer out			690	
Air preheater in			690	
Air preheater out				
Uncorrected			297	288
Corrected			288	280
Gas volume at air preheater outlet, acfm (corrected temperature)			1,041,200	1,029,000
CO_2 in gases leaving economizer, % volume (Dry)			15.40	15.40

No. of Pulverizers Operating	Minimum Load (Without Supplementary Fuel Firing) 4	Temp. Control Load (70%)	100% MCR Load	100% MCR Load
Gas Velocities (ft/sec)			4	3
Furnace exit			37	SAME
Superheater			50	AS
Reheater			49	IN
Economizer			49	(4) MILL
Gas Path Resistance (in. w.g.)				OPERATION
Furnace			0.10	0.10
Superheater			2.75	2.75
Reheater			incl.	incl.
Economizer			incl.	incl.
Air heater			5.45	5.40
Ducts and dampers			2.50	2.50
SCR			3.20	3.20
Total resistance			14.00	13.95
Air Path Resistance (in. w.g.)				
Steam coil air heater			1.00	1.00
Air preheater			3.05	3.20
Ducts and dampers			3.35	3.50
Measuring device			1.00	1.10
Windbox and burner			4.00	6.00
Inlet Silencer			0.70	0.70
Total resistance			13.05	15.55

	Minimum Load (Without Supplementary Fuel Firing) %	Temp. Control Load (70%)	100% MCR Load 4	100% MCR Load 3
No. of Pulverizers Operating				
Primary Path Resistance (in. w.g.)				
Primary air fan to pulverizer				
Ducts and dampers			2.50	1.82
Pulverizer			21.50	26.00
Measuring device			1.00	0.70
Pulverizer to burner			13.80	16.63
Total resistance			38.90	45.25
Heat Loss (percent)				
Dry gas			4.75	4.55
H_2O in air			0.12	0.11
H_2O in fuel			4.24	4.23
H_2O from H_2 in fuel			included above	
Unburnt carbon			0.55	0.55
Radiation loss			0.18	0.18
Unaccounted loss			0.50	0.50
Manufacturer's margin			0.50	0.50
Total losses			10.84	10.62
Gross thermal efficiency of the steam generator			89.16	89.38
Fuel fired, lb/hr			264,605	264,033

	Minimum Load (Without Supplementary Fuel Firing) %	Temp. Control Load (70%)	100% MCR Load
Steam quality, percent dry			99.9
Total dissolved solids, ppm			<0.1 Excluding Silica
Silica, ppm			<0.02
Emissions at Air Heater Outlet (lb/MM Btu)			
NO_x			0.30
CO			0.11
VOC			0.0036
Particulates			6.41
Ash Distribution (percent of total)			
Bottom ash			10
Economizer hopper			3
Air heater hopper			2
Air heater outlet			85
Expected dust particle size at air heater outlet, percent total			
<5 microns			24.5
>5 - <10 microns			18.5
>10 - <20 microns			21.0
>20 - <44 microns			19.0
>44 microns			17.0

	Minimum Load (Without Supplementary Fuel Firing) &	Temp. Control Load (70%)	100% MCR Load
Flue Gas Analysis (Wet) (percent volume)			
H_2O			8.40
CO_2			14.02
CO			Traces
O_2			3.27
N_2			74.24
SO_2			0.07
Heat release rate in furnace, effective projected radiant surface, Btu/hr/ft^2			103,465
Heat release rate in furnace, Btu/hr/ft^3			15,945
Heat release rate in furnace in burner strip area, Btu/hr/ft^2			390,055
Heat release rate in furnace plan area, Btu/hr/ft^2			1,811,000
Number of burners in use			16/12
Pulverizers			
Number in use			3/4
Coal rate per pulverizer, lb/hr			88,011/66,170
Total power, kW			945/1064

	Minimum Load (Without Supplementary Fuel Firing) %	Temp. Control Load (70%)	100% MCR Load
Primary Air Fans			
Number in use			3/4
Total power, kW			1236/1535
Total power for FD fan, kW			2064/1944
Total power for all (Mill, Fans, auxiliaries, kW (AH, Feeders)			4413/4710

2.0 EQUIPMENT DATA

2.1 STEAM DRUM AND WATER DRUM

a. Design pressure, psig	2875 / -
b. Inside diameter, inches	66 / -
c. Drum material	SA516 Gr 70 /
d. Drum thickness, inches	Shell: 9363 Head: 5.744 /
e. Drum length, feet	53.33 /
f. Normal water level (ref drum centerline), inches	3" Below
g. Maximum water level (ref drum centerline), inches	Alarm @ 2" above Trip @ 7" above
h. Minimum water level (ref drum centerline), inches	Alarm @ 11" below Trip @ 14" below

2.2 FURNACE

a. Furnace design pressure on a continuous basis, inches H_2O (internal/external)	± 35 @ 0.9 Yield
b. Furnace design pressure on a transient basis, inches H_2O (internal/external) @ 0.9 yield	± 52

c.	Volume, cu ft	218366
d.	Heating surface, sq ft	20819 (Water Walls only)
e.	Flat projected area, sq ft	33645 (includes roof) Rad. SH & Exit plane)
f.	Width/depth, ft	48.04 x 40
g.	Distance from top burner to bottom of convection pass, ft	55
h.	Tube size and spacing, in.	3 or 3.75
i.	Wall thickness, in.	0.31; 0.28
j.	Tube material	SA 210C
k.	Header material	SA 106C
l.	Surface covered by wall-blowers, sq ft	9450
m.	Water required for hydrotest, gallons	
n.	Temperature of water required for hydrotest, °F	70

2.3 FURNACE HOPPER

a.	Slope of hopper bottom, degrees from horizontal	50
b.	Size of throat opening, in.	48
c.	Length of throat opening, ft	48.04
d.	Recommended distance from lowest tube or header to top of water in ash hopper seal trough when in hot position, in.	306

2.4 ECONOMIZER

a.	Type	Bare
b.	Design pressure, psig	2925
c.	Heating surface, sq ft	49238
d.	Tube size, OD, in.	2.50; 2.25

e. Tube wall thickness, in. 0.25; /0.22

f. Tube material 178C /

g. Side to side spacing, in. 5.625 /

h. Front to back spacing, in. 3.25; /3.00

i. Header material 106C /

2.5 SUPERHEATER/REHEATER

2.5.1 SUPERHEATER

a. Type Radiant & Convective

b. Design pressure, psig 2875

c. Number of steam passes As Required

d. List superheater sections and include tube size, wall thickness, tube spacing [side to side (S1), and front to back (S2)], tube material, maximum gas temperature (T_g) entering section, and maximum outside diameter tube metal temperature (T_t) for each section at maximum continuous load when burning the performance fuel. All dimensions in inches.

	Section Name	T_g	T_t	S1	S2	Size	Thickness	Material
1.	Partial Walls	2350	1030	88	2 1/4	2	0.40	T22, TP 304 H
2.	Finishing	2065	1120	183/4	2 1/2	2 7/8	.36,.46	T11
3.	"				2 1/4	2 5/8	.40,.28	T22; TP304H
4.	Primary	1420	830	5 5/8	3	2 1/4	.27, .23	210A, T2
5.		—	—	—	—	—		
6.		—	—	—	—	—		

e. Heating surface, square feet (full circumference)

Finishing superheater	23249
Upper Partial Walls & Roof	11720 Projected Surface)
Primary superheater	60563
HRA Enclosure	21077

f. Number and size of outlets One /15.2" ID

g. Number and size of desuperheaters Two / As Required

h. Header material SA 335 - P22
Outlet Header

2.5.2 REHEATER

a. Type: Convective

b. Design pressure, psig: 675

c. Number of steam passes: 510 Tubes

d. List reheater sections and include tube size, wall thickness, tube spacing [side to side (S1), and front to back (S2)], tube material, maximum gas temperature (T_g) entering section, and maximum outside diameter tube metal temperature (T_t) for each section at maximum continuous load when burning the performance fuel. All dimensions in inches.

	Section Name	T_g	T_t	S1	S2	Size	Thickness	Material
1.	RH 1 & 2	1000	742	5 5/8	3 1/4	2 1/2	0.18	178C
2.	RH 3	1275	869	"	"	"	0.18	T2
3.	RH4	1680	1120	"	3	2 1/4	0.18	T11, TP304H
4.	RHOL	1730	1150	111/4	25/8	2 1/4	0.18	TP304H
5.								
6.								

e. Heating surface, square feet (full circumference)

Radiant reheater: -

Convection pass reheater: 93160

f. Number and size of outlets: One(1) / 30" ID

g. Number and size of desuperheaters: One /

h. Header material: SA 335-P22 - outlet header; SA 106C - inlet header

2.6 BURNERS AND IGNITERS

		COAL	NO. 2 FUEL OIL
a.	Number of burners	16	16
b.	Type of burners	Lo Nox	Forney 20M
c.	Rating of burners, 10^6 Btu/hr	(12) Burners 264	65
d.	Location of burners	Front & Rear Wall	Center of Coal Burner
e.	Burner turndown ratio	2.5 to 1	2 to 1

R1

f. Minimum load, all burners in service, 1,000 lb steam/hr	1,000,000
g. Velocity of coal/air mixture leaving burner at minimum mill capacity, fps	85
h. Velocity of coal/air mixture in coal pipe at minimum mill capacity, fps	65

2.7 IGNITERS (GAS)

a. Number of igniters	16
b. Igniter manufacturer	Forney or Equal
c. Igniter rating, 10^6 Btu/hr	65
d. Gas flow rate with all igniters in service, scfm	17500
e. Gas pressure required at Seller's terminal point, psig	25 Psig
f. Are igniters retractable?	Yes
g. Total quantity of gas required per cold startup, cu ft	1.24×10^6
h. Total operating time, hr	5 Hrs.
Flame Detection System	
Manufacturer	Forney or Equal
Model number	IDD-II

2.8 FAN

	Primary air fan	Forced draft fan
a. Number proposed	4	2
Fan manufacturer	Howden-Sirocco Inc. or Equal	
Model number	L1	26
Type/arrangement	SWSI / H3	DWDI/ 3

b. Place in proposal where descriptions of inlet vanes, outlet dampers, linkage, bearings, seals, and lubrication system are given

1.13 and Section 7

c. Proposal page where fan vibration detection system is described and type of vibration monitors included is given

Section 7 of Proposal

	Primary air fan	Forced draft fan
d. Housings		
Size, inlet eye diameter, inches	43.3	54.89
Inlet area (both boxes), (Only 1 box) square feet	14.58	122.50
e. Rotor		
Material	A242	A514 GR.A
Diameter of rotor, inches	104.4	90.5
Width of wheel, inches	7.35	38.38
Thickness of blades	.1875	.1875
Operating tip speed, fpm	32246	21123
Design tip speed, fpm	32246	21123
Maximum safe tip speed, fpm	33857	22179
Shop balancing speed, rpm	300	300
Critical speed, rpm	1593	1202
f. Shaft		
Overall length, inches	110	243
Shaft deflection, inches	Later	Later
Span between bearings, inches	71	202

	Primary air fan	Forced draft fan
Diameter at hub	6.5	17.3
Diameter at the bearings	5	6
g. Bearings	H.S.I or Equal	H.S.I Or Equal
Manufacturer and type	/Sleeve	/Sleeve
Babbitt material, type	Tin & Lead	Tin & Lead
RTDs	Yes	Yes
h. Inlet vanes and outlet dampers		
Rod material, vanes	1018	1018
Rod material, dampers	1018	1018
Span, vanes	12	12
Span, dampers	16	108
i. Damper operators	Bailey Or Equal	
Manufacturer		Bailey or Equal
Model number	Up403(Vanes)up303(U.L.D)	Up503(Vanes)Up403(U.L.D.)
Control signal type	4-20 Madc	4-20Madc
j. Material		
Housing	A36	A36
Hub	A668 ch.c	A668ch.c
Shaft	Ab68 ch.c	Ab68ch.c
Blades	A242	A514 GRA

	Primary air fan	Forced draft fan
k. Couplings		
Manufacturer	Falk or Equal	Falk or Equal
Model No.	G20	G20
l. Blades		
Type	Single thickness airfoil	Hollow airfoil
Wear material	N.A.	N.A.
m. Shaft seals		
Type	Rubbing	Rubbing
Material	Carbon Ring	Garlock
n. Baseplate or soleplate		
Mount	Yes	Yes
o. Lubrication		
Type for simple radial bearing	Oil	Oil
Type for radial and thrust bearing	Oil	Oil
Ring lubed or pressure lubed	Disk lubed	Disk lubed
p. Test block sizing conditions		
Fuel utilized for sizing	Worst Coal	Worst Coal
Flow, pounds/hour	179930	1891000
Flow, acfm	66350	457000
Temperature, °F	400	105
Dev. head, inches w.g.	54.0	20.5
Bhp	656	1689

	Primary air fan	Forced draft fan
Fan efficiency, %	85.9	87.3
Motor size, rated horsepower	700	1750
Speed, rpm	1200	890

q. At MCR load, for the fuel utilized in sizing the fans, list the following: 3 Mills worst coal

	Primary air fan	Forced draft fan
Flow, pounds/hour	163570	1576500
Flow, acfm	58000	365000
Temperature, °F	369	80
Dev. head, in. w.g.	41.00	15.60
Speed, rpm	1180	890
Fan efficiency, percent	73.6	71.7
Bhp	508	1250

r. Place in proposal where primary air and forced draft curves are given showing dev. head, cfm, efficiency, and bhp.

Section 1 of Proposal

s. Proposal page where sound power levels are given for the forced draft and primary air fans

Section 1 of Proposal

2.9 AUXILIARY FANS

Proposal page where name of fans, number proposed, motor size, and fan curves are given.

Page 1.10 of Section 1

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2.10 AIR PREHEATER	Primary air	Secondary air
a. Type and manufacturer	Not Rev'd.	ABB-Air PReheater
b. Number proposed per unit and diameter, ft		One (1) 32.5-V1-68 49ft dia.
c. Speed, rpm		1.03
d. Depth, in.		68 (80" casing)
e. Heating surface, sq ft		363608
f. Hot end, height and material spec.	22"	open hearth steel
g. Intermediate section, height and material spec.	34"	Low alloy steel
h. Cold end, height and material spec.	12"	Low alloy steel
i. Weight, lb		1,125,230
j. Water washing equipment, cold end/hot end		
Capacity of water required, gpm		2220
Maximum pressure of water required		75 psig
k. Size of electric drive, hp		40
l. Air motor requirements, scfm and psig		160 at 90
m. Recommended cold-end average temperature control set point for specified variations of coals fired, °F	165 /	
n. Bearing cooling water flow, gpm	Specification requires air cooler	
o. Steam sootblowing equipment	Two retractable sootblowers one at gas inlet, one at gas outlet	

2.11 MODULATING CONTROL DAMPERS

	Primary fan inlet vane control	FD fan inlet vane control
a. Manufacturer	Bailey or Equal	Bailey or Equal
b. Model number	Later	Later
c. Control signal type	4-20 Made	4-20 Made

2.12 PULVERIZERS

a. Type and manufacturer	MBF22.5 - Foster Wheeler
b. Number	4
c. Number of burners served per pulverizer	4
d. Rpm of pulverizer	24.7
e. Rotation	Clockwise when viewed from top
f. Capacity each, tph	44.0 for perf. coal 46.82 for worst coal
g. Bhp at rated capacity	393 for perf. coal 409 for worst coal
h. Recommended motor, hp/rpm	500 / 870
i. Pulverizer turndown ratio	2.5 to 1
j. Percent through 200 mesh	70
k. Percent through 50 mesh	98.5
l. Recommended coal size to pulverizer without decreasing capacity, in.	1 1/4" x 0
m. Maximum coal size, in.	2"
n. Maximum temperature of preheated air to pulverizer, °F	369 for worst coal
o. Weight of pulverizer, lb	

p.	Thickness and material of coal piping to burners, in.	0.5" carbon steel
q.	Expected grinding element life, tons of coal	
	Rolls	68500
	Thrust ring (if applicable)	-
	Grinding ring	-
r.	Expected maintenance cost of grinding elements, $/ton of coal	0.06
s.	Cooling water flow, gpm	35
	Maximum temperature and pressure	
t.	Required head of coal to seal silos from hot air from pulverizers, ft	12
u.	Place in proposal where pulverizer power consumption versus grindability curve is included for the pulverizer size proposal. The power consumption shall be given per ton of coal pulverized	Later
v.	Pulverizer inerting/firefighting system	See Section #13

2.13 FEEDERS (FUEL)

a.	Type and manufacturer	Gravimetric / STock or Equal
b.	Number	4
c.	Maximum capacity rating, lb/hr	55 tons/hr
d.	Feeder accuracy, percent	± 0.5

e. Loss of fuel detection system (located on raw fuel pipe to feeder)

Manufacturer	Stock or Equal
Model number	SD-Model w/countdown

f. Height of coal to seal inlet, in. — 12 Feet

g. Weight, lb — 4280 Each

2.14 SOOTBLOWERS

a. Manufacturer — Diamond Power or Equal

b. Area served, number, type, and number of wallboxes for future blowers

1.	Furnace	20	Wall blower	40
2.	Furnace	16	Full Ret.	6
3.	HRA	12	Full Ret.	-
4.	HRA	18	Half Ret	-
5.				
6.				
7.				

c. Length of steam blowing cycle, minutes — Approx. 335 Min.

d. Total steam required per cycle, lb/cycle — 46,925

e. Number of blowing cycles per day at MCR with specified fuel — 3

f. Maximum instantaneous steam flow rate, 1,000 lb/hr — 20,880

g. Minimum pressure and temperature required at steam source for boiler sootblowers — 600 Psig at 548°F

h. Minimum pressure and temperature required at steam source for air preheater sootblowers — 600 psig /

i. Maximum capacity of pressure-reducing station, lb/hr — Approx. 34,540

j. Place in proposal where drawing and criteria for blower locations are included — PD-915-200

k. Is boiler capable of withstanding the routine use of water-assisted wall blowers if installed after initial operations?

l. Sootblower steam flow meter

Manufacturer — Diamond Power or Equal

Model number — Later

m. Length of sootblower from boiler in pullout position — Full Ret. - 24'-0"
Half Ret. 12'-0"

n. Is an auxiliary source of steam required for the air preheater for boiler startup?

2.15 NITROGEN BLANKETING

a. SCF nitrogen required

b. Recommended pressure, psig

2.16 THERMOPROBES

a. Manufacturer — Diamond Power or Equal

b. Number supplied — One (1)

c. Model number — TP-500

2.17 STEAM COILS

a. Headers

Type — Later

Material

Size/thickness, in. — /

Number of passes	
Plug design	
Plug material	
Gasket material	
Corrosion allowance, in.	
Size, inlet nozzle, in.	
Size, outlet nozzle, in.	

b. Tubes

Material ASTM designation	Stainless steel
OD, in.	
Minimum thickness, in.	
Number per section	
Number of rows	
Length, in.	
Pitch, in.	
Tube joint type	
Maximum span between supports, ft	

c. Fins

Material	
Type	
OD, in.	
Thickness, in.	
Number per inch	

d. Performance

Surface, bare, ft^2 _____

Surface, finned, ft^2 _____

Heat transfer rate, Btu/hr _____

Total coefficient, Btu/hr-°F-ft^2 _____

LMTD (effective), °F _____

Fouling resistance (external and internal), hr-°F-ft^2/Btu _____

_____

Number of rows _____

e. Miscellaneous

Number of drawer-type sections per heater _____

Weight of each drawer-type section _____

3.0 VALVE DATA

3.1 SAFETY VALVES

a. Manufacturer — Dresser or Equal

b. Page in proposal where quantity, size, expected noise levels, and figure number of valves supplied are given. — Page 1.8 of Section 1

3.2 VENT AND DRAIN VALVES

a. Manufacturer — Yarway or Equal

b. List quantity, sizes, and page in proposal where list is given. — Page 1.8.1 of Section 1

3.3 CONTINUOUS BLOWDOWN REGULATING VALVE

a. Manufacturer — Yarway

b. Size and figure number — 1 1/2" / 5937

3.4 ECONOMIZER INLET STOP AND CHECK VALVES	
a. Stop valve manufacturer	Edwards or Equal
b. Stop valve size and figure number (motorized)	14" /3914 TY
c. Stop valve velocity through valve seat, fps	Later
d. Stop valve body material	WCB
e. Check valve manufacturer	Edwards or Equal
f. Check valve size and figure number	14" / 3992TY
g. Check valve velocity through valve seat, fps	Later
h. Check valve body material	WCB
3.5 SUPERHEATER OUTLET ELECTROMATIC RELIEF VALVE	
a. Manufacturer	Dresser or Equal
b. Page in proposal where size, expected noise level, and figure number of valve supplied are given	Page 1.8 of Section 1 /
c. Silencer	Dresser or Equal
3.6 ACID CLEANING AND INSPECTION VALVES	
a. Manufacturer	Fittings Only
b. Size and figure number	- / -
3.7 SUPERHEATER OUTLET STOP VALVE	
a. Stop valve manufacturer	Not applicable
b. Stop valve size and figure number (motorized)	- / -
c. Stop valve body material	-
3.8 REHEATER SAFETY VALVES	
a. Inlet, number and type	4 / Spring Loaded
b. Outlet, number and type	1 / Spring Loaded

3.9 ATTEMPERATOR VALVES	
a. Block valves (motorized)	(4) Superheat ~~(1) Reheat~~
b. Control valves (power operated)	(4) Superheat (1) Reheat
c. Control valve bypass (power operated)	None
d. Control valve isolating	(8) Superheat (2) Reheat
4.0 INSTRUMENTATION DATA	
4.1 THERMOCOUPLES	
a. Type of thermocouples	Chromel-Alumel
Manufacturer	Thermal Electric or Equal
Design	
b. Number supplied on	
Boiler drum	9
Superheater	100
Reheater	50
4.2 GAUGE GLASSES	
a. Manufacturer	Yarway or Equal
b. Number supplied	2
c. Model number	T4595F
d. Method of remote indication	Fiber Optic
4.3 REMOTE DRUM LEVEL INDICATORS	
a. Manufacturer	Yarway ~~or Equal~~ Acquarian 3000
b. Number supplied	2
c. Model number	4460 PRC
d. Relay unit model number	-

4.4 WEIGHTS

a. Steam generator as specified

Normal water level, tons	265
At flooded level, tons	575
b. Pulverized coal equipment, fuel piping, burners, and feeders, tons	1469
c. Refractories, insulation, lagging, tons	464
d. Other (list), tons	Press. parts - 2887 Gen. Acc-1400 S.S. & Platf.- 3402 Remainder-899 Flues & Ducts 732
e. Total net weight of complete unit as specified, tons	11,262

4.5 INFORMATION

a. What is the maximum normal load change rate increase and decrease that the boiler can achieve (% change/min)?	5 % /Minute
b. Indicate where the following information is provided in Seller's proposal:	
1. List of primary measurement points to include measurement ranges	Figure 3-7
2. Description of control equipment in accordance with Section 5.17 of 20524-M-001.1	Section 7 and 13 of Proposal
3. Description of services required	Section 13 of Proposal
4. For the full load plant acceptance test, the Seller shall provide the following information in order to measure the guarantee items listed in Section 5.22 of 20524-M-001.1 ·	
a) List of instruments to be provided along with accuracy range.	See Section 14 of Proposal
b) Frequency of fuel samples to be taken and what items in each sample that will be analyzed.	Every half hour prox. and ult. analysis HHV, Ash fusion temp. Ash Analysis

c) Method to be used to confirm that the boiler can meet each guaranteed item. — As per Power Test Code

5. Description of method to be used for disposal of hydrostatic test water, boiler boilout and rinse water, and acid cleaning effluent. — On site Disposal by Owner

6. Proposal page where a description of margins that are applied for the equipment supplied is given. — Section 1 of Proposal

7. Give proposal page where a discussion is given concerning what design and material have been incorporated to maintain the boiler availability. — Section 1 of Proposal

In particular discuss superheater/reheater materials, arrangement, and lug materials and design. — Section 1 of Proposal

8. Provide with the Seller's proposal a complete fan proposal for the fans to be provided. — Section 1 and 7 of Proposal

9. Provide page where combustion control SAMA/ISA diagrams are listed. — After Award of Contract

5.0 GUARANTEES — See Page 1.5 of Proposal

5.1 At MCR load, guaranteed power for all fans, pulverizers, and auxiliaries when firing the performance fuel given in Appendix A.

5.2 Proposal page where Seller's guarantee values in accordance with Section 5.22. — Page 1.5 of Section 1

5.3 Will full-time Manager be provided in accordance with Section 3.2.11. — Yes

6.0 WEIGHTS/ERECTION

6.1 TOTAL STEAM GENERATOR WEIGHT

a. Dry tons — Later

b. At normal water level, tons

c. Hydro weight (includes flooded economizer and superheater), tons	Later
d. Normal water volume, gallons	Later
e. Total hydro water volume, gallons	Later
1. Water walls and economizer, gallons	
2. Drum volume, gallons	
3. Superheater, gallons	
4. Reheater, gallons	
6.2 DRUMS	
a. Erection weight, tons	Later
b. Operational weight, tons	
6.3 TOTAL EQUIPMENT WEIGHT, TONS	
6.4 ERECTION	
a. Furnace	
1. Number of water wall panels	62
1A. Division Wall	5
2. Maximum panel weight	Later
3. Total furnace weight	Later
4. Number of site welds	2311
b. Convection superheater	
1. Number of lifts required for erection	459
2. Maximum weight of lift	Later
3. Total convection superheater weight	Later
4. Number of site welds	1836

c. Economizer	
1. Number of lifts required for erection	330
2. Maximum weight of lift	Later
3. Total economizer weight	Later
4. Number of site welds	1320
d. Convection pass enclosure walls	
1. Number of enclosure panels	25
2. Maximum panel weight	Later
3. Total enclosure wall weight	Later
4. Number of site welds	318
e. Reheater	
1. Number of lifts required for erection	4 / 0
2. Maximum weight of lift	Later
3. Total reheater weight	Later
4. Number of site welds	3060
e. Air heater	
1. Number of lifts required for the primary air heater	N/A
2. Maximum weight for lift	N/A
3. Total weight of air heater	N/A
4. Number of lifts required for the secondary air heater	Approx. 46 per heater
5. Maximum weight for lift	88,160 lbs.
6. Total weight of secondary air heater	1,125,230 lbs.
f. Total weight of air ducts	Later

g. Total weight of gas ducts _____

h. Fan weight

1. Primary air fan 18,910 each

2. Forced draft fan 87,290 each

6.5 TEMPORARY SERVICES REQUIRED BY THE SELLER

a. Electrical, amps @ volts 120 KVA

b. Other, specify potable water
Contstruction water

7.0 SERVICES

List component, quantity, pressure, and temperatures for all water, air, and other services required at Buyer's terminal points.

COOLING WATER

Component	GPM @ 90 °F	Outlet temperature
Air htr. Water Wash	2220 gpm @ 75 psig	-
Air Htr Deluge Syst.	2220 gpm @ 75 psig	
Hot Spot Det. Syst.	4 gpm @ 100 psig	N

SERVICE AIR

Component					
Low Speed Air Htr. motor	160	SCFM @	90	Pressure, psig and _____	°F
High Speed Air Htr motor	320	SCFM @	90	Pressure, psig and _____	°F
Leakage Cont. Syst., Air Htr	50	SCFM @	5	Pressure, psig and _____	°F
Hot Spot Det. Syst. Air Htr	80	SCFM @	75	Pressure, psig and _____	°F
_____	_____	SCFM @	_____	Pressure, psig and _____	°F
_____	_____	SCFM @	_____	Pressure, psig and _____	°F
_____	_____	SCFM @	_____	Pressure, psig and _____	°F
_____	_____	SCFM @	_____	Pressure, psig and _____	°F
_____	_____	SCFM @	_____	Pressure, psig and _____	°F
_____	_____	SCFM @	_____	Pressure, psig and _____	°F

INSTRUMENT AIR

Component					
Later	_____	SCFM @	_____	Pressure, psig and _____	°F
_____	_____	SCFM @	_____	Pressure, psig and _____	°F
_____	_____	SCFM @	_____	Pressure, psig and _____	°F
_____	_____	SCFM @	_____	Pressure, psig and _____	°F
_____	_____	SCFM @	_____	Pressure, psig and _____	°F
_____	_____	SCFM @	_____	Pressure, psig and _____	°F
_____	_____	SCFM @	_____	Pressure, psig and _____	°F
_____	_____	SCFM @	_____	Pressure, psig and _____	°F
_____	_____	SCFM @	_____	Pressure, psig and _____	°F
_____	_____	SCFM @	_____	Pressure, psig and _____	°F

OTHER

Component

_____	_____ Flow @	_____ Pressure, psig and	_____ °F
_____	_____ Flow @	_____ Pressure, psig and	_____ °F
_____	_____ Flow @	_____ Pressure, psig and	_____ °F
_____	_____ Flow @	_____ Pressure, psig and	_____ °F
_____	_____ Flow @	_____ Pressure, psig and	_____ °F
_____	_____ Flow @	_____ Pressure, psig and	_____ °F
_____	_____ Flow @	_____ Pressure, psig and	_____ °F
_____	_____ Flow @	_____ Pressure, psig and	_____ °F
_____	_____ Flow @	_____ Pressure, psig and	_____ °F

ELECTRICAL POWER

KVA @ 480 V Supply, Total _____

KVA @ 4160 V Supply, Total _____

8.0 PROPOSAL DRAWINGS, DESCRIPTION, AND MISCELLANEOUS DATA

8.1 Drawings submitted with the proposal shall show the location of components, including burners, fans, ducts, air heaters, air preheaters, access doors, turning vanes, observation ports, roof arrangement, and both initial and future soot blowers. Withdrawal clearances shall be indicated where necessary.

8.2 Drawing list shall be submitted with the proposal showing significant drawings to be submitted after contract award. Proposal page where a schedule for submittal of these drawings is given.

Section 13 of Proposal

8.3 Curves illustrating main steam temperature and reheat temperatures with and without desuperheater(s) in service shall be provided by the Seller. Curves shall be plotted with load as the abscissa. The above variables, plus excess air and quantities of spray water, shall be on the ordinate scale. Curves shall be shown from minimum load to maximum continuous load when firing the fuels listed in Appendix A of Specification 20524-M-001.1

Proposal Page Section 1 Proposal

8.4 A curve shall be included illustrating required temperature of air entering the air preheater for cold-end temperature protection from start-up to maximum continuous load. The curve shall be based on the worst fuel and shall include a curve illustrating the predicted air flow (pounds per hour) entering the air heater while using 0 °F air inlet temperature.

Proposal Page Later

8.5 Gas, metal, and steam temperatures throughout the unit shall be provided at maximum continuous load, while burning performance fuel.

Proposal Page Fill-in Data Sheets E-11, E-12

8.6 A drawing shall be provided that shows the air and gas velocities and pressures throughout the unit, including ducts and flues at maximum continuous load, while burning performance fuel.

Proposal Page Section 1 of Proposal

8.7 Proposal page where feedwater and boiler water quality limits of the steam generator are given.

Section 9 of Proposal

8.8 Proposal page where a boiler loading plan showing boiler column location plan for design of structural steel is given.

Later

8.9 Proposal page where schematic drawings showing process flow paths are given.

Section 1 of Proposal

8.10 The Seller shall submit a schedule for engineering, drawing submittal, manufacturing, and shipping for items included in this specification.

8.11 A curve showing steam air heater steam consumption versus load shall be submitted with the proposal.

8.12 Characteristic curves for all fans shall be provided showing head, brake horsepower, and efficiency versus flow from shutoff to test block flow.

8.13 The Seller shall include a description of heat insulation and lagging for the furnace, ducts, piping, and any other equipment requiring insulation.

8.14 The Seller shall state limitations when operating continuously at reduced loads.

8.15 The basis for sizing the pulverizers, provisions made to accommodate frozen coal, and means for obtaining early coal firing without oil stabilization shall be provided. The Seller shall state the percentage of wear margin allowed for in sizing the pulverizers.

8.16 Description of design features for emptying the feeders and the pulverizers prior to extended outages of the unit.

8.17 Design provisions incorporated to prevent pulverizer fires.

8.18 Design and construction features employed to avoid warping of dampers or registers used in high-temperature locations.

8.19 The Seller shall state any limitations that may exist in the capability, performance, and operation of auxiliary equipment when firing coals other than the performance coal listed in Appendix A and any limitations in equipment supplied by the Seller for operating continuously at reduced loads.

8.20 Quality control and inspection procedures for manufactured equipment and for purchased equipment, including shop performance test requirements.

8.21 Outline of the extent of equipment preassembly.

8.22 During the bid evaluation stage, the Seller shall be requested to provide the following:

a. Definition of Seller's field inspection requirements and procedures such as hydrotesting, painting, pump and equipment alignment, valve stroke actuation, etc.

b. Mounting details for all rotating equipment.

c. Specific details on installation and replacement of insulation and refractory.

d. Flue gas acid dew point and resultant corrosion protection measures.

8.23 Worst case flue gas flow for the range of fuels that the Buyer must report to the baghouse supplier for sizing. State the fuel used in determining this flue gas flow and the procedure used to calculate this flow.

8.24 Provide a complete list of similar size steam generators. Include for each unit:

a. In-service date

b. Customer

c. Station and unit number

d. Guaranteed maximum continuous main steam and reheat steam flow, temperature, and pressure

e. Design fuel analysis

f. Additional fuels fired at MCR load, i.e., gas, oils, or type of coals

g. Maximum furnace heat release rate (Btu/hr-sq ft)

h. Maximum plan area heat release rate in furnace (Btu/hr-cu ft)

i. Maximum furnace volumetric heat release rate (Btu/hr-cu ft)

j. Maximum furnace exit gas temperature, °F

k. Maximum flue gas velocity in the convection pass, fps

l. Number of forced outages and total downtime in hours directly due to problems with the boiler or associated equipment. Include equivalent outage hours for partial outages. Specify the source of these data.

9.0 TRAINING PROGRAM

9.1 Proposal page where Seller describes his start-up training program which shall include the items given in Attachment 2 of Specification 20524-M-001.1.

Section 13 of Proposal

9.2 The number of months prior to boiler hydro when the training program will be submitted to the Buyer.

Florida Department of Environmental Regulation

Twin Towers Office Bldg. ● 2600 Blair Stone Road ● Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

July 16, 1992

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Stephen A. Sorrentino
Indiantown Cogeneration, L.P.
7475 Wisconsin Avenue
Bethesda, MD 20814-3422

Re: Martin County - A.P.
Indiantown Cogeneration, L.P.
PSD-FL-168; Permit Modification

Dear Mr. Sorrentino:

The Department has received a request from Mr. Douglas Roberts on May 28, 1992, for minor modifications to the recently issued permit for the above referenced project. The Department concurs with your request and will allow you to split the auxiliary boiler into two boilers, use propane fuel, and change the lead (Pb) standards.

The Department grants the following amendments to the above referenced permit:

Project Description, 3rd Paragraph, Page 1 of 13

FROM:

The proposed facility includes one main boiler and one steam generator, and an auxiliary boiler operated during lightoff and startup of the main boiler or if the main boiler is down and process steam is required for Caulkins Citrus Processing. The primary source of air emissions will be the main boiler, firing coal. Secondary air emission sources include the auxiliary boiler firing natural gas or No. 2 fuel oil, and the material handling systems. The operation of these units will result in significant net emissions increases of regulated air pollutants over the current emissions levels and thus, is subject to review by the Department under the prevention of significant deterioration (PSD) regulations (Rule 17-2.500, Florida Administration Code).

TO:

The proposed facility includes one main boiler and one steam generator, and **one or two 50% capacity** auxiliary boilers operated during lightoff and startup of the main boiler or if the main

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boiler is down and process steam is required for Caulkins Citrus Processing. The primary source of air emissions will be the main boiler, firing coal. Secondary air emission sources include the auxiliary boilers firing natural gas, **propane** or No. 2 fuel oil, and the material handling systems. The operation of these units will result in significant net emissions increases of regulated air pollutants over the current emissions levels and thus, is subject to review by the Department under the prevention of significant deterioration (PSD) regulations (Rule 17-2.500, Florida Administration Code).

Specific Condition No. 2:

FROM: Only coal, natural gas or No. 2 fuel oil shall be fired in the pulverized coal (PC) boiler and auxiliary boiler.

TO: Only coal, natural gas, **propane** or No. 2 fuel oil shall be fired in the pulverized coal (PC) boiler and auxiliary boilers.

Specific Condition No. 3:

FROM: The maximum heat input to the PC boiler shall not exceed 3422 MMBtu/hr while firing coal. The auxiliary boiler shall not exceed 342 MMBtu/hr while firing No. 2 fuel oil and 358 MMBtu/hr firing natural gas or propane.

TO: The maximum heat input to the PC boiler shall not exceed 3422 MMBtu/hr while firing coal. The **one or two** auxiliary boilers shall not exceed **a combined total of** 342 MMBtu/hr while firing No. 2 fuel oil and **a combined total of** 358 MMBtu/hr firing natural gas or propane.

Specific Condition No. 4:

FROM: The PC boiler shall be allowed to operate continuously (8760 hrs/yr). The auxiliary boiler shall operate a maximum of 5000 hrs with up to 1000 hrs/yr on No. 2 fuel oil with 0.05% sulfur, by weight, and the balance on natural gas or propane. Fuel consumption must be continuously measured and recorded by fuel type (coal, natural gas or No. 2 fuel oil) for both the PC boiler and auxiliary boiler.

TO: The PC boiler shall be allowed to operate continuously (8760 hrs/yr). The auxiliary boiler **or boilers** shall operate a maximum of 5000 hrs **at the combined total heat input rates** with up to 1000 hrs/yr on No. 2 fuel oil with 0.05% sulfur, by weight, and the balance on natural gas or propane. Fuel consumption must be

continuously measured and recorded by fuel type (coal, natural gas, **propane** or No. 2 fuel oil) for both the PC boiler and auxiliary boilers.

Specific Condition No. 5:

FROM: Based on a permitted heat input of 3422 MMBtu/hr, the stack emissions from the main boiler shall not exceed any of the following limitations:

Pollutant	Basis lb/MMBtu	Emission Limitation lb/hr	TPY
SO_2	0.170*	582*	2549
NOx	0.170*	582*	2549
PM	0.018	61.6	270
PM_{10}	0.018	61.6	270
CO	0.110	376*	1649
VOC	0.0036	12.32	54.0
H_2SO_4	0.0004	1.45	6.51
Beryllium	0.0000027	0.0094	0.041
Mercury	0.0000114	0.039	0.17
Lead	0.00001	0.034	0.15
Fluorides	0.0015	5.08	22.3
Arsenic	0.000051	0.18	0.77

*24 hour daily block average (midnight to midnight)

TO: Based on a permitted heat input of 3422 MMBtu/hr, the stack emissions from the main boiler shall not exceed any of the following limitations:

Pollutant	Basis lb/MMBtu	Emission Limitation lb/hr	TPY
SO_2	0.170*	582*	2549
NOx	0.170*	582*	2549

PM	0.018	61.6	270
PM_{10}	0.018	61.6	270
CO	0.110	376*	1649
VOC	0.0036	12.32	54.0
H_2SO_4	0.0004	1.45	6.51
Beryllium	0.0000027	0.0094	0.041
Mercury	0.0000114	0.039	0.17
Lead	**0.0000187**	**0.064**	**0.280**
Fluorides	0.0015	5.08	22.3
Arsenic	0.000051	0.18	0.77

*24 hour daily block average (midnight to midnight)

Specific Condition No. 9

FROM: The auxiliary boiler, rated at up to 358 MMBtu/hr (Natural Gas and propane) and 342 MMBtu/hr (No. 2 fuel oil), shall be limited to a maximum of 5000 hours/year with up to 1000 hrs/yr firing No. 2 fuel oil with 0.05% sulfur, by weight, and the balance firing natural gas or propane. The maximum annual emissions will be as follows when firing No. 2 fuel oil for 1000 hrs/yr:

EMISSION LIMITATION

Pollutant	lbs/hr	tons/year
NO_X	68.0	34
SO_2	18.0	9
PM	1.4	0.70
PM_{10}	1.4	0.70
CO	48.0	24
VOC	0.620	0.31
Be	4.0×10^{-5}	2.0×10^{-5}
Hg	5.2×10^{-4}	2.6×10^{-4}
Pb	3.6×10^{-2}	1.8×10^{-2}
As	6.8×10^{-3}	3.4×10^{-3}

TO: The auxiliary boiler **or auxiliary boilers** rated at **a combined total of** up to 358 MMBtu/hr (Natural gas and propane) and 342

MMBtu/hr (No. 2 fuel oil), shall be limited to a maximum of 5000 hours/year **at the combined total heat input rates** with up to 1000 hrs/yr firing No. 2 fuel oil with 0.05% sulfur, by weight, and the balance firing natural gas or propane. The maximum **total** annual emissions **from the auxiliary boiler or boilers** will be as follows when firing No. 2 fuel oil for 1000 hrs/yr:

EMISSION LIMITATION

Pollutant	lbs/hr	tons/year
NO_x	68.0	34
SO_2	18.0	9
PM	1.4	0.70
PM_{10}	1.4	0.70
CO	48.0	24
VOC	0.620	0.31
Be	4.0×10^{-5}	2.0×10^{-5}
Hg	5.2×10^{-4}	2.6×10^{-4}
Pb	3.6×10^{-2}	1.8×10^{-2}
As	6.8×10^{-3}	3.4×10^{-3}

All other conditions remain as issued. This letter must be attached to the PSD-FL-168 permit and shall become a part of the permit.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant and the parties listed below must be filed within 14 days of receipt of this intent. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of their receipt of this intent, whichever first occurs. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information:

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File

Number and the county in which the project is proposed;

(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

(d) A statement of the material facts disputed by Petitioner, if any;

(e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and

(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this intent. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this intent in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

Sincerely,

Carol M. Browner
Secretary

CMB/MB/plm

cc: Jewell A. Harper, EPA
Isidore Goldman, SED
James W. Coleman, Jr., NPS
Steve Jelinek, ENSR

P 710 058 514

Certified Mail Receipt

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

UNITED STATES POSTAL SERVICE

Sent to Stephen Sorrentino	
Street & No. Indiantown Cogen	
P.O., State & ZIP Code Bethesda, MD	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees	$
Postmark or Date 7-21-92 PSD-FI-168	

PS Form **3800**, June 1990

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece next to the article number.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Stephen A. Sorrentino
Indiantown Cogen., L.P.
7475 Wisconsin Ave
Bethesda, MD 20814-3422

4a. Article Number P 710 058 514

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery 7-27-92

5. Signature (Addressee)

6. Signature (Agent) Karen Mantel

8. Addressee's Address (Only if requested and fee is paid)

PS Form **3811**, October 1990 ☆U.S. GPO: 1990—273-861

DOMESTIC RETURN RECEIPT

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

For Routing To Other Than The Addressee

To: _____ Location: _____

To: _____ Location: _____

To: _____ Location: _____

From: _____ Date: _____

Interoffice Memorandum

TO: Carol Browner

FROM: Howard L. Rhodes

DATE: July 15, 1992

SUBJ: Amendments to Construction Permit PSD-FL-168
Indiantown Cogeneration, L.P.

Attached for your approval and signature is a letter amending the project description and Specific Conditions Nos. 2, 3, 4, 5, and 9 for the above referenced construction permit.

The amendments pertain to the following issues: a) Originally one auxiliary boiler was permitted. The applicant now requests to install two 50% capacity auxiliary boilers without exceeding the original heat input rates or fuel useages; b) The applicant requests to fire propane (which is a clean fuel) along with permitted fuels natural gas and No. 2 fuel oil; c) Lead emissions- The final order of power plant siting certificate contains lead emissions of 0.000187 lbs/MBtu; 0.064 lbs/hr; and 0.280 tons/yr. When the PSD permit was issued the lead emission standard was erroneously truncated to 0.00001 lbs/MBtu; 0.034 lbs/hr; and 0.15 tons/yr. This amendment will reinstate the correct lead emission standards.

The Bureau of Air Regulation recommends approval of this amendment.

HR/MB/plm

Attachment

HOPPING BOYD GREEN & SAMS

ATTORNEYS AND COUNSELORS

123 SOUTH CALHOUN STREET

POST OFFICE BOX 6526

TALLAHASSEE, FLORIDA 32314

(904) 222-7500

FAX (904) 224-8551

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CECELIA C. SMITH

OF COUNSEL
W. ROBERT FOKES

May 28, 1992

Mr. Clair Fancy
Chief, Bureau of Air Regulation
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399

Re: Indiantown Cogeneration, L.P.
Indiantown Cogeneration Project
PSD-FL-168, Martin County

Dear Mr. Fancy,

On behalf of Indiantown Cogeneration, L.P., I am writing to request that the Department of Environmental Regulation (Department) make certain minor amendments to the above-referenced PSD permit. The Department issued the permit on March 26, 1992. Subsequent review of the permit and of the project's design have identified several items in the permit that require change.

During recent final design efforts, ICL has identified a need to provide greater reliability in the operation of the facility's auxiliary boiler. In the original design, a single auxiliary boiler would be used during plant startup and as a backup source of steam to the adjacent citrus plant during those periods when the main boiler was not operating. ICL now proposes that it be permitted to pursue an option to split the auxiliary boiler into two boilers, vented through a common stack, with a total combined capacity equal to the original boiler.

All emission limits and other requirements of the PSD permit for the single auxiliary boiler would be complied with, the only difference being that two 50% capacity boilers may be used, instead of one. The attached analyses show that there are no changes in air quality impacts or the BACT analysis for the auxiliary boiler as a result of this

change. A separate request to modify the site certification under the Power Plant Siting Act to allow use of two 50% capacity boilers has been previously filed with the Department. I understand the Department concluded the changes would not impact air quality, based on the review of the certification modifications. ICL therefore requests that the PSD permit be amended to reflect that two auxiliary boilers may be used instead of one, subject to the limits already established in the facility's PSD permit. The proposed amendments to the PSD permit to address this revision are attached under the heading "Auxiliary Boiler."

ICL also requests that Specific Condition 2 on page 5 be amended to reflect that propane is permitted to be fired in the main and auxiliary boilers. Propane is referenced elsewhere in the permit as a boiler fuel. Propane should therefore be listed in Specific Condition 2 for clarity. A proposed amendment to that effect is attached.

ICL requests a correction to the PSD permit emission limits for lead. Specific Condition 5 on page 6 of the PSD permit establishes emissions limits for several pollutants, including lead. The hourly and annual lead emission limits and the basis for their calculation as set forth in that condition vary from that requested in the PSD permit application and the limits established in the conditions of certification in the separate Site Certification Order. The difference in these values appears to result from rounding down of the requested basis of 0.0000187 to 0.00001 in calculating the emission rates for lead in the PSD permit. ICL is requesting that the Department amend the PSD permit to reflect the requested emission rates. The amended Specific Condition 5 is attached.

Your attention to this request is appreciated. Please do not hesitate to call me if you or members of your staff have any requests regarding this request.

Sincerely

Douglas S. Roberts

Encls.
cc: Preston Lewis
J. Rogers
B. Olsen
J. Harper, EPA
C. Shaver, NPS

Indiantown Cogeneration Project
PSD-FL-168
Amendments

1. Auxiliary Boiler

Page 1, ¶3, amend as follows:

The proposed facility includes one main boiler and one steam generator, and one or two auxiliary boilers operated during lightoff and startup of the main boiler or if the main boiler is down and process steam is required for Caulkins Citrus Processing. The primary source of air emissions will be the main boiler, firing coal. Secondary air emission sources include the auxiliary boilers firing natural gas, propane or No. 2 fuel oil, and the material handling systems. The operation of these units will result in significant net emissions increases of regulated air pollutants over the current emissions levels and thus, is subject to review by the Department under the prevention of significant deterioration (PSD) regulations (Rule 17-2.500, Florida Administrative Code).

Page 5, Specific Conditions 3 and 4, amend as follows:

3. The maximum heat input to the PC boiler shall not exceed 3422 MMBtu/hr while firing coal. The one or two auxiliary boilers shall not exceed a combined total of 342 MMBtu/hr while firing No. 2 fuel oil and a combined total of 358 MMBtu/hr firing natural gas or propane.

4. The PC boiler shall be allowed to operate continuously (8760 hrs/yr). The auxiliary boiler or boilers shall operate a maximum of 5000 hrs at the combined total heat input rates with up to 1000 hrs/yr on No. 2 fuel oil with 0.05% sulfur, by weight, and the balance on natural gas or propane. Fuel consumption must be continuously measured and recorded by fuel type (coal, natural gas or No. 2 fuel oil) for both the PC boiler and auxiliary boilers.

Page 7, Specific Condition 9, amend as follows:

9. The auxiliary boiler or auxiliary boilers rated at a combined total of up to 358 MMBtu/hr (Natural gas and propane) and 342 MMBtu/hr (No. 2 fuel oil), shall be limited to a maximum of 5000 hrs/year at the combined total heat input rates with up to 1000 hrs /yr firing No. 2 fuel oil with 0.05% sulfur, by weight, and the balance firing natural gas or propane. The maximum total annual emissions from the auxiliary boiler or boilers will be as follows when firing No. 2 fuel oil for 1000 hrs/yr:

2. Propane

Page 5, Specific Condition 2, amend to read:

2. Only coal, natural gas, propane or No. 2 fuel oil shall be fired in the pulverized coal (PC) boiler and auxiliary boilers.

3. Emission Limits for Lead:

Page 6, Specific Condition 5 amend to read:

5. Based on a permitted heat input rate of 3422 MMBtu/hr, the stack emissions from the main boiler shall not exceed any of the following limitations:

Pollutant	Basis lb/MBtu	Emission lb/hr	Limitation TPY
SO_2	0.170	582*	2549
NO_x	0.170	582*	2549
PM	0.018	61.6	270
PM_{10}	0.018	61.6	270
CO	0.110	376*	1649
VOC	0.0036	12.32	54.0
H_2SO_4	0.0004	1.45	6.51
Beryllium	0.0000027	0.0094	0.041
Mercury	0.0000114	0.039	0.17
~~Lead~~	~~0.0001~~	~~0.034~~	~~0.15~~
Lead	0.0000187	0.064	0.280
Fluorides	0.0015	5.08	22.3
Arsenic	0.000051	0.18	0.77

* 24 hour daily block average (midnight to midnight)

AIR QUALITY IMPACT INVESTIGATION IN SUPPORT OF THE INDIANTOWN COGENERATION PROJECT DESIGN AND SITE LAYOUT MODIFICATIONS

Proposed Action:

Substitution of Two 50% Auxiliary Boilers for the Original Single Auxiliary Boiler

In order to insure reliability to the steam host, ICL proposes to replace the single auxiliary boiler with two boilers, each one-half the size of the original auxiliary boiler. This substitution will provide a minimum of 50% of the normal steam supply in the event that one of the reduced size boilers is out of service.

Findings:

The modeling methodology employed in the original PSD permit application was used to determine whether air quality impacts caused by the proposed substitution will exceed those presented in the original analysis. SO_2 impacts associated with the operation of the two auxiliary boilers were investigated; one stack for two boilers at full load (i.e., 100% capacity) and one stack for one boiler at full load (i.e., 50 % capacity). Impacts associated with air pollutants, other than SO_2, were estimated by taking the ratio of the specified pollutant emission rate to the SO_2 emission rate.

The GEP stack height for the ICL facility, reported in the original PSD permit application, was calculated at 500 feet. The main boiler stack will be constructed to 495 feet. For the substitution discussed here, the auxiliary boiler stack will be increased from 90 feet to 200 feet. Modeling results based on this substitution, and reflecting the increased auxiliary boiler stack height are summarized in Table 1. Results indicate that the full load case has higher ground-level concentrations than those estimated for the 50% load scenario, over all averaging time periods. The maximum impact areas are within 300 meters of the main boiler stack due to plume downwash conditions created by the boiler building. Modeling results also show that the maximum combined impacts (i.e., main boiler plus auxiliary boiler(s)) are less than the impacts reported in the original PSD application. Similar results are expected for the other air pollutants emitted.

In summary, the substitution of the original auxiliary boiler with two boilers, each one-half the size of the original auxiliary boiler, will result in impacts slightly lower than those presented in the original PSD application. No additional adverse effects to air quality, due to the proposed substitution, are expected.

Proposed Action:

Increased Size of the Coal Storage Building

The original coal storage building was designed to accommodate a seven-day supply of coal. Based on discussions with the coal supplier, ICL has determined that additional coal will be required to be stored on site in order to insure an adequate fuel supply to the facility. ICL has proposed to increase the length of the coal storage building by an additional 150 feet, thereby adding 8000 tons of storage capacity.

Findings:

The increase in length of the coal storage building by 150 feet will not affect either the GEP stack height determination nor the plume downwash calculations, because the controlling structure, which dictates the occurrence and extent of plume downwash, is still the boiler building, as reported in the original PSD application.

In spite of the increase in capacity of the active coal storage pile from 24,000 to 32,000 tons, the daily coal consumption by the ICL facility remains unchanged. Due to the fact that there will be no increase in the number of railroad cars per train load and that the load capacity per car remains unchanged, the number of hours of coal unloading activities per day at the ICL facility is expected to be the same as that reported in the original PSD application. In the original PSD application, the coal unloading activities were very conservatively assumed to occur 4 hours per day on every day of the year. Therefore, no additional fugitive dust impacts associated with this proposed action are expected.

Proposed Action:

Increase in Size of the Ash Storage Silo

In order to accommodate changes to the actual operating practices defined in discussions with the railroad and coal supplier, additional storage capacity is required to provide up to nine days of ash storage on site. This will be accomplished by increasing the ash storage silo diameter from 50 feet to 55 feet and the silo height from 120 feet to 185 feet.

Findings:

The increase of the silo building dimensions will not increase ash emissions at any of the transfer points due to the fact that the daily coal consumption by the ICL facility remains unchanged.

In dispersion modeling, fugitive dust emissions are assumed to be released at ambient temperature with virtually no exit velocity. Therefore, fugitive dust concentration estimates are made with the assumption that there is very little momentum or buoyancy plume rise. By increasing the silo height from 120 feet to 185 feet the fugitive dust emission release will be at a greater height, thereby increasing downwind distance and consequently dispersion of the fugitive dust plume prior to its impact with the ground. Therefore, the fugitive dust concentrations at ground-level receptors, under the same ambient conditions, will be less with an increased release height.

In summary, fugitive dust concentrations around the ICL facility will be slightly less if the release height from the ash storage silo is increased from 120 feet to 185 feet. Therefore, the proposed action will not pose any adverse effects to air quality.

TABLE 1. ICL STACK SOURCES AT MAXIMUM IMPACT LOCATIONS
(AUXILIARY BOILERS AT 100 % LOAD)

Pollutant	Averaging Period	Aux. Boilers	New Total	Original Total
SO_2	3-Hour	17.2 (0.30,050)	23.2 (2.20,310)	24.7 (0.25,100)
	24-Hour	7.5 (0.25,330)	7.5 (0.25,330)	11.6 (0.25,110)
	Annual	0.94 (0.25,340)	0.94 (0.25,340)	1.15 (0.25,100)

(AUXILIARY BOILER AT 50 % LOAD)

Pollutant	Averaging Period	Aux. Boiler	New Total	Original Total
SO_2	3-Hour	6.1 (0.30,030)	22.7 (2.2,310)	24.7 (0.25,100)
	24-Hour	3.9 (0.25,350)	6.0 (3.2,310)	11.6 (0.25,110)
	Annual	0.62 (0.25,340)	0.64 (3.0,310)	1.15 (0.25,100)

Note: Concentrations are in $\mu g/m^3$.
Distance and direction shown are in km and degree, respectively, relative to the ICL main stack in parenthesis.
Total = Main Boiler + Auxiliary Boiler(s)

ENSR
ENSR Consulting and Engineering

MEMORANDUM

TO:	Jean Hopkins/US Generating Co.	**DATE:**	April 17, 1992
FROM:	Steve Jalinek	**FILE:**	5402-008-600
RE:	Indiantown Aux Boiler Design Change - Effect on BACT Conclusions	**CC:**	

Per your request, I have evaluated how changing the auxiliary boiler from a single 100% unit to a set of two 50% capacity units would affect the Indiantown PSD Best Available Control Technology (BACT) Analysis. As we discussed, it's my opinion that given certain design considerations, the BACT conclusions would remain the same if this change were made. This memo discusses these conclusions and the design parameters which must be considered in making the change.

I understand that the auxiliary boiler, originally designed to fire either natural gas, propane, or distillate fuel oil at an output of approximately 358 MMBtu/hr with a total maximum operating schedule of 5,000 hours/yr and a maximum of 1,000 hours/yr on oil, is being redesigned. The new configuration, requested by Caulkins Citrus Processing, will consist of two separate combustion units, each sized for a maximum heat rate of approximately 179 MMBtu/hr and the same operating schedule as proposed in the original application. Both units will exhaust through a common stack.

<u>NO_x Control</u>

The BACT for the original design evaluated the technical and economic feasibility of selective catalytic reduction (SCR), selective non-catalytic reduction (SNCR), flue gas recirculation (FGR), and low NO_x burners. These alternative controls are all technically feasible for boilers in either size range (360 or 180 MMBtu/hr). However, SCR, SNCR and FGR were all rejected as BACT for economic reasons, while low NO_x burners with a NO_x emission rate of 0.2 lb/MMBtu was concluded to represent BACT. The DER concurred with this conclusion.

The redesign calls for both boilers, which generally will operate at the same time, to exhaust through a common stack. In this configuration, a common SCR system would be technically feasible and would have essentially identical economic impacts as in the previous design since an equivalent amount of catalyst would be required in either case. However, separate emission

control equipment for each boiler would be required for the SNCR, FGR and low NO_x burner alternatives. This would result in slightly higher capital costs for these alternatives for the new design when compared to the costs for the original design. The controlled emissions, however, would remain the same, and thus the economic impact of each alternative would increase. Since the economic impacts for all of these alternatives were concluded to be unreasonable with the original design, the change to two boilers would not alter this conclusion.

Low NO_x burners with a maximum emission rate of 0.2 lb/MMBtu thus would likely still be concluded to represent BACT for the reconfigured auxiliary boiler equipment.

SO_2 and Acid Gas Control

The BACT for the original auxiliary boiler configuration evaluated flue gas desulfurization and fuel sulfur limitations and concluded that limiting the maximum fuel sulfur content to 0.05% was representative of BACT based on unreasonable economic impacts for flue gas desulfurization (FGD). The DER concurred with this conclusion.

As with SCR for NO_x control, the use of two 50% boilers with a common stack would allow the use of a common FGD system. Thus an FGD system for this configuration would have similar capital costs to one designed for a single 100% boiler since the exhaust flows for the two systems would be approximately equal. The emission rates of SO_2 and acid gases would be virtually the same in either case, consequently the cost effectiveness would remain the same and the BACT conclusions would not change. BACT could still be concluded to be represented by low sulfur fuel with a maximum emission rate of 0.052 lb/MMBtu.

CO and VOC Control

The original BACT concluded that combustion controls represented BACT for control of VOC and CO from the auxiliary boiler since the alternative which is generally considered the most stringent, catalytic oxidation, was concluded to be infeasible for an oil-fired source. Oil firing would still be conducted with the new design at the same operating schedule as the original design, thus the technical infeasibility of catalytic oxidation remains unchanged. Were oil firing to be eliminated as an alternative fuel, then the technical arguments against catalytic oxidation would no longer be valid, and the BACT conclusions might change.

However, at this time there is no plan to eliminate fuel oil firing and thus the BACT conclusion of combustion controls for control of CO and VOC remains valid.

Particulate Matter Control

BACT for PM in the original BACT was concluded to be represented by the use of high quality, low ash fuels since fabric filters are infeasible on oil-fired sources and electrostatic precipitators were concluded to be cost ineffective. As discussed, the use of two 50% units firing simultaneously and exiting from a common stack results in a comparable exhaust rate than a single 100% unit. An ESP designed for either configuration would be approximately identical in size and cost, and control the same amount of particulate matter. As a result, the cost effectiveness of this alternative would be identical, and unrepresentative of BACT, for either configuration.

Since neither the fuel mix nor the exhaust rate is changing, the BACT conclusion of 0.02 lb/MMBtu achieved firing low ash fuels, would be concluded to represent BACT for the modified configuration.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMIT

In the matter of an
Application for Permit by:

DER File No. PSD-FL-168
Martin County

Mr. Stephen A. Sorrentino
Indiantown Cogeneration, L.P.
7475 Wisconsin Ave.
Bethesda, MD 20814-3422

_____/

Enclosed is Permit Number PSD-FL-168 to construct a cogeneration project, issued pursuant to Section(s) 403, Florida Statutes.

Any party to this Order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

for Barry D Andrews
C. H. Fancy, P.E., Chief
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400
904-488-1344

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of business on 3/26/92 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED,
on this date, pursuant to
§120.52(11), Florida Statutes,
with the designated Department
Clerk, receipt of which is hereby
acknowledged.

_____ 3/26/92
(Clerk) (Date)

Copies furnished to:
Jewell A. Harper, EPA
Isidore Goldman, SED
James W. Coleman, Jr., NPS
Steve Jelinek, ENSR
B. Andrews
M. Newkirk
J. Rogers
C. Shaver, NPS
B. Owen

P 617 884 158

Certified Mail Receipt

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

UNITED STATES POSTAL SERVICE

Sent to Mr. Stephen A. Sorrentino	
Street & No. 7475 Wisconsin Ave.	
P.O., State & ZIP Code Bethesda, MD 20814-3422	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees	$
Postmark or Date Mailed: 3-26-92 Permit: PSD-FL-168	

PS Form 3800, June 1990

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt Fee will provide you the signature of the person delivered to and the date of delivery.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Mr. Stephen A. Sorrentino
Indiantown Cogeneration, L.P.
7475 Wisconsin Ave.
Bethesda, MD 20814-3422

4a. Article Number
P 617 884 158

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
MAR 30 1992

8. Addressee's Address (Only if requested and fee is paid)

5. Signature (Addressee)

6. Signature (Agent)
Lara MacDaller

PS Form 3811, November 1990 ☆U.S. GPO: 1991—287-036 **DOMESTIC RETURN RECEIPT**

Final Determination

PG&E/Bechtel Generating Company
Indiantown Cogeneration, L.P.
Martin County, Florida

Indiantown Cogeneration Project

PSD-FL-168

Department of Environmental Regulation
Division of Air Resources Management
Bureau of Air Regulation

March 17, 1992

Final Determination

The Indiantown Cogeneration, L.P. (ICL) PSD permit application (part of the Power Plant Siting application) has been reviewed by the Division of Air Resources Management. Comments received from EPA Region IV dated February 25, 1992 (see attachment 1) and United States Department of the Interior, National Park Service (NPS), Southeast Regional Office dated February 21, 1992 (see attachment 2) are addressed below.

Best Available Control Technology (BACT): The EPA agreed that FDER's BACT was consistent with the most recent determinations for pulverized coal (PC) boilers for particulate, SO_2, and NO_x. However, EPA recommended that the permit include a new specific condition to follow in the event that the selective noncatalytic reduction (SNCR) system was incapable of achieving the 0.17 lb/MMBtu (24-hour avg.) NO_x level. FDER has written Specific Condition No. 6 addressing EPA's concern. We are also requesting an opportunity to review the plans and specifications to assure that an appropriate design basis exists.

The NPS also expressed agreement with FDER's determination for particulate and SO_2 emission limitations and the method of control. However, they recommended that the source be required to install selective catalytic reduction (SCR) for NO_x control since it is being required for similar projects in New Jersey and Virginia. In the case of New Jersey, it is our understanding that the facilities are in ozone nonattainment areas. However, the ICL project is in an attainment area for all pollutants. Over the past two years FDER has required sources to achieve lower and lower NO_x levels as the technology advances . The NO_x level required for the Indiantown Cogeneration facility meets FDER's goals and time table. As indicated above, the source will be required to achieve the specified NO_x limit using whatever technologies are necessary.

Modeling: The NPS expressed concern about the impact of SO_2, NO_x, and VOC emissions on Class I areas. FDER is also concerned about the emissions of these pollutants even though the source is more than 100 km from any national park. However, the EPA ISCST model run for the ICL project indicated that the emissions were well below levels of concern for Class I areas.

The final action of the Department will be to issue construction permit PSD-FL-168 as proposed in the Technical Evaluation and Preliminary Determination.

Florida Department of Environmental Regulation

Twin Towers Office Bldg. ● 2600 Blair Stone Road ● Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

PERMITTEE:
Indiantown Cogeneration, L.P.
7475 Wisconsin Ave.
Bethesda, MD 20814-3422

Permit Number: PSD-FL-168
County: Martin
Latitude/Longitude: 27°02'20"N
80°30'45"W
Project: Indiantown Cogeneration Project

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

The Indiantown Cogeneration, L.P. (ICL) proposes to construct a cogeneration project near Indiantown, Florida. The proposed plant is a pulverized-coal-fired facility that will produce approximately 330 megawatts (MW) of electricity for sale to the Florida Power and Light Company (FPL) and approximately 225,000 lb/hour of process steam for sale to the Caulkins Indiantown Citrus Company ("Caulkins"). The site, which occupies approximately 232 acres, is located 9 miles east of Lake Okeechobee and about 3 miles northwest of the community of Indiantown in southwestern Martin County.

The proposed facility includes one main boiler and one steam generator, and an auxiliary boiler operated during lightoff and startup of the main boiler or if the main boiler is down and process steam is required for Caulkins Citrus Processing. The primary source of air emissions will be the main boiler, firing coal. Secondary air emission sources include the auxiliary boiler firing natural gas or No. 2 fuel oil, and the material handling systems. The operation of these units will result in significant net emissions increases of regulated air pollutants over the current emissions levels and thus, is subject to review by the Department under the prevention of significant deterioration (PSD) regulations (Rule 17-2.500, Florida Administration Code).

The power plant site certification number for this project is PA 90-31.

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Recycled Paper

Attachments are listed below:

1. Power Plant Site Certification Package PA 90-31 and its associated attachments, dated September 6, 1991.
2. DER's Technical Evaluation and Preliminary Determination dated December 26, 1991.
3. Letter from National Park Service dated February 20, 1992.
4. Letter from EPA dated February 25, 1992.

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

GENERAL CONDITIONS:

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

a. Have access to and copy any records that must be kept under the conditions of the permit;

b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and

c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

a. a description of and cause of non-compliance; and

b. the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department

GENERAL CONDITIONS:

as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

(x) Determination of Best Available Control Technology (BACT)
(x) Determination of Prevention of Significant Deterioration (PSD)
(x) Compliance with New Source Performance Standards (NSPS)

14. The permittee shall comply with the following:

a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement,

GENERAL CONDITIONS:

report, or application unless otherwise specified by Department rule.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the dates analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SPECIFIC CONDITIONS:

1. Beginning with the fifth quarter of operation, the Permittee shall submit to the Bureau of Air Regulation and the Air Section, Southeast District office, a quarterly report for the previous quarter showing the 12 month rolling average capacity factor for the generating unit.

The 12 month rolling average capacity factor shall be calculated by dividing each unit's megawatt hours output of generation by the product of the official megawatt rating of the unit and the number of hours in the 12 month period.

2. Only coal, natural gas or No. 2 fuel oil shall be fired in the pulverized coal (PC) boiler and auxiliary boiler.

3. The maximum heat input to the PC boiler shall not exceed 3422 MMBtu/hr while firing coal. The auxiliary boiler shall not exceed 342 MMBtu/hr while firing No. 2 fuel oil and 358 MMBtu/hr firing natural gas or propane.

4. The PC boiler shall be allowed to operate continuously (8760 hrs/yr). The auxiliary boiler shall operate a maximum of 5000 hrs with up to 1000 hrs/yr on No. 2 fuel oil with 0.05% sulfur, by

SPECIFIC CONDITIONS:

weight, and the balance on natural gas or propane. Fuel consumption must be continuously measured and recorded by fuel type (coal, natural gas or No. 2 fuel oil) for both the PC boiler and auxiliary boiler.

5. Based on a permitted heat input of 3422 MMBtu/hr, the stack emissions from the main boiler shall not exceed any of the following limitations:

Pollutant	Basis lb/MMBtu	Emission Limitation lb/hr	TPY
SO_2	0.170*	582*	2549
NOx	0.170*	582*	2549
PM	0.018	61.6	270
PM_{10}	0.018	61.6	270
CO	0.110	376*	1649
VOC	0.0036	12.32	54.0
H_2SO_4	0.0004	1.45	6.51
Beryllium	0.0000027	0.0094	0.041
Mercury	0.0000114	0.039	0.17
Lead	0.00001	0.034	0.15
Fluorides	0.0015	5.08	22.3
Arsenic	0.000051	0.18	0.77

*24 hour daily block average (midnight to midnight)

6. The 0.170 lb/MMBtu NO_x emission rate is the basis for the above maximum emission limitation. The permittee is allowed to use any technology (e.g. SNCR, SCR, or combustion controls) to achieve the NO_x limitation. Should a technology be chosen which does not meet the specified NO_x limits, the permittee must apply whatever technologies deemed necessary to ensure that the NO_x limitation is met. Plans and specifications must be submitted to DER's Bureau of Air Regulation in Tallahassee for review within 90 days after they become available.

SPECIFIC CONDITIONS:

7. NH_3 (Ammonia) - Slip from exhaust gases shall not exceed 50 ppmv.

8. Visible Emissions (VE) from each baghouse exhaust shall not exceed 10% opacity (six minute average). No VE during lime silo loading operations (i.e., less than 5% opacity). VE from the ash handling baghouse shall not exceed a particulate limit of 0.010 grains/acf and VE of 5% opacity.

9. The auxilliary boiler, rated at up to 358 MMBtu/hr (Natural Gas and propane) and 342 MMBtu/hr (No. 2 fuel oil), shall be limited to a maximum of 5000 hours/year with up to 1000 hrs/yr firing No. 2 fuel oil with 0.05% sulfur, by weight, and the balance firing natural gas or propane. The maximum annual emissions will be as follows when firing No. 2 fuel oil for 1000 hrs/yr:

EMISSION LIMITATION

Pollutant	lbs/hr	tons/year
NO_x	68.0	34
SO_2	18.0	9
PM	1.4	0.70
PM_{10}	1.4	0.70
CO	48.0	24
VOC	0.620	0.31
Be	4.0×10^{-5}	2.0×10^{-5}
Hg	5.2×10^{-4}	2.6×10^{-4}
Pb	3.6×10^{-2}	1.8×10^{-2}
As	6.8×10^{-3}	3.4×10^{-3}

10. Particulate emissions from the coal, and limestone handling facilities shall be controlled by enclosing all conveyors and conveyor transfer points (except those directly associated with the coal stacker/reclaimer for which an enclosure is operationally infeasible). Fugitive emission shall be tested as specified in Specific Condition No. 19. Inactive coal storage piles shall be shaped, compacted, and oriented to minimize wind erosion, and covered. Water sprays or chemical wetting agents and stabilizers shall be applied to uncovered storage piles, roads, handling equipment, etc. during dry periods and as necessary to all facilities to maintain an opacity of less than or equal to 5 percent. When adding, moving or removing coal from the coal pile an opacity of 20% is allowed. The lime handling system including the lime silos shall be maintained at a negative pressure while operating and the exhaust vented to a control system. The fly ash handling system (including transfer and silo storage) shall

SPECIFIC CONDITIONS:

be totally enclosed and vented (including pneumatic system exhaust) through fabric filters.

Submit for approval to the Department, Bureau of Air Regulation in Tallahassee within thirty (30) days after it becomes available, copies of technical data pertaining to the selected particulate emissions control for the coal, and lime handling facilities. These data shall include, but not be limited to guaranteed efficiency and emission rates, and major design parameters such as air/cloth ratio and flow rate. The Department shall issue a response within 30 days of receipt of the technical data.

11. Particulate emissions from bag filter exhausts from the coal, lime and flyash handling systems shall be limited to 0.010 gr/acf. A visible emission reading of 5% opacity or less may be used to establish compliance with this emission limit. A visible emission reading greater than 5% opacity will not create a presumption that the 0.010 gr/acf emission limit is being violated. However, a visible emission reading greater than 5% opacity will require the permittee to perform a stack test. Verification and recording of the above requirements for particulate emissions shall be done at least annually.

12. Emissions shall not be visible more than 2 minutes in any 15 minute period. Compliance with fugitive emissions limitations from all transfer points will be determined by EPA/DER referenced Method 22 and opacity Method 9 (Appendix A, 40 CFR 60).

13. Coal shall not be burned in the unit unless the spray dryer scrubber, fabric filter baghouse and other air pollution control devices are operating properly except as provided under 40 CFR Part 60, Subpart Da. Any malfunctions of these air pollution control devices are to be recorded; including duration, cause, and description of repair.

14. The fuel oil to be fired in the PC boiler and the auxiliary boiler shall be "new oil" which means an oil which has been refined from crude oil and has not been used. The quality of the No. 2 fuel oil used by the auxiliary boiler shall not contain more than 0.05% sulfur, by weight, based on each shipment analysis report.

15. No fraction of flue gas shall be allowed to bypass the air pollution control devices (PCD) system to reheat the gases exiting from the PCD system, if the bypass will cause emissions above the limits specified. The percentage and amount of flue gas bypassing

SPECIFIC CONDITIONS:

the PCD system shall be documented and records kept for a minimum of two years and must be available for FDER's inspection.

16. All fuel oil and coal shipments shall have a shipment analysis for sulfur content, ash content, and heating value. In the event continuous emission monitoring of sulfur dioxide is not performed, a daily analysis of coal sulfur content for the purpose of establishing the percentage reduction in potential sulfur emissions shall be made. Such determination shall be in accordance with EPA reference Method 19. Records of all the analyses shall be kept for FDER inspection for a minimum of two years after the data is recorded.

17. The applicant shall comply with applicable requirements and provisions of the New Source Performance Standard for electric utility steam generating units (40 CFR 60 Part Da).

18. Within 60 calendar days after achieving the permitted capacity at which the unit will be operated, but no later than 180 calendar days after initial startup, the permittee shall conduct stack tests for particulates, SO_2, NO_x, and visible emissions and furnish the Department a written report of the results of such tests within 45 days of completion of the tests. The tests shall be conducted in accordance with the provisions specified in 40 CFR 60 and shall be conducted within 90-100% of capacity.

19. Compliance with emission limitation standards shall be demonstrated using EPA Methods, as contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources), or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants), or any other method approved by the Department and EPA, in accordance with F.A.C. Rule 17-2.700.

EPA Method	For Determination of
1	Selection of sample site and velocity traverses.
2	Stack gas flow rate when converting concentrations to or from mass emission limits.
3	Gas analysis when needed for calculation of molecular weight or percent O_2.
4	Moisture content when converting stack velocity to dry volumetric flow rate for use in converting concentrations in dry gases to or from mass emission limits.

SPECIFIC CONDITIONS:

5	Particulate matter concentration and mass emissions.
201 or 201A	PM_{10} emissions.
6, 6C, or 19	Sulfur dioxide emissions from stationary sources.
7, 7C, or 19	Nitrogen oxide emissions from stationary sources.
8	Sulfuric acid mist from stationary source.
9	Visible emission determination of opacity.

- At least three one hour runs to be conducted simultaneously with particulate testing for the emissions from dry scrubber/baghouse, and ash handling building baghouse.
- At least one lime vehicle unloading into the lime silo (from start to finish).

22	Fugitive emissions from transfer points.
10	Carbon monoxide emissions from stationary sources.
12 or 101A	Lead concentration from stationary sources.
13A or 13B	Fluoride emissions from stationary sources.
18 or 25,	Volatile organic compounds concentration.
101A or 108	Mercury emissions.
104	Beryllium emission rate and associated moisture content.

NOTE: Use EPA draft method or other methods approved by Department to test for ammonia.

20. Performance tests shall be conducted under such conditions as the Department shall specify based on representative performance of the facility. The permittee shall make available to the Department

SPECIFIC CONDITIONS:

such records as may be necessary to determine the conditions of the performance tests.

21. The permittee shall provide written notice to the Southeast District office 30 days prior to the tests in order to afford the Department the opportunity to have an observer present.

22. Stack tests for particulates (PM and PM_{10}), NO_x and SO_2 and visible emissions shall be performed annually.

23. Stack emission monitoring shall include a flue gas oxygen meter to continuously monitor a representative sample of the flue gas. The oxygen monitor shall be used with automatic feedback controls to continuously maintain air/fuel ratio parameters at an optimum. The permittee shall install and operate continuously monitoring devices for each main boiler exhaust for sulfur dioxide, nitrogen dioxide and opacity, including flue gas O_2 and/or CO_2 content. The monitoring devices shall meet the applicable requirements of Section 17-2, F.A.C., and 40 CFR 60 a minimum of 95% of the time the source is operating.

24. The permittee shall operate two continuous ambient air monitoring sites for sulfur dioxide in accordance with FDER quality control procedures and EPA reference methods in 40 CFR, Part 53, and two ambient air monitoring sites for suspended particulates, and one continuous NO_x monitor site. The ambient monitoring site locations shall be approved by the Department's Bureau of Air Monitoring and Assessment. The frequency of operation of the particulate monitors shall be every six days commencing as specified by the Department's Bureau of Air Monitoring and Assessment. During construction and operation, wind speed/wind direction will be recorded and reported with the ambient data.

25. The permittee shall provide stack sampling facilities as required by Rule 17-2.700(4) FAC.

26. The ambient monitoring program shall begin at least one year prior to initial start up of the unit and shall continue for at least one year after commencement of commercial operation. The Department's Bureau of Air Monitoring and Assessment and the permittee shall review the results of the monitoring program annually and determine the necessity for the continuation of or modifications to the monitoring program.

27. Prior to operation of the source, the permittee shall submit to the Department's Bureau of Air Regulation a plan or procedure

SPECIFIC CONDITIONS:

that will allow the permittee to monitor emission control equipment efficiency and enable the permittee to return malfunctioning equipment to proper operation as expeditiously as possible.

28. Stack monitoring, fuel usage and fuel analysis data shall be reported to the Department's Southeast District Office on a quarterly basis commencing with the start of commercial operation in accordance with 40 CFR, Part 60, Section 60.7, and 60.49a and in accordance with Section 17-2.08, FAC.

29. Utilizing the Aerometric Information and Retrieval System (AIRS) or other format approved in writing by the Department, ambient air monitoring data shall be reported to the Bureau of Air Monitoring and Assessment of the Department quarterly. Upon commencement of ambient air monitoring, such reports shall be due within 45 days of the end of the quarterly reporting period. Reporting and monitoring shall be in conformance with 40 CFR Parts 53 and 58.

30. Beginning one month after certification, the permittee shall submit to the Department a quarterly status report briefly outlining progress made on engineering design and purchase of major pieces of air pollution control equipment. All reports and information required to be submitted under this condition shall be submitted to the Siting Coordination Office, Department of Environmental Regulation, 2600 Blair Stone Road, Tallahassee, Florida, 32301.

31. In the event of a prolonged (thirty days or more) equipment malfunction or shutdown of air pollution control equipment, operation shall be allowed to resume and continue to take place under appropriate Department order, provided that the Permittee demonstrates such operation will be in compliance with all applicable ambient air quality standards and PSD increments. During such malfunction or shutdown, operation of the facility shall comply with all other requirements of this permit and all applicable state and federal emission standards not affected by the malfunction or shutdown which is the subject of the Order. Operational stoppages exceeding two hours for air pollution control systems are to be reported to the Southeast District office. Operational malfunctions which do not stop operation but may prevent compliance with emission limitations must also be reported to the Southeast District office.

PERMITTEE:
Indiantown Cogeneration, L. P.

Permit Number: PSD-FL-168
Project: Indiantown Cogeneration Project

SPECIFIC CONDITIONS:

Issued this 25th day of March, 1992

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

Carol M. Browner, Secretary

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

For Routing To Other Than The Addressee	
To:	Location:
To:	Location:
To:	Location:
From:	Date:

Interoffice Memorandum

TO: Carol Browner

FROM: Steve Smallwood

DATE: March 17, 1992

SUBJ: Approval of Construction Permit PSD-FL-168
Indiantown Cogeneration, L.P.

Attached for your approval and signature is the Final Determination and permit based on the Best Available Control Technology (BACT) determination, Prevention of Significant Deterioration (PSD) determination, and New Source Performance Standards (NSPS) compliance. The attached was prepared by the Bureau of Air Regulation for the above mentioned company to construct a cogeneration project.

I recommend your approval and signature.

SS/PL/plm

Attachments

Carol- Let me know if you want a verbal briefing on this
3-19-92

Florida Department of Environmental Regulation

Twin Towers Office Bldg. ● 2600 Blair Stone Road ● Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

December 26, 1991

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Ms. Jewell A. Harper
Air Enforcement Branch
U.S. EPA, Region IV
345 Courtland Street, NE
Atlanta, GA 30365

Dear Ms. Harper:

Re: Indiantown Cogeneration, L.P.
330 MW - Pulverized Coal-Fired Steam Electric Generator
Federal Number: PSD-FL-168

Enclosed for your review and comment is a copy of the Technical Evaluation and Preliminary Determination for the above referenced project. Please submit any comments or questions within 30 days to Tom Rogers or Barry Andrews at the above address or call (904)488-1344 at your earliest convenience.

Sincerely,

C. H. Fancy, P.E.
Chief
Bureau of Air Regulation

CHF/MH/mh

Enclosure

c: Isidore Goldman, Southeast Dist.
Tom Rogers, BAMA
Chris Shaver, NPS
Stephen A. Sorrentino, PG&E/Bechtel

Recycled Paper

Technical Evaluation
and
Preliminary Determination

Indiantown Cogeneration, L.P
330 MW - Pulverized Coal-Fired Steam Electric Generator
Martin County, Florida

Permit No. PSD-FL-168

Department of Environmental Regulation
Division of Air Resources Management
Bureau of Air Regulation

December 26, 1991

Power Plant Site Certification
Review Case No. PA 90-31
INDIANTOWN COGENERATION PROJECT

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State of Florida Department of Environmental Regulation
Indiantown Cogeneration L.P.
Electric Power Plant Site Certification Review
Case No. PA90-31

I. INTRODUCTION

Pursuant to the Florida Power Plant Siting Act, Sections 403.501-519, Florida Statutes, the Indiantown Cogeneration, L.P. (ICL) applied in December of 1990 for certification of 330 MW pulverized coal-fired steam electric generating unit at a site located in Martin County immediately southeast of Caulkins Indiantown Citrus Company (Caulkins).

Filing of a complete application triggers an assessment process of environmental, socioeconomic, cultural and land-use impacts from construction and operation of the proposed unit. The electrical Need for the unit may have already been determined at the time of site certification application filing, or the determination may be made concurrent with the impact assessment process. The Public Service Commission, pursuant to s. 403.519, F.S., is the determining body for need issues.

The Department of Environmental Regulation (DER) was made lead agency in the state impact assessment process and is responsible for preparation of the written analysis required by the Power Plant Siting Act. Both the Power Plant Siting Act and DER's companion rule, Chapter 17-17, F.A.C., identify minimum criteria which must be studied in the review of the proposed steam electric generation facility. These include: Accessibility to transmission corridors, proximity to transportation systems, cooling systems requirements, soil and foundation conditions, impact on water supplies, impact on terrestrial and aquatic plant and animal life, impacts on air and water quality, impact on surrounding land uses, impact on public lands and submerged lands, impact on archaeological sites and historic preservation areas, construction and operational safeguards, "environmental" impacts (such as impacts from solid and hazardous waste disposal, noise, site modifications, wastewater disposal techniques, and meteorological changes) and, finally, site specific studies, which can address any feature not covered elsewhere.

While the majority of these studies are environmental in nature, some of the studies pertain to socioeconomics, archaeology, land-use planning, and other disciplines outside DER's statutory charges. Accordingly, the Power Plant Siting

Act (PPSA) also requires the participation of certain other state agencies.

Concurrent with the review by the State, the U.S. Army Corps of Engineers also assesses the portions of the project that affect the wetlands to be crossed by the rail loop and water supply pipeline.

The result of assessments is a set of specific conditions that must be met as a part of the certification process. The recommended Conditions of Certification for the Indiantown Cogeneration, L.P. are attached in Appendix I.

II. SITE DESCRIPTION

A. Power Plant

The Indiantown Cogeneration, L.P. (ICL) project will be constructed in southwestern Martin County, Florida.

The site and its access facilities occupy Sections 26, 27, 34, and 35, Township 39 South, Range 38 East, Martin County, Florida. The site, which occupies approximately 232 acres, is located 9 miles east of Lake Okeechobee and about 3 miles northwest of the unincorporated town of Indiantown. To the north of the site are the Caulkins Citrus Processing Facility (Caulkins) and the vacant Florida Steel Corporation (FSC) site. Both of these facilities border State Road 710 and the CSX Railroad. The ICL project site is bounded on the west by Tampa Farm Products and on the south and east by unimproved industrially zoned land.

The site is currently unimproved and is zoned industrial. There are no existing buildings and the only structures on he site are the transmission towers in the FPL transmission line right-of-way.

Approximately 21 acres of the site will be used to construct the power block portion of the cogeneration plant. The power block includes the boiler, turbine generator, air pollution control equipment, cooling tower, water treatment facilities, lime and ash storage, and administration and maintenance buildings. Another 15 acres will be used for coal handling and storage facilities. A cooling water storage pond will be constructed on approximately 25 acres.

Within the site boundary are 23.9 acres of wetlands which will be preserved. Around each of the wetlands a 50 foot buffer zone will be maintained, accounting for an additional 8

The use of the existing railroad berm ROW for the pipeline route will minimize the wetlands impacts from the pipeline construction. However, waters of the State will be affected in at least six locations: Nubbin Slough, Henry Creek, Lettuce Creek, Myrtle Slough and two unnamed wetlands. The work at Nubbin Slough will include the construction of an intake structure. The other wetland areas listed above will be disturbed to construct aerial (trestle) pipe crossings of the wetland. ICL proposes to bury the pipeline along the railroad ROW with the exception of the aerial crossings listed above. If there are additional impact areas, they are expected to be the temporary disturbance of a wetland edge immediately adjacent to the railroad berm for the placement of the pipe.

C. Air Resources

The Indiantown Cogeneration, L.P. (ICL) proposes to construct a cogeneration project near Indiantown, Florida. The proposed plant is a pulverized-coal-fired facility that will produce approximately 330 megawatts (MW) of electricity for sale to the Florida Power and Light Company (FPL) and approximately 225,000 lb/hour of process steam for sale to the Caulkins Indiantown Citrus Company ("Caulkins"). The site, which occupies approximately 232 acres, is located 9 miles east of Lake Okeechobee and about 3 miles northwest of the community of Indiantown in southeastern Martin County.

The proposed facility includes one main boiler and one steam generator, and an auxiliary boiler operated during lightoff and startup of the main boiler or if the main boiler is down and process steam is required for Caulkins Citrus Processing. The primary source of air emissions will be the main boiler, firing coal. Secondary air emission sources include the auxiliary boiler firing natural gas or No. 2 fuel oil, and the material handling systems. The operation of these units will result in significant net emissions increases of regulated air pollutants over the current emissions levels and thus, is subject to review by the Department under the prevention of significant deterioration (PSD) regulations (Rule 17-2.500, Florida Administration Code).

The proposed project will be located in a Class II PSD area. The nearest Class I area is the Everglades National Park which is approximately 145 kilometers south of the proposed project. At this distance, the proposed project is not expected to influence the Class I area and no analysis was completed. The pollutant emissions estimated by the applicant,

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considering control equipment, indicate that the following ten compounds will be emitted in PSD-significant amounts: carbon monoxide (CO), nitrogen oxides (NOx), volatile organic compounds (VOC), particulate matter (PM and PM10), and sulfur dioxide (SO2), and the non-criteria pollutants beryllium (Be), mercury (Hg), fluorides (F-), and inorganic arsenic (As). Table 1 lists the significant and net emission rates for the proposed facility.

The air quality impact analysis required by the PSD regulations for these pollutants include:

* An analysis of existing air quality;
* A PSD increment analysis (NO2, PM and SO2 only);
* An Ambient Air Quality Standards (AAQS) analysis;
* An analysis of impacts on soils, vegetation, and visibility and of growth-related air quality impacts; and
* A "Good Engineering Practice" (GEP) stack height determination.

The analysis of existing air quality generally relies on preconstruction monitoring data collected with EPA-approved methods. The AAQS analysis depends on the air quality dispersion modeling carried out in accordance with EPA guidelines.

Based on these required analyses, the Department has reasonable assurance that the proposed facility, as described in this report and subject to the conditions of approval proposed herein, will not cause or contribute to violation of any PSD increment or ambient air quality standard. A discussion of the modeling methodology and required analysis follows.

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1. Modeling Methodology

The EPA-approved Industrial Source Complex Short-Term (ISCST) dispersion model was used in the air quality impact analysis. This model determines ground-level concentrations of inert gases or small particles emitted into the atmosphere by point, area, and volume sources. The model incorporates elements for plume rise, transport by the mean wind, Gaussian dispersion, and pollutant removal mechanisms such as deposition and transformation. The ISCST model allows for the separation of sources, building wake downwash, and various other input and output features. A series of specific model features, recommended by the EPA, are referred to as the regulatory options. The applicant used all of the regulatory options in each modeling scenario.

The applicant conducted screening modeling, for the purpose of defining the worst-case operating conditions and the significant impact area, and refined modeling to ensure that the highest concentrations were identified. For both sets of modeling runs the applicant received prior approval from the Department on the by submitting a modeling protocol.

For the modeling, five years of sequential hourly meteorological data were used. The surface and upper-air data were National Weather Service (NWS) data collected in West Palm Beach, Florida, about 26 miles east-northeast of the proposed facility, during the period 1982-1986. Since five years of data were used, the highest second-high short-term predicted concentrations are compared with appropriate ambient standards or PSD increments. For the annual averages the highest predicted yearly average was compared to the standards.

The screening phase modeling used a polar receptor grid centered on the plant's main stack. The grid system consisted of 612 receptors surrounding the facility at 36 direction radials, each separated by 10° increments, from 0.5 kilometers to 4.5 kilometers at successive 250-meter intervals. This coarse-mesh receptor grid provides sufficient resolution and downwind coverage to determine the extent of the significant impact area for each pollutant and the locations of all critical receptors to be evaluated in the further refined modeling.

The initial screening modeling identified the worst-case operating condition (considering five operating conditions varying load and fuel types) to be the main boiler at full load and the auxiliary boiler firing No. 2 fuel oil. Table 2 and Table 3 summarize the stack and emission characteristics of

Table 1. Significant and Net Emission Rates (Tons per Year) for the Proposed Project.

Pollutant	Significant Emission Rate	Existing Emission	Proposed Maximum Emission	Net Emission Change	Applicable Pollutant (Yes/No)
Criteria Pollutants					
CO	100	0	1858.4	1858.4	Yes
NO_2	40	0	2850.5	2850.5	Yes
SO_2	40	0	2629.4	2629.4	Yes
PM (TSP)	25	0	306.1	306.1	Yes
PM_{10}	15	0	276.2	276.2	Yes
VOC	40	0	56.6	56.6	Yes
Pb	0.6	0	0.152	0.152	No
Non-Criteria Pollutants					
Asbestos	0.007	0	0	0	No
Be	0.0004	0	0.041	0.041	Yes
F-	3	0	22.26	22.26	Yes
Hg	0.1	0	0.172	0.172	Yes
Vinyl Chloride	1.0	0	0	0	No
Total Reduced Sulfur	10	0	0	0	No
Hydrogen Sulfide	10	0	0	0	No
Reduced Sulfur Compunds	10	0	0	0	No
Sulfuric Acid Mist	7	0	6.51	6.51	No
Other Pollutants Regulated Under Clean Air Act					
Benzene	N/A	0	0	0	No
As	N/A	0	0.766	0.766	Yes

Table 2. Stack Parameters for the Proposed Facility.

Source	Height (m)	Exit Temperature (K)	Exit Velocity (m/s)	Diameter (m)
Main Boiler	150.9	333.2	30.5	4.88
Aux. Boiler	27.4	533.2	31.4	1.68

Table 3. Maximum Pollutant Emissions for the Proposed Project.

Pollutant	Annual Rate[a] (TPY)		Short-Term Rate (lb/hr)	
	Main Boiler	Aux. Boiler	Main Boiler	Aux. Boiler
CO	1651.1	23.7	377.0	47.3
NO_x	2551.5	34.1	582.6	68.2
PM[b]	270.2	0.7	61.7	1.4
SO_2	2551.2	8.85	582.6	17.7
VOC	N/A	0.32	N/A	0.63
Be	0.041	N/A	0.0094	N/A
F-	22.26	N/A	5.08	N/A
Hg	0.172	N/A	0.039	N/A
As	0.766	N/A	0.175	N/A

[a] Maximum annual emissions are based on the maximum hourly emission rate: 8,760 hrs/yr for the main boiler and 1,000 hrs/yr for the auxiliary boiler, with an annual load factor of 100% for both boilers.

[b] PM and PM_{10} emission rates are assumed to be the same.

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this worst-case condition. This worst-case condition was used in further screening and refined modeling.

The refined modeling was conducted using a fine-grid (100-meter resolution) centered over each of the receptors which had the highest, second-high short-term concentrations.

Impacts due to fugitive particulate emissions from the material handling systems were estimated near the plant property lines. Fugitive dust tends to be released near ground level with insignificant plume rise. As a result, higher particulate concentrations are expected to occur in the nearby area. Therefore, 72 discrete receptors were placed along the ICL property line and one downwind ring distance (100 meters) beyond the ICL property line at each 10° azimuth direction using the main stack as the origin.

The results of these model runs, as shown on Table 4, show that for particulate matter and carbon monoxide the maximum predicted concentrations are less than the defined significant impact levels for these pollutants. As such, no further modeling analyses for these two pollutants is required. However, for SO2 and NO2 further modeling analyses are required since the maximum predicted concentrations are greater than their defined significant impact levels. The radii of the significant impact areas were identified to be 4.25 km for SO2 (24-hour average) and 4.5 km for NO2 (annual average). None of the other pollutants emitted have defined significant impact levels.

A more detailed description of the modeling methodology and analysis, along with the model output, is contained in the ICL application. The Department has reviewed the applicant's analysis and found that it conforms with the guidelines established by the EPA and followed by the Department.

2. Analysis of Existing Air Quality

Preconstruction ambient air quality monitoring is required for all pollutants subject to PSD review. In general, one year of quality assured data using an EPA reference, or the equivalent monitor must be submitted. Sometimes less than one year of data, but no less than four months, may be accepted when Departmental approval is given.

An exemption to the monitoring requirement can be obtained if the maximum air quality impact, as determined by air quality modeling, is less than a pollutant-specific "de minimus" concentration. In addition, if current monitoring

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data exists and these data are representative of the proposed source area, then at the discretion of the Department these data may be used.

The maximum predicted ambient impacts of the proposed facility for those pollutants subject to PSD review are listed in Table 5. The monitoring "de minimus" level for each pollutant is also listed. Inorganic arsenic is not listed in Table 5 because there is no "de minimus" level for this pollutant. All pollutants have maximum predicted impacts below their respective "de minimus" values. Therefore, specific preconstruction monitoring is not required for any pollutant.

The applicant has, however, used the available monitoring data located in Martin and the surrounding counties to develop existing background concentrations for the proposed facility area. These background values have been used to develop the maximum total concentrations for comparison with the ambient air quality standards.

3. PSD Increment Analysis (NO2, PM and SO2)

The PSD increment represents the amount that new sources in an area may increase ambient ground-level concentrations of a pollutant. The purpose of these increment limitations is to prevent areas which currently have good air quality from being significantly degraded. If an area currently has ambient concentrations near the ambient air quality standards for NO2, PM and SO2, then the increased emissions from new sources must not cause or contribute to a violation of the ambient air quality standard and the allowed increments would be reduced to prevent such exceedances.

The proposed project is to be located in a Class II area and must meet the increments defined for this class. All of the emissions of NO2, PM and SO2 at the proposed ICL facility will consume increments. The increased ground-level PM concentrations due to the ICL facility alone has been shown, from the dispersion modeling, to be less than the defined significant impact levels for all averaging times (see Table 4). As such, no other increment consuming sources were evaluated for PM. For NO2 and SO2, considering all increment consuming sources that may contribute to the significant impact area of the proposed facility site, the modeling results indicate the proposed facility does not contribute to a violation of the PSD Class II increments. Table 6 summarizes the modeling results and the comparisons to the PSD Class II increments standards.

Table 4. Maximum Predicted Concentrations for Comparison to the Significant Impact Levels ($\mu g/m^3$).

Pollutant	Averaging Time	Maximum Predicted Concentration	Significant Impact Levels	Significant Pollutant (Yes/No)
CO	1-hour	78.2	2000.0	No
	8-hour	50.9	500.0	
NO_2	Annual	4.4	1.0	Yes
SO_2	3-hour	24.7	25.0	Yes
	24-hour	11.6	5.0	
	Annual	1.2	1.0	
PM[a]	24-hour	3.35	5.0	No
	Annual	0.26	1.0	

[a] PM and PM_{10} concentrations are assumed the be the same.

Table 5. Maximum Predicted Concentration for Comparison to the De Minimus Ambient Levels ($\mu g/m^3$).

Pollutant	Averaging Time	Maximum Predicted Concentration	De Minimus Ambient Level	Monitoring Pollutant (Yes/No)
CO	8-hour	50.9	575.0	No
NO_2	Annual	4.4	14.0	No
SO_2	24-hour	11.6	13.0	No
PM (TSP)	24-hour	3.3	10.0	No
PM_{10}	24-hour	3.3	10.0	No
VOC	Tons per Year	56.6 TPY	100.0 TPY	No
Be	24-hour	0.0001	0.001	No
F-	24-hour	0.0007	0.25	No
Hg	24-hour	0.05	0.25	No

Table 6. PSD Class II Increment Analysis.

Pollutant	Averaging Time	Proposed Project Increment[a]	All PSD Cosuming Increment[b]	Maximum Impact Location[c]	PSD Class II Increment
NO_x	Annual	4.42	6.53	(0.3, 100)	25.0
SO_2	3-hour	0.0	176.8	(3.6, 310)	512.0
	24-hour	0.0	49.4	(3.0, 280)	91.0
	Annual	0.53	3.98	(3.5, 270)	20.0

Note: All increments are in $\mu g/m^3$.

[a] Concentration contributed by the proposed project at the maximum impact location[c].

[b] Maximum concentration contributed by all the PSD consuming sources that will influence the significant impact area.

[c] Where the maximum concentration occurred. Shown within the parentheses are distance (km) and direction (degrees) relative to the main boiler stack of the proposed project.

4. Ambient Air Quality Standards (AAQS) Analysis

Of the pollutants subject to review, only CO, NO2, PM, SO2, and ozone have AAQS with which to compare. In general, the total ambient air quality impact for each pollutant is obtained by adding the estimated background concentration to the maximum predicted modeled concentrations of the proposed facility and the background sources. In the case of the ICL facility, the predicted maximum concentration increases of CO and PM are less than the significant impact levels defined in the State regulations (see Table 4). As such, no further modeling for other sources is required for CO and PM. A significant impact level for ozone is not defined. Ozone is a photochemically formed pollutant resulting mainly from motor vehicle emissions. The regulated pollutant for ozone formation is volatile organic compounds (VOC) which cannot be modeled for source-specific applications. Ozone, by way of VOC's, is regulated through BACT. Table 7 summarizes the estimates of the predicted maximum air quality concentrations for these pollutants in the vicinity of the proposed ICL facility.

Beryllium (Be), mercury (Hg), fluorides (F-), and inorganic arsenic (As) do not have an AAQS. However, these pollutants were modeled and the results were compared to the Department's acceptable ambient concentrations ("no-threat" levels). Table 8 summarizes the results of this analysis. The predicted concentrations for each of these pollutants is less than their respective "no-threat" levels.

Given existing air quality in the area of the proposed facility, emissions from the proposed facility are not expected to cause or contribute to a violation of an AAQS.

5. Additional Impacts Analysis

a. Impacts on Soils and Vegetation

The maximum ground-level concentration predicted to occur for each pollutant as a result of the proposed project, including a background concentration, will be below the applicable AAQS including the national secondary standards developed to protect public welfare-related values. As such, this project is not expected to have a harmful impact on soils and vegetation.

b. Impact on Visibility

The EPA Level-1 visibility screening analysis

Table 7. Ambient Air Quality Standards (AAQS) Analysis.

Pollutant	Averaging Time	Maximum Predicted Impact	Monitored Background Impact	Total Impact	Florida AAQS
CO[a]	1-hour	78.2	8001	8079	40000
	8-hour	50.9	5715	5766	10000
NO_2	Annual	6.1	5.4	11.5	60
SO_2	3-hour	182.0	61.0	243.0	1300
	24-hour	48.5	12.6	61.1	260
	Annual	6.88	1.3	8.2	60
PM[a,b]	24-hour	3.3	39.0	42.3	150
	Annual	0.26	13.3	13.6	60
PM_{10}[a,b]	24-hour	3.3	39.0	42.3	150
	Annual	0.26	13.3	13.6	50

Note: All impacts are in $\mu g/m^3$.

[a] Only the proposed project are counted.
[b] PM and PM10 are assumed to be the same.

Table 8. "No-Threat" Level Analysis.

Pollutant	Averaging Time	Maximum Predicted Impact ($\mu g/m^3$)	"No-Threat" Level ($\mu g/m^3$)
Be	8-hour	0.00021	0.02
	24-hour	0.000092	0.005
	Annual	0.000009	0.0004
F-	8-hour	0.11	25.0
	24-hour	0.05	6.0
Hg	8-hour	0.0015	0.1
	24-hour	0.00066	0.024
As	8-hour	0.0039	2.0
	24-hour	0.0015	0.5
	Annual	0.00017	0.0002

was performed by the applicant for impact on the Everglades National Park area, located 145 km to the south. The results indicate that no impact on visibility is expected in this area as a result of the proposed facility.

c. Growth-Related Air Quality Impacts

The proposed project is not expected to significantly change employment, population, housing or commercial/industrial development in the area to the extent that an air quality impact will result.

6. GEP Stack Height Determination

Good Engineering Practice (GEP) stack height means the greater of: (1) 65 meters or (2) the maximum nearby building height plus 1.5 times the building height or projected width, whichever is less. For the proposed ICL facility, both the main boiler stack and the auxiliary boiler stack are located within the area of influence for the boiler building. The height of the boiler building is 60.96 meters and represents the lesser dimension of the height and width. The calculated GEP stack height, thus, is 152.4 meters. The actual height of the main boiler stack is 150.9 meters, and the height of the auxiliary boiler stack is 27.4 meters. Since both stacks are less than the GEP stack height, the building downwash effect was included in the modeling analysis in every scenario.

7. Best Available Control Technology (BACT) Determination

PG&E/Bechtel Generating Company is proposing to install an operate a coal-fired cogeneration facility near Indiantown, Florida in Martin County. The facility will generate a nominal 330 net megawatts (MW).

The major combustion equipment will consist of a pulverized coal (PC) boiler and an auxiliary boiler. The PC boiler is rated at 3,422 MMBtu/hr (coal) and the auxiliary boiler is rated a 342 MMBtu/hr (#2 fuel oil) and 358 MMBtu/hr (natural gas). The applicant has discussed the BACT's separately. The applicant has indicated the maximum annual tonnage of regulated air pollutants emitted from the facility based on 100 percent capacity and type of fuel fired at ISO conditions to be as follows:

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To Colin Campbell	From Willard Hanks	
Co./Dept. RTP Enviro	Co. FL DEP	
Phone #	Phone # 850/488-1344	
Fax # 919/845-1424	Fax #	

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PC BOILER	Potential Emissions (tons/yr)	PSD Significant Emissions(tons/yr)
NO_x	2549	40
SO_2	2549	40
PM	270	25
PM_{10}	270	15
CO	1648	100
VOC	54	40
H_2SO_4	6.5	7
Be	0.041	0.0004
Hg	0.172	0.1
Pb	0.28	0.6
As	0.765	--
HF	22.36	3

AUXILIARY BOILER Pollutant	#2 fuel oil Emissions (tons/yr)	
NO_x	34	40
SO_2	9	40
PM	0.7	25
PM_{10}	0.7	15
CO	24	100
VOC	0.31	40
Be	2.0×10^{-5}	0.0004
Hg	2.6×10^{-4}	0.1
Pb	1.8×10^{-2}	0.6
As	3.4×10^{-3}	--

Florida Administrative Code Rule 17-2.500(2)(f)(3) requires a BACT review for all regulated pollutants emitted in an amount equal to or greater than the significant emission rates listed in the previous table. The BACT requirements are intended to insure that a proposed facility will incorporate air pollution control systems that reflect the latest techniques (including fuel cleaning or treatment or innovative fuel combustion) used in the particular industry. An evaluation of the air pollution control techniques and systems is required including a consideration for energy requirements, environmental and economic impact.

a. BACT Determination Requested by the Applicant

The applicant has suggested that BACT for the PC boiler be the following emission limitations and method of controls:

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PC BOILER Pollutant	Determination lb/MMbtu	METHOD OF CONTROL
NO_x	0.17	Selective Non-Catalytic Reduction (SNCR)
SO_2	0.17	Lime Spray Drying
CO	0.11	Combustion Control
VOC	0.0036	Combustion Control
PM and PM_{10}	0.018	Fabric Filter
Be	2.73×10^{-6}	Fabric Filter
Hg	11.4×10^{-6}	Lime Spray Drying
As	51.1×10^{-6}	Fabric Filter

For the auxiliary boiler BACT is represented by clean fuel firing (natural gas and #2 fuel oil with 0.05% sulfur, by weight) and limited operating hours per year (max. 1000 hrs/yr on #2 fuel oil and max. 4000 hrs/yr on natural gas).

b. BACT Determination Procedure

In accordance with Florida Administrative Code Chapter 17-2, Air Pollution, this BACT determination is 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. In addition, the regulations state that in making the BACT determination the Department shall give consideration to:

(a) Any Environmental Protection Agency determination of Best Available Control Technology pursuant to Section 169, and any emission limitation contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources) or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants).

(b) All scientific, engineering, and technical material and other information available to the Department.

(c) The emission limiting standards or BACT determinations of any other state.

(d) The social and economic impact of the application of such technology.

The EPA currently stresses that BACT should be determined using the "top-down" approach. The first step in this approach is to determine for the emission source in question the most stringent control available for a similar or identical source or source category. If it is shown that this level of control is technically or economically infeasible for the source in question, than the next most stringent level of control is determined and similarly evaluated. This process continues until the BACT level under consideration cannot be eliminated by any substantial or unique technical, environmental, or economic objections.

The air pollutant emissions from coal-fired power plants can be grouped into categories based upon what control equipment and techniques are available to control emissions from these facilities. Using this approach, the emissions can be classified as follows:

- Combustion Products (e.g., Particulates). Controlled generally by good combustion of clean fuels and baghouse filters.

- Products of Incomplete Combustion (e.g., CO). Controlled generally by proper combustion techniques.

- Acid Gases (e.g., NO_x). Controlled generally by gaseo control devices.

Grouping the pollutants in this manner facilitates the BACT analysis because it enables the equipment available to control the type or group of pollutants emitted and the corresponding energy, economic, and environmental impacts to be examined on a common basis. Although all of the pollutants addressed in the BACT analysis may be subject to a specific emission limiting standard as a result of PSD review, the control of "nonregulated" air pollutants is considered in imposing a more stringent BACT limit on a "regulated" pollutant (i.e., particulates, sulfur dioxide, fluorides, sulfuric acid mist, etc,), if a reduction in "nonregulated" air pollutants can be directly attributed to the control device selected as BACT for the abatement of the "regulated" pollutants.

c. BACT Analysis

Combustion Products - PC Boiler

The projected emissions of particulate matter, PM_{10}, beryllium, and mercury from the Indiantown facility surpass the significant emission rates given in Florida Administrative Code Rule 17-2.500, Table 500-2. A review of the BACT/LAER Clearinghouse indicates that the particulate emission rates range from 0.011 (LAER) to 0.05 lb/MMbtu for other coal-fired boilers. In general, the BACT/LAER Clearinghouse does not contain specific emission limits for beryllium and mercury from coal-fired boilers. BACT for heavy metals from these facilities is typically represented by the level of particulate control. The control options for controlling PM, PM_{10}, Be and Hg from these coal-fired boilers are approximately 65% that use fabric filter baghouses and 35% that use electrostatic precipitators (ESP). Wet control techniques were not considered to be feasible due to the limited availability of limited clean water and lack of wastewater treatment and disposal capability at the Indiantown site. Baghouses provide better control of fine particulate. When it is used with a lime spray dryer additional SO_2 control results.

A PM/PM_{10} emissions limitation of 0.018 lb/MMBtu from the PC Boiler firing coal is reasonable as BACT for the Indiantown facility. Gore-Tex bags, instead of conventional fabric, were considered at an additional cost of $832,000 to reduce 90 tons/year of emissions. The $9,244/ton incremental cost was considered excessive.

Therefore, BACT for controlling PM, PM10, Be, and Hg on the PC boiler is the use of a fabric filter with conventional bags.

Combustion Products - Auxiliary Boiler

Emissions of particulate matter (PM) from oil-fired boilers comes from the ash in the fuel and incomplete fuel combustion. The auxiliary boiler will operate a maximum of 1000 hrs/yr on #2 fuel oil and a maximum of 4000 hrs/yr on natural gas. PM_{10} is expected to be 95% of the total particulate emission rate. Again the most available control technology is either fabric filters or electrostatic precipitators. The applicant contacted several fabric filter vendors and was unable to find one that would provide this equipment for an oil-fired boiler. An evaluation of ESP

indicates that 99% control (removing 3.5 tpy) can be obtained but at a cost of $137,000/ton of PM removed. Therefore, it is not considered to represent BACT for PM on the auxiliary boiler.

Products of Incomplete Combustion PC and Auxiliary Boilers

The emissions of carbon monoxide (CO) and volatile organic compounds (VOC) exceed PSD significant emission rate of 100 tpy and 40 tpy respectively. The PC boiler emissions of CO and VOC are controlled by either good combustion (minimizing pollutant formation) or flue gas catalytic oxidation of the CO and VOC. A review of the BACT/LAER Clearinghouse indicates that the emission levels of 0.11 and 0.0036 lb/MMBtu for CO and VOC, respectively, are achievable by a combustion control system are representative of previous BACT determinations.

Catalytic oxidation has never been applied to either coal-fired or oil-fired boilers. However, it has been used as the most stringent control for CO and VOC for combustion turbines. The catalyst vendors indicate flue gas particulate plugs the catalyst system on coal-fired units and is not feasible for oil-fired units due to sulfur, ash, and trace element concentrations.

Use of an oxidation catalyst system in either the proposed Indiantown PC boiler or the fuel oil-fired auxiliary boiler is considered technically infeasible.

Therefore, the applicant concluded that combustion controls be considered BACT to minimize the formation and emission of both CO and VOC without adverse economic, energy or environmental impacts. Furthermore, combustion controls are the most stringent control alternatives applicable to PC and fuel oil-fired units.

Acid Gases - PC Boiler

The emissions of sulfur dioxide (SO_2), nitrogen dioxide (NO_x), fluorides (HF), and sulfuric acid mist (H_2SO_4), as well as other acid gases which are not regulated under the PSD Rule, represent significant potential air pollutant emissions which must be subject to appropriate control. Sulfur dioxide emissions from coal fired boilers are directly related to the sulfur content of the fuel. The addition of "add on" control equipment and the utilization of combustion technologies which serve to control sulfur dioxide emissions during combustion are other techniques that can be used to minimize emissions.

SO2 and Acid Gases

The applicant elected to discuss SO_2, HF and H_2SO_4 removal methods together since they are common. Emissions of sulfur oxides and acid gases (H_2SO_4 and HF) are generated in fossil-fuel fired sources from the release in the furnace of sulfur and fluorine present in the fuel. Sulfur compounds are formed when the organic and pyritic sulfur is oxidized, forming primarily SO_2 and smaller quantities of SO_3 and SO_4. SO_3 further reacts with water present in the flue gas to form H_2SO_4. Uncontrolled emissions of SO_2 are affected only by the fuel sulfur content.

The control of SO_2 and acid gas emissions is accomplished primarily by removing these pollutants from the flue gas by wet or dry scrubbing. Wet scrubbing achieves high levels of removal of SO_2/acid gas and is comparable to dry scrubbing. Wet scrubbing is accomplished by passing the flue gas through a scrubbing liquid in a water saturated environment. The pollutants become a part of the liquid slurry and treated in a wastewater treatment and disposal system. The three reagents are sodium-based, calcium-based and dual-alkali. Regardless of the reagent used, they are all recycled to reduce the water consumption and the reagent requirements.

The wet scrubbing advantage over dry scrubbing includes a reduction of the reagent consumption because of easier recycling and ability to operate at low temperatures. The two main disadvantages are: 1) The amount of water required for wet scrubbing and 2) The difficulty in treating the slurry due to acidic and/or high-chloride levels requiring percolation through limestone beds, evaporation ponds and deep well injection. Other methods of treating the slurry such as reverse osmosis , electrodialysis and flash evaporation/ crystallization are more sophisticated and more costly. The use of wet scrubbers causes a low scrubber outlet temperature (120 - 130° F) causing visible moisture plumes. Wet scrubbing also results in significant repairs due to corrosion, erosion and scaling of wet scrubber equipment, piping, pumps, fans, and valves. The wet slurry eventually must be disposed of, further complicating the use of wet scrubbing as an alternative. Generally wet scrubbers are more expensive than spray dryer scrubbers not only to purchase and but to operate as well.

Spray dryer absorbers located upstream of the particulate removal device is the other predominant method for removing SO_2/acid gases. A spray dryer achieves comparable levels of pollutant removal and is less mechanically complex. The

reagent is produced as a dry solid waste which can be returned directly to the coal mine for disposal.

Limestone injection is employed with circulating fluidized bed (CFB) boilers but is not technically applicable for a PC boiler.

Both wet and dry scrubbers are capable of achieving the most stringent control possible. By firing maximum 2% sulfur coal and obtaining 95% removal of SO_2/acid gases a 0.17 lb/MMBtu emission rate can be obtained at Indiantown. Total capital cost to achieve 0.17 lb/MMBtu is estimated a $67,828,000 for wet limestone and $32,271,000 for the spray drying scrubbers. Total annual costs are estimated at $31,395,000/yr and $25,383,000/yr respectively. Wet scrubbing uses more energy than the spray drying method.

The applicant concluded that the spray dryer would be BACT for the PC boiler. This method of control can reduce the emissions to 0.17 lb/MMBtu for SO_2/acid gas and is more economical and more energy efficent.

NOx

The emissions of nitrogen oxides represent a significant proportion of the total emissions and need to be controlled if deemed appropriate. The applicant has stated that BACT for nitrogen oxides will be met by using Selective Non-Catalytic Reduction (SNCR) to limit emissions to 0.17 lb/MMBtu.

The alternative methods applicable to PC Boilers for controlling NO_x are combustion controls, selective non-catalytic reduction (SNCR), and selective catalytic reduction (SCR).

A review of the EPA's BACT/LAER Clearinghouse indicates that the lowest NO_x emission limit established to date for a coal-fired boiler is 0.44 lb/MMBtu. This level of control was accomplished through the use of combustion techniques.

SCR is a post-combustion method for control of NO_x emissions. The SCR process combines vaporized ammonia with NO_x in the presence of a catalyst to form nitrogen and water. The vaporized ammonia is injected into the exhaust gases prior to passage through the catalyst bed. The SCR process has not been applied to domestic coal-fired sources but has been used in Japan and Europe starting in 1980. About 25 utility boilers are operating in Japan with up to 80% removal efficiency. About twice as many utility boilers are operating in Europe

with removal efficiencies up to 90%. SCR on combustion turbines can achieve up to 90% reduction of NO_x with a new catalyst. As the catalyst ages, the maximum NO_x reduction will decrease to approximately 86 percent.

SCR has never been applied to a commercial-scale unit firing domestic coals and never applied in Japan or Europe to a commercial PC boiler using a baghouse for particulate control. Furthermore, using this technology would increase annual operating cost by $8,961,400/yr and $5,978/ton of NO_x controlled. Therefore, the applicant states that SCR is not considered BACT because of the uncertainty of the application and the high cost.

The SNCR process is based on a gas phase homogeneous reaction between NO_x in the flue gas and either injected ammonia or urea to form gaseous nitrogen and water vapor. These systems do not employ a catalyst and, therefore, operate at higher temperatures than SCR systems. The two commercially available SNCR processes are NO_xOUT by EPRI and $DeNO_x$ by Exxon Corporation. Of the two technologies only $DeNO_x$ has been used on PC boilers. The applicant states that the use of $DeNO_x$ has some risk since it has not been applied to a facility like Indiantown but it has been applied to a number of CFB facilities.

Based on vendor information and relevant experience it is expected that NO_x can be controlled to 0.17 lb/MMBtu. The annual cost is estimated at $4,244,400 reducing the emissions by 1499 tons/yr. Therefore, the applicant estimated the cost of reducing NO_x emissions to be $2,899/ton which is considered economically justifiable for BACT.

Acid Gases - Auxiliary Boiler

The auxiliary boiler is expected to operate about 5000 hrs/yr (4000 hrs/yr using natural gas and 1000 hrs/yr using #2 fuel oil with 0.05% Sulfur, by weight). The applicant is proposing to control SO_2 and acid gas emissions by the use of low sulfur oil to meet a maximum of 0.052 lb/MMBtu.

The cost of applying wet scrubbing to reduce the emissions is estimated to be $65,523/ton which is not considered economical. This method would also produce a significant amount of solid waste and result in adverse energy impacts. For NO_x control SCR, SNCR and Flue Gas Recirculation (FGR) were evaluated and the cost per ton of NO_x reduced were $5,623, $6,189 and $4,007 respectively. The applicant considered these cost excessive for previous BACT determinations for this type of facility.

d. Environmental Impact Analysis - PC Boiler

The use of a fabric filter to control particulate emission from the PC boiler does not appear to have any negative environmental impacts. However, the energy impact is considered significant since about 1250 KW of energy is required to operate the fabric filter.

The use of SNCR to control NO_x has a potential environmental impact associated with residual ammonia in the flue gas and safety associated with ammonia storage. Both of these concerns are expected to be minimized by close monitoring and control along with good operating/safety procedures.

e. BACT Determination by DER

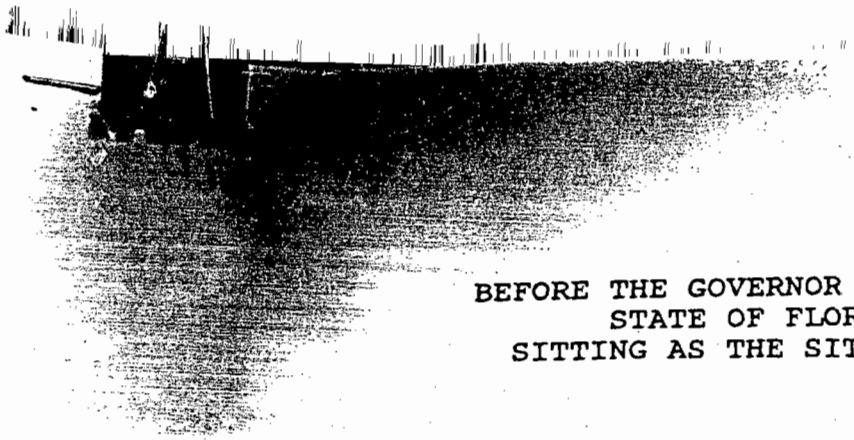
Based on the information presented by the applicant and the studies conducted the Department believes that the use of a fabric filter for particulate control, SNCR for NOx control, and dry spray scrubbing for SO_2/acid gas control is justifiable as BACT. Therefore, the Department accepts the applicant's BACT recommendations as shown in the following table:

Pollutant	Emission Limit	Maximum Emissions Tons/year(a)	Method of Control
NO_x	0.17 lbs/MMBtu	2549	SNCR
SO_2	0.17 lbs/MMBtu	2549	Spray Drying
PM	0.018 lbs/MMBtu	270	Fabric Filter
PM_{10}	0.018 lbs/MMBtu	270	Fabric Filter
CO	0.11 lbs/MMBtu	1648	Combustion
VOC	0.0036 lbs/MMBtu	54	Combustion
H_2SO_4	0.0004 lbs/MMBtu	6	Spray Drying
Be	2.73×10^{-6} lbs/MMBtu	0.041	Fabric Filter
Hg	11.4×10^{-6} lbs/MMBtu	0.172	Spray Drying
Pb	18.7×10^{-6} lbs/MMBtu	0.28	Spray Drying
As	51.1×10^{-6} lbs/MMBtu	0.765	Fabric Filter
HF	0.002 lbs/MMBtu	22.36	Spray Drying

(a) Maximum total emissions are based on the maximum hourly emission rate and 8760 hrs/yr

For the auxiliary boiler BACT will be represented by a limitation on hours of operation and the use of clean fuels (maximum 1000 hours/year firing #2 fuel oil with 0.05% sulfur, by weight, and 4000 hours/year firing natural gas).

Auxiliary Boiler (#2 fuel oil) Pollutant	Maximum Emissions (tons/yr)
NO_x	34
SO_2	9
PM	0.70
PM_{10}	0.70
CO	24
VOC	0.31
Be	2.0×10^{-5}
Hg	2.6×10^{-4}
Pb	1.8×10^{-2}
As	3.4×10^{-3}



Indiantown 12-24-91

BEFORE THE GOVERNOR AND CABINET
STATE OF FLORIDA
SITTING AS THE SITING BOARD

IN RE:
APPLICATION FOR POWER PLANT
SITE CERTIFICATION OF
INDIANTOWN COGENERATION
PROJECT, PA 90-31

DOAH CASE NO. 90-8072EPP

FINAL ORDER APPROVING CERTIFICATION

On February 4, 1992, this matter came before the Governor and Cabinet, sitting as the Siting Board, pursuant to the Florida Electrical Power Plant Siting Act (PPSA), Section 403.501, et seq., Florida Statutes (1991), for final agency action concerning a Recommended Order dated December 24, 1991, attached as Exhibit 1, which recommends site certification for the Indiantown Cogeneration Project Power Plant. On September 24, 1991, the Board adopted a previous Recommended Order in this case which concluded that the proposed project was consistent with all applicable zoning ordinances and land use plans. The Public Service Commission entered a Final Order certifying the need for the proposed project on March 21, 1991.

No exceptions to the Recommended Order have been filed. Having reviewed the Recommended Order and having otherwise been fully advised, it is **ORDERED:**

1. Pursuant to Section 120.57(1)(b)10, Florida Statutes (1991), the Recommended Order dated December 24, 1991, (Exhibit 1) is **APPROVED** and **ADOPTED** by the Board.

2. The Board hereby **APPROVES** certification of the location, construction, and operation of the Indiantown Cogeneration Project at the proposed site, subject to the Conditions of Certification contained in Appendix A of Exhibit 1.

3. The Board hereby **DELEGATES** to the Department of Environmental Regulation the authority to assure and enforce compliance by Indiantown Cogeneration Partnership and its agents with all of the Conditions of Certification.

Indiantown Cogeneration Project
DER Case No. PA 90-31
DOAH Case No. 90-8072EPP

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PART II

DEPARTMENT OF ENVIRONMENTAL REGULATION

(1) AIR

The construction and operation of the Indiantown Cogeneration Project (ICP) shall be in accordance with all applicable provisions of Chapter 17-2, 17-256, and 17-702, Florida Administrative Code, except for SO_2 and NOx during startup, shutdown, and malfunciton, then 40CFR60 shall apply.

A. Construction

1. General

a. Construction shall reasonably conform to the plans and schedule given in the application.

b. The permittee shall report any delays in construction and completion of the project which would delay commercial operation by more than 90 days to the DER Southeast District office in West Palm Beach.

2. Equipment Identification

The Licensee shall submit at least four copies of complete information as to the make and model numbers of the selected pulverized coal and auxilliary boilers, all pollution control and continuous emissions monitoring devices, operation and maintenance manuals and calibration procedures, updated process flow diagrams showing mass/energy/heat balances and ammonia injector locations and rates, and related equipment, to the DER Bureau of Air Regulation at least 90 days prior to commencing on-site construction of that particular item.

3. Stack Height and Design

The height of the boiler exhaust stack for ICL shall not be less than 495 ft. above grade. Detailed stack drawings showing sampling locations shall be submitted to the DER Bureau of Air Regulation at least 90 days prior to commencing on-site construction of the affected equipment or feature.

4. Fugitive Dust and Odors

The Licensee shall employ proper odor and dust-control techniques to minimize odor and fugitive dust emissions. Precautions to prevent fugitive particulate emissions during construction shall be to coat the roads and construction sites used by contractors, regrass or water areas of disturbed soils. Control techniques shall be sufficient to prevent nuisance conditions on adjoining property.

5. Open Burning

Open burning in connection with initial land clearing shall be in accordance with Chapter 17-256, F.A.C., Chapter 5I-2, F.A.C., Uniform Fire Code Section 33.101 Addendum, and any other applicable regulations of Martin or Okeechobee Counties, as applicable.

No open burning of construction generated material, after initial land clearing shall be allowed.

B. Operation

1. Boilers

The Pulverized Coal (PC) boiler is permitted to operate at a maximum of 3422 MMBtu/hr heat input (nominal 330 MW). This facility shall be allowed to operate continuously (8,760 hrs/yr). In addition to the PC boiler, the facility has an auxiliary boiler rated at up to 342 MMBtu/hr (#2 Fuel Oil) and 358 MMBtu/hr (Natural Gas or propane) which operates a maximum of 5,000 hours with up to 1000 hrs/yr on #2 Fuel Oil and the balance on natural gas or propane.

2. Emissions Limitations

a. Pulverized Coal Boiler

Based on a permitted heat imput of 3422 MMBTU/hr heat input, the stack emissions from the main boiler shall not exceed any of the following limitations:

i. Combustion Emissions

Pollutant	Basis lb/MMBtu	Emission Limitation lb/hr	TPY
SO_2	0.170	582*	2549
NOx	0.170	582*	2549
PM	0.018	61.6	270
PM_{10}	0.018	61.6	270
CO	0.110	376*	1649
VOC at 7% O_2	0.0036	12.30	54
H_2SO_4	0.0004	1.450	6.350
Beryllium	0.00000273	0.0093	0.041

Mercury	0.0000114	0.039	0.172
Lead	0.0000187	0.064	0.280
Fluorides	0.002	7.26	22.26
Arsenic	0.0000511	0.175	0.765

*24 hour daily block average (midnight to midnight)

ii. NH_3 (Ammonia) - Slip from exhaust gases shall not exceed 50 ppmv.

iii. *VE (Visible Emissions)

- VE from each baghouse exhaust shall not exceed 10% opacity (six minute average).

- No VE during lime silo loading operations (i.e., less than 5% opacity).

- VE from the ash handling baghouse shall not exceed a particulate limit of 0.010 grains/acf and VE of 5% opacity.

b. Auxilliary Boiler

The auxilliary boiler, rated at up to 358 MMBtu/hr (Natural Gas and propane) and 342 MMBtu/hr (#2 Fuel Oil), shall be limited to a maximum of 5000 hours/year with up to 1000 hrs/yr firing #2 fuel oil with 0.05% sulfur, by weight, and the balance firing natural gas or propane. The maximum annual emissions will be as follows when firing #2 fuel oil:

MAXIMUM EMISSIONS

Pollutant	lbs/hr	tons/year
NO_x	68.4	34
SO_2	17.8	9
PM	1.40	0.70
PM_{10}	1.40	0.70
CO	47.30	24
VOC	0.63	0.31
Be	4.1×10^{-5}	2.0×10^{-5}
Hg	5.1×10^{-4}	2.6×10^{-4}
Pb	3.6×10^{-2}	1.8×10^{-2}
As	6.8×10^{-3}	3.4×10^{-3}

c. Particulate emissions from the coal, and limestone handling facilities:

i) All conveyors and conveyor transfer points will be enclosed to preclude PM emissions (except those directly associated with the coal stacker/reclaimer for which an enclosure is operationally infeasible). Fugitive emission shall be tested as specified in conditions 1.B.2.e.

ii) Inactive coal storage piles shall be shaped, compacted, and oriented to minimize wind erosion, and covered.

iii) Water sprays or chemical wetting agents and stabilizers shall be applied to uncovered storage piles, roads, handling equipment, etc. during dry periods and as necessary to all facilities to maintain an opacity of less than or equal to 5 percent, except when adding, moving or removing coal from the coal pile, which would be allowed no more than 20%.

iv) The lime handling system including the lime silos shall be maintained at a negative pressure while operating and the exhaust vented to a control system.

v) The fly ash handling system (including transfer and silo storage) shall be totally enclosed and vented (including pneumatic system exhaust) through fabric filters; and

vi) The Licensee shall submit to the Department, Bureau of Air Regulation in Tallahassee within thirty (30) days after it becomes available, copies of technical data pertaining to the selected particulate emissions control for the coal, and lime handling facilities. These data shall include, but not be limited to guaranteed efficiency and emission rates, and major design parameters such as air/cloth ratio and flow rate. The Department may, upon review of these data, disapprove the use of any such device if the Department determines the selected control device to be inadequate to meet the emission limits specified in COC-(1)B.2.d. below. Such disapproval shall be issued within 30 days of receipt of the technical data.

d. Particulate emissions from bag filter exhausts from the following facilities shall be limited to 0.010 gr/acf: coal, lime and flyash handling systems. A visible emission reading of 5% opacity or less may be used to establish compliance with this emission limit. A visible emission reading greater than 5% opacity will not create a presumption that the 0.010 gr/acf emission limit is being violated. However, a visible emission reading greater than 5% opacity will require the permittee to perform a stacktest, as

set forth in COC-(1)B.3. Verification and recording of the above requirements for particulate emissions shall be done at least annually.

e. Emissions shall not be visible more than 2 minutes in any 15 minute period. Compliance with fugitive emissions limitations from all transfer points will be determined by EPA/DER referenced Method 22 and opacity Method 9 (Appendix A, 40 CFR 60).

f. Coal shall not be burned in the unit unless the spray dryer scrubber, fabric filter baghouse and other air pollution control devices are operating properly except as provided under 40 CFR Part 60, Subpart Da. Any malfunctions of these air pollutions control devices are to be recorded; including duration, cause, and description of repair as specified in condition 1.D.

g. The fuel oil to be fired in the PC boiler and the auxiliary boiler shall be "new oil" which means an oil which has been refined from crude oil and has not been used. The quality of the No. 2 fuel oil used by the auxiliary boiler shall not contain more than 0.05% sulfur, by weight, based on each shipment analysis report.

h. No fraction of flue gas shall be allowed to bypass the air pollution control devices (PCD) system to reheat the gases exiting from the PCD system, if the bypass will cause emissions above the limits specified in COC-(1)B.2. The percentage and amount of flue gas bypassing the PCD system shall be documented and records kept for a minimum of two years available for FDER's inspection.

i. All fuel oil and coal shipments shall have a shipment analysis for sulfur content, ash content, and heating value. In the event continuous emission monitoring of sulfur dioxide is not performed, a daily analysis of coal sulfur content for the purpose of establishing the percentage reduction in potential sulfur emissions shall be made. Such determination shall be in accordance with EPA reference Method 19. Records of all the analyses shall be kept for public inspection for a minimum of two years after the data is recorded.

j. The applicant shall comply with applicable requirements and provisions of the New Source Performance Standard for electric utility steam generating units (40 CFR 60 Part Da).

k. As a requirement of this specific condition, the applicant shall comply with all emissions limits and enforceable restrictions required by the State of Florida Department of Environmental Regulation pursuant to Section 403.511(5), F.S., which may be adopted by regulation and which

are more restrictive, that is lower emissions limits or more strict operating requirements and equipment specifications, than the requirements of COC-II(1)B.2. of these conditions.

3. Stack Testing

a. Within 60 calendar days after achieving the maximum capacity at which the unit will be operated, but no later than 180 operating days after initial startup, the permittee shall conduct performance tests for particulates, SO_2, NO_x, and visible emissions during normal operations near (±10%) 3422 MMBtu/hr heat input and furnish the Department a written report of the results of such performance tests within 45 days of completion of the tests. The performance tests will be conducted in accordance with the provisions of 40 CFR 60.46a and 48a.

b. Compliance with emission limitation standards mentioned in Specific Condition No. 1 shall be demonstrated using EPA Methods, as contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources), or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants), or any other method as approved by the Department, in accordance with F.A.C. Rule 17-2.700. A test protocol shall be submitted for approval to the Bureau of Air Regulation at least 90 days prior to testing.

EPA Method	For Determination of
1	Selection of sample site and velocity traverses.
2	Stack gas flow rate when converting concentrations to or from mass emission limits.
3	Gas analysis when needed for calculation of molecular weight or percent O_2.
4	Moisture content when converting stack velocity to dry volumetric flow rate for use in converting concentrations in dry gases to or from mass emission limits.
5	Particulate matter concentration and mass emissions.
201 or 201A	PM_{10} emissions.
6, 6C, or 19	Sulfur dioxide emissions from stationary sources.
7, 7C, or 19	Nitrogen oxide emissions from stationary

sources.

8	Sulfuric acid mist from stationary source.
9	Visible emission determination of opacity. - At least three one hour runs to be conducted simultaneously with particulate testing for the emissions from dry scrubber/baghouse, and ash handling building baghouse. - At least one lime vehicle unloading into the lime silo (from start to finish).
22	Fugative emissions from transfer points.
10	Carbon monoxide emissions from stationary sources.
12 or **101A**	Lead concentration from stationary sources.
13A or **13B**	Fluoride emissions from stationary sources.
18 or **25,**	Volatile organic compounds concentration.
101A or **108**	Mercury emissions.
104	Beryllium emission rate and associated moisture content.

NOTE: Use EPA draft method or other methods approved by Department to test for ammonia.

c. Performance tests shall be conducted under such conditions as the Department shall specify based on representative performance of the facility. The permittee shall make available to the Department such records as may be necessary to determine the conditions of the performance tests.

d. The permittee shall provide 30 days notice of the performance tests or 15 days notice for stack tests in order to afford the Department the opportunity to have an observer present.

e. Stack tests for particulates (PM and PM_{10}), NO_x and SO_2 and visible emissions shall be performed annually in accordance with COC (1)B.3.b. above.

C. Monitoring and Reporting

1. Air Monitoring Program

a. A flue gas oxygen meter shall be installed for each unit to continuously monitor a representative sample of the flue gas. The oxygen monitor shall be used with automatic feedback or manual controls to continuously maintain air/fuel ratio parameters at an optimum. Performance tests shall be conducted and operating procedures established. The document "Use of Flue Gas Oxygen Meter as BACT for Combustion Controls" may be used as a guide. The permittee shall install and operate continuously monitoring devices for each main boiler exhaust for sulfur dioxide, nitrogen dioxide and opacity, including flue gas O_2 and/or CO_2 content. The monitoring devices shall meet the applicable requirements of Section 17-2, F.A.C., and 40 CFR 60 a minimum of 95% of the time the source is operating.

b. The permittee shall operate two continuous ambient monitoring devices for sulfur dioxide in accordance with DER quality control procedures and EPA reference methods in 40 CFR, Part 53, and two ambient monitoring devices for suspended particulates, and one continuous NO_x monitor. The monitoring devices shall be specifically located at a location approved by the Department's Bureau of Air Regulation. The frequency of operation of the particulate monitors shall be every six days commencing as specified by the Department's Bureau of Air Regulation. During construction and operation, a meteorological station will be operated and data reported with the ambient data.

c. The permittee shall maintain a log of the amounts and types of fuel received and copies of fuel analyses containing information on sulfur content, ash content and heating values. These logs shall be kept for at least two years.

d. The permittee shall provide stack sampling facilities as required by Rule 17-2.700(4) FAC.

e. The ambient monitoring program shall begin at least one year prior to initial start up of the unit and shall continue for at least one year after commencement of commercial operation.

The Department's Bureau of Air Monitoring and Assessment and the permittee shall review the results of the monitoring program annually and determine the necessity for the continuation of or modifications to the monitoring program.

f. Prior to operation of the source, the permittee shall submit to the Department's Bureau of Air Regulation a plan or procedure that will allow the permittee to monitor emission control equipment efficiency and enable the permittee to return malfunctioning equipment to proper operation as expeditiously as possible.

2. Reporting

a. For the ICL, stack monitoring, fuel usage and fuel analysis data shall be reported to the Department's Southeast District Office on a quarterly basis commencing with the start of commercial operation in accordance with 40 CFR, Part 60, Section 60.7, and 60.49a and in accordance with Section 17-2.08, FAC.

b. Utilizing the SAROAD or other format approved in writing by the Department, ambient air monitoring data shall be reported to the Bureau of Air Monitoring and Assessment of the Department quarterly. Upon commencement of ambient air monitoring, such reports shall be due within 45 days of the end of the quarterly reporting period. Reporting and monitoring shall be in conformance with 40 CFR Parts 53 and 58.

c. Beginning one month after certification, the permittee shall submit to the Department a quarterly status report briefly outlining progress made on engineering design and purchase of major pieces of air pollution control equipment. All reports and information required to be submitted under this condition shall be submitted to the Siting Coordination Office, Department of Environmental Regulation, 2600 Blair Stone Road, Tallahassee, Florida, 32301.

D. Malfunction or Shutdown

In the event of a prolonged (thirty days or more) equipment malfunction or shutdown of air pollution control equipment, operation shall be allowed to resume and continue to take place under appropriate Department order, provided that the Licensee demonstrates such operation will be in compliance with all applicable ambient air quality standards and PSD increments and industrial waste rules. During such malfunction or shutdown, the operation of the ICL shall comply with all other requirements of this certification and all applicable state and federal emission standards not affected by the malfunction or shutdown which is the subject of the Order. Operational stoppages exceeding two hours for air pollution control systems or four hours for other systems or operational malfunctions as defined in the operational contingency plans as specified in COC/I-(17) are to be reported as specified in COC/I-(12). Identified operational malfunctions which do not stop operation but may prevent compliance with emission limitations be reported to DER as specified in COC/I-(12).

(2) WETLANDS

A. The proposed pipeline from the project site to Nubbin Slough shall be routed within the ROW of the

for PG E
PSD Panel

United States Department of the Interior

NATIONAL PARK SERVICE
AIR QUALITY DIVISION
P.O. BOX 25287
DENVER, CO 80225

IN REPLY REFER TO:

Short to Jean H.

Kent

NOV 19 1991
K. L. Fickett

DATE: 11/18/91 TIME: 3pm

FAX PHONE NO. FTS 327-2822 or (303) 969-2822

NUMBER OF PAGES TO FOLLOW: 2

TO: Kent Fickett
PHONE:

FROM: Chris Shaver
PHONE: 303-969-2075

SUBJECT: Indiantown

REMARKS: As first priority, we would like to see results of modeling analysis your modeler discussed with ours (Indiantown, FP+L Martin, other sources nearby" or between Indiantn to Everglades. Once we see individual + semi-cumulative impact results we will be better able to decide what if any additional analyses re: ADRVs are needed.

United States Department of the Interior

NATIONAL PARK SERVICE
SOUTHEAST REGIONAL OFFICE
75 Spring Street, S.W.
Atlanta, Georgia 30303

IN REPLY REFER TO:
N3615 (SER-ODN)

RECEIVED
OCT 21 1991
OCT 19 1991
Bureau of
Air Regulation

Ms. Patricia G. Adams
Bureau of Air Regulation
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Dear Ms. Adams:

We have performed a cursory review of the Indiantown Cogeneration, L.P. Project (ICL) Electric Power Plant Site Certification Review application regarding ICL's proposal to construct a cogeneration facility near Indiantown, Florida, and we find the application incomplete with respect to potential impacts on Everglades National Park (NP). The Indiantown facility will be located approximately 145 km north of Everglades NP, a Class I air quality area administered by the National Park Service. The Site Certification application, which included the Prevention of Significant Deterioration (PSD) application, does not adequately address impacts on air quality and sensitive resources at Everglades NP and, therefore, should be deemed incomplete under 40 CFR 52.21.

In the air quality analysis, ICL did not model the impact of the proposed project on Everglades NP because the facility will be located more than 100 km from the park. As we have indicated in other permit reviews and in our recent letter to you clarifying Federal Land Manager notification procedures, guidance provided by the EPA recognizes the possible impacts of large sources located more than 100 km from a class I area. Therefore, it follows that the analysis of impacts on affected class I areas should not be limited to 100 km, but should include all sources that could impact the class I airshed, regardless of their distance from the area. The National Park Service requests that such analysis be performed for the ICL facility, including both an increment consumption analysis and a total ambient impact analysis.

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Company: Florida Dept. of Environmental Reg

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We are also concerned that the NO_x and SO_2 emissions from the ICL facility may contribute to acid deposition at Everglades NP that could impact the aquatic system. Nitrogen deposition can also lead to unnatural fertilization and can cause shifts in vegetation community composition.

In conclusion, we ask that the Florida Department of Environmental Regulation (FDER) require ICL to conduct complete increment and total ambient impact analyses, for all PSD significant pollutants, for the Everglades NP Class I area before deciding to issue a final permit. To assess potential impacts on sensitive AQRVs, it is important for us and the applicant to know the <u>total</u> ambient concentrations at the Class I area. We ask that the FDER require ICL to perform an AQRV analysis that thoroughly addresses potential impacts to sensitive resources in the park. We reserve the right to have adequate time to review this additional information as part of the review process for this application.

If you have any questions regarding this matter, please contact Dee Morse of our Air Quality Division in Denver at (303) 969-2071.

Sincerely,

C. W. Ogle

FOR James W. Coleman, Jr.
Regional Director
Southeast Region

October 17, 1991

N3615 (SER-ODN)

Ms. Patricia G. Adams
Bureau of Air Regulation
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

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Sincerely,

Regional Director
Southeast Region

bcc:
SERO: AQC
EVER: Supt.
AQD-DEN: Morse

BEST AVAILABLE COPY

FAX TELECOMMUNICATION
FROM THE SOUTHEAST REGIONAL OFFICE
Office of the Regional Chief Scientist

National Park Service
75 Spring Street SW
Atlanta, GA 30303

DESTINATION (phone #) 904-922-6979

TO: Ms. Patricia A. Adams

ORGANIZATION: Bureau of Air Regulation

FROM: Richard Quarles

ORGANIZATION: SERO

SUBJECT: Indiantown Cogeneration, L.P. Project

NUMBER OF PAGES TO FOLLOW: 2

REMARKS OR INSTRUCTIONS:

FAX Phone: 404/331-4949
FTS 841-4949

For assistance with the FAX
Call 404/331-4919

FAX operator, complete the following before returning form to originator:

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Sincerely,

C. W. Ogle

for James W. Coleman, Jr.
Regional Director
Southeast Region

cc: C. Dancy
D. Andrews
P. Lewis
J. Rogers
B. Orlen

Florida Department of Environmental Regulation

Twin Towers Office Bldg. ● 2600 Blair Stone Road ● Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

October 4, 1991

Mrs. Christine Shaver, Chief
Permit Review & Technical Support Branch
National Park Service-Air Quality Division
Post Office Box 25287
Denver, Colorado 80225

Dear Mrs. Shaver:

Re: Indiantown Cogeneration Project
Martin County
PSD-FL-168

Enclosed for your review and comment is the Electric Power Plant Site Certification Review for the above referenced PSD permit application. If you have any comments or questions, please contact Preston Lewis or Tom Rogers at the above address or at (904)488-1344.

Sincerely,

Patricia G. Adams

Patricia G. Adams
Planner
Bureau of Air Regulation

PA/kt

enclosure

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10-2-91

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of the foregoing was sent by U.S. Mail or hand delivery to the following this 2nd, day of October, 1991.

The Honorable Lawton Chiles
Governor
The Capitol, Room 210
Tallahassee, Florida 32399

The Honorable Jim Smith
Secretary of State
The Capitol, LL-10
Tallahassee, Florida 32399

The Honorable Robert A. Butterworth
Attorney General
The Capitol, Plaza Level
Tallahassee, Florida 32399

The Honorable Bob Crawford
Commissioner of Agriculture
The Capitol, Plaza Level
Tallahassee, Florida 32399

The Honorable Gerald A. Lewis
State Comptroller
The Capitol, Room 2001
Tallahassee, Florida 32399

The Honorable Tom Gallagher
State Treasurer and Insurance Commissioner
The Capitol, LL-27
Tallahassee, Florida 32399

The Honorable Betty Castor
Commissioner of Education
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9-24-91

BEFORE THE GOVERNOR AND CABINET
OF THE STATE OF FLORIDA

In Re: APPLICATION FOR POWER PLANT SITE CERTIFICATION OF INDIANTOWN COGENERATION PROJECT	DOAH CASE NO. 90-8072EPP DER CASE NO. PA 90-31

FINAL ORDER

BY THE GOVERNOR AND CABINET

The Governor and Cabinet, sitting as the Siting Board, pursuant to the Florida Electrical Power Plant Siting Act, Section 403.501 et seq., Florida Statutes (Supp 1990), have reviewed the Recommended Order dated August 5, 1991, which is attached as Exhibit 1. No exceptions have been filed by any party. Therefore, it is

ORDERED:

1. The Recommended Order is adopted as the final order of the Siting Board.

2. The Siting Board finds that the proposed power plant site, including a 330 MW coal-fired cogeneration facility and associated cooling water pipeline, is consistent and in compliance with local land use plans and zoning ordinances.

DONE AND ENTERED THIS 24th day of September, 1991, in Tallahassee, Florida pursuant to the vote of the Governor and Cabinet, sitting as the Siting Board, at a duly constituted Cabinet meeting, September 24, 1991.

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to S120.52 Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Harry C. Carter 10-1-91
Clerk Date

BY THE GOVERNOR AND CABINET
SITTING AS THE SITING BOARD

LAWTON CHILES
GOVERNOR

State of Florida
Division of Administrative Hearings
The DeSoto Building, 1230 Apalachee Parkway
Tallahassee, FL 32399-1550
(904) 488-9675 • SunCom: 278-9675

August 5, 1991

Sharyn L. Smith
Director

Ann Cole
Clerk

Honorable Lawton Chiles
Governor
State of Florida
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Honorable Gerald A. Lewis
Comptroller
State of Florida
The Capitol, Plaza Level
Tallahassee, FL 32399-0350

Re: Application for Power Plant Site Certification of Indiantown Cogeneration Project, DOAH Case No. 90-8072EPP

Dear Siting Board:

Enclosed is my Recommended Order in the Land Use portion of the referenced case. Exhibits received in evidence have been delivered to Richard T. Donelan, Jr., at the Department of Environmental Regulation. A transcript of this hearing was not filed with the Division.

As required by Section 120.58(5), Florida Statutes, please provide the Division of Administrative Hearings a copy of your final order in this case within 15 days of rendition.

Sincerely,

DIANE K. KIESLING
Hearing Officer

DKK:dw
Enclosure
cc: (See next page)

RECEIVED 8/5/91

cc: Douglas S. Roberts, et al.
Richard T. Donelan, Jr.
Steven Pfeiffer , et al.
H. R. Bishop, et al.
Fred W. Van Vonno
John Fumero
Roger G. Saberson
Peter Merritt
Ken Plante
Robert V. Elias
Brian Sodt
John D. Cassels, Jr.
James Antista
Hamilton S. Oven, Jr.
Board of Trustees of the Internal Improvement Trust Fund

8-5-91

STATE OF FLORIDA
DIVISION OF ADMINISTRATIVE HEARINGS

In Re: APPLICATION FOR POWER PLANT SITE CERTIFICATION OF INDIANTOWN COGENERATION PROJECT	)	DOAH CASE NO. 90-8072EPP DER CASE NO. 90-31

RECOMMENDED ORDER

Pursuant to notice, the Division of Administrative Hearings, by its duly designated Hearing Officer, Diane K. Kiesling, held a formal hearing in the above-styled case on July 30, 1991, in Indiantown, Florida.

APPEARANCES

For Indiantown Cogeneration Project:	Gary P. Sams Douglas S. Roberts Hopping Boyd Green & Sams 123 S. Calhoun Street Post Office Box 6526 Tallahassee, FL 32314
For Department of Environmental Regulation	Richard T. Donelan Assistant General Counsel 2600 Blair Stone Road Tallahassee, FL 32399-2400
For Department of Community Affairs	Steven Pfeiffer, General Counsel 2740 Centerview Drive Tallahassee, FL 32399-2100
For Department of Transportation	H. R. Bishop Assistant General Counsel Haydon Burns Building 605 Suwannee Street Tallahassee, FL 32399
For Martin County:	Fred W. Van Vonno Assistant County Attorney 2401 Southeast Monterey Road Stuart, FL 34996

STATEMENT OF THE ISSUES

The issue for determination is whether the proposed Indiantown Cogeneration, L.P. (ICL) Project site is consistent and in compliance with existing land use plans and zoning ordinances of Martin County and Okeechobee County, Florida. See Section 403.508(2), Florida Statutes. No party to the proceeding disputes that the site is consistent and in compliance with the plans and ordinances in effect on December 21, 1990, when the application was filed.

PRELIMINARY STATEMENT

Pursuant to the Florida Electrical Power Plant Siting Act, Sections 403.501 - 403.519, Florida Statutes, on December 21, 1990, ICL filed an application for power plant site certification (SCA) for the construction and operation of a coal-fired cogeneration project at a site in western Martin County. This Project is known as the Indiantown Cogeneration Project. The statutory scheme requires this land use hearing and a separate certification hearing, which will be held at a later date.

At the hearing, ICL presented the testimony of Stephen Sorrentino, Charles Carlton, Analee Moore, and Paul Darst. ICL Exhibits 2-7, 9-12, 15, 17-28 were admitted into evidence. The Department of Community Affairs (DCA) called Paul Darst.

A Joint Proposed Recommended Order of ICL, DER, DCA, and Martin County was filed on August 2, 1991, and admitted as ICL Exhibit 29. No other parties filed briefs or proposed recommended orders. All parties who did not join in the Joint

Proposed Recommended Order or did not appear at the land use hearing have waived their opportunity to contest land use issues. Said waivers have been made both tacitly and expressly.

The Joint Proposed Recommended Order is incorporated in this Recommended Order.

FINDINGS OF FACT

1. ICL published notices of this land use hearing on June 15, 1991, in The Stuart News, on June 19, 1991, in The Indiantown News, and on June 16, 1991, in The Okeechobee News. Notices of this hearing were published by the Department of Enviromental Regulation in the Florida Administrative Weekly on June 28, 1991. ICL mailed notice of this hearing to the chief executives of the local and regional authorities with responsibility for zoning and land use planning whose jurisdiction includes the site. The Applicant, ICL, posted a notice of this hearing at the proposed site.

2. ICL proposes to construct and operate a 330 Mw cogeneration facility which captures waste heat from electrical generation to produce steam for industrial processes. The facility will burn pulverized coal to generate electricity for sale to Florida Power & Light Company (FPL) and supply up to 225,000 pounds per hour of steam for drying operations at the adjacent Caulkins Citrus Processing plant.

3. Steam generation will be accomplished by means of a pulverized coal boiler. The boiler will be of an outdoor natural-circulation type in which coal will be mixed with air and ignited. Electricity will be generated by passing steam produced

by the boiler through an extraction-condensing turbine generator. Sulfur oxide and nitrogen oxide compounds and particulates will be removed from the boiler exhaust gases using various removal systems.

4. Coal will be delivered by trains arriving from the north. A rail loop and coal unloading, handling and storage facilities will be constructed onsite. Ash will be temporarily stored in onsite silos before being removed from the site.

5. A new site access road will be constructed along the western and southern boundary of the site to provide access to State Road 710 and West Farm Road. A railroad spur across the adjacent Florida Steel plant site will connect the site to the CSX railroad.

6. The proposed project will include a water pipeline that will extend 19 miles southeast from Taylor Creek/Nubbin Slough in Okeechobee County to the facility site. An intake structure will be constructed at Taylor Creek/Nubbin Slough to pump water to the plant site. To distribute electricity generated, the ICL facility's electrical switch yard will connect to an existing FPL electrical transmission line which crosses the northern portion of the Project site.

Site for Indiantown Cogeneration Project

7. The site for the proposed Indiantown Cogeneration Project is a 220 acre tract which lies approximately 20 miles west of Stuart, three miles northwest of Indiantown and nine miles east of Lake Okeechobee. To the north of the Site are the Caulkins Citrus Processing Plant and a vacant Florida Steel

Corporation plant site. Both of these facilities border State Road 710 and the CSX Railroad.

8. The proposed corridor for the cooling water pipeline to serve the Project is within the existing CSX Railroad right-of-way which parallels State Road 710, running southeast from the intake structure location in Okeechobee County to the site. The permanent right-of-way for the pipeline is to be located within this corridor.

Consistency and Compliance of the Project Site with Local Land Use Plans of Martin County

9. The proposed site is designated for "Industrial" use on the Land Use Map adopted by the Martin County Board of County Commissioners (BOCC) as part of its 1990 Comprehensive Growth Management Plan (Martin Plan).

10. The Martin Plan was the local land use plan in effect in Martin County on the date ICL filed this SCA. This Plan encouraged future development of industrial uses, including cogeneration facilities, to occur under a planned unit development industrial zoning classification. The evidence at the hearing established that the Project is consistent and in compliance with the Martin Plan in effect on the date ICL filed the SCA.

11. During the PUD(i) rezoning process discussed below, the proposed project was also reviewed by Martin County for consistency with the other policies of the Martin Plan. The project, as proposed, was found to be consistent with this Plan.

12. On July 9, 1991, the Martin County BOCC adopted a land text amendment (ICL Exhibit 9), which added steam/electricity cogeneration plants as permitted uses within areas designated Industrial. The Department of Community Affairs has made no determination as to the amendment's compliance or non-compliance with Chapter 163 and specifically reserves its responsibility to review the amendment pursuant to its statutory authorization.

Consistency of the Project Site
With Martin County Zoning Regulations

13. The Project is consistent and in compliance with the industrial zoning of Martin County that was in effect for the Project Site on December 21, 1990, the date ICL filed its SCA.

14. On July 23, 1991, the BOCC granted petitions by ICL to change the zoning for the proposed site from M-3 and M-1, industrial, to Planned Unit Development (industrial) or PUD(i); to grant a height exception for structures higher than 60 feet; and to grant an advertised conditional use for utilities. All parties present throughout the land use hearing have stipulated that this zoning change and related approvals do not affect adversely the use of the site as the location for the proposed power plant while still protecting the public interest under the applicable land use plan and zoning ordinances of Martin County.

15. The later-adopted PUD(i) zoning criteria for the Project are contained in a document titled "Indiantown Cogeneration Project Planned Unit Development Zoning Agreement" between ICL, the current property owners, and the Martin County BOCC, dated July 23, 1991.

16. The PUD Agreement establishes certain conditions and standards upon which construction and operation of the ICL project may be undertaken at the proposed site. The Agreement incorporates and references various other local regulations with which a project at this site must comply. The PUD(i) zoning agreement also recognizes that final approval for the project will be obtained under the Florida Electrical Power Plant Siting Act, Chapter 403, Part II, Florida Statutes, and that the final development plan of approval contemplated by the Agreement would be obtained through this certification process.

17. The PUD(i) Agreement provides that ICL shall have the right to develop the project in accordance with applicable laws, ordinances and regulations; with the provisions and requirements of the PUD(i) Zoning Agreement; and with the Preliminary and Final Development Plans.

18. Exhibit D to the PUD(i) Zoning Agreement is a Preliminary Development Plan for the ICL project. This exhibit provides a conceptual layout for the proposed project that is subject to modification based on detailed site planning and engineering required as part of the certification of the Project in conjunction with the final development plan approval (site certification process). The Project, as proposed in the SCA, is consistent with this Preliminary Development Plan.

19. A development schedule for the proposed project is established in Exhibit E to the PUD(i) Agreement. This timetable contemplates and incorporates site certification by the Governor and Cabinet under the Florida Electrical Power Plant Siting Act.

ICL will be able to develop the Project proposed in the SCA consistent with this timetable.

20. Twenty-two (22) Special Conditions are established for the Indiantown Cogeneration Project in Exhibit F to the PUD Agreement. ICL has committed to meet all of the Special Conditions and its design, as developed to date and presented in the site certification application, is consistent and in compliance with all twenty-two Special Conditions. The special conditions are:

A. Special Conditions 1 and 4 require that certain precautions be taken in the event that archaeological artifacts or endangered plants and animals are discovered on the site.

B. A $1 million Community trust program is to be created by ICL to benefit projects in the Indiantown community, under Special Condition 2. Special Condition 8 requires ICL to encourage Project employees to live and become active in the Indiantown Community. Under Special Condition 10, ICL is to make employment applications available in the Indiantown area during periods of significant hiring.

C. Special Condition 3 provides that ICL is solely responsible for obtaining necessary drainage permits from the South Florida Water Management District and that Martin County has no responsibility for funding of Project drainage improvements.

D. With regard to special Condition 5, the Department of Community Affairs concurs that the evidence at the land use hearing established that the Project at this location is consistent and in compliance with local land use plans and zoning ordinances in effect as of December 21, 1990.

E. Special Condition 6 prohibits disposal of wastewater filter cake at the Martin County landfill.

F. Under Special Condition 7, ICL agrees not to haul fill to or from the Site without Martin County approval. This is in compliance with the Excavation and Fill provisions of the Martin County Code, Sections 33-804, 805, 806, and 809.

G. A hazardous waste management plan, consistent with a hazardous waste management plan attached to the Zoning Agreement, is required by Special Condition 8.

H. Landscaping along the access road and around the administration buildings and parking areas is required by Special Condition 10. This condition satisfies the requirements of the Martin County Landscape Code, Chapter 23, Article III of the Martin County Code.

I. Special Condition 13 requires that plant operations not cause unreasonable levels of sound to reach the boundary of any existing adjacent residential

district. ICL is to provide general public notice of any planned steamblows. No quantitative noise standards are established by Martin County.

J. Special Condition 14 establishes performance standards which are consistent with the provisions of Section 33-581.44(G) and (H) of the Martin County Code. The performance standards establish limits on the density of smoke; size of particulates; emissions of odors, dust and dirt, and of obnoxious gases and fumes; sewage disposal; set-backs for unenclosed buildings; fire protection measures; building heights; vegetative buffers adjacent to S.R. 710; and Project lighting. Several of these special performance standards provide additionally for compliance to be shown as part of the final certification order under the Florida Electrical Power Plant Siting Act.

K. Special Conditions 15 and 17 provide that potable water and wastewater services for the Project will be supplied by the Indiantown Company. Final agreements for the provisions of these services are to be provided as part of the final development plan approval.

L. Special Condition 16 provides for protection of upland and wetland preserve areas as shown on the approved development plans. This condition complies with the upland and wetland preservation

policies of the Martin County Comprehensive Growth Management Plan.

M. The size and dimension criteria of project facilities are governed by Special Condition 18.

N. Special Condition 19 requires that soil erosion and sedimentation be controlled during construction through such practices as wetting, seeding or sodding of exposed areas. Under Special Condition 20, shoulders of Project roadways are to be stabilized.

O. Pursuant to Special Condition 22, a south-bound turn lane on S.R. 710 is to be constructed at the entrance road to the Project.

P. Permitted uses on the site are set out in Special Condition 23, allowing uses including pulverized coal electric generating unit, coal handling and storage facilities, rail transportation facilities, and other associated facilities. The uses permitted are described in greater detail in attachment 4 to that Exhibit F.

21. The ICL Project, as designed, committed to by ICL, and proposed in the site certification application, is consistent and in compliance with the foregoing provisions of the PUD(i) Zoning Agreement.

Project Compliance with
Martin County Height Limitations

22. On July 23, 1991, the Martin County BOCC adopted a special exception to allow heights in excess of 60 feet for

facilities associated with the Indiantown Cogeneration Project. The project, as proposed, is consistent and in compliance with the provisions of this height exception. The PUD(i) Zoning Agreement in Special Condition 13 establishes maximum heights of the various project facilities; and the proposed Indiantown Cogeneration Project, as designed, committed to by ICL and proposed in the site certification application, complies with all of them.

Consistency and Compliance of the Water Pipeline, Rail Spur and Site Access Road with Local Land Use Plans and Zoning Ordinances of Martin and Okeechobee Counties

23. The location and construction of the cooling water pipeline is consistent with the policies of the Martin County Comprehensive Growth Management Plan that protect the residential quality of life and prevent impacts to tree canopies and soil erosion from such uses. The Martin County Zoning Code provides, in Chapter 35, Article II, that normal linear distribution facilities, such as the proposed water pipeline, are excepted from the definition of those utilities that are treated as advertised conditional uses. The water pipeline is, therefore, a permitted use in all zoning districts in Martin County.

24. The Electric Utility Element of the adopted Okeechobee County Comprehensive Plan (Okeechobee Plan) provides that support facilities needed to provide electric utility service are deemed consistent with that Plan and are an allowed use in all land use categories. The water pipeline and intake structure are necessary support facilities to the Indiantown

Cogeneration Project and, therefore, are consistent with the Okeechobee Plan. The Okeechobee County zoning ordinance allows, in any zoning district, installations necessary to the performance of an essential service, including water systems. Such facilities are to conform to the character of the zoning district. The water pipeline and intake structure are consistent with these provisions of the Okeechobee County zoning regulations.

25. The Martin Plan provides that new rail facilities and roads be designed to minimize impacts on natural systems, which ICL has done in the siting of the rail spur and site access road to serve the site. The proposed location of the site access road is in the basic alignment of a future road between S.R. 710 and West Farm Road shown in the Traffic Circulation Element of the Martin Plan. The site access road to be constructed by ICL fulfills this objective of the Plan. Martin County zoning regulations are silent on the issue of the location of a rail spur or new roads. The proposed access road and rail spur are, therefore, consistent and in compliance with Martin County land use plans and zoning ordinances.

CONCLUSIONS OF LAW

1. The Division of Administrative Hearings has jurisdiction over the parties to, and the subject matter of, these proceedings. Section 403.508(1), Florida Statutes.

2. The sole issue for determination in this land use hearing is whether the project site is consistent and in compliance with existing land use plans and zoning ordinances of

Martin County and Okeechobee County, Florida. Section 403.508(2), Florida Statutes.

3. Any defects in the publication of notice of this hearing due to the publication schedules of the various newspapers are immaterial due to the breadth of notice given for this hearing. Pursuant to Section 403.5095, Florida Statutes, and Rule 17-17.161(2), Florida Administrative Code, any such defects are found to be inadvertent and immaterial and not to have affected the ability of the public to participate in this hearing. The notice time frames are adjusted accordingly.

4. For project facilities located within Martin County, the applicable land use plans and zoning ordinances are those adopted by Martin County in effect as of December 21, 1990, the date of ICL's site certification application. It has been established by competent, substantial evidence, and all parties present throughout the land use hearing have stipulated, that the proposed power plant site, as the location for a coal-fired cogeneration facility with a capacity of 330 megawatts, the access road and the rail spur, are consistent and in compliance with the Martin County Comprehensive Growth Management Plan and with the zoning ordinances of Martin County for this site and project.

5. The heights of facilities proposed by ICL in its design and site certification application are consistent and in compliance with the special height exception granted by Martin County.

6. ICL's proposed water pipeline is a permitted use in all Martin County zoning districts and is consistent with Martin County's land use plans. Accordingly, the proposed pipeline corridor is consistent and in compliance with the applicable land use plans and zoning ordinances of Martin County.

7. The Indiantown Cogeneration Project Planned Unit Development Zoning Agreement and the land use text amendment regarding cogeneration plants within areas designated Industrial as adopted by the Martin County Board of County Commissioners subsequest to the filing of the Site Certification Application do not affect the proposed site in a manner so as to prevent or impair its use as a location for this project. Section 403.508(2), Florida Statutes (Supp. 1990). This order in no way disturbs the legal status of the PUD Agreement and the obligations of ICL and Martin County under its provisions.

8. The Department of Community Affairs concurs that the evidence at the land use hearing established that the project at the proposed location is consistent with the existing Martin County Comprehensive Plan and land development regulations. DCA specifically reserves, and this order does not affect, its responsibility to review, pursuant to Chapter 163, Part II, Florida Statutes (1989), the land use text plan amendment adopted by the Martin County BOCC on July 9, 1991, which added steam/electricity cogeneration plants as permitted uses within areas designated Industrial. Further, DCA has made no determination as to the amendment's compliance or non-compliance with Chapter 163.

9. For Project facilities located in Okeechobee County, the applicable land use plans and zoning ordinances are those adopted by Okeechobee County in effect as of December 21, 1990. Section 403.508(2), Florida Statutes (Supp. 1990). The Okeechobee County Zoning Code is applicable to the location of the water pipeline and intake structure located in Okeechobee County.

10. It has also been established by competent, substantial evidence that the proposed locations for the water intake structure and the water pipeline in Okeechobee County are consistent and in compliance with the Okeechobee County Comprehensive Plan and the Okeechobee County Zoning Ordinance. ICL's proposed water pipeline is a permitted use in all Okeechobee County zoning districts.

RECOMMENDATION

Based on the foregoing Findings of Fact and Conclusions of Law, it is hereby

RECOMMENDED:

That the Governor and Cabinet, sitting as the Siting Board, enter a final order determining that the proposed Indiantown Cogeneration Project and its site (including the associated water pipeline and intake structure), as proposed in the Site Certification Application, are consistent and in compliance with land use plans and zoning ordinances of Martin and Okeechobee Counties.

DONE AND ENTERED this 5th day of August, 1991, in Tallahassee, Leon County, Florida.

DIANE K. KIESLING, Hearing Officer
Division of Administrative Hearings
The DeSoto Building
1230 Apalachee Parkway
Tallahassee, Florida 32399-1550
(904) 488-9675

Filed with the Clerk of the Division of Administrative Hearings this 5th day of August, 1991.

NOTICE OF RIGHT TO SUBMIT EXCEPTIONS: All parties have the right to submit written exceptions to this Recommended Order. All agencies allow each party at least 10 days in which to submit written exceptions. Some agencies allow a larger period within which to submit written exceptions. You should contact the agency that will issue the final order in this case concerning agency rules on the deadline for filing exceptions to this Recommended Order. Any exceptions to this Recommended Order should be filed with the agency that will issue the final order in this case.

Copies furnished:

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Honorable Lawton Chiles
Governor, State of Florida
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Honorable Robert A. Butterworth
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Honorable Tom Gallagher
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State of Florida
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Honorable Gerald A. Lewis
Comptroller, State of Florida
The Capitol, Plaza Level
Tallahassee, FL 32399-0350

Case No. 90-8072EPP

BEST AVAILABLE COPY

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Power[1] Generation Facility [X] New[1] [ ] Existing[1]

APPLICATION TYPE: [X] Construction [ ] Operation [ ] Modification

COMPANY NAME: Indiantown Cogeneration, Ltd. Partnership COUNTY: Martin

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) See Table I

SOURCE LOCATION: Street SR 710 City Indiantown

UTM: East 548.019 Km North 2990.692 Km

Latitude 27 ° 2 ' 20 "N Longitude 80 ° 30 ' 45 "W

APPLICANT NAME AND TITLE: _____

APPLICANT ADDRESS: _____

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Indiantown Cogeneration, Limited Partnership

I certify that the statements made in this application for a _____ permit are true, correct and complete to the best of my knowledge and belief. Further I agree to maintain and operate the pollution control source and pollution contro facilities in such a manner as to comply with the provision of Chapter 403, Florid Statutes, and all the rules and regulations of the department and revisions thereof. also understand that a permit, if granted by the department, will be non-transferabl and I will promptly notify the department upon sale or legal transfer of the permitte establishment.

*Attach letter of authorization

Signed: _____

Name and Title (Please Type)

Date: _____ Telephone No. _____

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project hav been designed/examined by me and found to be in conformity with modern engineerin principles applicable to the treatment and disposal of pollutants characterized in th permit application. There is reasonable assurance, in my professional judgment, tha

[1] See Florida Administrative Code Rule 17-2.100(57) and (104)

the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the prope maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

Signed _____

_____
Name (Please Type)

_____
Company Name (Please Type)

_____
Mailing Address (Please Type)

Florida Registration No. _____ Date: _____ Telephone No. _____

SECTION II: GENERAL PROJECT INFORMATION

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

See Attached

B. Schedule of project covered in this application (Construction Permit Application Only)

Start of Construction 7/92 Completion of Construction 12/95

C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

	Capital	O & M
Selected Non-Catalytic Reduction System	$ 8,108,000	$ 2,939,400
Spray Dryer Absorber System	$32,271,000	$20,145,000/year
Baghouse	$20,524,000	$ 5,999,000/year

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

No previous permits have been issued

II.A.

TABLE I

INDIANTOWN COGENERATION EMISSION SOURCES

Main Boiler Stack

Auxiliary Boiler Stack

Coal Handling Areas

Ash Handling Areas

Cooling Tower

Lime Handling Areas

E. Requested permitted equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 52 ;

if power plant, hrs/yr 8760; if seasonal, describe: _____

F. If this is a new source or major modification, answer the following questions. (Yes or No)

1. Is this source in a non-attainment area for a particular pollutant? No

   a. If yes, has "offset" been applied? N/A

   b. If yes, has "Lowest Achievable Emission Rate" been applied? N/A

   c. If yes, list non-attainment pollutants. N/A

2. Does best available control technology (BACT) apply to this source? If yes, see Section VI. Yes

3. Does the State "Prevention of Significant Deterioriation" (PSD) requirement apply to this source? If yes, see Sections VI and VII. Yes

4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source? Yes

5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source? No

H. Do "Reasonably Available Control Technology" (RACT) requirements apply to this source? No

   a. If yes, for what pollutants? N/A

   b. If yes, in addition to the information required in this form, any information requested in Rule 17-2.650 must be submitted.

Attach all supportive information related to any answer of "Yes". Attach any justification for any answer of "No" that might be considered questionable.

Refer to PSD Permit Application Documentation

III. C.

Name of Contaminant	Emission Max. #/Hr.	Emission Actual T/Yr.	Allowed Emission Rate	Allowable Emission #/Hr.	Potential Emission #/Hr.	Potential Emission T/Yr.	Relate to Flow Dia. (Loc.#)
Main Stack (continued):							
Lead	0.064	0.28	None	None	3.19	13.97	12
Beryllium	0.0094	0.041	None	None	0.46	2.03	12
Mercury	0.040	0.172	None	None	0.08	0.34	12
Arsenic	0.175	0.765	None	None	5.81	25.47	12
Fluorides	5.09	22.3	None	None	25.38	111.14	12
Auxiliary Boiler:							
Sulfur Dioxide	17.8	8.9	0.80	27.3	17.8	8.9	11
Particulates	1.4	0.7	0.03	10.2	1.4	0.7	11
Nitrogen Dioxide	68.2	34.1	0.3	102.5	68.2	34.1	11
Carbon Monoxide	47.3	23.7	None	None	47.3	23.7	11
VOC	0.63	0.32	None	None	0.63	0.32	11
Fugitive Emissions:							
Particulate	0.34	1.49	None	None	34.5	151.1	1
Particulate	0.696	3.05	None	None	3.78	16.6	2
Particulate	0.0007	0.0031	None	None	0.352	1.54	3
Particulate	0	0	None	None	0	0	4
Particulate	0.288	1.26	None	None	144.4	632.3	5
Particulate	0.001	0.0044	None	None	0.51	2.26	6
Particulate	0.209	0.915	None	None	104.4	457.3	7
Particulate	0.059	0.26	None	None	29.4	128.8	8
Particulate	0.0012	0.053	None	None	6	26.3	9
Particulate	0.0012	0.0053	None	None	0.6	2.63	10
Particulate	0.0024	0.011	None	None	1.2	5.26	13
Salt	43	188	None	None	43	188	15

TII. C

INDIANTOWN
FUGITIVE DUST EMISSIONS TABLE

SOURCE NUMBER	EMISSION POINT	CONTROL METHOD	DISCHARGE FLOW CFM	DISCH. ELEV. ABOVE GRADE FT
1	COAL UNLOAD AREA	FABRIC FILTER	30000	25
2	STORAGE/TRANS. TOWER AREA	FABRIC FILTER	30000	60
3	COAL RECLAIM AREA	FABRIC FILTER	20000	25
4	EMERG. RECLAIM AREA	FABRIC FILTER	20000	25
5	CRUSHER TOWER AREA	FABRIC FILTER	10000	75
6	SILO BAY AREA	FABRIC FILTER	10000	180
7	ASH SILO AREA	FABRIC FILTER FABRIC FILTER	3000 5000	120 120
8	ASH RECYCLE SILO	FABRIC FILTER	3000	75
9	LIME SILO AREA	FABRIC FILTER	3000	120
10	LIME SLURRY PLANT	FABRIC FILTER	3000	60
	SODA ASH SILO	FABRIC FILTER	3000	75

D. Control Devices: (See Section V, Item 4)

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)
Selected Non-Catalytic Reduction System	Nitrogen Oxides	37%	N/A	Vendor Quote
Spray Dryer Absorber	Sulfur Dioxide	95%	N/A	Vendor Quote
Baghouse	Particulate	99+%	> 0.1	Vendor Data

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
Coal	290,000 #/hr	-	3422
Natural Gas	350,000 Ft^3/hr	-	358
Fuel Oil	2500 gal/hr	-	341.6

*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis: Coal

Percent Sulfur: 2% Percent Ash: 12%

Density: 45 #/Ft^3 lbs/gal Typical Percent Nitrogen: 1.16

Heat Capacity: 11,800 (min.) BTU/lb -- BTU/gal

Other Fuel Contaminants (which may cause air pollution):

F. If applicable, indicate the percent of fuel used for space heating. N/A

Annual Average Maximum

G. Indicate liquid or solid wastes generated and method of disposal.

Attached

H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):

Main Boiler Stack

Stack Height: 495 ft. Stack Diameter: 16 ft.

Gas Flow Rate: 1123665 ACFM 978063 DSCFM Gas Exit Temperature: 140 °F.

Water Vapor Content: 15 % Velocity: 100 FPS

Auxiliary Boiler Stack (see attached table)

SECTION IV: INCINERATOR INFORMATION - N/A

Type of Waste	Type 0 (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq.& Gas By-prod.)	Type VI (Solid By-prod.)
Actual lb/hr Incinerated							
Uncontrolled (lbs/hr)							

Description of Waste _____

Total Weight Incinerated (lbs/hr) _____ Design Capacity (lbs/hr) _____

Approximate Number of Hours of Operation per day _____ day/wk _____ wks/yr. _____

Manufacturer _____

Date Constructed _____ Model No. _____

	Volume $(ft)^3$	Heat Release (BTU/hr)	Fuel		Temperature (°F)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: _____ ft. Stack Diamter: _____ Stack Temp. _____

Gas Flow Rate: _____ ACFM _____ DSCFM* Velocity: _____ FPS

*If 50 or more tons per day design capacity, submit the emissions rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device: [ ] Cyclone [ ] Wet Scrubber [ ] Afterburner

[ ] Other (specify) _____

III. G. Liquid and Solid Waste Generation and Disposal

Liquid Wastes	Disposal
Sanitary Wastes	Sent to Indiantown Municipal System
Wastewater	Treated, then reused in process where possible remainder to deep well injection
Spent Solvents	Off-site disposal
Coal Pile Runoff/Leachate	Treated and sent to cooling tower
Solid Wastes	
Office Wastes	Off-site disposal
Air Filters	Off-site disposal
Resin Beds	Off-site disposal
Bottom Ash	Off-site disposal at coal mine
Fly Ash and Reaction Products	Off-site disposal at coal mine

INDIANTOWN

AUXILIARY BOILER STACK PARAMETERS

	AUXILIARY BOILER	
	No. 2 FUEL OIL	NATURAL GAS
EXHAUST STACK TEMP	500°F	480°F
STACK EXIT VELOCITY	103 FT/SEC	102 FT/SEC
STACK HEIGHT	90 FT	90 FT
STACK EXIT DIAMETER	5.5 FT	5.5 FT

Brief description of operating characteristics of control devices:

Ultimate disposal of any effluent other than that emitted from the stack (scrubber water, ash, etc.):

NOTE: Items 2, 3, 4, 6, 7, 8, and 10 in Section V must be included where applicable.

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

N/A 1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]

2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made. later

3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test). Refer to PSD Permit Application Documents

4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design pressure drop, etc.) Refer to PSD Permit Application Documents

5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (1-efficiency). Refer to PSD Permit Application Documents

6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained. Attached (Fig. 3.4.4-1)

7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map). Attached (Fig. 2.1.0-1)

8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram. Attached (Fig. 3.2-4)

9. The appropriate application fee in accordance with Rule 17-4.05. The check should be made payable to the Department of Environmental Regulation.

10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?

[X] Yes [ ] No 40 CFR 60 Subpart Da

Contaminant	Rate or Concentration
See tables in PSD Permit Application	
Documents	

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy)

[ ] Yes [X] No

Contaminant	Rate or Concentration
Refer to PSD Permit Application Documents	

C. What emission levels do you propose as best available control technology?

Contaminant	Rate or Concentration
See Table in PSD Permit Application	
Documents	

D. Describe the existing control and treatment technology (if any).

1. Control Device/System:
2. Operating Principles:
3. Efficiency:*
4. Capital Costs:

*Explain method of determining

5. Useful Life:

6. Operating Costs:

7. Energy:

8. Maintenance Cost:

9. Emissions:

Contaminant	Rate or Concentration

10. Stack Parameters

a. Height: ft.

b. Diameter: ft.

c. Flow Rate: ACFM

d. Temperature: °F.

e. Velocity: FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary). Refer to PSD Permit Application Documents

1.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels;

2.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

[1]Explain method of determining efficiency.
[2]Energy to be reported in units of electrical power - KWH design rate.

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

3.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

4.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Costs:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected: See BACT for PSD Permit Application

1. Control Device:

2. Efficiency:[1]

3. Capital Cost:

4. Useful Life:

5. Operating Cost:

6. Energy:[2]

7. Maintenance Cost:

8. Manufacturer:

9. Other locations where employed on similar processes:

a. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

[1]Explain method of determining efficiency.
[2]Energy to be reported in units of electrical power - KWH design rate.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

b. (1) Company:

(2) Mailing Address:

(3) City: (4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

10. Reason for selection and description of systems:

[1]Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION

A. Company Monitored Data Air quality impact below the level requiring monitoring (see attached PSD application documents)

1. _____ no. sites _____ TSP _____ ( ) SO_2* _____ Wind spd/dir

Period of Monitoring _____/_____/_____ to _____/_____/_____
month day year month day year

Other data recorded _____

Attach all data or statistical summaries to this application.

*Specify bubbler (B) or continuous (C).

2. Instrumentation, Field and Laboratory

a. Was instrumentation EPA referenced or its equivalent? [ ] Yes [ ] No

b. Was instrumentation calibrated in accordance with Department procedures?

[ ] Yes [ ] No [ ] Unknown

B. Meteorological Data Used for Air Quality Modeling

1. 5 Year(s) of data from 1 / 1 / 82 to 12 / 31 / 86
month day year month day year

2. Surface data obtained from (location) West Palm Beach, FL

3. Upper air (mixing height) data obtained from (location) West Palm Beach, FL

4. Stability wind rose (STAR) data obtained from (location) West Palm Beach, FL

C. Computer Models Used

1. ISCST (version 88348) Modified? If yes, attach description.

2. (no modifications) Modified? If yes, attach description.

3. _____ Modified? If yes, attach description.

4. _____ Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables. Attached to DER AQ submittal only

D. Applicants Maximum Allowable Emission Data

Pollutant	(Main Stack) Emission Rate	
TSP	7.8	grams/sec
SO^2	73	grams/sec

E. Emission Data Used in Modeling

Attach list of emission sources. Emission data required is source name, description of point source (on NEDS point number), UTM coordinates, stack data, allowable emissions, and normal operating time. See PSD Application Documents

F. Attach all other information supportive to the PSD review. See PSD Application Documents

G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.

see BACT

H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.

see BACT

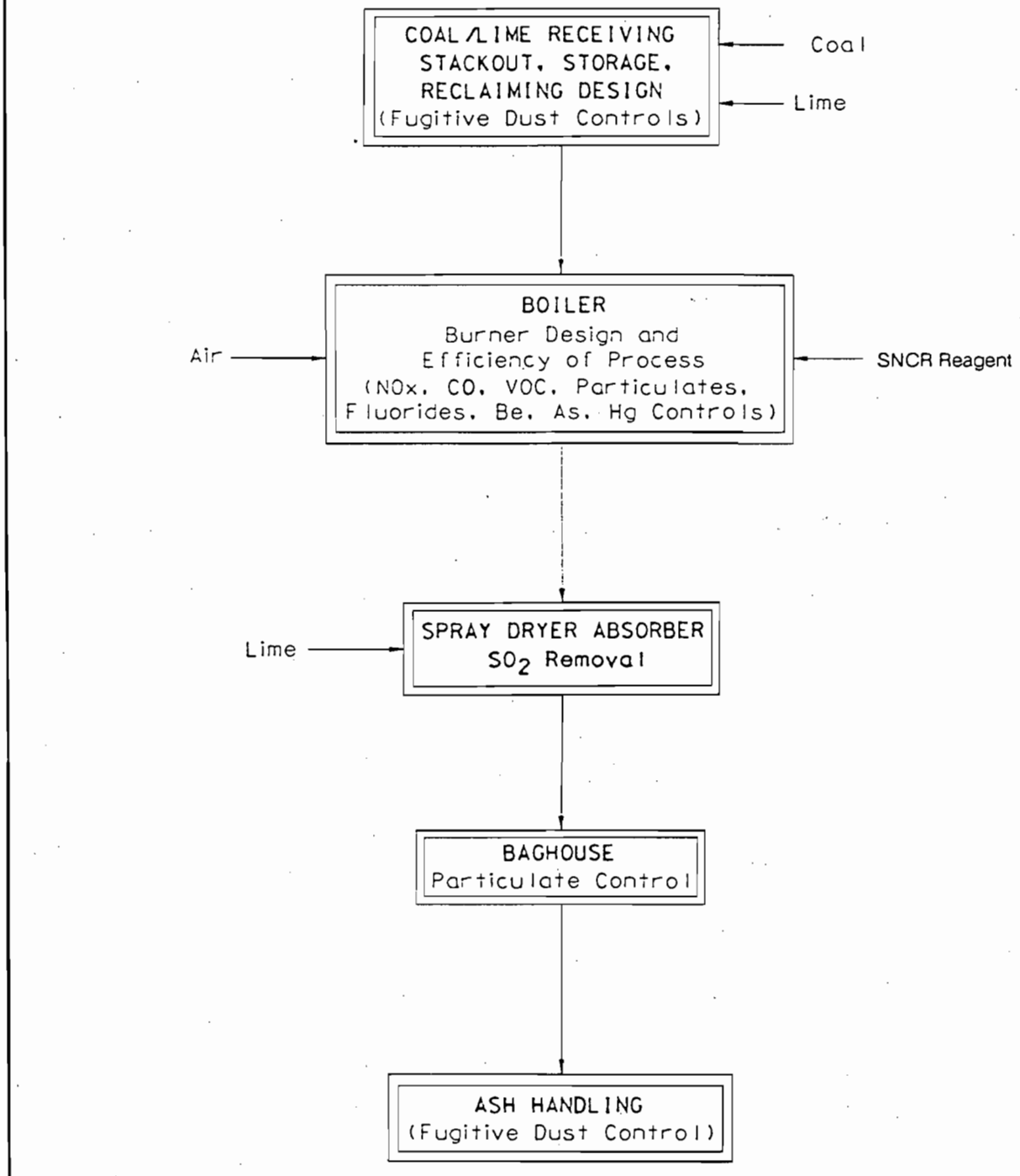


Figure 3.4.4-1.

AIR EMISSIONS CONTROL EQUIPMENT DIAGRAM

Source: Bechtel 1990

INDIANTOWN
COGENERATION
PROJECT

Indiantown Cogeneration, L.P.

DEP ROUTING AND TRANSMITTAL SLIP

TO: (NAME, OFFICE, LOCATION)

1. Air / MS#5500
2. ~~Al Linero~~
3. _____
4. _____
5. _____

PLEASE PREPARE REPLY FOR:

____ SECRETARY'S SIGNATURE

____ DIV/DIST DIR SIGNATURE

____ MY SIGNATURE

____ YOUR SIGNATURE

____ DUE DATE _____

ACTION/DISPOSITION

____ DISCUSS WITH ME

____ COMMENTS/ADVISE

____ REVIEW AND RETURN

____ SET UP MEETING

____ FOR YOUR INFORMATION

____ HANDLE APPROPRIATELY

____ INITIAL AND FORWARD

____ SHARE WITH STAFF

____ FOR YOUR FILES

COMMENTS:

[redacted]

We'll revise the Title V at a later date. 8/8 8/7

Scott

Patty - let Mike + Scott Sheffak know. Maybe Title V needs to update Operation Permit, but al don't know.

No one outside of our Bureau needs copy, Buck copies parties.

Al

FROM: Scott Sheerland DATE: 7/26/00 PHONE: 1-9682

DEP 15-026 (12/93)

8/7

Scott -
See Al's note -
If you don't need
copy - just return
to me for the
file. Thanks
Patty

Is your RETURN ADDRESS completed on the reverse side?

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Ms. Michelle Griffin
Indiantown Cogeneration Facility
Post Office Box 1620
Indiantown, Florida 34956

4a. Article Number

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
7-24-95

5. Signature (Addressee)
Stephanie Watkins

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)

PS Form **3811**, December 1991 ☆U.S. GPO: 1993—352-714 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

Z 392 979 058

Receipt for Certified Mail
No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

UNITED STATES POSTAL SERVICE

PS Form **3800**, March 1993

Sent to Ms. Michelle Griffin	
Street and No. PO Box 1620	
P.O., State and ZIP Code Indiantown, Florida 34956	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date Sent 7/14/95 ~~Revised~~ PSD PL-168	

6-21-95

TO Marty

DATE 6/21 TIME 10:10

WHILE YOU WERE OUT

M Michelle Griffin

of

PHONE 407/597-6500
AREA CODE NUMBER EXTENSION

TELEPHONED	~~PLEASE CALL~~ ✓	~~WILL CALL AGAIN~~	
RETURNED YOUR CALL		CALL IMMEDIATELY	
CAME TO SEE YOU		WANTS TO SEE YOU	

Called BACK 6/21/95

MESSAGE

Letter 3/95 to Bruce —
Amendment Request

By CGH

TO: Teresa
thru AL.

Florida Department of
Environmental Protection

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Lawton Chiles
Governor

Virginia B. Wetherell
Secretary

April 11, 1994

Mr. Paul Reinermann
Environmental Specialist
Indiantown Cogeneration, L.P.
7500 Old Georgetown Road
Bethesda, Maryland 20814-6161

Dear Mr. Reinermann,

We have received the Hard Copy Information Reports you submitted April 1 for the PSD monitoring sites required under the Power Plant Siting Conditions of Certification for the Indiantown Cogeneration Project permit. The two sites meet siting requirements and are acceptable for PSD monitoring.

SAROAD numbers were issued for these sites. The monitoring site at Caulking Indiantown Citrus Company, labeled "Site #1 - Caulking Plant Site," is SAROAD #10-1930-003-J02. The monitoring site on State Road 710, labeled "Site #2 - FL Martin Site," about five miles northwest of Indiantown, is SAROAD #10-1930-001-J02.

Thank you for your prompt and thorough response. If you need further information or assistance, please call Ms. Tammy Eagan at 904/488-6140.

Sincerely,

Dotty Diltz

Dotty Diltz, Chief
Bureau of Air Monitoring
and Mobile Sources

DD/te

cc: Micheal D. Mazaika
Tammy Eagan
Clair Fancy

Printed on recycled paper.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

ROUTING AND TRANSMITTAL SLIP

TO: (NAME, OFFICE, LOCATION)

1. Clair Fancy
2. ~~Preston~~
3. ~~Steve~~ RECEIVED
4. Patty Adams - file APR 12 1994

Bureau of Air Regulation

FROM: Jammy Gagan

DATE 4/12/94

PHONE

08-18-93

Indiantown Cogeneration, L.P.

RECEIVED
AUG 26 1993
Division of Air
Resources Management

August 16, 1993

File

Control #: 0975
Reference Code:
File #: 6.3.3.2

Mr. Hamilton S. Oven, Jr.
Administrator, Office of Siting Coordinator
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Dear Mr. Oven:

As required by Condition of Certification II1.A.2(c), this letter transmits the sixth quarterly report for the Indiantown Cogeneration Project for the period ending June 30, 1993.

During the second quarter of 1993, construction activities continued to emphasize foundation construction and installation of underground piping and duct banks. Work continued on the turbine foundation and installation commenced on the turbine pedestal legs. First structural steel delivery and erection for the boiler building occurred on May 13, 1993. Installation of boiler structural steel continues in preparation for the commencement of boiler erection in the third quarter of 1993. Installation of the stack shell has continued this quarter and is approximately 75% complete. Installation of piling and dewatering for the coal unloading building and the circulatory water pumphouse has commenced. The liner for the 35 acre cooling water storage pond was completed during this period and installation of the sand cover is currently underway. Work on the coal pile runoff basin liner was initiated during this quarter.

The railroad bridge over the hydrologic connection between wetland #5 and the offsite wetland has been completed. The wetland vegetation of the connection has been restored. The sheet piling at the railroad spur near Tampa Farms Road was also completed. Work has commenced on the railroad track with installation of ties and ballast. Makeup water pipeline material delivery has been initiated and we continue to pursue post-certification approvals with the South Florida Water Management District.

Bechtel Engineering continued detailed design efforts on the 19-mile makeup water pipeline and Taylor Creek Intake Structure. Design efforts are proceeding on piping layouts for the boiler and turbine buildings. The first piping isometrics for the mainsteam, cold reheat and hot reheat systems were issued for construction. Electrical design for underground conduit continues as well as cable tray design for the upper elevations of the boiler building and turbine building. Structural design for this period was focused on foundation design for the coal unloading areas,

Patty

INDIANTOWN

U.S. Generating Company

is pleased to announce that effective

August 30, 1993

USGen will relocate its headquarters office to

7500 Old Georgetown Road
Bethesda, Maryland 20814-6161

The main phone number remains
301-718-6800
The main fax number will be
301-718-6900

P 710 058 514

Certified Mail Receipt

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

UNITED STATES POSTAL SERVICE

Sent to Stephen Sorrentino	
Street & No. Indiantown Cogen	
P.O., State & ZIP Code Bethesda, MD	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees	$
Postmark or Date 7-21-92 PSD-FI-168	

PS Form 3800, June 1990

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece next to the article number.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Stephen A. Sorrentino
Indiantown Cogen, L.P.
7475 Wisconsin Ave
Bethesda, MD 20814-3422

4a. Article Number P 710 058 514

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery 7-27-92

5. Signature (Addressee)

6. Signature (Agent) Karen Mottle

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, October 1990 ☆U.S. GPO: 1990—273-861

DOMESTIC RETURN RECEIPT

P 617 884 158

Certified Mail Receipt
No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

UNITED STATES POSTAL SERVICE

Sent to Mr. Stephen A. Sorrentino	
Street & No. 7475 Wisconsin Ave.	
P.O., State & ZIP Code Bethesda, MD 20814-3422	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees	$
Postmark or Date Mailed: 3-26-92 Permit: PSD-FL-168	

PS Form 3800, June 1990

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt Fee will provide you the signature of the person delivered to and the date of delivery.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Mr. Stephen A. Sorrentino
Indiantown Cogeneration, L.P.
7475 Wisconsin Ave.
Bethesda, MD 20814-3422

4a. Article Number
P 617 884 158

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
MAR 30 1992

8. Addressee's Address (Only if requested and fee is paid)

5. Signature (Addressee)

6. Signature (Agent)
Karen Mastaller

PS Form 3811, November 1990 ☆U.S. GPO: 1991—287-038 **DOMESTIC RETURN RECEIPT**

United States Department of the Interior
NATIONAL PARK SERVICE
SOUTHEAST REGIONAL OFFICE
75 Spring Street, S.W.
Atlanta, Georgia 30303

TAKE PRIDE IN AMERICA

IN REPLY REFER TO:
N3615 (SER-ODN)

RECEIVED
OCT 21 1991
OCT 18 1991
Bureau of
Air Regulation

Ms. Patricia G. Adams
Bureau of Air Regulation
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Dear Ms. Adams:

We have performed a cursory review of the Indiantown Cogeneration, L.P. Project (ICL) Electric Power Plant Site Certification Review application regarding ICL's proposal to construct a cogeneration facility near Indiantown, Florida, and we find the application incomplete with respect to potential impacts on Everglades National Park (NP). The Indiantown facility will be located approximately 145 km north of Everglades NP, a Class I air quality area administered by the National Park Service. The Site Certification application, which included the Prevention of Significant Deterioration (PSD) application, does not adequately address impacts on air quality and sensitive resources at Everglades NP and, therefore, should be deemed incomplete under 40 CFR 52.21.

In the air quality analysis, ICL did not model the impact of the proposed project on Everglades NP because the facility will be located more than 100 km from the park. As we have indicated in other permit reviews and in our recent letter to you clarifying Federal Land Manager notification procedures, guidance provided by the EPA recognizes the possible impacts of large sources located more than 100 km from a class I area. Therefore, it follows that the analysis of impacts on affected class I areas should not be limited to 100 km, but should include all sources that could impact the class I airshed, regardless of their distance from the area. The National Park Service requests that such analysis be performed for the ICL facility, including both an increment consumption analysis and a total ambient impact analysis.

FEDERAL EXPRESS

QUESTIONS? CALL 800-238-5355 TOLL FREE.

AIRBILL
PACKAGE
TRACKING NUMBER
0626497896

1120M 0626497896

RECIPIENT'S COPY

1 Date: 10/18/91

From (Your Name) Please Print: Rick Dawson
Your Phone Number (Very Important): (404)331-4916
Company: IONAL PARK SERVICE
Department/Floor No.:
Street Address: SPRING ST RM 1078
City: ANTA
State: GA
ZIP Required: 3 0 3 0 3

2 To (Recipient's Name) Please Print: Ms. Patricia G. Adams
Recipient's Phone Number (Very Important): ( )
Company: Bureau of Air Regulation / Florida Dept. of Environmental Regu
Department/Floor No.:
Exact Street Address (We Cannot Deliver to P.O. Boxes or P.O. Zip Codes): Twin Towers Office Building / 2600 Blair Stone Road
City: Tallahassee
State: FL
ZIP Required: 32399-24

YOUR INTERNAL BILLING REFERENCE INFORMATION (First 24 characters will appear on invoice.)
042-1001-181

H IF HOLD FOR PICK-UP, Print FEDEX Address Here
Street Address:
City:
State:
ZIP Required:

3 PAYMENT 1 [X] Bill Sender 2 [ ] Bill Recipient's FedEx Acct. No. 3 [ ] Bill 3rd Party FedEx Acct. No. 4 [ ] Bill Credit Card 5 [ ] Cash/Check

4 SERVICES (Check only one box)

Priority Overnight (Delivery by next business morning†)		Standard Overnight (Delivery by next business afternoon†)	
11	YOUR PACKAGING	51	YOUR PACKAGING
16	FEDEX LETTER *	56	FEDEX LETTER *
12	FEDEX PAK *	52	FEDEX PAK *
13	FEDEX BOX	53	FEDEX BOX
14	FEDEX TUBE	54	FEDEX TUBE
Economy Two-Day (Delivery by second business day†)		Government Overnight (Restricted for authorized users only)	
30	ECONOMY	46	[X] GOVT LETTER
		41	GOVT PACKAGE

Freight Service (for Extra Large or any package over 150 lbs.)
70 [ ] OVERNIGHT FREIGHT ** (Confirmed reservation required)
80 [ ] TWO-DAY FREIGHT **
†Delivery commitment may be later in some areas.
*Declared Value Limit $100.
**Call for delivery schedule.

DELIVERY AND SPECIAL HANDLING (Check services required)

1 [ ] HOLD FOR PICK-UP (Fill in Box H)
2 [X] DELIVER WEEKDAY
3 [ ] DELIVER SATURDAY (Extra charge) (Not available to all locations)
4 [ ] DANGEROUS GOODS (Extra charge)
5 [ ]
6 [X] DRY ICE _____ Lbs
7 [ ] OTHER SPECIAL SERVICE _____
8 [ ]
9 [ ] SATURDAY PICK-UP (Extra charge)
10 [ ]
11 [ ] DESCRIPTION
12 [ ] HOLIDAY DELIVERY (If offered) (Extra charge)

PACKAGES	WEIGHT In Pounds Only
Total	Total

DIM SHIPMENT (Chargeable Weight)
[ ] _____ lbs.

Received At
1 ☐ Regular Stop 3 ☐ Drop Box
2 ☐ On-Call Stop 4 ☐ B.S.C. 5 ☐ Station

FedEx Emp. No.:
Date/Time:

5 Release Signature: [signature]

Emp. No.: Date:
[ ] Cash Received
[ ] Return Shipment
[ ] Third Party [ ] Chg. To Del. [ ] Chg. To Hold
Street Address:
City: State: Zip:
Received By: X
Date/Time Received: FedEx Employee Number:

Federal Express Use
Base Charges
Declared Value Charge
Other 1
Other 2
Total Charges

REVISION DATE 1/91
PART #137204 FXEM 4/91
FORMAT #068
068

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PRINTED IN U.S.A.

FACILITY #	FACILITY	DESCRIPTION	LINE
		PROJECT MILESTONES	31
50	ASH	ASH HANDLING	32
		ASH HANDLING FOUNDATION	33
60	FUEL	COAL HANDLING SYSTEM	34
		COAL HANDLING BUILDING/FOUNDATION	35
70	WATER TREATMENT	INTAKE STRUCTURE AT TAYLOR CREEK	36
		OFFSITE PIPELINE WATER SYSTEM	37
		PRE-ENGINEERED BUILDING	38
		COOLING TOWER	39
		COOLING TOWER FOUNDATION	40
		FIELD ERECTED TANKS/FOUNDATIONS	41
		CIRCULATING WATER PUMPS, FOREBAY/FOUNDATION	42
		CIRCULATING WATER PIPE	43
		DEMINERALIZED WATER, EVAP, SOFTENER SYSTEM/FOUNDATION	44
			45
80	BLDG	ADMINISTRATION BLDG/ MAINTENANCE SHOP/WAREHOUSE	46
			47
90	MISCELLANEOUS		48
		MAIN TRANSFORMER	49
		MAIN TRANSFORMER FOUNDATIONS/SWYD FDN	50
		STARTUP & TEST	51
		PERFORMANCE TESTING	52
CAULKINS		PIPELINES/FOUNDATION	53
			54
			55
			56
			57
			58
		OWNER OBLIGATIONS	59
		OWNER PERMITS(NOT ALL INCLUSIVE) SEE NOTE B	60

MO's -6 -5 -4 -3 -2 -1 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43

NTP MOB; FIRST BOILER CONCRETE; START BOILER STEEL ERECTION; SET DRUM; DEL STG; ENERGIZATION; HYDRO; BOIL STEAM OUT BLOW; TURBINE ROLL; TARGET COMPLETION; GUARANTEED COMPLETION

ASH HANDLING: DSN/SPEC; BEA; FAB & DEL; ERECT; FROM LINE 18

ASH HANDLING FOUNDATION: DSN; DRIVE SILO PILES; FDN

COAL HANDLING SYSTEM: BEA; DSN/FAB & DEL; INSTL FDN; ERECT CONVEYORS; TO LINE 5 SHEET 1 OF 2

COAL HANDLING BUILDING/FOUNDATION: SURCHARGE AREA; DSN; INSTL FDNS; ERECT BLDGS; INSTL EQUIP

INTAKE STRUCTURE AT TAYLOR CREEK: DSN; EXC; ERECT

OFFSITE PIPELINE WATER SYSTEM: DSN/SPEC; BEA; FAB & DEL; INSTL PIPE; FROM LINE 4 SHEET 1 OF 2; TEST

PRE-ENGINEERED BUILDING: DSN/SPEC; BEA; FAB & DEL; FDNS; ERECT

COOLING TOWER: DSN/SPEC; BEA; VI; FAB & DEL; ERECT

COOLING TOWER FOUNDATION: DSN; FDN

FIELD ERECTED TANKS/FOUNDATIONS: DSN/SPEC; BEA; FAB & DEL; FDNS; ERECT

CIRCULATING WATER PUMPS, FOREBAY/FOUNDATION: DSN/SPEC; BEA; FAB & DEL; FDN; ERECT CIRC WATER FOREBAY & INSTALL EQUIP

CIRCULATING WATER PIPE: DSN/SPEC; BEA; FAB & DEL; INSTALL

DEMINERALIZED WATER, EVAP, SOFTENER SYSTEM/FOUNDATION: DSN/SPEC; BEA; FAB & DEL; FDN; INSTALL

ADMINISTRATION BLDG/ MAINTENANCE SHOP/WAREHOUSE: BLDG DESIGN; FDN; ERECT BLDG

MAIN TRANSFORMER: DSN/SPEC; BEA; FAB & DEL; MAIN XFMR; INSTALL; TIE-IN; FROM LINES 14, 15, 16 & 18

MAIN TRANSFORMER FOUNDATIONS/SWYD FDN: DSN; FDNS

STARTUP & TEST: PRE-ENERGIZATION CHECKOUT; STARTUP/TEST; TEST

PERFORMANCE TESTING

PIPELINES/FOUNDATION: DSN/SPEC; BEA; FABRICATE & DELIVER; FDN; INSTALL

OWNER OBLIGATIONS: PROVIDE ALL EASEMENTS, RIGHT OF WAYS & PROPERTY LEASES; 9); RELOCATE PINE TREES FOR BUFFER ZONE; 10) 11); PROVIDE TRANSFORMER AND POWER AT TAYLOR CREEK/NUBBINS SLOUGH; 1); 2), 3) & 4); 5A); 5B); 6); 7)

MO's -6 -5 -4 -3 -2 -1 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43

FILE: C:\INDIAN4A

LEGEND:

- MILESTONE
- START OR FINISH ACTIVITY
- AWARD P.O./SUBCONTRACT
- RELEASE FOR FABRICATION
- ISSUE FOR BID
- SITE DELIVERY
- ACTIVITY
- RESTRAINT
- CRITICAL PATH

UPDATE LINE

- UPDATE (ACTUAL/FORECAST)

ABBREVIATIONS:

APT	AQUIFER PUMP TEST
AUX	AUXILIARY
BEA	BID, EVALUATE, & AWARD
BKF	BACKFILL
BFP	BOILER FEED PUMP
BLDG	BUILDING
CIRC	CIRCULATING
CONSTR	CONSTRUCTION
CR	CONTROL ROOM
DA	DEAERATOR
DCS	DISTRIBUTED CONTROL SYSTEM
DEL	DELIVER
DSN	DESIGN
EA	EVALUATE & AWARD
EQUIP	EQUIPMENT
EXC	EXCAVATE
FAB	FABRICATE
FDN	FOUNDATION
FR	FORMING, REBAR
F/W HTR	FEEDWATER HEATER
INSTL	INSTALL
I/O CAB	INPUT/OUTPUT CABINETS
LOI	LETTER OF INTENT
MCC	MOTOR CONTROL CENTER
MOB	MOBILIZATION
NTP	NOTICE TO PROCEED
PB	POWER BLOCK
P&ID'S	PIPING & INSTRUMENT DIAGRAMS
P.O.	PURCHASE ORDER
PRELIM	PRELIMINARY
PREP	PREPARATION
PRESS	PRESSURE
RVW	REVIEW
S/C	SUBCONTRACT
SCR	SELECTIVE CATALYTIC REDUCTION
SPEC	SPECIFICATION
STG	STEAM TURBINE GENERATOR
STL	STEEL
S/U	STARTUP
SWGR	SWITCHGEAR
SWYD	SWITCHYARD
UTIL	UTILITIES
VE	VENDOR ENGINEERING
VI	VENDOR INFORMATION
XFMR	TRANSFORMER

OWNER MILESTONES:

(1) O & M PERSONNEL NOTIFICATION FROM CONTRACTOR

(2) SWITCHYARD AVAILABLE FOR CONTRACTOR TESTING/SRARTUP NEEDS

(3) OPERATIONAL SPARE PARTS AVAILABLE

(4) O & M PERSONNEL AVAILABLE FOR TRAINING

(5) A) NATURAL GAS AVAILABLE FOR AUX BOILER STARTUP

B) COAL, LIME & OTHER OWNER SUPPLIED MATERIALS OR SERVICES AVAILABLE.

(6) ADMIN BLDG AVAILABLE FOR OWNER USE

(7) SWITCHYARD AVAILABLE FOR ACCEPTANCE OF ELECTRICAL OUTPUT AND CAULKINS READY TO ACCEPT STEAM

(8) REFER TO SCOPE BOOK PART I, SECTION 2.0 FOR OBLIGATIONS REQUIRED AT NTP AND FOR OTHER POST-NTP OBLIGATIONS

(9) ACCESS ROAD AND TURNOUT APPROVALS

(10) CONSTRUCTION DEWATERING PLAN APPROVAL

(11) MINOR IMPOUNDMENT PLAN APPROVAL

REVISED: 07-01-92

NO	DATE	REVISION	BY	PE	CNSTL	PC	PROCS	S/U	PM
1	10/23/92	ISSUE FOR USE							
0	11/21/92	ISSUE FOR USE							

BECHTEL
GAITHERSBURG, MARYLAND

INDIANTOWN COGENERATION

PULVERIZED COAL UNIT
CONTRACT MILESTONE
SUMMARY SCHEDULE
SHEET 2 OF 2

JOB NO.	BECHTEL DRAWING NO.	REV
20524	G15-002	1

FACILITY #	FACILITY	DESCRIPTION	LINE #
		PROJECT MILESTONES	1
		LICENSING AND PERMITS (BY OWNER)	2
80	YARD	SITE PREPARATION	3
		WASTE WATER STORAGE POND & COOLING WATER STORAGE POND	4
		COAL PILE RUNOFF BASIN	5
		POWER BLOCK (U/G PIPING ELECTRICAL) AND OTHER YARD UTIL	6
		RAILROAD/TURNOUTS/SPURS	7
		CSX ACTIVITIES	8
		ACCESS ROAD	9
		PILING	10
10	BOILER	BOILER STRUCTURAL	11
		BOILER (M001)	12
		BOILER BUILDING FOUNDATION	13
		BOILER BUILDING MECHANICAL	14
		BOILER BUILDING PIPING	15
		BOILER BUILDING ELECTRICAL	16
		AUXILIARY BOILERS & DAS	17
20	TURBINE	STEAM TURBINE GENERATOR (M003)	18
		TURBINE BUILDING STRUCTURAL	19
		TURBINE BUILDING FOUNDATION (PEDESTAL/SLAB)	20
		TURBINE BUILDING FOUNDATION	21
		TURBINE BUILDING MECHANICAL	22
		TURBINE BUILDING PIPING	23
		TURBINE BUILDING ELECTRICAL	24
30	CR	DISTRIBUTED CONTROL SYSTEM	25
40	FLUE GAS	FLUE GAS DESULFURIZATION (SDA's) AND BAGHOUSE (M032)	26
		FLUE GAS FOUNDATIONS	27
		STACK	28
		ID FAN	29
		STACK & ID FAN FOUNDATION/PILING	30

MO's: -6 -5 -4 -3 -2 -1 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43

NTP, MOB, FIRST BOILER CONCRETE, START BOILER STEEL ERECTION, SET DRUM, DEL STG, ENERGIZATION, HYDRO, BOIL OUT BLOW, STEAM TURBINE ROLL, TARGET COMPLETION, GUARANTEED COMPLETION

PREP. RVW. APPROVAL

FINAL GEOTECH REPORT; BEA; MOB; PB AREA PREP; SITE PREPARATION; LANDSCAPING (BY OWNER)

LAYDOWN AREA; EXCAVATE, INSTALL & TEST; TO LINE 37 SHEET 2 OF 2

MOB; EXCAVATE & INSTALL; APT; RESTORE BASIN

DSN/SPEC; BEA; FAB & DEL; INSTL U/G PB AREA; INSTL YARD UTILITIES; FROM LINE 34 SHEET 2 OF 2

DSN/SPEC; BEA; MOB; INSTL BOILER SECTION; INSTL RAILROAD SYSTEM

RVW; CSX INSTL SPUR/TURNOUT OWNER SUPPLIED

SPEC; BEA; INSTL CONSTR ROAD; MAINTAIN ROADWAY; INSTL PLANT ROADS; FINAL PAVING; MOB/DRIVE TEST PILES

DSN/SPEC; BEA; DRIVE BLR; DRIVE TG

EARLY RELEASE NOTICE; DESIGN & FABRICATE STEEL; DEL STL; ERECT BOILER STEEL; ERECT ROOF STL

NEGOTIATE; VE; FAB & DEL; FIRST PRESS PARTS; ERECT; LAST PRESS PARTS

FDN PRELIM DSN; FDN FINAL DSN; INSTL FDN; FDN SURVEY & PREP

PRELIM DSN; FINAL DSN; BEA; BFP; FAB & DEL; BFP; INSTALL

PRELIM DSN; DSN/P&ID'S; SPEC; BEA; FAB & DEL; FIRST DEL; FIRST DEL CRITICAL PIPE; INSTALL

SINGLE LINES, RACEWAY & EQUIP DSN/SPEC; BEA; FAB & DEL RACEWAY; INSTALL MCC; INSTALL

DSN/SPEC; BEA; FAB & DEL; AUX BOILER; INSTALL

NEGOTIATE; LOI; VI; FAB & DEL; ERECT; TEST; LOADTEST

PRELIM DSN; FINAL DSN; BEA; FAB & DEL; DEL STL; ERECT; TO LINE 51

PRELIM DSN; FINAL DSN; PEDESTAL; CURE/REMOVE SHORING; ELEVATED SLAB

FDN DSN; INSTL FDN

PRELIM DSN; FINAL DSN; BEA; CONDENSER; FAB & DEL; CONDENSER; INSTALL

PRELIM DSN; DSN/P&ID's; FAB & DEL; FIRST DEL; FIRST DEL CRITICAL PIPE; INSTALL

SINGLE LINES, RACEWAYS EQUIP DSN/SPEC; BEA; FAB & DEL; RACEWAY; SWGR; MCC; INSTALL; EQUIPMENT

LOI; DSN/SPEC; BEA; FAB & DEL; I/O CAB; DCS INSTL

NEGOTIATE; VI; FAB & DEL; GROUND FAB; ERECT

DSN; DRIVE PILES; FDN (SCRUBBER); FDN (BAGHOUSE)

DSN/SPEC; BEA; ERECT SHELL; ERECT LINER

DSN/SPEC; BEA; FABRICATE & DELIVER; ERECT

DSN; DRIVE PILES; INSTALL FDNS

TO LINE 51

LEGEND:
- MILESTONE
- START OR FINISH ACTIVITY
- AWARD P.O./SUBCONTRACT
- RELEASE FOR FABRICATION
- ISSUE FOR BID
- SITE DELIVERY
- ACTIVITY
- RESTRAINT
- CRITICAL PATH
- UPDATE LINE
- UPDATE (ACTUAL/FORECAST)

ABBREVIATIONS:

APT	AQUIFER PUMP TEST
AUX	AUXILIARY
BEA	BID, EVALUATE, & AWARD
BKF	BACKFILL
BFP	BOILER FEED PUMP
BLDG	BUILDING
CIRC	CIRCULATING
CONSTR	CONSTRUCTION
CR	CONTROL ROOM
DA	DEAERATOR
DCS	DISTRIBUTED CONTROL SYSTEM
DEL	DELIVER
DSN	DESIGN
EA	EVALUATE & AWARD
EQUIP	EQUIPMENT
EXC	EXCAVATE
FAB	FABRICATE
FDN	FOUNDATION
FR	FORMING, REBAR
F/W HTR	FEEDWATER HEATER
INSTL	INSTALL
I/O CAB	INPUT/OUTPUT CABINETS
LOI	LETTER OF INTENT
MCC	MOTOR CONTROL CENTER
MOB	MOBILIZATION
NTP	NOTICE TO PROCEED
PB	POWER BLOCK
P&ID'S	PIPING & INSTRUMENT DIAGRAMS
P.O.	PURCHASE ORDER
PRELIM	PRELIMINARY
PREP	PREPARATION
PRESS	PRESSURE
RVW	REVIEW
S/C	SUBCONTRACT
SCR	SELECTIVE CATALYTIC REDUCTION
SPEC	SPECIFICATION
STG	STEAM TURBINE GENERATOR
STL	STEEL
S/U	STARTUP
SWGR	SWITCHGEAR
SWYD	SWITCHYARD
UTIL	UTILITIES
VE	VENDOR ENGINEERING
VI	VENDOR INFORMATION
XFMR	TRANSFORMER

REVISED: 06/25/92

NO	DATE	REVISION	BY	PE	CNST	PE	PROC	S/U	PM
1	6/23/92	ISSUE FOR USE							
0	1/31/92	ISSUE FOR USE							

BECHTEL
GAITHERSBURG, MARYLAND

INDIANTOWN COGENERATION

PULVERIZED COAL UNIT
CONTRACT MILESTONE
SUMMARY SCHEDULE
SHEET 1 OF 2

JOB NO.	BECHTEL DRAWING NO.	REV
20524	G15-002	1

FILE C:\INDAN4

DEP ROUTING AND TRANSMITTAL SLIP

TO: (NAME, OFFICE, LOCATION)

1. Air / MS #5500
2. ~~Al Linero~~
3.
4.
5.

PLEASE PREPARE REPLY FOR:

8/7

Scott -
See Al's note -
If you don't need
a copy - just return
to me for the
file - thanks
Patty

____ DUE DATE _____

ACTION/DISPOSITION

____ DISCUSS WITH ME

____ COMMENTS/ADVISE

____ REVIEW AND RETURN

____ SET UP MEETING

____ FOR YOUR INFORMATION

____ HANDLE APPROPRIATELY

____ INITIAL AND FORWARD

____ SHARE WITH STAFF

____ FOR YOUR FILES

COMMENTS:

[redacted]

Well twist the
Title V at a later
date. 8/7/00

Scott
Patty - Let Mike +
Scott Sheplak know.
Maybe Title V needs
to update Operation
Permit, but Al don't
know.
No one outside of
our Bureau needs
copy. Buck copies partic.
Al

FROM: Scott Sheplak DATE: 7/26/00 PHONE: 1-9682

DEP 15-026 (12/93)

Check Sheet

Company Name: INDIAN TOWN COGEN. PROJ.
Permit Number:
PSD Number: PSDFL-168
Permit Engineer:

Application:

- ☐ Initial Application
  - ☐ Incompleteness Letters
  - ☐ Responses
  - ☐ Waiver of Department Action
  - ☐ Department Response
  - ☐ Other

Cross References:

- ☐ DOAH CASE NO 90-8072EPP
- ☐
- ☐

Intent:

- ☐ Intent to Issue
- ☐ Notice of Intent to Issue
- ☑ Technical Evaluation
- ☐ BACT Determination
- ☐ Unsigned Permit
- Correspondence with:
  - ☐ EPA
  - ☐ Park Services
  - ☐ Other
- ☐ Proof of Publication
  - ☐ Petitions - (Related to extensions, hearings, etc.)
  - ☐ Waiver of Department Action
  - ☐ Other

Final Determination:

- ☑ Final Determination
- ☑ Signed Permit
- ☐ BACT Determination
  - ☐ Other

Post Permit Correspondence:

- ☑ Extensions/Amendments/Modifications
- ☑ Other —

Indiantown Cogeneration, L.P.

Indiantown Cogeneration, L.P.
P.O. Box 1799
13303 SW Silver Fox Lane
Indiantown, FL 34956
Tel: 561.597.6500
Fax: 561.597.6210

RECEIVED
OCT 18 2001
BUREAU OF AIR REGULATION

October 16, 2001

Hamilton S. Oven, P.E.
Administrator, Siting Coordination Office
Florida Department of environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: ICLP's Request for Modifications

Dear Mr. Oven:

Indiantown Cogeneration L.P. (ICLP) hereby submits the attached Application for Modification of the Site Certificate for the Indiantown Cogeneration Facility.

ICLP's Application for Modifications of the site Certificate (the Modifications) describes proposed changes to the Facility's operations. The Modifications will require changes to the Conditions of Certification, in accordance with Section 403.5161(1)(c), F.A.C.

Copies of the Modifications are also being sent to the people identified in the attached Distribution List.

ICLP would like to meet with you at your earliest convenience to discuss the Modifications for ICLP's Facility. In the interim, please call me at 561-597-6500, extension 46, if you have any questions regarding this submission.

Thank you for your assistance with this issue.

Sincerely,

George K. "Chip" Allen
General Manager

cc: Nick Laryea, ICLP
Robert DeHart, PG&E National Energy Group
David Dee, Landers & Parsons
A.J. Jablonowski, Earth Tech
Edward Kent, Earth Tech

RECEIVED
OCT 18 2001
BUREAU OF AIR REGULATION

Application for Modification of the Site Certificate for the Indiantown Cogeneration Facility

October 2001

Prepared for:

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engineering and technology earthtech for the planet.

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1. INTRODUCTION

Indiantown Cogeneration, L.P. (ICLP) is the owner and operator of the Indiantown Cogeneration Facility (the Facility) located in Indiantown, Florida. The construction and operation of the Facility was authorized in a Site Certificate which was issued on February 6, 1992 and then modified by orders issued in July 1992, March 1995, July 2000, and March, 2001 (see Attachment A). The 1992 and 1995 modifications addressed several changes that were identified as the Facility's conceptual design evolved into a more detailed design for construction. The 2000 modifications permitted the construction of a carbon dioxide plant, clarified permit conditions, and made minor facility operational changes. In 2001, modifications were approved which clarified the South Florida Water Management District's (SFWMD) authority to approve withdrawals of ground or surface water. The modifications also changed the approved elevation for one of the ponds at the Facility.

This request for modification of the Site Certificate supplements the March 2001 modifications to take into account the conditions experienced in the 2000-2001 extended and severe drought and to account for the potentially lower operating levels of Lake Okeechobee and/or its tributaries resulting from phased implementation of the Comprehensive Everglades Restoration Program. The specific request is as follows:

- Request authorization for modifications to ICLP's water withdrawal system to withdraw surface water from Taylor Creek (L-63N) when the elevation of the creek is at or above 16.5 feet NGVD.

2. MODIFICATION REQUESTED

Requested Change in Limitations on Water Withdrawal from L-63N Canal

During the extended and severe drought of 2000-2001 the water level in Taylor Creek (L-63N Canal) fell below elevation 17.5 beginning on 12/11/00 and except for eight days in January and February, 2001 remained below 17.5 through June 12, 2001. Attachment B displays the water levels in Taylor Creek at Structure 191. On May 22, 2001 the water level in Taylor Creek reached its lowest elevation of 15.95 NGVD. The existing Conditions of Certification for ICLP set elevation 17.5 NGVD as the minimum allowable water level in Taylor Creek for which ICLP may continue withdrawals from Taylor Creek. However, on February 14, 2001 (See Attachment C), SFWMD authorized ICLP to continue using Taylor Creek as a water source at elevations below 17.5 NGVD until July 31, 2001. During the 2000-2001 drought, as authorized by SFWMD (see Attachment C) ICLP has withdrawn water from the L-63N Canal at levels below 16.0 NGVD.

ICLP proposes changing the limitation on water withdrawal from L-63N Canal from the currently approved minimum withdrawal elevation of 17.5 NGVD to 16.5 NGVD.

Effects of Comprehensive Everglades Restoration Program (CERP)

As part of the CERP program, water storage in South Florida will be greatly enhanced through construction of Aquifer Storage and Recovery Wells, Water Storage Reservoirs and other water storage enhancing activities. This increased storage will provide for both flood control and water supply. Some of this storage will be located in the Lake Okeechobee basin. Once this storage is completed, the elevation and duration of damaging high water levels on Lake Okeechobee will be reduced and higher water levels in the lake can be maintained during droughts.

The potential problem for ICLP is that the various CERP storage facilities (i.e. ASR wells, and reservoirs) are not yet in place, but SFWMD is already operating Lake Okeechobee at lower levels during average rainfall conditions. This strategy increases the likelihood that during droughts, severely low water levels will occur in the lake and its tributaries such as Taylor Creek. This increases the risk that water levels in L-63N will fall below elevation 17.5 NGVD.

Effects on Other Permitted Users

Use of Taylor Creek water during the drought was reduced by blending Taylor Creek water with ICLP's backup groundwater supply. The blending was necessary to dilute the high chloride levels present in the ICLP backup groundwater supply. Although the water level in L-63 N Canal fell below elevation 16.0 NGVD during the drought, Taylor Creek was able to continue supplying water to ICLP and the other permitted users along the canal. Attachment D is a list obtained from SFWMD of the permitted users along the interconnected canals C-59 and C-63. Also shown on the Attachment D is the available data regarding intake elevation for each permitted user. All intakes are below elevation 16.0 NGVD except Permit No. 56-00129-W, Moose John Thurston. Since water levels have been below elevation 16.0 NGVD in L-63N Canal during May 2001, it is likely that the Moose John Thurston intake has been lowered. Earth Tech contacted the South Florida

Water Management District Lake Okeechobee Field Station (conversation with Bevel Williams of SFWMD on 9/26/01) and learned that during the 2000-2001drought, there were no complaints by permitted water users regarding low water levels in the C-59 or C-63 canals.

Effects on Natural Resources

The withdrawal rates of ICLP represent a very small proportion of the water in the Taylor Creek/Nubbin Slough watershed and serve to reduce phosphorous loadings to Lake Okeechobee. As stated in the 1995 final order Modifying Conditions of Certification:

> "The plant's maximum water withdrawals from Taylor Creek/Nubbin Slough represent approximately 0.16 percent of the total annual inflow into Lake Okeechobee and about 5 percent of the flow of the Taylor Creek/Nubbin Slough system." and "The plant's water withdrawals can reduce the annual discharge of phosphorous to Lake Okeechobee by approximately 7.0 tons for a 1.0 percent annual reduction of total phosphorous to Lake Okeechobee."

The Water Resources Development Act of 2000 has authorized funding for construction of 50,000 acre-feet of storage and 20,000 acre-feet of storage treatment area in the Taylor Creek/Nubbin Slough watershed. This project is known as the Taylor Creek/Nubbin Slough Reservoir Assisted Storage Treatment Areas (RASTA's). The completion of these projects will provide nutrient removal, flood control, and improved water availability during droughts. This project will mitigate or prevent any adverse effects of ICLP's withdrawals on natural resources in the watershed.

Existing Water Use

ICLP is permitted by the existing conditions of certification to make the following water withdrawals for use at the Facility:

Table C-1: Existing Water Allocation

Source	Maximum Annual Allocation (MGY)	Maximum Daily Allocation (MGD)
L-63N	1943.00	5.32
Upper Floridan Aquifer	195.00	2.60
Upper Permeable Zone – Lower Floridan Aquifer	174.0	2.32
Surficial Aquifer	3.0	0.04

From Condition Part IV B.2, Revised 5/2000.

No increase in the maximum allocation of surface water is requested in this proposed Modification to the Conditions of Certification.

Details Regarding Water Quality from the Different Water Sources

Water from L-63N and the Upper Floridan Aquifer is of sufficient quality to support short-term operations at ICLP. However, chloride concentrations in the four Upper Floridan aquifer wells ranged from 830 to 1,300 parts per million in during February 2001. Water from the Upper Floridan Aquifer can be blended with water from the other sources, but this will seriously affect the performance of the facility's demineralization system. Long-term use of the Upper Floridan Aquifer is therefore not feasible.

Discussion of Water Sources

ICLP is permitted to withdraw water from Taylor Creek (L-63N) when the elevation of the creek is above 17.5 feet NGVD. During the first five years of operating experience at ICLP, there were no periods when ICLP needed to use the Facility's backup water supply. However, due to the extended and severe drought conditions during 2000-2001, there were periods when L-63N fell far below 17.5 feet NGVD and onsite well water was used. ICLP had been concerned that the poor water quality of the on-site wells would prevent their effective use as a water source, but through experience in 2000 ICLP learned that water from the Upper Floridan Aquifer is of adequate quality to support short-term plant operations. In accordance with the February 14 authorization letter from SFWMD, ICLP continued to use water from L-63N even when the water level was below 17.5 feet NGVD. Relatively poor quality water from the upper producing zone of the Lower Floridan Aquifer was blended with the surface water (from L-63N) to achieve a blended chloride concentration of approximately 630 mg/l. Extensive damage to the Facility's titanium evaporator tubes resulted from these elevated chloride levels.

ICLP proposes to continue to use Taylor Creek/Nubbin Slough (L-63N) as the primary source of water for all periods when adequate water is available through L-63N. This includes periods when L-63N is below 16.5 feet NGVD because of actions being taken by SFWMD, rather than a water scarcity situation.

For periods when the water level of L-63N is below 16.5 feet temporarily because of drought conditions, ICLP can treat and use groundwater from the existing permitted groundwater wells. However, to sustain operations over longer periods of drought conditions, ICLP will need additional withdrawals from the Upper Floridan Aquifer for the Facility. This pending request for additional Upper Floridan Aquifer wells was contained in the November 2000 Application for Modifications of the Site Certificate for the Indiantown Cogeneration Facility.

Summary of Requested Change in Minimum Water Level for Withdrawals from C-63N

ICLP requests authorization for modifications to ICLP's water withdrawal plan to withdraw surface water from Taylor Creek (L-63N) when the elevation of the creek is at or above 16.5 feet NGVD.

Requested Modifications to Conditions of Certification

ICLP proposes the following changes to the Conditions of Certification to reflect the modified ground water allocation:

Condition Part IV B.2.b. Limitations on Authorized Withdrawal

(1) Withdrawals from the L-63N Canal shall only occur when the water level in the L-63N is at or above ~~17.5~~ 16.5 feet NGVD.

(2) Withdrawals from the Upper and Lower Production Zones of the Upper Floridan Aquifer shall only occur when the water level in the L-63N Canal is below ~~17.5~~ 16.5 feet NGVD.

Condition Part IV B.2.d Authorized Surface Water Withdrawal Elevation

The intake for the surface water withdrawal facilities in L-63N shall be designed such that surface water withdrawals shall cease when water levels in the canal fall below ~~17.5'~~ 16.5 feet NGVD (See also Condition E.3.a(5)).

3. ADDITIONAL INFORMATION SUBMITTALS

a.(5) Design details which demonstrate that withdrawals from the canal cannot occur below elevation ~~17.50~~ 16.5 feet NGVD.

Attachment A

Existing Conditions of Certification and Revisions

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

In Re: Indiantown Cogeneration, L.P.) Indiantown Cogeneration Facility) Modification of Conditions) of Certification) Martin County, Florida))	DEP CASE NO. PA 90-31D OGC CASE NO. 00-2146

FINAL ORDER MODIFYING
CONDITIONS OF CERTIFICATION

On February 7, 1992, the Governor and Cabinet, sitting as the Siting Board, issued a final order approving certification for the Indiantown Cogeneration Facility (Facility). The site certification order approved the construction and operation of a 330 MW (net) coal fired electrical power plant and associated linear facilities to be located in Martin and Okeechobee Counties, Florida. The conditions of certification were subsequently modified on July 21, 1992, April 3, 1995, and July 26, 2000.

Pursuant to section 403.516, Florida Statutes, and rule section 62-17.211(4), Florida Administrative Code, the Department proposes to modify and clarify the conditions of certification. The conditions of certification currently provide that the South Florida Water Management District (SFWMD) must authorize certain withdrawals of ground or surface water. The proposed modifications more clearly describe the SFWMD's authority to approve withdrawals by the Indiantown Cogeneration Facility. The proposed modifications also change the approved elevation for one of the ponds at the Facility. Copies of the Department's proposed modifications are available for public review.

On January 19, 2001, copies of the proposed modifications were made available for public review and all parties to the original proceeding were furnished with a copy of the Notice of Intent to Issue Proposed Modification of Power Plant Certification and with a copy of the proposed final order. On January 26, 2001, a Notice of Intent to Issue Proposed Modification of Power Plant Certification was published in the Florida Administrative Weekly. The notices specified that all parties to the original certification proceeding have 45 days from the issuance of the notice by mail to such party's last address of record in which to object to the requested modification. Failure of any of the parties to file a response constitutes a waiver of objection to the requested modification. The notices further specified that any person who is not already a party to the certification proceeding and whose substantial interest is affected by the requested modification has 30 days from the date of publication of the public notice to object in writing. If no objections are received, then a Final Order approving the modification shall be issued by the Department. If objections are raised and agreement cannot be subsequently reached, then pursuant to §403.516(1)(c), F.S., the applicant or the Department may file a petition for modification seeking approval for those portions of the request for modification to which written objections were timely filed. No written objections to the proposed modifications have been received by the Department. Accordingly, in the absence of any timely objection,

IT IS ORDERED:

The proposed changes to the conditions of certification for the Indiantown Cogeneration Facility, as described in the request for modification dated November 10, 2000, and as set forth below, are **APPROVED**. Pursuant to Section 403.516(1)(b), F.S., the conditions of certification for the Indiantown Cogeneration Facility are **MODIFIED** as follows:

Condition IV.B.2.b.(4)

Any withdrawals from the L-63N Canal or the Upper or Lower Production Zone of the Upper Floridan aquifer or the Surficial Aquifer in excess of the amounts specified herein (or during conditions other than specified herein) shall require prior SFWMD approval. The SFWMD may grant such approval for any withdrawal less than 180 days in duration, without modifying these Conditions of Certification. The SFWMD's approval shall be based on the non-procedural requirements of Chapter 40E, F.A.C.

Condition IV.C.2.b. Authorized Discharge Facilities

BASIN 2:	1-0.25' diameter circular orifice with the invert at elevation 33.5' NGV 1-20 V-notch with the invert at elevation 35.5' NGVD. 1-4.0' wide weir with the crest at elevation 36.5' NGVD and a length of 18" diameter culvert discharging into 20' of rip-rapped spreader swale.
BASIN 3:	1-0.25' diameter circular orifice with the invert at elevation 32.7' NGVD 1-20 V-notch with the invert at elevation 34.6' NGVD 1-4.0' wide weir with the crest at elevation 36.0' NGVD and a length of 18" diameter culvert discharging into a 20' of rip-rapped spreader swale.
BASIN 6:	1-12' wide weir consisting of a 3 sided drop inlet with the crest at ~~38.5'~~ 37.75' NGVD.

Any party to this proceeding has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Protection, M.S.35, Office of General Counsel, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, and by filing a copy of the Notice of Appeal accompanied by the applicable filing fee with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date that this Final Order is filed with the Department of Environmental Protection.

DONE AND ORDERED this 14th day of March, 2001, in Tallahassee, Florida.

STATE OF FLORIDA, DEPARTMENT OF ENVIRONMENTAL PROTECTION

Kirby B. Green

KIRBY B. GREEN, III
DEPUTY SECRETARY
3900 Commonwealth Boulevard
Tallahassee, FL 32399-3000

FILING AND ACKNOWLEDGMENT:

FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

J. Chapman
CLERK

3-15-01
DATE

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing has been sent this 15 day of March, 2001, by U.S. Mail to the following listed persons:

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BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

In Re: Indiantown Cogeneration, L.P.) Indiantown Cogeneration Facility) Modification of Conditions) of Certification) Martin County, Florida))	DEP File No. PA90-31C OGC Case No. 00-0048

FINAL ORDER MODIFYING CONDITIONS OF CERTIFICATION

On February 7, 1992, the Governor and Cabinet, sitting as the Siting Board, issued a final order approving certification for the Indiantown Cogeneration Project. The site certification order approved the construction and operation of a 330 megawatt (MW) (net) coal fired electrical power plant and associated linear facilities to be located in Martin and Okeechobee Counties, Florida. The conditions of certification were subsequently modified on July 21, 1992, and April 3, 1995.

Pursuant to section 403.516, Florida Statutes, and rule section 62-17.211(4), Florida Administrative Code, the Department proposes to modify the conditions to conform to the revised Industrial Wastewater Facility Permit, permit number FL0183750, issued January 19, 2000, and to conform to a modification of the Prevention of Significant Deterioration (PSD) Permit, permit number PSD-FL-168, issued April 20, 2000. The proposed modifications allow emergency discharge of cooling water and process water, clarify allowable operation rates of auxiliary boilers, allow the addition of a carbon dioxide recovery facility and a chilled water plant, allow an increase in the cooling water storage pond elevation, and allow automatic modifications for conforming conditions of certification to subsequently issued or modified federally delegated or approved permits. Additionally, the Department proposes to update the conditions to reflect the Department's current name and rule citations. Copies of the Department's proposed modifications, Industrial Wastewater Facility Permit, and Prevention of Significant Deterioration permit modification are available for public review.

On January 25, 2000, all parties to the original proceeding were sent a Notice of Receipt of Proposed Modification of Power Plant Certification. On May 10, 2000, all parties to the

original proceeding were furnished copies of the Notice of Intent to Issue Proposed Modification of Power Plant Certification and a copy of the proposed final order. On May 12, 2000, a Notice of Intent to Issue Proposed Modification of Power Plant Certification was published in the *Florida Administrative Weekly*. The notices specified that all parties to the original certification proceeding have 45 days from the issuance of the notice by mail to such party's last address of record in which to object to the requested modification. Failure of any of the parties to file a response constitutes a waiver of objection to the requested modification. The notices further specified that any person who is not already a party to the certification proceeding and whose substantial interest is affected by the requested modification has 30 days from the date of publication of the public notice to object in writing. If no objections are received, then a Final Order approving the modification shall be issued by the Department. If objections are raised and agreement cannot be subsequently reached, then pursuant to § 403.516(1)(c), F.S., the applicant may file a petition for modification seeking approval for those portions of the request for modification to which written objections were timely filed. No written objections to the proposed modifications have been received by the Department. Accordingly, in the absence of any timely objection,

IT IS ORDERED:

The proposed changes to the Indiantown Cogeneration Facility Conditions of Certification as described in the request for modification dated December 30, 1999; to conform to the modification of Industrial Wastewater Facility Permit No. FL0183750, issued January 19, 2000; and to conform to the modification of Permit No. PSD-FL-168, issued April 20, 2000, are APPROVED. Pursuant to Section 403.516(1)(b), F.S., the conditions of certification for the Indiantown Cogeneration Facility are **MODIFIED** as follows:

PART I

ADMINISTRATIVE CONDITIONS

(1) ENTITLEMENT

(1)- (2) NO CHANGE.

(3) JURISDICTIONAL AGENCIES

The following agencies are deemed to have jurisdictional interest in the certification, and thus regulatory authority over the development, construction, operation, and maintenance of the facility:

Department of Environmental Protection ~~Regulation~~ [DEP] ~~[DER]~~

~~Game & Fresh Water~~ Fish and Wildlife Conservation Commission [FWCC] ~~[GFWFC]~~

~~Department of Natural Resources [DNR]~~

Department of Community Affairs [DCA]

Department of Transportation [DOT]

South Florida Water ~~Eater~~ Management District [SFWMD]

Treasure Coast Regional Planning Council [TCRPC]

Martin County [MC]

Central Florida Regional Planning Council [CFRPC]

Okeechobee County [OC]

(4) NO CHANGE.

(5) TRANSFER OF CERTIFICATION

If contractual rights, duties, or obligations are transferred under this Certification, notice of such transfer or assignment shall immediately be submitted to the Florida Department of Environmental Protection ~~Regulation~~ and the Affected Agencies by the previous certification holder (Licensee) and the Assignee. Included in the notice shall be the identification of the entity responsible for compliance with the Certification. Any assignment or transfer shall carry with it the full responsibility for the limitations and conditions of this Certification.

(6) – (7) NO CHANGE.

(8) RIGHT OF ENTRY

The Licensee shall allow during operational or business hours the Secretary of the Florida Department of Environmental Protection ~~Regulation~~ and/or authorized representatives, including personnel of the Affected Agencies, upon the presentation of credentials:

A. – D. No change.

(9) – (11) NO CHANGE.

(12) COMPLIANCE

A. Compliance with Conditions

1. No change.

2. An environmental control program shall be established under the supervision of a qualified Environmental Engineer/Specialist to assure that all construction activities conform to applicable environmental regulations and the applicable Conditions of Certification. If during construction there is detected a violation of standards, harmful effect or irreversible environmental damage not anticipated by the application, the evidence presented at the certification hearing, or a post-certification submittal, the Licensee shall notify the DEP ~~DER~~ Southeast District Office and Siting Coordination Office, as required in B.

3. No change.

4. In the event of a malfunction of the Cogeneration facility boiler's pollution control system resulting in a violation of this certification or DEP ~~DER~~ regulations, that unit shall be promptly shut down.

B. Non-compliance Notification

If, for any reason, the Licensee does not comply with or will be unable to comply with any limitation specified in this certification, the Licensee shall notify the Southeast District Office of the Department of Environmental Protection ~~Regulation~~ by telephone within one working day after said noncompliance occurs and shall confirm this in writing within seventy-two (72) hours of becoming aware of such conditions, and shall supply the following information:

1. and 2. No change.

C. No change.

(13) POST CERTIFICATION REVIEW

Further information may be required by these conditions for site-specific or more detailed review and approval to determine compliance with the conditions of certification. Compliance determinations of the Department and other reviewing agencies are subject to review pursuant to Chapters 120, and 403, Florida Statutes.

A. In order to provide adequate lead time for review, such information, as developed, must be submitted for post-certification review at least 180 days prior to the intended commencement date of construction or operation of the feature undergoing review unless otherwise provided

herein. Notification of the submittal of the information, and any determinations made pursuant to these COC, shall be provided to the DEP ~~DER~~ Siting Coordination Office for record-keeping purposes.

B. and C. No change.

(14) NO CHANGE.

(15) COMMENCEMENT OF CONSTRUCTION

At least 30 days prior to the commencement of construction, the Licensee or Project Engineer shall notify the DEP ~~DER~~ Siting Coordination Office, the DEP ~~DER~~ Southeast District Office, and Affected Agencies of the construction start date. Quarterly construction status reports shall similarly be submitted by the Licensee beginning with the initial construction start date. The report shall be a short narrative describing the progress of construction.

(16) COMMENCEMENT OF OPERATION

At least 30 days prior to the commencement of operation, the Licensee or Project Engineer shall notify the DEP ~~DER~~ Siting Coordination Office and Affected Agencies of the operation start date.

(17) OPERATIONAL CONTINGENCY PLANS

A. Operating Procedures

The Licensee shall develop and furnish the DEP ~~DER~~ Southeast District Office a copy of written operating instructions for all aspects of the operations which are critical to keeping the facility working properly. The instructions shall also include procedures for the handling of suspected hazardous or toxic wastes.

B. Contingency Plans

The Licensee shall develop and furnish the DEP ~~DER~~ Southeast District Office written contingency plans for the continued operation of the system in event of breakdown. Stoppages which compromise the integrity of the operations must have appropriate contingency plans. Such contingency plans shall identify critical spare parts to be readily available.

C. and D. No change.

(18) and (19) NO CHANGE.

(20) ENFORCEMENT

The Department of Environmental Protection ~~Regulation~~, as supported by the applicable Affected Agency, may take any and all lawful actions to enforce any conditions of this Certification. Any agency which deems enforcement to be necessary shall notify the Secretary of DEP ~~DER~~ of the proposed actions. The affected agency may request the Department to initiate modification of this Certification for any change in any activity resulting from enforcement of this Certification which change will have a duration longer than 60 days.

(21) NO CHANGE.

(22) MODIFICATION OF CONDITIONS

A. Pursuant to Subsection 403.516 (1), F.S., the Board hereby delegates the authority to the Secretary to modify any condition of this certification dealing with sampling, monitoring, reporting, specification of control equipment, related time schedules, emission limitations, conservation easements, transfer or assignment of the Certification or related federally delegated permits, or any special studies conducted, as necessary to attain the objectives of Chapter 403, Florida Statutes.

B. Subject to the notice requirements of 403.516(1), F.S., the certification shall be automatically modified to conform to subsequent DEP-issued amendments, modifications, or renewals of any separately-issued Prevention of Significant Deterioration (PSD) permit, Title V Air Operation permit, or National Pollutant Discharge Elimination System (NPDES) permit for the Indiantown Cogeneration Project and the conditions of such permits shall be controlling over these Conditions of Certification.

C. All other modifications to these conditions shall be made in accordance with Section 403.516, Florida Statutes.

(23) FEDERAL ANNUAL OPERATING FEES AND PERMITS

A. DEP ~~DER~~ Responsibilities

The Department of Environmental Protection ~~Regulation~~ shall implement the provisions of Title V of the 1990 Clean Air Act for the Indiantown Cogeneration Project by developing Conditions of Certification requiring submission of annual operating permit information and annual pollutant emission fees in accordance with Federal Law and Federal Regulations. The

terms of such conditions shall be imposed under the modification provisions of Section 403.516(1), F.S., for which the Board specifically delegates the authority to prescribe said terms.

B. and C. No change.

PART II

DEPARTMENT OF ENVIRONMENTAL PROTECTION ~~REGULATION~~

(1) AIR

The construction and operation of the Indiantown Cogeneration Project (ICP) shall be in accordance with all applicable provisions of Chapter 62-204, 62-210, 62-212, 62-296, 62-297, ~~17-2,~~ 62-256, ~~17-256,~~ and 62-702, ~~17-702,~~ Florida Administrative Code, except for SO_2 and NOx during startup, shutdown, and malfunction, then 40CFR60 shall apply.

A. Construction

1. General

a. No change.

b. The permittee shall report any delays in construction and completion of the project which would delay commercial operation by more than 90 days to the DEP ~~DER~~ Southeast District office in West Palm Beach.

2. Equipment Identification

The Licensee shall submit at least four copies of complete information as to the make and model numbers of the selected pulverized coal and auxiliary boilers, all pollution control and continuous emissions monitoring devices, operation and maintenance manuals and calibration procedures, updated process flow diagrams showing mass/energy/heat balances and ammonia injector locations and rates, and related equipment, to the DEP ~~DER~~ Bureau of Air Regulation at least 90 days prior to commencing on-site construction of that particular item.

3. Stack Height and Design

The height of the boiler exhaust stack for ICL shall not be less than 495 ft. above grade. Detailed stack drawings showing sampling locations shall be submitted to the DEP ~~DER~~ Bureau

of Air Regulation al least 90 days prior to commencing on-site construction of the affected equipment or feature.

4. No change.

5. Open Burning

Open burning in connection with initial land clearing shall be in accordance with Chapter 62-256 ~~17-256,~~ F.A.C., Chapter 51-2, F.A.C., Uniform Fire Code Section 33.101 Addendum, and any other applicable regulations of Martin or Okeechobee Counties, as applicable.

No open burning of construction generated material, after initial land clearing, shall be allowed.

B. Operation

1. Boilers

The Pulverized Coal (PC) boiler is permitted to operate at a maximum of 3422 MMBtu/hr heat input (nominal 330 MW). This facility shall be allowed to operate continuously (8,760 hrs/yr). In addition to the PC boiler, the facility will have one or two auxiliary boilers rated at up to a combined total of 342 MMBtu/hr (#2 Fuel Oil) and a combined total of 358 MMBtu/hr (Natural Gas or propane) which operate ~~at the combined total heat input rate a maximum of 5,000 hours with up to 1,000 hrs/yr on #2 Fuel Oil and the balance on natural gas or propane~~ at a combined total of less than 1.79×10^{12} British Thermal Units per year. The auxiliary boilers are each permitted to operate 5,000 full load equivalent hours per calendar year, with no more than 1,000 hours of that period using fuel oil with 0.05% sulfur, by weight, as the primary fuel.

2. CO_2 Recovery Plant

A CO_2 recovery plant is permitted to operate continuously for 8,760 hours per year. A slipstream, consisting of between 5% to 10% of the main boiler (stack) flue gas shall be routed to the CO_2 recovery plant. The flue gas will be cooled and scrubbed with a monoethanolamine (MEA) solution, which captures CO_2. The CO_2 will then be stripped out of the MEA solution, cleaned, compressed and shipped in liquid form. The CO_2 plant will be designed to produce 400 tons per day (TPD) of liquid CO_2. Note: The production is limited in order to ensure that

secondary pollutants are within the ranges provided in the application. Any increase in capacity shall be accompanied by an appropriate review for PSD or MACT applicability.

~~2.~~ 3. Emissions Limitations

a. i. and ii. No change.

iii. VE (Visible Emissions)

VE from the pulverized coal boiler ~~each~~ baghouse exhaust shall not exceed 10 percent opacity (6 minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

VE from ~~each~~ other baghouse exhausts shall not exceed 10% opacity (six minute average).

No VE during lime silo loading operations (i.e., less than 5% opacity).

VE from the ash handling baghouse shall not exceed a particulate limit of 0.010 grains/acf and VE of 5% opacity.

b. The auxiliary boiler or boilers, rated at up to a combined total of 358 MMBtu/hr (Natural Gas and propane) and a combined total of 342 MMBtu/hr (#2 fuel oil), shall be limited to a ~~maximum of 5,000 hours/year at the combined total heat input rates with up to 1,000 hrs/yr firing #2 Fuel Oil with 0.05% sulfur, by weight, and the balance firing natural gas or propane.~~ combined total of less than 1.79×10^{12} British Thermal Units per year. The auxiliary boilers are each permitted to operate 5,000 full load equivalent hours per calendar year, with no more than 1,000 hours of that period using fuel oil with 0.05% sulfur, by weight, as the primary fuel. The maximum total annual emissions from the auxiliary boiler or boilers will be as follows when firing #2 Fuel Oil:

c. through g. No change.

h. No fraction of flue gas shall be allowed to bypass the air pollution control devices (PCD) system to reheat the gases exiting from the PCD system, if the bypass will cause emissions above the limits specified in COC-(1)B.2. The percentage and amount of flue gas bypassing the PCD system shall be documented and records kept for a minimum of two years available for DEP's ~~FDER's~~ inspection.

i. and j. No change.

k. As a requirement of this specific condition, the applicant shall comply with all emissions limits and enforceable restrictions required by the State of Florida Department of Environmental Protection ~~Regulation~~ pursuant to Section 403.511(5), F.S., which may be adopted by regulation and which are more restrictive, that is lower emissions limits or more strict operating requirements and equipment specifications, than the requirements of COC-II (1)B.2. of these conditions.

l. CO_2 Recovery Plant

The CO_2 absorber column shall emit no more than 5 lb./hr VOC in addition to the products of combustion from the PC boiler. (Emissions from the PC boiler are regulated by Condition II.1.C.2.a.) If any batches of CO_2 do not meet product specifications, the off-spec product may also be vented to atmosphere.

~~3.~~ 4. Stack Testing

a. No change.

b. Compliance with emission limitation standards mentioned in Specific Condition No. ~~1~~ (1)B.2. above shall be demonstrated using EPA Methods, as contained in 40 CFR Part 60 (Standards for Performance for New Stationary Sources), or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants), or any other method as approved by the Department, in accordance with F.A.C. Rule 62-297.620 ~~17-2.700~~. ~~A test protocol shall be submitted for approval to the Bureau of Air Regulation at least 90 days prior to testing.~~

EPA Method	For Determination of
1	Selection of sample site and velocity traverses.
2	Stack gas flow rate when converting concentrations to or from mass emissions limits.
3, 3A & 3B	Gas analysis when needed for calculation of molecular weight of or percent O_2.
4	Moisture content when converting stack velocity to dry volumetric flow rate for use in converting concentrations in

	dry gases to or from mass emission limits.
5	Particulate matter concentration and mass emissions.
~~201 or 201A~~	~~PM_{10} emissions~~
6, 6C, or 19	Sulfur dioxide
~~7, 7C, or 19~~ 7E	Nitrogen oxide emissions from stationary sources.
~~8~~	~~Sulfuric acid mist from stationary source.~~
9	Visible emissions determination for opacity.
	(201)-At least three one hour runs to be conducted simultaneously with particulate testing for the emissions from dry scrubber/baghouse, and ash handling building baghouse.
	(202)-At least one lime vehicle unloading into the lime silo (from start to finish).
22	Fugitive emissions from transfer points.
10	Carbon monoxide emissions from stationary sources.
12 or 101A	Lead concentration from stationary sources.
13A or 13B	Fluoride emissions from stationary sources.
18 or 25	Volatile organic compounds concentration.
101A or 108	Mercury emissions.
104	Beryllium emission rate and associated moisture content.

Note: Use EPA draft method or other methods approved by the Department to test for ammonia.

C. Monitoring and Reporting

1. Air Monitoring Program

a. A flue gas oxygen meter shall be installed for each unit to continuously monitor a representative sample of the flue gas. The oxygen monitor shall be used with automatic feedback or manual controls to continuously maintain air/fuel ratio parameters at an optimum. Performance tests shall be conducted and operating procedures established. The document "Use of Flue Gas Oxygen Meter as BACT for Combustion Controls" may be used as a guide. The

permittee shall install and operate continuously monitoring devices for each main boiler exhaust for sulfur dioxide, nitrogen dioxide and opacity, including flue gas O_2 and/or CO_2 content. The monitoring devices shall meet the applicable requirements of Section 62-297, ~~17-2,~~ F.A.C., and 40 CFR 60 a minimum of 95% of the time the source is operating.

b. The permittee shall operate two continuous ambient monitoring devices for sulfur dioxide in accordance with DEP ~~DER~~ quality control procedures and EPA reference methods in 40 CFR, Part 53, and two ambient monitoring devices for suspended particulates, and one continuous NOx monitor. The monitoring devices shall be specifically located at a location approved by the Department's Bureau of Air Regulation. The frequency of operation of the particulate monitors shall be every six days commencing as specified by the Department's Bureau of Air Regulation. During construction and operation, a meteorological station will be operated and data reported with the ambient data.

c. No change.

d. The permittee shall provide stack sampling facilities as required by Rule 62-297.310(6), ~~17-2.700 (4)~~ F.A.C.

e. and f. No change.

g. Prior to the operation of the CO_2 Recovery Plant, the permittee shall submit to the Department's Bureau of Air Regulation a plan or procedure demonstrating that the system used to measure the PC boiler emissions accurately accounts for the exhaust gasses ducted to the CO_2 plant.

h. Within 90 days of initial operation of the CO_2 Recovery Plant, the permittee shall submit to the Department's Bureau of Air Regulation a summary of the actual emissions of the Recovery Plant. This shall include (at a minimum) emissions of all regulated pollutants, MEA, ammonia and methanol based upon a net CO_2 recovery level of 400 TPD of liquid CO_2 as well as the estimated maximum daily throughput of the Recovery Plant (if greater than 400 TPD). An O&M plan shall be submitted to the Department's Southeast District Office, detailing best practices for the minimization of secondary pollutant emissions.

2. Reporting

a. For the ICL, stack monitoring, fuel usage and fuel analysis data shall be reported to the Department's Southeast District Office on a quarterly basis commencing with the start of

commercial operation in accordance with 40 CFR, Part 60, Section 60.7, and 60.49a and in accordance with Sections 62-210.370 and 62-210.700, ~~17-2.08,~~ F.A.C.

b. and c. No change.

D. Malfunction or Shutdown

In the event of a prolonged (thirty days or more) equipment malfunction or shutdown of air pollution control equipment, operation shall be allowed to resume and continue to take place under appropriate Department order, provided that the Licensee demonstrates such operation will be in compliance with all applicable ambient air quality standards and PSD increments and industrial waste rules. During such malfunction or shutdown, the operation of the ICL shall comply with all other requirements of this certification and all applicable state and federal emission standards not affected by the malfunction or shutdown which is the subject of the Order. Operational stoppages exceeding two hours for air pollution control systems or four hours for other systems or operational malfunctions as defined in the operational contingency plans as specified in COC/I-(17) are to be reported as specified in COC/I-(12). Identified operational malfunctions which do not stop operation but may prevent compliance with emission limitations shall be reported to DEP ~~DER~~ as specified in COC/I-(12).

(2) WETLANDS

A. No change.

B. Prior to the submission of any post-certification information to the Department, ICL shall arrange for a site inspection by DEP ~~DER~~ District personnel from the Southeast District office in West Palm Beach or from the Bureau of Submerged Lands and Environmental Resources ~~Wetland Resource Management~~, Jurisdictional Evaluation Section, in Tallahassee to determine the extent of jurisdiction on the site and along the proposed pipeline route. At the time of the request, the Department will determine whether jurisdiction can be determined informally by the District office, or whether a binding jurisdictional declaratory statement, pursuant to Rule 62-340 ~~17-312.040~~, F.A.C., is required. The permittee shall flag the outermost limits of construction for the entire pipeline route and shall provide aerial photographs at a scale determined to be appropriate by the Department prior to the site inspection to enable the District personnel to determine if the proposed pipeline will affect jurisdictional wetland areas.

C. At least 90 days prior to the anticipated start of construction, the permittee shall submit fully dimensioned or scaled drawings on 8.5" by 11" paper, signed and sealed by an engineer registered in the state of Florida, that show limits of jurisdictional wetlands that will be affected by the project. The submittal shall also include calculations showing the acreage of affected wetlands by wetland type, a narrative describing construction techniques to be used for the project at both the power plant site and along the alignment of the pipeline, measures proposed to control erosion and turbidity, and a narrative that provides:

1. a detailed description of each wetland impact area;
2. the acreage, type, and quality of all the jurisdictional wetlands that will be affected.

The drawings shall include plan view and cross-section views for each area of jurisdictional wetlands that will be affected by the project, as identified pursuant to Condition No. (2) B. above. In addition to showing the existing and proposed DEP ~~DER~~ jurisdictional limits, the drawing shall depict existing and proposed ground elevations, the limits of construction for the pipeline, and all existing and proposed locations, sizes and invert elevations of structures that may be located in the jurisdictional wetlands.

D. No change.

E. All clearing and construction activities shall be confined to the limits of construction as shown on the drawings that are accepted by the Department pursuant to Condition No. (2) C. above. Within 30 days of the completion of construction, ICL shall arrange a site visit by DEP ~~DER~~ District personnel from the Southeast Florida District office in West Palm Beach to verify that no wetland damage has occurred outside the construction limits. If wetland damage occurs outside the construction limits during construction, ICL shall submit to the Bureau of Wetland Resource Management for review a plan to restore the wetland area which was damaged and to provide mitigation for the damage. The plan shall be implemented within 30 days of the Department approval of the restoration and mitigation plan. This condition does not preclude the Department from taking enforcement action if unauthorized activities occur.

F. Prior to initiating construction, ICL shall submit a map and aerial photographs showing the location of all staging areas for the project construction to the Bureau of Wetland Resource Management for review and written approval. These areas shall be upland areas which are not

currently providing endangered or threatened species habitat. The staging areas shall not be used prior to receiving DEP ~~DER~~ approval.

G. and H. No change.

I. If determined to be appropriate by the Department, ICL shall provide mitigation to offset the loss and habitat degradation resulting from the construction of this project in jurisdictional wetlands.

The plan for performing the mitigation shall be submitted and approved by the Department prior to construction. The plan shall include the following information, which is to be submitted to the Bureau of Submerged Lands and Environmental Resources ~~Wetland Resource Management~~:

1. through 6. No change.

If the mitigation submittal is deemed by the Department to provide insufficient information for review, additional information requested by the Department shall be submitted.

If the Department, upon review of the proposed mitigation, determines that the proposed mitigation is inadequate to offset water quality degradation, wetland loss, and habitat degradation from this project, the permittee shall propose additional mitigation.

If the proposed mitigation plan is deemed acceptable by the Department, the Department shall establish construction conditions, success criteria and monitoring plans to be carried out for the approved mitigation. These conditions, criteria and monitoring plans shall be incorporated into the certification conditions as a minor modification.

No construction within wetland areas shall commence until the Department approves the mitigation plan, and the mitigation construction conditions, success criteria and monitoring plans are incorporated into the certification conditions.

J. and K. No change.

(3) DISCHARGES TO SURFACE WATERS

A. Stormwater

1. Construction

To control run-off during construction which may reach and thereby pollute Waters of the State, necessary measures shall be utilized to settle, filter, treat or absorb silt-containing or

pollutant-laden stormwater to ensure against spillage or discharge of excavated material that may cause turbidity in excess of 29 Nephelometric Turbidity Units above background in Waters of the State. Control measures may consist of sediment traps, barriers, beams, and vegetation plantings. Exposed or disturbed soil shall be protected and stabilized as soon as possible to minimize silt and sediment laden run-off. The pH of the run-off shall be kept within the range of 6.0 to 8.5. The Permittee shall comply with Florida Administrative Code Chapters ~~17-25,~~ 40E-2~~,~~ and 40E-4. The Permittee shall complete the forms required by ~~17-25.09 (1) and~~ 40D-4 and submit those forms and the required information to the SFWMD for any modifications that might occur.

2. Operation

Any discharges from the site stormwater system via the emergency overflow structure which result from an event LESS than a ten-year, 24-hour storm (as defined by the U.S. Weather Bureau Technical Paper No. 40, or the DOT drainage manual, or similar documents) shall meet applicable State Water Quality Standards, Chapter 62-302 ~~17-302,~~ F.A.C., and the Standards of ~~Chapter 17-25, F.A.C., and~~ Chapter 40-E, F.A.C.

B. No change

C. Wastewater

There shall be no discharge of industrial or domestic wastewaters from the site to the waters of the state, except emergency storm water-related discharges from the cooling water pond and the wastewater storage pond, as a result of extreme rainfall events and as specifically authorized by DEP Industrial Wastewater Permit No. FL0183750, issued on January 19, 2000, or as subsequently amended, and subject to all the terms and conditions provided therein. An extreme rainfall event is defined as a rainfall event exceeding a 100 year/72 hour storm for the wastewater storage pond, but the extreme rainfall event for the cooling water pond is defined as an event exceeding the 25 year/72 hour storm.

D. Tanks

Diesel fuel also will be used to fuel on-site locomotives which move rail cars around the site. Diesel fuel will be delivered by truck and stored in above-ground storage tanks designed, constructed and maintained in accordance with Chapter 62-761 ~~17-792~~, F.A.C., including secondary containment. Stormwater will be collected from the bermed area around the tanks and pumped back to the plant for treatment and use. Any pollutant storage tanks on-site for facility

construction activities must also be above-ground and designed, constructed and maintained in accordance with Chapter 62-761 ~~17-762~~, F.A.C., including secondary containment.

(4) GROUNDWATER

1. Discharges to Groundwaters

Any accidental discharges to groundwater shall be collected and treated as necessary, or otherwise be of high enough quality, to be able to meet the applicable Water Quality Standards of Sections 62-520.400 ~~17-301.402~~ and 62-520.404 ~~17-301.404~~, F.A.C. If monitoring should indicate a violation of the standards, the licensee shall immediately notify the Southeast District office and SFWMD and institute remedial action.

2. Groundwater Monitoring Program

a. A groundwater monitoring plan shall be submitted within 180 days of certification in accordance with Rule 62-522 ~~17-28.700~~ F.A.C., for approval by the Southeast District Office. The groundwater monitoring program shall be reviewed and approved in accordance with COC I.13. The complete groundwater monitoring plan shall be signed, sealed, and dated by a professional engineer or professional geologist demonstrating competency in the field of groundwater monitoring, testing, and analysis. The monitoring plan shall contain the following information:

1. and 2. No change.

3. Monitoring wells shall be constructed in accordance with Rule 62-532 ~~17-532~~, F.A.C., except as follows: The minimum inside diameter shall be two inches. Flush threaded couplings shall be used to join polyvinyl chloride (PVC) pipe.

b. and c. No change.

d. Upon completion of construction of the groundwater monitoring system, but no less than 12 months before the commencement of operation, the Permittee shall sample all groundwater monitoring wells for the Primary and Secondary Drinking Water parameters included in Chapter 62-550 ~~17-550~~, F.A.C., Public Drinking Water Systems. The specific parameters to be sampled are listed in Part II, Quality Standards, Analytical Methods, Sampling, Sections 62-550.310 ~~17-550.310~~ and 62-550.320 ~~17-550.320~~, F.A.C.

e. The field testing, sample collection and preservation and laboratory testing, including quality control procedures, shall be in accordance with Chapters 62-4.246 ~~17-4.246,~~ 62-

160 ~~17-160~~, and 62-550, Part V ~~17-301.401~~, F.A.C. Approved methods as published by the Department or as published in Standard Methods, A.S.T.M. or EPA methods shall be used. Approved methods for chemical analyses are summarized in the Federal Register, December 1, 1976 (41FR52780) except that turbidity shall be measured by the Nephelometric Method.

f. and g. No change.

h. For four quarters commencing at least 12 months before the start of commercial operation all groundwater monitoring wells shall be sampled and the samples analyzed for the parameters on the following list. Thereafter, one down gradient well, as selected by the Department, shall be sampled and analyzed annually for parameters on the following list. Upon demonstration that key indicators such as sulfate, iron, pH or chloride show a significant increase over background levels, all affected wells shall be sampled and analyzed for the following parameters:

(No change to chart.)

Water elevations for all wells shall be measured on a quarterly schedule, and submitted to the Department along with quarterly data and shall be measured in reference to 1929 NGVD for all monitoring wells (1/100 of a foot) and surface waters (1/10 of a foot).

i. No change.

j. All groundwater analysis shall be submitted within 60 days of sampling on DEP ~~DER~~ form 62-522.900(2) ~~17-1.216(2)~~ with a summary of all exceedances of the MCL's per Rule 62-550, F.A.C., ~~17-550~~ to: Florida Department of Environmental Protection ~~Regulation~~, Southeast Florida District Office, 400 North ~~1900 South~~ Congress Avenue, West Palm Beach, Florida 33401 ~~32399-2400~~.

k. No change.

(5) SANITARY WASTES

A. No change.

B. A complete submittal of plans, drawings and specifications for waste pumps, lift stations, sewage collection systems, and wastewater collection systems in accordance with appropriate DEP ~~DER~~ rules shall be furnished to the Southeast District Office for approval at least 180 days prior to start of construction for the particular of such component. In order to obtain approval, the receiving sewage treatment plant shall indicate it has available capacity and

its acceptance of the proposed connection of the wastewater collection system. Also plans and specifications for connections to off-site sewage and wastewater transmission systems shall be furnished to the Southeast District Office for review in accordance with Condition I (13). Department approval shall be obtained prior to the start of construction.

(6) SOLID/HAZARDOUS WASTES

A. Construction

Solid wastes resulting from construction shall be disposed of in accordance with the applicable regulations of Chapter 62-701 ~~17-701~~, F.A.C. Hazardous waste/materials handling contingency plans shall be submitted to the Southeast District Office for review and approval at least 90 days prior to start of construction.

B. Operation

1. No bottom ash, fly ash, spent acid gas control media, wastewater treatment sludges, or other forms of solid waste shall be disposed of in Florida, except in a licensed off-site landfill in accordance with all applicable portions of Chapters 62-701 ~~17-701~~ and 62-702 ~~17-702~~, F.A.C. Plans of solid waste disposal contingency plans for handling hazardous waste/materials, shall be provided to the Southeast District Office and the Division of Waste Management for review and approval at least 90 days prior to start of operation of the ICL Unit. Review shall be performed in accordance with Condition I(13). The final plans for this facility shall include provisions for the isolated temporary handling of suspected hazardous, or toxic wastes. The ICL shall not be operated until an out of state disposal area or a Florida landfill capable of disposing of plant wastes provides a letter or contract indicating acceptance of such wastes.

2. through 5. No change.

(7) OPERATIONAL SAFEGUARDS

The overall design and layout of the facilities shall be such as to mitigate potential adverse effects to humans and the environment. Security control measures shall be utilized to prevent exposure of the public to hazardous conditions. The Federal Occupational Safety and Health Standards will be complied with during construction and operation. The safety standards specified under Section 440.56, Florida Statutes, by the ~~Industrial Safety Section of the~~ Florida Department of Labor and Employment Security, Division of Safety ~~Commerce~~ will be complied with during operation.

(8) and (9) NO CHANGE.

PART III

~~GAME AND FRESH WATER~~ FISH AND WILDLIFE CONSERVATION COMMISSION

(1) No more than 60 days prior to commencement of any clearing activities on the Project Site or in the pipeline right-of-way, respectively, a wildlife survey shall be conducted of the site or the pipeline right-of-way, whichever is applicable, the purpose of which is to update and supplement the survey results presented in the Site Certification Application concerning the presence of listed species (endangered or threatened species, or species of special concern) likely to occur on the site or in the right-of-way based on range and habitat. This survey shall be consistent with methodologies established or accepted by the Florida ~~Game and Fresh Water~~ Fish and Wildlife Conservation Commission (FFWCC) ~~(FGFWFC)~~. Results of said survey(s) shall be submitted to the FFWCC ~~FGFWFC~~ and the United States Fish and Wildlife Service within seven days of completion thereof. If the survey indicates that any listed species will be affected by construction of the Project or pipeline, the Permittee and the FFWCC ~~FGFWFC~~, shall, within 15 days of receipt of the survey by the FFWCC ~~FGFWFC~~, consult and determine the appropriate measures necessary to avoid, minimize, mitigate, or otherwise appropriately address such impacts.

(2) ICL shall place or construct culverts or similar structures to facilitate movement of wildlife across or beneath the perimeter access road to and from upland preserve areas of the Project site. The structures shall be located in reference to the Project's Site layout, as follows:

(a) through (c) No change.

These structures shall be designed to remain dry during a two year storm event and shall be approximately 3 feet high and 5 feet wide.

ICL shall submit detailed designs of the structures and their location to the FFWCC ~~FGFWFC~~ for review and approval 60 days prior to construction of the portions of the access road being culverted.

(3) No change.

(4) At least 60 days before commencement of onsite construction, ICP shall submit an upland preserve and wetland management plan to the Florida ~~Game and Fresh Water~~ Fish and Wildlife

Conservation Commission and to Martin County for review and approval. This plan shall present management practices for the seven wetlands and the PUD planned unit development (industrial) zoning agreement of Martin County, and illustrated on figure 1. At a minimum, this plan shall include a statement of preserve management objectives; a statement of what habitat functions the preserves are expected to provide; a description of how habitat values will be maintained, including measures such as perimeter staking, and vegetation control; if controlled burning is proposed to control vegetation, a schedule of fire management through an certified burn specialist and including, but not limited to burn conditions, burn frequency, and measures taken to avoid spread of wildfire; measures to be taken to remove exotic vegetation from both uplands and wetlands; legal instrument(s) by which preserve areas and wetlands have been reserved from future developmental uses; and the entity responsible for management.

PART ~~Part~~ IV

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

A. LEGAL / ADMINISTRATIVE CONDITIONS

1. GENERAL

a. Responsible Entity

The Permittee shall be responsible for compliance with the Certification Conditions. If contractual rights, duties, or obligations are transferred under this Certification, notice of such transfer or assignment, including the identification of the entity responsible for compliance with the Certification, shall immediately be submitted to the Florida Department of Environmental Protection ~~Regulation~~ and the SFWMD by the previous certification holder (Permittee) and the Assignee. Any assignment or transfer shall carry with it the full responsibility for the limitations and conditions of this Certification. The previous Permittee shall be responsible for informing the Assignee of all authorized facilities and uses and the conditions under which they were authorized.

b. – i. No change.

j. Post Certification Construction Notifications

At least 30 days prior to the commencement of construction, the Permittee or Project Engineer shall notify the SFWMD ~~Field Engineering~~ Environmental Resource Compliance Division (using the appropriate SFWMD Form) of the actual or anticipated construction start date and the expected completion date/duration of construction. Annual construction status reports shall be submitted by the Permittee to the SFWMD ~~Field Engineering~~ Environmental Resource Compliance Division (using the appropriate SFWMD Form) beginning one year after the initial construction start date.

k. Operation Authorization

Operation of the cogeneration facility shall not begin until the Florida Department of Environmental Protection ~~Regulation~~ has received an executed agreement between the Permittee and an entity capable of receiving and disposing of the combustion waste products generated by the proposed facility.

l. No change

2. PROCESSING OF INFORMATIONAL REQUESTS

a. - d. No change

e. Subsequent modifications to the drawings and supporting calculations submitted to the SFWMD which may alter the quantity and/or quality of waters discharges off-site shall be made pursuant to Section 403.516, F.S., and Rule 62-17.211 ~~17-17.211~~, F.A.C. As part of this process, these modifications shall be reviewed by the SFWMD for a determination that the modifications are in compliance with the non-procedural requirements of Chapter 40E-2, 40E-4, and 40E-6, F.A.C., prior to the commencement of construction.

f. No change

B. WATER USE CONDITIONS

1. GENERAL

a. No change

b. Impacts on Existing Legal Uses

~~The Permittee shall be responsible for mitigating to the satisfaction of the SFWMD, any adverse impacts on existing legal uses caused by the surface ground water withdrawals authorized by this Certification. If adverse impacts occur, or are imminent, SFWMD reserves the right to~~

~~curtail withdrawal rates pursuant to the enforcement provisions of Condition IV.A.1.1 of these conditions. The adverse impacts can include:~~

~~(1) A reduction in well water levels that impairs the ability of an adjacent well to produce water (an adjacent well may be a domestic well, lawn irrigation well, public water supply well etc.);~~

~~(2) A significant reduction in water levels in an adjacent water body such as a lake, pond, wetland, or canal system;~~

~~(3) Saline water intrusion or induction of pollutants into the water supply of adjacent water user, resulting in a significant reduction in water quality; and/ or~~

~~(4) A change in water quality that causes impairment or loss of use of a well or water body.~~

The Permittee shall mitigate any adverse impact on existing legal uses caused by the ground water withdrawals authorized by this Certification. When adverse impacts occur or are imminent, the SFWMD reserves the right to curtail future withdrawal rates pursuant to the enforcement provisions of Condition A.1.1 of these conditions. The adverse impacts can include:

(1) A reduction in well water levels that impairs the ability of an adjacent well, including a domestic well, lawn irrigation well, or public water supply well, to produce by 10% or greater;

(2) A significant reduction in water levels in an adjacent water body such as a lake, pond, wetland, or canal system that impairs the ability to produce water by 10% or greater;

(3) Saline water intrusion or induced movement of pollutants into the water supply of an adjacent water user, resulting in a significant reduction in water quality; and/or

(4) A change in water quality caused by the Permittee that results in significant impairment or loss of use of a well or water body.

c. Impact on Existing Off-Site Land Uses

~~The Permittee shall be responsible for mitigating, to the satisfaction of the SFWMD, any adverse impacts on existing off-site land uses as a consequence of the surface or ground water withdrawals authorized by this Certification. If the withdrawals cause an adverse impact on existing land uses, the SFWMD reserves the right to curtail future withdrawals rates pursuant to~~

~~the enforcement provisions of Conditions IV.a1.1 of these conditions. The adverse impacts can include:~~

~~(1) A significant reduction in water levels in an adjacent water body such as a lake, pond, wetland, or canal system;~~

~~(2) Land collapse or subsidence caused by a reduction in water levels;~~

~~(3) Damage to crops and other vegetation, causing financial harm to the landowner; and/or~~

~~(4) Damage to the habitat of rare, endangered or threatened species.~~

The Permittee shall mitigate any adverse impacts on existing off-site land uses that are a consequence of the groundwater withdrawals authorized by this Certification. If increased withdrawals cause an adverse impact on existing land uses, the SFWMD reserves the right to curtail future withdrawal rates pursuant to the enforcement provisions of Condition A.1.1 of these conditions. Adverse impacts can include:

(1) A significant reduction in water levels in an adjacent water body, including impoundments, to the extent that the designed function of the water body is impaired;

(2) Land collapse or subsidence caused by a reduction in water levels; and/or

(3) Damage to crops and other types of vegetation.

d. Impacts to Natural Resources

The Permittee shall mitigate any adverse impacts to natural resources as a consequence of the groundwater withdrawals authorized by this Certification. When adverse impacts occur, or are imminent, the SFWMD reserves the right to curtail future withdrawal rates pursuant to the enforcement provisions of Condition A.1.1 of these conditions. Adverse impacts can include:

(1) A reduction in ground water levels that results in significant lateral movement of the fresh water/salt water interface;

(2) A reduction in water levels that adversely impacts the hydroperiod of protected wetland environments;

(3) A significant reduction in water levels or hydroperiod in a naturally occurring water body such as a lake or pond;

(4) Induced movement or induction of pollutants into the water supply resulting in a significant reduction in water quality; and/or

5) Harm to the natural system including damage to habitat for rare or endangered species.

~~d~~ e. Well System Operations

At any time, if there is an indication that the well casing, valves, or controls associated with the on-site backup well system leak or have become inoperative, the Permittee shall be responsible for making the necessary repairs or replacement to restore the well system to an operating condition acceptable to the SFWMD. Failure to make such repairs shall be cause for requiring that the well(s) be filled and abandoned in accordance with the procedures outlined in Chapter ~~40 E~~ 40E-3 (Water Wells), F.A.C.

2. SITE SPECIFIC DESIGN AUTHORIZATIONS

a. Authorized Withdrawals

Source	**Maximum Annual Allocation (MGY)**	**Maximum Daily ~~Source~~ Allocation (MGD)**
L-63N Canal	~~1484.00~~ 1942.00	~~4.69~~ 5.32
Upper Floridan Aquifer	195.00	2.60
Upper Permeable Zone-Lower Floridian Aquifer	174.0	2.32
Surficial Aquifer	3.0	0.04

b. Limitations on Authorized Withdrawals

(1) Withdrawals from the L-63N Canal shall only occur when the water level in the L-63N Canal is at or above 17.50 feet NGVD~~.~~ , except as provided for in subsection (7) below.

(2) Withdrawals from the Upper and Lower Production Zones of the Upper Floridan aquifer and the Surficial aquifer shall only occur when the water level in the L-63N Canal is below 17.50 feet NVGD~~.~~ or during tests and maintenance on the wells. Maintenance is defined as one hour of operation per week for each well or the minimum operation of the pump necessary to maintain mechanical integrity as specified by the pump manufacturer.

(3) No change

(4) Any withdrawals from the L-63N Canal, ~~or~~ the Upper or Lower Production Zone of the Upper Floridan aquifer or the Surficial aquifer in excess of the amounts specified herein shall require prior SFWMD approval.

(5) No change

(6) The withdrawals from the Upper and Lower Production Zones of the Upper Floridan aquifer and the Surficial Aquifer are authorized for a period not to exceed 75 days at the specified maximum daily allocation or 90 days at an allocation not to exceed the maximum annual allocation. The permittee shall not exceed a total of 90 withdrawal days from the Floridan aquifer during any consecutive 365 day period without prior approval from the SFWMD.

(7) When operation of the SFWMD's S-191 control structure during flood events results in a water elevation of less than 17.50' NGVD in the L-63N Canal, withdrawals from the L-63N Canal may continue subject to the permittee obtaining prior confirmation from the SFWMD's Okeechobee Field Station (7:00 a.m. to 4:00 p.m., Monday through Friday) or the SFWMD's West Palm Beach Operations Control Center that the SFWMD is in a flood control operations mode.

(8) The permittee shall provide documentation of SFWMD approval of withdrawals from the L-63N Canal below 17.50' when the SFWMD is in a flood control operations mode. The documentation shall be in the form of a letter faxed to the SFWMD's West Palm Beach Operations Control Center within 24 hours of the verbal request to continue withdrawals and shall indicate the date and approximate time of approval and the name of the SFWMD employee granting the approval.

c. Authorized Withdrawal Facilities

2 - ~~2,550~~ 3,700 GPM Surface Water Pumps in L 63N

1 - 10" x 1340' ~~Flowing~~ Floridan Aquifer Well cased to 500'
(existing well)

1 - 10" x 1265' ~~Flowing~~ Floridan Aquifer Well cased to 750'

2 - 15" x 1350' ~~Flowing~~ Floridan Aquifer Wells cased to 750'

2 - 15" x 1650' ~~Flowing~~ Floridan Aquifer Wells cased to 1487'

1 - 8" x 118' Surficial Aquifer Well cased to 78'

d. Authorized Surface Water Withdrawal Elevation

The intake for the surface water withdrawal facilities in L-63N shall be designed such that surface water withdrawals shall cease when water levels in the canal fall below 17.50' NVGD ~~(See also Condition E.3.a(5)).~~ , except as provided for in Conditions B.2.b(1), (2), and (7).

e. No change.

f. Modification of Authorized Withdrawals

By January 1, 2005, and every ten years thereafter, unless extended by mutual agreement between the Permittee and SFWMD, the Permittee shall submit to the SFWMD a report on the project's consumptive water use which contains the information required by Chapter 40E-2, F.A.C., as in effect at that time. Within 90 days after receipt of the report, SFWMD shall evaluate the information and issue a written notification to DEP ~~DER~~ and the Permittee as to whether the maximum annual withdrawals of water for consumptive use authorized by this certification remain in compliance with the provisions of Chapter 373, F.S., and Chapter 40E-2, F.A.C., as in effect at that time. If the notification indicates that the withdrawals are not in compliance with those provisions, SFWMD shall recommend possible alternatives for bringing the withdrawals into compliance or otherwise meeting the minimum consumptive water use needs of the certified project. If mutual agreement cannot be reached within 180 days after issuance of the written notification on whether the maximum annual withdrawals of water for consumptive use remains in compliance, then the written notification shall be immediately referred to the Division of Administrative Hearings (DOAH) for resolution in accordance with the procedural provisions of Section 403.516(1)(c) and 120.57, F.S. In any proceeding conducted pursuant to this Condition of Certification, SFWMD shall demonstrate that the authorized water uses are no longer consistent with SFWMD's non-procedural criteria. The Permittee shall then demonstrate its entitlement to maintaining the authorized water uses by showing that the authorized water use

is consistent with the non-procedural criteria of SFWMD for such water uses or that a variance or other relief is warranted. The hearing officer shall submit a recommended order to the Siting Board whether the authorized water uses should be modified. The Siting Board shall then enter a final order on the matter, which order will constitute final agency action.

3. ADDITIONAL INFORMATION REQUIREMENTS

a. Floridan Aquifer Withdrawals

The authorized withdrawals from the Floridan aquifer are subject to the submittal of the following tests and analyses, a SFWMD evaluation of the results for a determination of compliance with the non-procedural requirements of Chapter 40E-2, F.A.C., and SFWMD's written approval to initiate withdrawals. The following information shall be submitted:

(1) The results of the Aquifer Performance Test (APT) to be conducted at the project site once the on-site water storage pond has been constructed or an alternate disposal method is approved by ~~DER~~ FDEP and SFWMD. The test shall be designed to determine the transmissivity and storage of the Upper and Lower production zones of the Upper Floridan aquifer and the leakance between the zones. A plan which details the APT shall be submitted to the SFWMD for approval at least 30 days prior to the commencement of the test.

(2) and (3) No change

b. - e. No change.

f. Water Conservation Plan

Within two (2) years of issuance of the modified Certification Order, the Permittee shall submit a Water Conservation Plan required by Chapter 40E-2, F.A.C., in effect at that time, for review and approval by SFWMD staff. The plan shall, at a minimum, incorporate the following components:

(1) An audit of the amount of water needed in the Permittee's operational processes. The following measures shall be implemented within one year of audit completion if found to be cost effective in the audit:

(a) Implementation of a leak detection and repair program;

(b) Implementation of a recovery/recycling or other program providing for technological, procedural or programmatic improvements to the Permittee's facilities; and

(c) Use of processes to decrease water consumption.

(2) Development and implementation of an employee awareness program concerning water conservation.

C. SURFACE WATER MANAGEMENT CONDITIONS

1. GENERAL CONDITIONS

a. Professional Engineer Certificate

The operation of the surface water management system authorized under this Certification shall not become effective until a Florida Registered Professional engineer certifies, upon completion of each phase, that these facilities have been constructed in accordance with the design approved by the SFWMD. Within 30 days after completion of construction of the surface water management system, the Permittee or authorized agent shall submit the engineer's certification and notify the SFWMD ~~Field Engineer~~ Environmental Resource Compliance Division that the facilities are ready for inspection and approval. Such notification shall include as-built drawings of the site which shall include elevations, locations, and dimensions of components of the surface water management system.

b. - k. No change.

2. SITE SPECIFIC DESIGN AUTHORIZATIONS

a. No change.

b. Authorized Discharge Facilities

BASIN 2:	1-0.25' diameter circular orifice with the invert at elevation 33.5' NGVD 1-2□ V-notch with the invert at elevation 35.5' NGVD. 1-4.0' wide weir with the crest at elevation 36.5' NGVD and a length of 18" diameter culvert discharging into 20' of rip-rapped spreader swale.
BASIN 3:	1-0.25' diameter circular orifice with the invert at elevation 32.7' NGVD 1-2□ V-notch with the invert at elevation 34.6' NGVD 1-4.0' wide weir with the crest at elevation 36.0' NGVD and a length of 18" diameter culvert discharging into a 20' of rip-rapped spreader

	swale.
BASIN 6:	1-12' wide weir consisting of a 3 sided drop inlet with the crest at ~~37.5'~~ 38.5' NGVD.

c. - e. No change.

3. ADDITIONAL INFORMATION REQUIREMENTS

a. - d. No change.

e. Surface Water Quality Sampling and Monitoring ~~Program for Surface Water Discharges~~

~~Within six months of issuance of this certification, the Permittee shall develop and implement a monitoring program for surface water discharges. Within three months of issuance of this Certification, the Permittee shall submit a preliminary surface water quality monitoring program to the District for a determination of compliance with the non-procedural requirements of Chapter 40E-4, F.A.C. At a minimum, the program shall monitor all off-site discharges from the surface water management system and all surface water management system discharges into the on-site wetlands, specifically where Basin No. 2 discharges into Wetland No. 6 and Basin No. 3 discharges into Wetland No. 4.~~

~~(1) While the program may incorporate additional monitoring requirements and parameters required by the other agencies, at a minimum, it shall include the following parameters and time frames.~~

~~MONITOR TYPE AND SCHEDULE~~	~~PARAMETERS~~
~~A. GENERAL (EVERY OTHER MONTH)~~	~~TOTAL ORGANIC CARBON, DISSOLVED OXYGEN, pH, TURBIDITY, SPECIFIC CONDUCTANCE, CHEMICAL OXYGEN DEMAND, TOTAL SUSPENDED SOLIDS, ALKALINITY.~~
~~B. ORGANIC (SEMI-ANNUAL)~~	~~OIL AND GREASE, DETERGENTS, EPA METHODS 601 AND 602.~~
~~C. METALS (SEMI-ANNUAL)~~	~~ALUMINUM, ANTIMONY, ARSENIC,~~

	~~BERYLLIUM, CADMIUM, COPPER, CYANIDE, IRON, LEAD, MERCURY, NICKEL, SELENIUM, SILVER, ZINC.~~

~~(2) Water quality samples shall be taken at the above noted locations in accordance with the above schedule during periods of discharge. A laboratory certified by the State of Florida shall be responsible for all water quality analyses under (1)B and (1)C above. Reports shall be submitted to the SFWMD on a semi-annual basis. Initial sampling results shall be reported to the SFWMD no later than six months following the issuance of this Certification.~~

Surface water quality sampling and monitoring data shall be collected and analyzed in accordance with applicable FDEP and EPA criteria. The monitoring results shall be reported to the SFWMD at the intervals specified in the applicable FDEP Conditions of Certification.

~~(3) The SFWMD will evaluate the monitoring results to determine whether the discharge degrades receiving waters and conforms to State water quality standards as defined in Chapter 17-302, F.A.C. If water quality problems develop, the SFWMD reserves the right to require more frequent sampling and more thorough analyses in order to provide assurances that the discharges will not cause additional off-site water quality impacts.~~

f. No change.

D. NO CHANGE.

E. LAND MANAGEMENT CONDITIONS

1. NO CHANGE.

2. GENERAL DESIGN CONDITIONS

a. through d. No change.

e. All excavations shall be in accordance with FDEP ~~DER~~ requirements and silt booms shall be employed where necessary.

f. – n. No change.

3. ADDITIONAL INFORMATION SUBMITTALS

a. Construction Plans for Authorized Uses in SFWMD Right of Way

Prior to the commencement of construction of any portion of the withdrawal facilities and associated piping to be located within the SFWMD ROW, the Permittee shall submit

complete detailed construction drawings showing the proposed facilities to the SFWMD for a determination of compliance with the non-procedural requirements of Chapter 40E-6, F.A.C. The drawings shall be identical to the plans to be provided to the Permittee's contractor, shall depict the proposed facilities in both plan and profile views and shall show at a minimum:

(1) - (4) No change.

(5) Design details which demonstrate that withdrawals from the canal cannot occur below elevation 17.50 NGVD (see also Conditions IV.B.2.b.(1) and 7 and IV.B.2.d.);

(6) - (9) No change.

b. No change.

PART V

TREASURE COAST REGIONAL PLANNING COUNCIL

1. – 4. No change.

5. At least 60 days prior to construction, ICP shall submit and upland preserve and wetland management plan to the Florida ~~Game and Fresh Water~~ Fish and Wildlife Conservation Commission and to Martin County for review and approval. This plan shall present management practices for the seven wetlands and the upland preserve areas, as designated in the Application and the PUD planned unit development (industrial) zoning agreement of Martin County, and illustrated on Figure 1. At a minimum, this plan shall include a statement of preserve management objectives; a statement of what habitat functions the preserves are expected to provide; a description of how habitat values will be maintained, including measures such as perimeter staking, and vegetation control if controlled burning is proposed to control vegetation, a schedule of fire management through a certified burn specialist and including, but not limited to, burn conditions, burn frequency, and measures taken to avoid spread of wildfire; measures taken to remove exotic vegetation from both uplands and wetlands; legal instrument by which preserve areas and wetlands have been reserved from future developmental uses; and the entity responsible for management.

6. No change.

PART VI

DEPARTMENT OF TRANSPORTATION

1.-8. No change.

9. No new access to the State Highway System is proposed in the site certification modification proposed for calendar year 2000. If new access or modification of current access to the State Highway System is proposed at a later date, such as related to the borrow pit sites when they are identified, access will be subject to the requirements of Rule Chapters 14-96, State Highway System Connection Permits, Administrative Process, and 14-97, State Highway System Access Management Classification System and Standards, Florida Administrative Code, will be required.

10. If any overweight or overdimensional vehicles are operated by the applicant, permitting requirements of Chapter 316, Florida Statutes, and Rule Chapter 14-26, Safety Regulations and Permit Fees for Overweight and Overdimensional Vehicles, Florida Administrative Code, must be adhered to.

11. No new use of State of Florida right of way or transportation facilities, including any new or relocated transmission lines, is proposed via the calendar year 2000 modification. If any use of State of Florida right of way or transportation facilities is later proposed, such usage will be subject to the requirements of the Department of Transportation's Utility Accommodation Manual and Rule Chapter 14-46.001, Utilities Installation or Adjustment, Florida Administrative Code.

PART VII

NO CHANGE.

PART VIII

DEPARTMENT OF COMMUNITY AFFAIRS

1. – 5. No change.

6. At least 60 days prior to construction, ICP shall submit an upland preserve and wetland management plan to the Florida ~~Game and Fresh Water~~ Fish and Wildlife Conservation Commission and to Martin County for review and approval. This plan shall present management practices for the seven wetlands and the upland preserve areas, as designated in the Application and the PUD planned unit development (industrial) zoning agreement of Martin County, and illustrated on Figure 1. At a minimum, this plan shall include a statement of preserve management objectives; a statement of what habitat functions the preserves are expected to provide; a description of how habitat values will be maintained, including measures such as perimeter staking and vegetation control; if controlled burning is proposed to control vegetation; a schedule of fire management through a certified burn specialist and including, but not limited to, burn conditions, burn frequency, and measures taken to avoid spread of wildfire; measures taken to remove exotic vegetation from both uplands and wetlands; legal instrument by which preserve areas and wetlands have been reserved from future development uses; and the entity responsible for management.

PART IX

NO CHANGE.

PART X

TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND

1. In the event that the facilities, pipeline or improvements constructed or maintained by ICL under this certification are placed on, under, over, or across lands owned by the Board of Trustees of the Internal Improvement Trust Fund, ICL shall first obtain the consent of the Trustees for the use of such lands prior to the construction of those facilities. Such requests for consent shall be made and granted pursuant to Chapter 253, F.S., and Chapter 18-21, F.A.C. The issuance of such consent shall be based upon the information provided during the certification proceeding and such other information necessary to demonstrate compliance with Chapter 253, F.S., and Chapter 18-21, F.A.C.

Any party to this Notice has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Protection, M.S.35, Office of General Counsel, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, and by filing a copy of the Notice of Appeal accompanied by the applicable filing fee with the appropriate district court of appeal. The Notice of Appeal must be filed within 30 days from the date that this Final Order is filed with the Department of Environmental Protection.

DONE AND ENTERED this 26th day of July 2000, in Tallahassee, Florida.

STATE OF FLORIDA, DEPARTMENT OF ENVIRONMENTAL PROTECTION

Kirby B. Green III

KIRBY B. GREEN, III
DEPUTY SECRETARY
3900 Commonwealth Boulevard
Tallahassee, FL 32399-3000
Telephone: (850) 488-7131

FILING IS ACKNOWLEDGED ON THIS DATE, PURSUANT TO §120.52, FLORIDA STATUTES, WITH THE DESIGNATED DEPARTMENT CLERK, RECEIPT OF WHICH IS HEREBY ACKNOWLEDGED.

Brenda Reardon
Deputy CLERK

7/26/00
DATE

CERTIFICATE OF SERVICE

I CERTIFY that a true and correct copy of the foregoing Final Order Modifying Conditions of Certification was mailed to the following on this 26 day of July 2000.

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Florida Bar No. 0066834

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196 Baker Avenue
Concord, Massachusetts 01742-2167

MICHELLE GRIFFIN
APR 6 1995

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

In Re: INDIANTOWN COGENERATION L.P., MODIFICATION OF CERTIFICATION PA 90-31 MARTIN COUNTY, FLORIDA	)	DEP CASE NO. PA 90-31B OGC NO. 91-0146

FINAL ORDER MODIFYING CONDITIONS OF CERTIFICATION

On February 6, 1992, the Governor and Cabinet, acting as the Siting Board, issued a final order approving certification for the Indiantown Cogeneration, L.P., (ICL) Project. That certification order approved the construction and operation of a 330 MW (net) cogeneration facility and associated facilities to be located in Martin and Okeechobee Counties, Florida.

On August 25, 1994, ICL filed a request to modify the conditions of certification pursuant to Section 403.516(1)(b), F.S. ICL requested that the conditions be modified to approve changes to the Planned Unit Development condition as agreed to by Martin County, a change in groundwater withdrawal rates and groundwater withdrawal zones, a change in surface water pumping rates, and a new condition to allow use of treated wastewater for cooling system makeup.

Copies of ICL's request were distributed to all parties to the certification proceeding and made available for public review. On January 6, 1995, a Notice of Proposed Modification of Power Plant Certification regarding the proposed modifications was published in the Florida Administrative Weekly. The notice specified that a hearing would be held if a party to the original certification hearing objects within 45 days from receipt of the proposed modification or if a person whose substantial interests will be affected by the proposed modification objects in writing within 30 days after issuance of the public notice. No written objection to the proposed

modifications was received by the Department.

Accordingly, in the absence of any timely objection,

IT IS ORDERED:

The proposed changes to the Indiantown Cogeneration Project, described in the August 25, 1994, request for modification, are APPROVED. Pursuant to Section 403.516(1)(b), F.S. the Department hereby MODIFIES the conditions of certification for the Indiantown Cogeneration Project as follows:

Condition Part II.(9) is added as follows:

(9) USE OF TREATED WASTEWATER

Treated domestic wastewater may be used as makeup water to the Project's cooling water system upon receipt of permission from the Department and the South Florida Water Management District. Such approval may be obtained by submission of the following information:

A. The name and address of the domestic treatment system to supply the treated effluent.

B. The DEP permit number for the supplying treatment system.

C. Plans and specifications for the proposed connecting pipeline and pumps necessary to transmit the treated effluent to the Project.

D. An analysis of the characteristics of the treated effluent.

E. Demonstration that the treated effluent is treated to meet the following requirements prior to use in the cooling system:

1. Maintenance of a minimum of a 1.0 mg/liter free

chlorine residual after a 15 minute contact time.*

2. Turbidity not to exceed 5 NTU.

3. Continuous chlorine monitoring.

* The Department may approve a lower level of chlorination upon demonstration that a viral concentration of less than one PFU per 25 gallons can be achieved at a that lower level of concentration and that satisfactory control of biological growth in the cooling tower can be maintained.

Condition Part IV B.2. is revised to read as follows:

B. WATER USE CONDITIONS

2. Site Specific Design Authorizations

a. Authorized Withdrawal

Source	Maximum Annual Allocation (MGY)	Maximum Daily Allocation (MGY)
L-63N	1484.00	4.69
~~Upper-Production-Zone~~ Upper Floridan Aquifer	195.00 ~~38.70~~	2.60 ~~0.43~~
Upper Permeable ~~Lower-Production~~ Zone-Lower ~~Upper~~ Floridan Aquifer	174.0 ~~336.60~~	~~4.46~~ 2.32

c. Authorized Withdrawal Facilities

~~3 1,700-GPM-Surface-Water-Pumps-in-L-63N~~

2 - 2,550 GPM Surface Water Pumps in L-63N

1 - 10" x 1340' Flowing Well cased to 500' (existing well)

1 - 10" x ~~1300~~ 1265' Flowing Well cased to ~~600~~ 750'

2 - 15" x 1350' Flowing Wells cased to 750'

~~4 - 14" x 1600' Flowing Wells cased to 1400'~~

2 - 15" x 1650' Flowing Wells cased to 1487'

VII. Martin County

1. Construction and operation of the Indiantown Cogeneration Project shall be undertaken in accordance with the planned unit development (industrial) agreement ("PUD Agreement") between the Permittee and Martin County, Florida, dated July 24, 1991 as amended on July 28, 1992. Said agreement is incorporated into these Conditions of Certification by this reference and shall be complied with and enforced as if the provisions of that agreement were contained in these Conditions. An amendment of the PUD Agreement which is adopted accordance with the laws and ordinances of Martin County in effect shall be deemed incorporated into these Conditions of Certification for purposes of conflicts with any other Condition of Certification, with an applicable nonprocedural requirement within the regulatory authority of an agency other than Martin county, or with a material statement of fact or study of the permittee in the record on which certification is based, then such an amendment to the PUD Agreement shall also require modification of certification pursuant to Section 403.516, F.S. before that amendment to the PUD agreement may become enforceable under this certification. Upon submittal to Martin County of an amendment to the PUD Agreement, the permittee shall provide a copy of the proposed PUD amendment to all agency parties to this certification for review for consistency with this Condition.

~~1. Construction and operation of the Indiantown Cogeneration Project shall be undertaken in accordance with the planned unit~~

development (industrial) agreement between the Permittee and Martin County, Florida, dated July 24, 1991. Said agreement is incorporated into these Conditions of Certification by this reference and shall be complied with and enforced as if the provision of that agreement were contained in these Conditions.

Any party to this Order had the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the clerk of the Department of Environmental Protection in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date that the Final Order is filed with the Department of Environmental Protection.

DONE AND ENTERED this 31st day of March, 1995, in Tallahassee, Florida.

STATE OF FLORIDA, DEPARTMENT OF ENVIRONMENTAL PROTECTION

Kirby B. Green III for
Virginia B. Wetherell
Secretary

3900 Commonwealth Boulevard
Tallahassee, FL 32399-3000
(904) 488-4805

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to §120.52 Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Clerk 4/3/95 Date

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of the foregoing was sent by U.S. Mail to the following this 3rd day of April, 1995.

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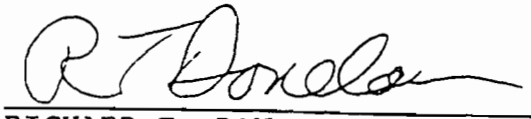
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STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



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BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In Re: INDIANTOWN COGENERATION L.P., MODIFICATION OF CERTIFICATION PA 90-31 MARTIN COUNTY, FLORIDA	)))))	DER CASE NO. PA 90-31

FINAL ORDER MODIFYING CONDITIONS OF CERTIFICATION

On February 6, 1992, the Governor and Cabinet, acting as the Siting Board, issued a final order approving certification for the Indiantown Cogeneration, L.P., (ICL) Project. That certification order approved the construction and operation of a 330 MW (net) cogeneration facility and associated facilities to be located in Martin and Okeechobee Counties, Florida.

On April 21, 1992, ICL filed a request to modify the conditions of certification pursuant to section 403.516(1)(b), F.S. ICL requested that the conditions be modified to approve several recently identified changes to the project design and operation. These proposed changes include alternate rail spur corridors to the project site, changes to or increases in the storage capacity of various onsite facilities, an additional nitrogen oxide control option, use of two auxiliary boilers one-half the size of the original auxiliary boiler, onsite fuel storage facilities, and alterations to the plant layout.

Copies of ICL's request were distributed to all parties to the certification proceeding and made available for public review. On May 1, 1992, a Notice of Proposed Modification of Power Plant Certification regarding the proposed modifications was published in the Florida Administrative Weekly. ICL published notice of the proposed modification in the Indiantown News on April 29, 1992. The notices specifies that a hearing would be held if requested on or before 45 days from receipt of the proposed modification by the parties or within 30 days of publication of the notice. No hearing was requested. No person has filed written objections to the proposed modifications.

Accordingly, in the absence of any dispute,

IT IS ORDERED:

The proposed changes to the Indiantown Cogeneration Project, described in the April 20, 1992, request for modification, are approved based on the absence of any request

for a hearing or written objections. The Department hereby approves the requested modifications. All modifications to the original certification as conceptually described in the request for modification, in and of themselves and as they impact the total infrastructure, shall be in conformance and in compliance with the following as appropriate:

- Domestic Waste Treatment and Disposal Facilities - Chapters 17-4, 17-28, 17-600, 17-602, 17-604, 17-610 and 17-640, F.A.C.

- Potable Water - Chapters 17-4, 17-531, 17-532, 17-550, 17-555, and 17-560, F.A.C.

- Industrial Waste - Chapters 17-4, and 17-660, F.A.C.

- Stormwater - Chapters 17-4, and 17-25, F.A.C.

Pursuant to Section 403.516(1)(b), F.S. the Department hereby modifies the conditions of certification for the Indiantown Cogeneration Project as follows:

Condition II(1), B.1. is revised to read as follows:

1. Boilers

The Pulverized Coal (PC) boiler is permitted to operate at a maximum of 3422 MMBtu/hr heat input (nominal 330 MW). This facility shall be allowed to operate continuously (8,760 hrs/yr.) In addition to the PC boiler, the facility <u>will have one or two</u> auxiliary boiler<u>s</u> rated at up to <u>a combined total of</u> 342 MMBtu/hr (#2 Fuel Oil) and <u>a combined total of</u> 358 MMBtu/hr (Natural Gas or Propane) which operate <u>at the combined total heat input rate</u> a maximum of 5,000 hours with up to 1000 hrs/yr on #2 Fuel Oil and the balance on natural gas or propane.

Condition II(1), B.2.b. is revised to read as follows:

b. Auxiliary Boiler

The auxiliary boiler <u>or boilers</u>, rated at up to a <u>combined total</u> of 358 MMBtu/hr (Natural Gas and propane) and <u>a combined total of</u> 342 MMBtu/hr (#2 Fuel Oil), shall be limited to a maximum of 5000 hours/year <u>at the combined total heat input rates</u> with up to 1000 hrs/yr firing

#2 Fuel Oil with 0.05% sulfur, by weight, and the balance firing natural gas or propane. The maximum total annual emissions from the auxiliary boiler or boilers will be as follows when firing #2 Fuel Oil:

Condition Part II (2), Wetlands, create a new paragraph K. to read as follows:

K. The provisions of Condition II(2) are also applicable to wetlands located along the alternate rail corridors connecting the site to the CSX Railroad.

Condition II(3) - create a new paragraph D. to read as follows:

D. Tanks

Diesel fuel also will be used to fuel on-site locomotives which move rail cars around the Site. Diesel fuel will be delivered by truck and stored in above-ground storage tanks designed, constructed and maintained in accordance with Chapter 17-762, F.A.C., including secondary containment. Stormwater will be collected from the bermed area around the tanks and pumped back to the plant for treatment and use. Any pollutant storage tanks on-site for facility construction activities must also be above-ground and designed, constructed and maintained in accordance with Chapter 17-762, F.A.C., including secondary containment.

Conditions Part IV, C, 1. - create a new paragraph k. to read as follows:

k. In the event the rail spur selected by the permittee impacts the surface water management system of an existing legal user, the permittee shall be responsible for correcting any water quality or water quantity problems resulting from the selected rail spur. Detailed plans and supporting calculations shall be submitted to SFWMD pursuant to Conditions IV, C, 3., a.(3).

Condition Part VI - create a new paragraph 8 to read as follows:

8. The permittee shall obtain approval from the Department of Transportation, pursuant to Rule 14-46.003(2), F.A.C., for any public railroad-highway grade crossings associated with the rail spur the permittee selects to connect the Project Site to the CSX Railroad.

Any party to this Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the clerk of the Department of Environmental Regulation in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date that the Final Order is filed with the Department of Environmental Regulation.

DONE AND ENTERED this 20th day of July, 1992 in Tallahassee, Florida.

STATE OF FLORIDA, DEPARTMENT OF ENVIRONMENTAL REGULATION

Carol M. Browner
Secretary

FILING AND ACKNOWLEDGEMENT

FILED, on this date, pursuant to S120.52 Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Kathy C. Carter 7.21.92
Clerk Date

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400
Telephone: (904) 488-9730

BEFORE THE GOVERNOR AND CABINET
OF THE STATE OF FLORIDA

In Re: APPLICATION FOR POWER PLANT SITE CERTIFICATION OF INDIANTOWN COGENERATION PROJECT	)	DOAH CASE NO. 90-8072EPP DER CASE NO. PA 90-31

FINAL ORDER

FOR

INDIANTOWN COGENERATION PROJECT

ISSUED: February 7, 1992

BEFORE THE GOVERNOR AND CABINET
STATE OF FLORIDA
SITTING AS THE SITING BOARD

IN RE:
APPLICATION FOR POWER PLANT
SITE CERTIFICATION OF
INDIANTOWN COGENERATION
PROJECT, PA 90-31

DOAH CASE NO. 90-8072EPP

FINAL ORDER APPROVING CERTIFICATION

On February 4, 1992, this matter came before the Governor and Cabinet, sitting as the Siting Board, pursuant to the Florida Electrical Power Plant Siting Act (PPSA), Section 403.501, et seq., Florida Statutes (1991), for final agency action concerning a Recommended Order dated December 24, 1991, attached as Exhibit 1, which recommends site certification for the Indiantown Cogeneration Project Power Plant. On September 24, 1991, the Board adopted a previous Recommended Order in this case which concluded that the proposed project was consistent with all applicable zoning ordinances and land use plans. The Public Service Commission entered a Final Order certifying the need for the proposed project on March 21, 1991.

No exceptions to the Recommended Order have been filed. Having reviewed the Recommended Order and having otherwise been fully advised, it is ORDERED:

1. Pursuant to Section 120.57(1)(b)10, Florida Statutes (1991), the Recommended Order dated December 24, 1991, (Exhibit 1) is APPROVED and ADOPTED by the Board.

2. The Board hereby APPROVES certification of the location, construction, and operation of the Indiantown Cogeneration Project at the proposed site, subject to the Conditions of Certification contained in Appendix A of Exhibit 1.

3. The Board hereby DELEGATES to the Department of Environmental Regulation the authority to assure and enforce compliance by Indiantown Cogeneration Partnership and its agents with all of the Conditions of Certification.

NOTICE OF RIGHTS

Any party to this certification proceeding has the right to seek judicial review of this Order pursuant to Section 120.68, Florida Statutes, by the filing of a notice of appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Siting Board in the Department of Environmental Regulation Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy with the appropriate District Court of Appeal. The notice of appeal must be filed within 30 days from the date this Final Order is filed with the Clerk of the Siting Board.

DONE and ORDERED this 6th day of February, 1992, in Tallahassee, Florida, pursuant to the vote of the Governor and Cabinet sitting as the Siting Board, at a duly-noticed and constituted Cabinet meeting on February 4, 1992.

THE GOVERNOR AND CABINET
SITTING AS THE SITING BOARD

BY: Lawton Chiles
THE HONORABLE LAWTON CHILES

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to S120.52 Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Shirley C. Carter 2.7.92
Clerk Date

I hereby certify that the attached order was provided by mail on this 13th day of February, 1992, to the following persons:

The Honorable Lawton Chiles
Governor
The Capitol, Room 210
Tallahassee, Florida 32399

The Honorable Jim Smith
Secretary of State
The Capitol, LL-10
Tallahassee, Florida 32399

The Honorable Robert A. Butterworth
Attorney General
The Capitol, Plaza Level
Tallahassee, Florida 32399

The Honorable Bob Crawford
Commissioner of Agriculture
The Capitol, Plaza level
Tallahassee, Florida 32399

The Honorable Gerald A. Lewis
State Comptroller
The Capitol, Room 2001
Tallahassee, Florida 32399

The Honorable Tom Gallagher
State Treasurer and Insurance Commissioner
The Capitol, LL-27
Tallahassee, Florida 32399

The Honorable Betty Castor
Commissioner of Education
The Capitol, Plaza Level
Tallahassee, Florida 32399

Hamilton S. Oven, Jr., P.E.
Florida Department of Environmental Regulation
2600 Blair Stone Road, Room 309L
Tallahassee, FL 32399-2400

Richard T. Donelan, Esquire
Assistant General Counsel
Florida Department of Environmental
Regulation
2600 Blair Stone Road, Room 654
Tallahassee, Florida 32399-2400

Kathryn Funchess
Stephen Pfeiffer
General Counsel
Florida Department of Community Affairs
2740 Centerview Drive
Tallahassee, Florida 32399-2100

Vernon Whittier
Assistant General Counsel
Department of Transportation
Haydon Burns Building
605 Suwannee Street, M.S. #58
Tallahassee, Florida 32399

John Fumero
South Florida Water Management District
Post Office Box 24680
West Palm Beach, Florida 33416-4680

Eugene McClellan, Assistant General Counsel
Department of Natural Resources
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Tallahassee, Florida 32399

Roger G. Saberson
Attorney for Treasure Coast
Regional Planning Council
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Delray Beach, FL 33482-4514

Fred W. Van Vonno
Assistant County Attorney
Martin County
2401 Southeast Monterey Road
Stuart, Florida 34996

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Central Florida Regional Planning Council
Post Office Box 2089
Bartow, Florida 33830-2089

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James Antista, General Counsel
Kenneth McLaughlin, Assistant General Counsel
Florida Game and Fresh Water Fish Commission
Bryant Building
620 South Meridian Street
Tallahassee, FL 32399-1600

Doug Roberts
Carolyn S. Raepple
Gary Sams
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P.O. Box 6526
Tallahassee, FL 32314
(Counsel for Applicant)

R T Hamilton, Jr.
Asst. General Counsel
Dept. of Environmental
Regulation

State of Florida
Division of Administrative Hearings
The DeSoto Building, 1230 Apalachee Parkway
Tallahassee, FL 32399-1550
(904) 488-9675 • SunCom: 278-9675

December 24, 1991

Sharyn L. Smith
Director

Ann Cole
Clerk

Honorable Lawton Chiles
Governor
State of Florida
The Capitol
Tallahassee, FL 32399

Honorable Jim Smith
Secretary of State
State of Florida
The Capitol, PL-02
Tallahassee, FL 32399-0250

Honorable Robert A. Butterworth
Attorney General
State of Florida
The Capitol
Tallahassee, FL 32399-1050

Honorable Tom Gallagher
Treasurer and Insurance
Commissioner
State of Florida
The Capitol
Tallahassee, FL 32399-0300

Honorable Bob Crawford
Commissioner of Agriculture
State of Florida
The Capitol
Tallahassee, FL 32399-0810

Honorable Gerald A. Lewis
Comptroller
State of Florida
The Capitol, Plaza Level
Tallahassee, FL 32399-0350

Honorable Betty Castor
Commissioner of Education
State of Florida
The Capitol
Tallahassee, FL 32399

Re: Application for power plant site certification of Indiantown Cogeneration Project, DOAH Case No. 90-8072EPP

Dear Siting Board:

Enclosed is my Recommended Order in the site certification hearing of the referenced case. Exhibits received in evidence and the transcript of the certification hearing have been transmitted to Richard T. Donelan, Jr., at the Department of Environmental Regulation.

As required by Section 120.58(5), Florida Statutes, please provide the Division of Administrative Hearings a copy of your final order in this case within 15 days of rendition.

Sincerely,

DIANE K. KIESLING
Hearing Officer

DKK:dw
Enclosure

RECEIVED
DEC 26 1991
D. E. R.
SITING COORDINATION

STATE OF FLORIDA
DIVISION OF ADMINISTRATIVE HEARINGS

In Re: APPLICATION FOR POWER PLANT SITE CERTIFICATION OF INDIANTOWN COGENERATION PROJECT	)	DOAH CASE NO. 90-8072EPP DER CASE NO. 90-31

RECOMMENDED ORDER

STATE OF FLORIDA
DIVISION OF ADMINISTRATIVE HEARINGS

In Re: APPLICATION FOR POWER PLANT SITE CERTIFICATION OF INDIANTOWN COGENERATION PROJECT	)	DOAH CASE NO. 90-8072EPP DER CASE NO. 90-31

RECOMMENDED ORDER

Pursuant to proper public notice, a certification hearing as required by Section 403.508(3), Florida Statutes (Supp. 1990), was held in Indiantown, Florida on October 21, 1991, before the Division of Administrative Hearings, by its designated Hearing Officer, Diane K. Kiesling.

APPEARANCES

For Indiantown Cogeneration Project:	Douglas S. Roberts Carolyn S. Raepple Hopping Boyd Green & Sams 123 S. Calhoun Street Post Office Box 6526 Tallahassee, FL 32314
For Department of Environmental Regulation:	Richard T. Donelan, Jr. Assistant General Counsel 2600 Blair Stone Road Tallahassee, FL 32399-2400
For Martin County:	Fred W. Van Vonno Assistant County Attorney 2401 Southeast Monterey Road Stuart, FL 34996
For South Florida Water Management:	Cecile Ross Assistant Counsel 3301 Gun Club Road West Palm Beach, FL 33416-4680
For Treasure Coast Regional Planning Council:	Roger G. Saberson 70 S.E. 4th Avenue Delray Beach, FL 33482-4514

STATEMENT OF THE ISSUES

The general purpose of the hearing was to receive written and documentary evidence, including that presented by members of the public, concerning whether, through available and reasonable methods, the location and operation of the proposed cogeneration project will produce minimal adverse effects on human health, the environment, the ecology of the land and its wildlife, and the ecology of State waters and their aquatic life, in an effort to fully balance the increasing demands for electrical power plant location and operation with the broad interests of the public. Section 403.502, Florida Statutes (Supp. 1990).

PRELIMINARY STATEMENT

This proceeding was held pursuant to the Florida Electrical Power Plant Siting Act, Chapter 403, Part II, Flo Statutes (Supp. 1990), and Chapter 17-17, Florida Administrative Code, to consider the application of Indiantown Cogeneration, L.P. (ICL) for site certification of a proposed 330 megawatt coal-fired cogeneration project at a site located in western Martin County, Florida. By order dated September 24, 1991, the Governor and Cabinet, sitting as the Siting Board, adopted the Hearing Officer's Recommended Order holding the proposed Indiantown Cogeneration Project (ICP) is consistent and in compliance with existing land use plans and zoning ordinances of Martin County and Okeechobee County, Florida. Pursuant to Section 403.519, Florida Statutes, the Florida Public Service Commission issued a determination of need for the proposed ICP March 21, 1991.

The Department of Community Affairs (DCA), the Florida Game and Fresh Water Fish Commission (FGFWFC), and the Department of Transportation (DOT) did not enter appearances at the hearing but did enter into settlement stipulations with ICL that were received into evidence. The Department of Natural Resources (DNR), the Central Florida Regional Planning Council (CFRPC), and Okeechobee County did not appear at the certification hearing.

ICL presented the oral or written testimony of twelve witnesses and their supporting exhibits, 1-63. Eleven witnesses were offered and accepted as expert witnesses in various fields. All written testimony and exhibits offered by ICL were received into evidence. Pursuant to a stipulation among the parties, the testimony and exhibits of three witnesses were admitted by sworn affidavit without those witnesses having to appear at the hearing. The revised DER written analysis and agency report was admitted. ICL exhibits 64-66 were admitted in evidence and ICL exhibits 67 through 72, constituting stipulations between ICL and various agency parties and containing agreed-upon conditions of certification, were also received into evidence. DER exhibit 1 was admitted. During the public hearing, two members of the general public offered comments and testimony on their own behalf. No other witnesses or exhibits were offered by any other parties. Attached to this Recommended Order as Appendix A are the Conditions of Certification to which the parties have all agreed.

The transcript of the proceedings was filed on December 4, 1991. The parties joint proposed recommended order was filed

on December 3, 1991. Because only one proposed recommended order was filed by the parties, it is unnecessary to make spec: rulings on each proposed finding of fact. All proposed findings of fact are adopted in substance as modified herein, except for proposed finding of fact 73 which is unnecessary.

FINDINGS OF FACT

General Project Description

1. The Indiantown Cogeneration Project (ICP) will consist of a coal-fired cogeneration facility capable of generating 330 megawatts (net) of electricity for sale to Florida Power and Light Company. The plant will also supply up to 225,000 pounds per hour of process steam to the adjacent Caulkins Citrus Processing plant. Steam for electrical production citrus processing will be produced in a pulverized coal boiler.

2. Cogeneration facilities such as the ICP are energy generating facilities that produce more than one form of energy. In this project, the second form of energy is generated by capturing waste heat in the form of steam from the electrical generating process and using it in the citrus processing facility. A cogeneration facility, therefore, achieves efficiencies in fuel use, capital investment, and operating costs.

3. The 220-acre project site is located in southwestern Martin County, approximately nine miles east of Lake Okeechobee, 20 miles west of Stuart, and three miles northwest of

the unincorporated community of Indiantown, Florida. The site lies south of State Road 710 directly behind the existing Caulkins Citrus Processing Plant and the vacant Florida Steel Corporation site, both of which border on State Road 710. A CSX railroad line runs parallel to State Road 710.

4. Features of the project include a rail spur to connect the site to the existing CSX rail line, a new site access road that will ultimately be dedicated to public use, and a 19-mile water pipeline connecting the facility to a surface water source in neighboring Okeechobee County. This pipeline will be located within the existing CSX railroad right-of-way. The ICP will tie into an existing electrical transmission line crossing the site; no new transmission facilities will be required for the project. A rail loop will be constructed within the project site to accommodate coal deliveries by rail. Enclosed coal and lime handling and storage facilities will be constructed on the site. However, there will be no on-site ash disposal. The project site will also include a 25-acre cooling water storage pond. Within the site, 24 acres of wetlands will be preserved and buffered by minimum 50-foot upland buffers.

5. The main project site is currently unimproved and is zoned for industrial uses. The site is used on a limited basis for cattle grazing. Surrounding land uses consist of other industrial or agricultural uses, including pasture and citrus groves. There are no existing buildings at the site. The only structures on site are the existing electrical transmission towers within the FPL transmission line right-of-way.

6. Cooling and process water for the project will be obtained principally from Taylor Creek/Nubbin Slough also known as L-63N in Okeechobee County. The intake structure and pumphouse will be located on a one-half acre site, which is adjacent to the existing CSX railroad right-of-way. The cooling water pipeline will run from the intake structure southeast within the railroad right-of-way to the ICP site. During periods of drought when surface water is not available from Taylor Creek/Nubbin Slough, the ICP will withdraw groundwater from the upper Floridan aquifer, a zone of water containing high levels of dissolved solids.

Site Selection

7. The ICP site offers a number of advantages for the proposed cogeneration facility. First, the facility is sited close to the adjacent citrus processing plant, which minimizes heat loss in delivering steam to the citrus plant through a steam line. The site also provides direct access to an existing transmission line. Third, the site is close to State Road 710 and the CSX railroad, providing vehicular access and good rail access for delivery of coal and removal of ash. The railroad right-of-way also provides a corridor for the water supply pipeline within an already existing disturbed area. Additionally, the project will obtain water primarily from Taylor Creek/Nubbin Slough, which drains agricultural areas into Lake Okeechobee and carries a high nutrient load. Coal was selected as the primary fuel for the facility for several reasons.

including constraints on natural gas delivery, enhancement of fuel diversity on the FPL system, cost effectiveness, and the availability of high quality low sulfur coal in addition to the use of advanced air pollution control systems.

8. In selecting the site and designing the ICP, ICL discussed the project extensively with local residents and officials. The concerns and suggestions raised were addressed or incorporated into the ICP's final design. These features included use of low sulfur coal, avoidance of wetlands, use of low quality surface water, covering coal piles, and off-site disposal of ash. In addition, ICL has committed to establish a trust fund to support community improvements in Indiantown and to encourage Project employees to live in the Indiantown area.

PSC Need Determination

9. The determination of need for the Indiantown Cogeneration Project was entered by the Public Service Commission (PSC) in Order No. 24268 issued on March 21, 1991. The PSC reached the following conclusions in its order:

(a) The proposed power plant will contribute to electric system reliability and integrity. This conclusion was based on the fact the project is located close to Florida Power & Light Company's (FPL) load center, will not interfere with the ability to import power from other utilities, and would result in minimal transmission losses compared to other more distant sites. Further, FPL's ability to dispatch the facility, to obtain generation during times of peak demand, and to coordinate

maintenance of facilities contributed to this determination reliability and integrity.

(b) The ICP was also found to provide adequate electricity at reasonable cost based on the Project's proximity to the load center, contractual incentives to provide the most efficient delivery of power, and the easy integration of the plant into FPL's transmission grid. The ICP was concluded to be less expensive than the equivalent portion of FPL's own generating alternative.

(c) The Project was also determined to be the most cost-effective alternative available for meeting the need for additional generating capacity. It was found to be less expensive than FPL's own constructed units or the statewide avoided unit as determined by the PSC.

(d) The Commission concluded that FPL, as a purchaser of the electricity to be generated, had taken reasonable measures to conserve electricity. The Commission concluded that FPL had reduced its need for electrical generating capacity through demand-side management and cost effective conservation programs.

(e) Finally, the Commission determined that the Project would contribute to the larger statewide and Peninsular Florida need for power in 1996, the in-service year for this project.

Project Design and Site Layout

10. The steam production facility for the project will be an outdoor, natural circulation-type, pulverized coal boiler. Pulverized coal will be mixed with hot combustion air and ignited in the furnace section of the boiler. Advanced combustion burners will be used in the boiler to minimize the formation of nitrogen oxides. High pressure steam from the boiler will go to an extraction-condensing steam turbine/generator where electricity will be produced.

11. A low-pressure steam extraction is taken from the steam turbine and routed to the Caulkins Citrus plant via a steam line. The steam will be used in the Caulkins plant in evaporators to concentrate orange juice and in dryers to produce a cattle feed supplement from citrus peel and pulp. The condensed steam will be returned from the citrus facility for reuse in the ICP.

12. The plant will use a selective non-catalytic reduction (SNCR) process to reduce formation of nitrogen oxides. In this process ammonia is injected into the boiler to react with nitrogen oxides, forming elemental nitrogen and water. A computer-controlled system will be used to inject ammonia at preselected temperature zones to maximize the control of nitrogen oxide emissions with the least amount of ammonia injection. The exiting flue gas will then enter a spray dryer absorber system where a lime slurry is injected to reduce sulfur dioxide emissions through reactions of sulfur dioxide and other gases with the lime slurry. This produces gypsum particles which,

along with other particles, principally fly ash, are removed in the baghouse. In that facility, the particulate-laden gas st: enters the baghouse, passes through the bag filters where ash is removed, and discharges to the stack.

13. Bottom ash formed during coal combustion will drop into a water-impounded hopper. From there it will be removed by a submerged drag chain conveyor to a storage facility. The bottom ash as well as the fly ash will be removed from the site for disposal.

14. Coal will be delivered to the project site by rail and unloaded in a totally enclosed facility through bottom dump hoppers. Coal storage will be provided in both active and inactive piles. The active pile will be maintained in an enclosed building capable of containing seven days' supply of coal. Coal will be reclaimed from the active coal pile transported in enclosed galleries to the coal crusher. The active coal pile building will include a physical barrier, such as a liner, below the pile to protect groundwater. An outdoor inactive coal pile will contain thirty (30) days of compacted coal. The inactive pile will be grass covered and a liner will be used under it to protect groundwater.

15. Lime, which will be used in the control of sulfur dioxide emissions, will be delivered in bottom dump rail cars or self-unloading trucks. Rail unloading will take place in a separate unloading building with a dust collection system to prevent fugitive dust emissions. A liner will be installed in the area around the unloading building. Lime will be

mechanically transferred from the unloading building in enclosed conveyors to a lime storage silo.

16. The ICP will also include an auxiliary boiler which serves two functions. First, this boiler will provide start-up steam to the turbine cycle during start-up of the main boiler. The auxiliary boiler also is intended to supply steam to the citrus processing facility during those times when the main boiler is not in operation. This boiler is a package-type boiler capable of firing natural gas, propane or fuel oil.

17. The ICP's heat dissipation system will consist of a mechanical draft cooling tower, an on-site cooling water storage pond, and an intake structure and pipeline for providing water to the project site. Steam exiting the turbine generator will be condensed by cooling water flowing through a condenser. This heat will ultimately be transferred to the atmosphere in a cooling tower where hot water contacts cool air. In the tower, fans will force air up through falling hot water. The cooled water will be collected in a basin at the bottom of the tower and reused in the plant circulating water system. Mist eliminators will be used within the tower to reduce the escape of water droplets entrained in the air flowing out of the cooling tower. Such water droplets contain solids, including salts, that are present in the cooling water and which could impact vegetation upon which these solids fall. The potential for drift impacts to wetlands has been minimized through the use of mist eliminators that reduce drift to 1/1000th of the plant circulating water flow and by orientation of the cooling tower.

18. A lined 25-acre cooling water storage pond will be constructed on site to provide nine days of plant water nee This pond will store water from Taylor Creek/Nubbin Slough and lined to prevent water loss due to seepage to the ground.

19. Water will be obtained from Taylor Creek/Nubbin Slough through a water intake structure excavated in the bank of the canal. Two wedge-wire screens, each with the capacity to provide 100 percent of the facility's water needs, will be placed in the intake forebay. The slots in the screen are narrowly spaced, at 1 millimeter, and design flow through the slots is less than one-half foot per second. This will minimize impingement or entrapment of fish or larvae on the intake screens. The intake screens will be connected to a pump house located behind the canal bank with three pumps, each capable of providing 50 percent of the plant's water needs.

20. From the pump house, water will be conveyed to the on-site cooling water storage pond via an 18 to 24-inch water pipeline to be located within the existing CSX Railroad right-of-way. The pipeline will be buried except where it crosses streams and wetlands. At such locations, the pipeline will be supported on existing bridge supports, be placed on precast pilings or span the wetland entirely.

21. The ICP is designed so that there will be no discharge of plant wastewaters, including process wastewaters, cooling tower blowdown, or contaminated stormwater. Instead, wastewater will be reused in the plant, further reducing the plant's water needs. The water treatment and recycling system

consists of several components. The plant's cooling water will be treated to remove solids that could cause scaling and corrosion problems. These solids will be removed as a sludge and the treated water will be recycled for cooling.

22. Raw water requires treatment before use as process water in the plant. Liquid waste from the water treatment system will be treated and cycled through the cooling tower water treatment system prior to being sent to a filter press where solids are removed. A portion of the effluent from the water treatment system will be used directly in the spray dryer for control of sulfur dioxide emissions and a portion of the effluent will be sent to an evaporator where it will be reprocessed, with clean water recycled to the plant and the evaporator brine also used in the spray dryer. During periods when the plant is relying on Floridan water, which is of lower quality, excess wastewater generated by the evaporator cannot be recycled as quickly into the plant process. A lined 8-acre wastewater storage pond will be used to store up to 75 days of wastewater production. When the plant water supply reverts to Taylor Creek/Nubbin Slough, the wastewater stored in this pond will be recycled into the plant for use in the spray dryer.

23. Sanitary wastewater will be collected and pumped to the Indiantown Water Company for treatment. Potable water needs of the facility will also be supplied by the Indiantown Water Company.

24. The site will contain several stormwater management basins. The basin around the cooling tower and power block area

and the basin serving the coal pile area will be lined. Stormwater in these basins, which could be contaminated by pl. activities, will be pumped to the on-site water treatment facilities for use in the plant. Other stormwater management basins are designed to collect and discharge stormwater to existing on-site wetlands to maintain pre-development rates of water flow.

25. The site contains seven wetlands, totalling approximately 24 acres. Each wetland will be surrounded by a minimum 50-foot upland buffer. Additional upland areas, totalling 59 acres, will also be preserved on site. No plant construction or operations will occur within these wetland or upland preserve areas.

Construction Activities and Schedule

26. Construction of the ICP will involve initial clearing and grubbing of the site, pile driving, site filling operations, foundation installation, and equipment erection activities. Erosion and sedimentation control measures will be taken in areas requiring land clearing. Appropriate measures will be taken to reduce fugitive dust emissions during construction, including water spraying of roadways, speed reductions, and covered or wetted truck beds to reduce material blown from trucks.

27. Construction of the water pipeline will require minimal clearing and grubbing, only to the extent required to dig the trench and store topsoil. Backhoes and draglines will be

used to install the pipe. Sedimentation and erosion measures will be used to minimize soil erosion and turbidity in streams. The cooling water intake structure at Taylor Creek/Nubbin Slough will be constructed by installing a cofferdam in the canal and excavating behind the cofferdam to install the intake pipes and screens. Local erosion and sedimentation control measures will be undertaken to prevent sediment from entering the canal during construction of the intake.

28. Investigations of the soil at the site indicate that adequate support for building foundations will be provided. Foundations for major buildings will require pile-type foundations. Other buildings can be constructed on support or spread footings. In the event large structures are relocated to areas where no soils data exist, further field investigations as needed will be undertaken to properly design foundations.

29. Construction of the ICP should take approximately 3 1/2 years, commencing in mid-1992. The estimated cost of the facility is between $600 million and $700 million. The construction work force will peak at 800 workers for several months in the third year of construction. The average for that third year, 1994, will be approximately 600 construction employees.

30. Approximately 80 permanent jobs will be created by the ICP. The plant will operate on a 7-day-per-week, around-the-clock basis. ICL has committed to an incentive program to encourage new plant employees to live in and become active in the Indiantown community. Additionally, ICL will undertake a local

recruitment program to enhance employment opportunities at the plant for Indiantown residents.

Fuel Use and Supply

31. The ICP's main boiler is designed to burn a low sulfur coal, containing less than 2% sulfur, as the primary fuel. Coal will be delivered by trains entering and leaving the site from the north, with no coal traffic passing through Indiantown. Three trains per week will be required to supply coal. Ash resulting from coal combustion will be removed from the site for disposal or to be reclaimed for beneficial uses.

32. Natural gas will be used as a start-up fuel in the main boiler and as the primary fuel in the auxiliary boiler. Propane will act as a backup fuel for natural gas in both boilers. Natural gas will be supplied by an existing pipeline which serves the adjacent citrus processing plant.

33. A very low sulfur fuel oil will be used as an alternate backup fuel when natural gas or propane is not available, such as during a natural gas curtailment. The infrequent deliveries of fuel oil will be by tank truck and pumped to an on-site storage tank which will be designed in accordance with FDER regulations.

Consumptive Water Use

34. The ICP will utilize surface water withdrawn from the Taylor Creek/Nubbin Slough as its principal source of water for cooling and process water needs. At a 100 percent operating

capacity factor, the plant's annual water withdrawal would be 5,430-acre feet. An analysis of the effects of these withdrawals on water levels in Taylor Creek/Nubbin Slough indicated that this source could supply the plant water requirements approximately 95 percent of the time. This conclusion was based on ceasing pumping when the water level in the canal reaches 17.5 feet. During the 16-year study period, the longest period in which the water level dropped below 17.5 feet was approximately 75 days.

35. The plant's maximum water withdrawals from Taylor Creek/Nubbin Slough represent 0.16 percent of the total annual inflow into Lake Okeechobee and about 5 percent of the flow of the Taylor Creek/Nubbin Slough system. However, Taylor Creek/Nubbin Slough water is high in nutrients, including phosphorous. The plant's water withdrawals can reduce the annual discharge of phosphorous to Lake Okeechobee by approximately 7.0 tons for a 1.0 percent annual reduction of total phosphorous to Lake Okeechobee. Further, investigations indicate that there will be no impacts to other surface water users in the area of the intake canal.

36. During periods when surface water is not available from Taylor Creek/Nubbin Slough, the ICP will obtain water from wells in the Floridan aquifer. This groundwater contains high concentrations of total dissolved solids which require treatment before use. Water will be obtained from both the upper production zone, beginning at about 685 feet below ground level, and the lower production zone, beginning at a depth of 1,485 feet below ground, within the Floridan aquifer.

37. The ICP will use the lowest quality water available in sufficient quantities to meet the Project's water ne Minimum adverse impacts to the water resource, other legal users, or land uses are anticipated.

Surface Water Management

38. Construction and operation of the project will involve treatment, storage and management of surface water runoff resulting from rainfall. Existing drainage consists of a ditch which traverses the site from north to south. The stormwater runoff currently has a low flow velocity and is ultimately conveyed to the St. Lucie Canal, approximately 2.5 miles to the south via an existing system of agricultural canals.

39. Construction drainage will consist of drainage ditches, swales, and culverts directing stormwater into sev sedimentation basins. Operations drainage will consist of a series of permanent basins that will collect, treat, and either recycle or discharge stormwater. The expected increase in peak stormwater runoff will be alleviated by two stormwater management basins which will store incremental runoff while releasing water to maintain pre-development discharge rates, including flows to on-site wetlands and ditches. The stormwater management system is also designed to provide water quality control for stormwater prior to discharge. Oil/water separators, trash racks, and emergency cutoff devices will be installed to provide additional water quality protection. A surface water quality monitoring program will be implemented during construction and operation t detect any impacts to surface waters.

40. Stormwater within three basins which have the potential to pick up contaminants will not be discharged but will be recycled to the plant for treatment and use. These basins include the area around the cooling tower and the west side of the power block, the outdoor covered coal pile, and the wastewater pond. The stormwater management system and the other impoundments are designed in accordance with SFWMD's regulations for such facilities.

Impacts to Surface Waters

41. Impacts on surface water hydrology from the Project construction and operation will be minimal. Because the plant will utilize a "zero discharge" wastewater treatment system, there will be no impact from plant wastewater discharges. The stormwater management system will collect, detain, possibly treat, and discharge stormwater using design features to remove potential contaminants and maintain acceptable water quality. That portion of the existing ditch traversing the site which will be relocated has been designed to minimize impacts of slightly higher peak stormwater runoff rates from developed areas during a design storm through removal and replacement of damaged culverts in that ditch.

42. Plant water withdrawals from Taylor Creek/Nubbin Slough will have minimal impacts on the flow in that water body. Water levels in the canal will not deviate significantly from historical water levels during a normal year as a result of surface water withdrawals. The quantity of water withdrawn will

have a negligible impact on Lake Okeechobee. However, these withdrawals will have a significant positive impact on wa quality by reducing nutrient inflows to the lake.

Impacts to Groundwater Resources

43. Construction and operation of the ICP will require short-term and long-term groundwater withdrawals. Temporary dewatering of groundwater near the surface will be required during construction of the coal unloading building and of the circulating water lines. Analyses show that these construction activities are not expected to adversely affect nearby wetlands or water wells. Mitigation measures, including installation of sheet piling and infiltration galleries (which direct water into the ground), will be used to insure no adverse impacts. No impact is expected to occur to the groundwater contaminant pl on the adjacent Florida Steel site.

44. During operation, the ICP will withdraw water from the Floridan aquifer as a backup water source. Geophysical and computer analyses of these withdrawals indicate that there will be minimal effects on other groundwater users. These analyses are subject to confirmation by an aquifer performance test (APT) to be conducted once the on-site storage pond has been constructed. In the event the APT results are not consistent with the modeling analyses and impacts to the nearby Caulkins wells are likely, mitigation for these impacts will be provided in accordance with an agreement between ICL and the Caulkins Citrus facility to mitigate any impacts to Caulkins' wells as result of the ICP withdrawals.

45. Use of impervious liners beneath the coal unloading and storage areas and the wastewater and stormwater basins will prevent adverse effects on groundwater due to the percolation of potentially contaminated water into the surficial aquifer. A groundwater monitoring plan will be implemented during construction and operation to detect any impacts to groundwater.

Waste Management

46. The ICP will generate solid wastes from the operation of the combustion system, the water and wastewater treatment system, and the flue gas cleaning system. Miscellaneous wastes such as general office refuse and maintenance wastes will also be produced. There will be no on-site disposal of solid wastes. Combustion ash and solids from the dry scrubber will be removed from the site for off site disposal or recycling. The filter cake from the water treatment, consisting of solids removed from raw water, will be disposed of off site. The filter cake is not expected to be hazardous and may have value as a fertilizer due to the high phosphorous content of the surface water. The spent resin beds in the water treatment demineralizer will be removed by their suppliers. Miscellaneous office wastes will be directed to a licensed, off-site disposal area.

47. The ICP may generate small quantities of wastes that may be classified as hazardous, including solvents, spent acids, caustics, and water treatment materials. The acids and caustics will be neutralized in a neutralization tank for pH

adjustment and will not require further handling as a hazardous wastes. Generation of other hazardous wastes will be minim by use of less hazardous or nonhazardous materials or systems. Hazardous wastes that are produced will be properly placed in a lined storage-for-disposal area and removed from the site within 90 days by a permitted hazardous waste transporter.

Air Pollution Controls and Impact Analysis

48. The Indiantown Cogeneration Project is located in Martin County, which has been designated by the U.S. Environmental Protection Agency and DER as an attainment area for all six criteria (or regulated) air pollutants.

49. Under federal and State of Florida Prevention of Significant Deterioration (PSD) regulations, the ICP is subject to "new source review." This review requires that the ICP i new source performance standards (NSPS) and that best available control technology (BACT) be applied to control emissions of PSD air pollutants emitted in excess of applicable significant emission rates. For the ICP, a BACT analysis must be conducted for the following pollutants: nitrogen oxides, sulfur dioxide, particulate matter, carbon monoxide, volatile organic compounds, acid gases, mercury, beryllium, arsenic, and radionuclides.

50. The term "BACT" is defined in Chapter 17-2.100(28), Florida Administrative Code, as

> An emission limitation, including a visible emission standard, based on the maximum degree of reduction of each pollutant emitted which the Department [of Environmental Regulation], 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.

Such an analysis is conducted by identifying available and technically feasible emission control alternatives and evaluating their degree of emission reduction, costs, and adverse impacts. BACT for each pollutant is the most stringent degree of emission control that is not rejected on the basis of unreasonable economic, energy, environmental, or other technical grounds. The BACT requirements are intended to insure that a proposed facility such as the ICP incorporates emission controls reflecting the latest techniques used in a particular industry, while allowing for future growth in the vicinity of the proposed facility.

51. For nitrogen oxides, the BACT determination established an emission level of 0.17 pounds per million BTU's (lb/MMBTU) of fuel consumed. This emission level can be achieved by the use of low NO_x burners which minimize the formation of nitrogen oxides and the use of a selective non-catalytic reduction system. For control of sulfur dioxide and other acid gases, the BACT analysis determined that an emission level of 0.17 lb/MMBTU of SO_2 could be best achieved by use of a dry scrubber process.

52. The BACT analysis for control of particulate matter concluded that the level of emission control was best achieved using a fabric filter in a baghouse. Other trace metal

pollutants, including arsenic, beryllium, and mercury, which are emitted as particulate matter, were also concluded to be b controlled by a fabric filter. The fabric filter will also act as the appropriate control for radionuclides. For carbon monoxide and volatile organic compounds, BACT has been determined to be the design of the combustion control system to maximize combustion efficiency.

53. For the auxiliary boiler, the BACT analysis concluded that the appropriate emission levels could be achieved for sulfur dioxide by using fuel sulfur limitations; for nitrogen oxides, by using low NO_x burners; for particulate matter, by using low-ash, clean fuels; and for carbon monoxide and volatile organic compounds, by employing combustion controls which minimize the formation of these pollutants.

54. Fugitive dust emissions will be generated by delivery, storage, and handling of coal, lime, and ash. These emissions will be controlled by a variety of control technologies and techniques, which were determined to be BACT for the control of fugitive emissions. The active coal pile will be totally enclosed in a building ventilated through a fabric filter. Coal, lime, and ash will be conveyed and handled within enclosed conveyors, also equipped with fabric filters. Fly ash will be conveyed within pneumatic systems which exhaust through a fabric filter and will be stored within enclosed silos before being transported off site. These various control methods result in minimal emissions of fugitive dust from the ICP.

55. In addition to applying the "best available control technologies," air emissions from the project must also comply with federal and state ambient air quality standards (AAQS) for six criteria pollutants and must not exceed the PSD increments for sulfur dioxide, particulates, and nitrogen oxides. Martin County and the contiguous counties are in a Class II area for PSD purposes, areas where moderate increases in air pollutants are allowed. An air quality analysis, undertaken in accordance with monitoring and computer modeling procedures approved by DER, demonstrates that the ICP will not cause or contribute to any violations of state or national ambient air quality standards. The ICP's predicted impacts also comply with the allowable Class II PSD increments for sulfur dioxide, particulates, and nitrogen oxides.

56. An analysis of potential visibility impacts to the nearest PSD Class I area, the Everglades National Park, predicted that no significant visibility impairment will be observed in the Park. An analysis of potential air quality impacts from commercial, residential, and industrial growth that might result from the Project indicates that minimal associated growth is anticipated and therefore no air quality related impacts attributable to such growth are anticipated. No adverse impacts to area soils and vegetation are expected to occur as a result of Project emissions.

57. An impact analysis was also undertaken for non-criteria pollutants (or air toxins). Four trace elements, beryllium, fluorides, inorganic arsenic, and mercury, which were

shown to be emitted in significant amounts, were analyzed. While ambient air quality standards have not been established for th pollutants, a DER draft list of "no threat" levels has been published. These "no threat" levels can be used for a health effects evaluation. They are based upon conservative assumptions to insure protection of public health and incorporate an ample margin of safety so that no impact to the public health is expected where predicted concentrations are below these levels. For the ICP, there are no exceedances of the "no threat" levels and it may be concluded that these trace element emissions will impose no significant health risks.

58. An analysis of the impacts of drift from the cooling tower indicated that there would be no impact to nearby vegetation, including wetlands, or to surface waters as a result of the ICP's operations. Orientation of the cooling tower, of advanced drift eliminators, and collection of stormwater within the area around the cooling tower will be implemented to minimize the effects of any salts contained in the drift. Additionally, a monitoring program will be undertaken to evaluate wetlands that may be potentially affected by cooling tower drift. A computer modeling analysis of the potential for ground fogging by the cooling tower plume indicates that there will be no fogging on nearby roadways as a result of the Plant's operations.

Noise Impacts

59. A field survey for ambient noise levels indicates that existing noise levels are very low, as one would expect in a

largely rural farming area. The dominant noise source in the area is road traffic from nearby State Road 710. An impact assessment of noise from project construction and operation indicates that, except for short term, sporadic site construction activities which will be perceptible at the nearest residence, noise levels from the Project will be insignificant. During construction the most significant noise sources will be pile driving, steam blowouts to clean pipes, and operation of diesel-powered equipment. However, these activities will be infrequent and the 3,500 foot distance to the nearest residence will buffer construction noise levels. Public notice will be given for any steam blowouts which are expected to occur over a two-week period. During plant construction and operation, noise reduction measures will be taken to maintain a relatively quiet noise environment for any existing residents who might be affected. These noise abatement measures are intended to insure land use compatibility with a substantial margin of assurance.

Wetlands, Vegetation, and Wildlife Impacts

60. The predominant natural vegetation on the project site consists of pine flatwoods with scattered shallow wet prairie wetlands. The land along the northern portion of the site within the existing transmission line corridor is described as ruderal. These vegetation communities are common throughout the region. No threatened or endangered plant species were found on the plant site. Three ferns found on the Project site are listed by the Florida Department of Agriculture and Consumer

Services as threatened so as to protect them from commercial exploitation. However, these ferns are common in peninsu Florida and any impacts will be negligible.

61. The ICP has been designed to avoid impacts to all wetlands located on the project site. These wetlands vary in quality from good to poor, with the poor quality wetlands having been impacted by cattle grazing, drainage, and drought conditions.

62. The land within the pipeline corridor has been previously altered by construction, operation, and maintenance of the existing railroad. The uplands and wetlands are of low ecological value. Most of the water crossings have been channelized and are dominated by weedy wetland species. Construction of the pipeline will result in no significant changes in upland vegetation. Use of aerial crossings, pilir or existing bridges to cross wetlands with the pipeline will produce negligible impact on previously disturbed wetland areas.

63. The project site, the pipeline corridor, and the site of the water intake structure were all surveyed for the presence of wildlife, including threatened and endangered species. No habitats of endangered or threatened species were found to exist in the vicinity of or on the proposed plant site. The biological resources of the site consisted of species common to the pine and wet prairie communities of southeast Florida. The fish and aquatic species at the site of the intake structure are common freshwater species for the Lake Okeechobee-Kissimmee River system. The clearing of up to 135 acres of on-site pine

flatwoods will have insignificant impacts on wildlife since this habitat is regionally common. Since construction of the pipeline will result in neither significant changes in upland vegetation nor any impacts to wetlands, there will be no permanent displacement of wildlife within the previously disturbed areas of the pipeline corridor.

Traffic Impacts

64. A highway traffic analysis conducted for the Project demonstrates that local roadways will not be significantly adversely affected. This analysis was undertaken in accordance with methodologies required by Martin County, Treasure Coast Regional Planning Council, and the Florida Department of Transportation. The analysis for up to 800 construction personnel and 80 operational employees using these methodologies indicates that all area roads will operate at acceptable levels of service.

65. ICL will construct a new plant access road that will connect State Road 710 to South West Farms Road to the southeast of the project site. This access road will provide direct access to the Caulkins Citrus facility from the citrus groves located west of the plant and reduce citrus truck traffic which currently must pass through downtown Indiantown to reach the Caulkins plant. This road is shown as a future improvement on the traffic element of the Martin County comprehensive plan.

66. Pursuant to a stipulation with DOT and other agencies, ICL has committed to construct a right turn lane into

the new plant access road from the southbound lane of State Road 710 to provide safe turning movements. ICL has also committed make improvements at the intersection of the new plant access road and State Road 710 to accommodate traffic turning right on to State Road 710 from the plant access road.

Land Use Compatibility and Socioeconomic Impacts

67. The site for the ICP is an appropriate location for a power plant from a land use perspective. The site is currently surrounded by agriculturally related manufacturing and processing plants and other agricultural activities, including pasture and citrus groves. Necessary infrastructure, including road and rail access, already exists or will be available concurrent with project development. Although the site is located in a rural area, the ICP site is within commuting distance of metropolitan areas, which have an ample supply of skilled labor to construct and operate the plant. Visually, the project facilities will be compatible with the other uses in the area. Further, the site is set back from State Road 710 and a vegetative buffer will screen the site from nearby roadways. Use of the railroad right-of-way for installation of the pipeline is compatible with railroad operations and will result in no disruption of existing land use patterns. The water intake structure in Okeechobee County will not have any land use impact.

68. The Indiantown Cogeneration Project is generally compatible with the goals and policies of the State Comprehensive Plan and the Treasure Coast Regional Comprehensive Policy Plan

69. The ICP will have a substantial beneficial impact on the local economy and tax revenues. The annual project construction payroll is estimated to peak at nearly $17.7 million. Permanent employment of 80 new operations employees will produce an estimated annual payroll of $2.3 million. Indirect employment in the local economy as a result of plant operations will create an additional 155 jobs with an estimated annual payroll of $3.0 million.

70. For Martin County government the net fiscal effect of the ICP will be positive, generating a surplus of tax revenues over public expenditures on the order of $3.7 million per year. For the Martin County taxing district that includes Indiantown, district tax revenues will increase by about 20-25% per year or approximately $210,000 at project buildout.

71. Okeechobee County will also realize economic benefits from the project with construction wages between $1.25 million and $3.75 million for construction employees living in Okeechobee County. An annual payroll of $442,000 for Okeechobee County residents is expected from permanent jobs during plant operation. Net revenues to Okeechobee County as a result of project operation are expected to increase by over $50,000 per year.

Archaeological, Cultural, and Historic Resources

72. A survey of the project site, including the pipeline corridor, revealed no archaeological or cultural sites. Two areas of possible historic interest were located but they are

outside the areas to be developed. In the event archaeological or cultural resources are discovered during project constructi adequate procedures to protect such finds have been accepted by ICL as a condition of certification.

CONCLUSIONS OF LAW

The Division of Administrative Hearings has jurisdiction of the parties to and the subject matter of this proceeding. Section 403.508(3), Florida Statutes (Supp. 1990).

This proceeding was held to implement the purpose and intent of the electrical power plant site certification process, which is to assure the citizens of Florida that construction and operation safeguards of the Indiantown Cogeneration Project are technically sufficient for their welfare and protection, and to effect a reasonable balance between the need for the propo project and the environmental impact resulting from its construction and operation, including air and water quality, fish and wildlife, and the water resources and other resources of the State. Subsections 403.502(1) and (2), Florida Statutes (Supp. 1990).

In accordance with Chapter 403, Part II, Florida Statutes (Supp. 1990), Chapter 120, Florida Statutes, and Chapter 17-17, Florida Administrative Code, proper notice of this hearing was given to all persons and parties entitled thereto as well as to the general public. All the necessary and required governmental agencies were parties to this proceeding. All required reports and studies were completed and presented.

The Florida Public Service Commission, by an order dated March 21, 1991, determined the need for the electrical generating capacity to be supplied by the Project, pursuant to Section 403.519, Florida Statutes (Supp. 1990).

The Governor and Cabinet of the State of Florida, sitting as the Siting Board, determined on September 24, 1991, that the proposed site of the ICP is in conformity with existing land use plans and zoning ordinances.

The Florida Department of Environmental Regulation and the other participating agencies either have recommended, do not object to, or take no position as to certification of the project for construction and operation, subject to this order and the attached conditions of certification.

ICL, the applicant, has entered into settlement stipulations with the Department of Environmental Regulation, the Department of Community Affairs, the Department of Transportation, the Game and Fresh Water Fish Commission, the South Florida Water Management District, the Treasure Coast Regional Planning Council, and Martin County. These stipulations contain conditions of certification that are acceptable to all parties and which are incorporated into the conditions of certification appended as Appendix A to this Recommended Order. As a result of these stipulations, none of the parties oppose certification. The South Florida Water Management District and the Florida Game and Fresh Water Fish Commission do not take any position as to issues outside their jurisdiction. The Treasure Coast Regional Planning Council takes no position as to the

granting of certification; however, any certification should be subject to the attached conditions.

Based on a preponderance of the evidence presented at the certification hearing, Indiantown Cogeneration, L.P., the applicant, has met its burden of proving that the Indiantown Cogeneration Project is entitled to certification. Competent, substantial evidence adduced at the hearing demonstrates that the construction and operational safeguards for the ICP are technically sufficient for the welfare and protection of the citizens of Florida and are reasonable and available methods to achieve that protection. The proposed project, if constructed, maintained and operated in accordance with this Recommended Order and the attached conditions of certification, will produce minimal adverse effects on human health, the environment, the ecology of the land and its wildlife, and the ecology of st waters and their aquatic life. Certification for construction and operation of this project is consistent with the premise of abundant, low-cost electrical energy and will effect a reasonable balance between those environmental impacts which will occur and the PSC-determined need for this Project.

RECOMMENDATION

Based upon the entire record of this proceeding and the above Findings of Fact and Conclusions of Law, it is hereby RECOMMENDED that Indiantown Cogeneration, L.P., be granted certification pursuant to Chapter 403, Part II, Florida Statutes (Supp. 1990), for the location, construction, and operation of the Indiantown Cogeneration Project as proposed in the S

Certification Application and the responses to agency sufficiency comments and in accordance with the Conditions of Certification, attached hereto and incorporated as Appendix A.

DONE and ENTERED this 24th day of December, 1991, at Tallahassee, Florida.

DIANE K. KIESLING, Hearing Officer
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Filed with the Clerk of the Division of Administrative Hearings this 24th day of December, 1991.

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Case No. 90-8072EPP

Indiantown Cogeneration Project
DER Case No. PA 90-31
DOAH Case No. 90-8072EPP

CONDITIONS OF CERTIFICATION (COCs)

PART I

ADMINISTRATIVE CONDITIONS

(1) ENTITLEMENT

Pursuant to s. 403.501-519, F.S., the Florida Electrical Power Plant Siting Act, this certification is issued to Indiantown Cogeneration L.P. (ICL) as owner/operators of the facility.

(2) SCOPE OF LICENSE

Site certification is limited to the construction and operation of the 330 MW (net) electrical power plant and associated linear facilities to be located in Martin and Okeechobee Counties.

(3) JURISDICTIONAL AGENCIES

The following agencies are deemed to have jurisdictional interest in the certification, and thus regulatory authority over the development, construction, operation, and maintenance of the facility:

Department of Environmental Regulation [DER]
Game & Fresh Water Fish Commission [GFWFC]
Department of Natural Resources [DNR]
Department of Community Affairs [DCA]
Department of Transportation [DOT]
South Florida Water Management District [SFWMD]
Treasure Coast Regional Planning Council [TCRPC]
Martin County [MC]
Central Florida Regional Planning Council [CFRPC]
Okeechobee County [OC]

(4) DEFINITIONS

A. Licensee/Permittee: References herein to the "Licensee (Permittee)" apply to Indiantown Cogeneration L.P. (ICL) as owner/operator, or to its successors or assigns. (See COC/I-(5). regarding transfer of certification).

B. Completeness/sufficiency: The term "complete" as used herein shall have the same meaning as contained in Chapter

120, F.S., not Chapter 403, F.S., i.e., a complete application shall also provide sufficient information for an agency to perform an analysis of compliance with the conditions of certification and applicable regulations. Where agency-recommended COCs have used the Ch. 403 FS term of "sufficient", that shall have the same meaning as the term "complete" as used herein.

C. Affected Agencies: References to the "affected agencies" apply to the jurisdictional agencies listed in COC/I-(3).

D. Other terms: The meaning of terms not otherwise specified in A-C, as used herein, shall be governed by the definitions contained in Chapter 403, Florida Statutes and any regulations adopted pursuant thereto; by Chapter 373, Florida Statutes, for conditions of the South Florida Water Management District, or applicable rules of the SFWMD; or by the appropriate governing definitions of the Affected Agencies.

In the event of any dispute over the meaning of a term in these conditions which is not defined in such statutes or regulations, such dispute shall be resolved by reference to the most relevant definitions contained in any other state or federal statute or regulation.

(5) TRANSFER OF CERTIFICATION

If contractual rights, duties, or obligations are transferred under this Certification, notice of such transfer or assignment shall immediately be submitted to the Florida Department of Environmental Regulation and the Affected Agencies by the previous certification holder (Licensee) and the Assignee. Included in the notice shall be the identification of the entity responsible for compliance with the Certification. Any assignment or transfer shall carry with it the full responsibility for the limitations and conditions of this Certification.

(6) SEVERABILITY

The provisions of this certification are severable, and if any provision of this certification or the application of any provision of this certification to any circumstances, is held invalid, the application of such provisions to other circumstances and the remainder of the certification shall not be affected thereby.

(7) PROFESSIONAL CERTIFICATION

Where post-certification submittals are required by these conditions, drawings shall be signed and sealed by a Professional Engineer, or Professional Geologist, as applicable, registered in the State of Florida.

Indiantown Cogeneration Project
DER Case No. PA 90-31
DOAH Case No. 90-8072EPP

CONDITIONS OF CERTIFICATION

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(8) RIGHT OF ENTRY

The Licensee shall allow during operational or business hours the Secretary of the Florida Department of Environmental Regulation and/or authorized representatives, including personnel of the Affected Agencies, upon the presentation of credentials:

A. To have access during normal business hours (Mon.-Fri., 9:00 a.m. to 5:00 p.m.) to any records required to be kept under the conditions of this certification for examination and copying; and

B. To inspect and test any monitoring equipment or monitoring method required in this certification and to sample any discharge of pollutants; and

C. To assess any damage to the environment or violation of ambient standards; and

D. To have reasonable escorted access to the power plant site and any associated linear facilities to inspect and observe any activities associated with the construction, operation, maintenance, or monitoring of the proposed project in order to determine compliance with the conditions of this Certification. The Licensee shall not refuse immediate entry or access upon reasonable notice to any Affected Agency representative who requests entry for the purpose of the above noted inspections and presents appropriate credentials.

(9) DESIGN STANDARDS

The facility shall be constructed pursuant to the design standards presented in the application, responses to agency sufficiency comments, and any approved post-certification submittals, and shall be considered the minimum design standards for compliance.

(10) LIABILITY

The Licensee shall hold and save the Affected Agencies harmless from any and all damages, claims, or liabilities which may arise by reason of the construction, operation, maintenance and/or use of any facility authorized by this Certification, to the extent allowed under Florida law.

(11) PROPERTY RIGHTS

This certification does not convey any property rights in either real or personal property, nor any exclusive privileges, nor does it authorize any injury to public or private property or any invasion of personal rights nor any infringement of Federal, State or local laws or regulations.

(12) COMPLIANCE

A. Compliance with Conditions

1. The Licensee shall at all times maintain in good working order and operate all treatment or control facilities or systems installed or used by the Licensee so as to achieve compliance with the terms and conditions of this certification. All discharges or emissions authorized herein shall be consistent with the terms and conditions of this certification. The discharge of any regulated pollutant not identified in the application, or more frequent than, or at a level in excess of that authorized herein, shall constitute a violation of the certification.

2. An environmental control program shall be established under the supervision of a qualified Environmental Engineer/Specialist to assure that all construction activities conform to applicable environmental regulations and the applicable Conditions of Certification. If during construction there is detected a violation of standards, harmful effect or irreversible environmental damage not anticipated by the application, the evidence presented at the certification hearing or a post-certification submittal the Licensee shall notify the DER Southeast District Office and Siting Coordination Office, as required in B.

3. Any anticipated facility expansions beyond the certified steam eletric generating capacity, production increases, or process modifications which may result in new, different, or increased discharges of pollutants, change in type of fuel, or expansion in steam generation capacity shall require submission of a modification petition pursuant to Chapter 403, Florida Statutes.

4. In the event of a malfunction of the Cogeneration facility boiler's pollution control system resulting in a violation of this certification or DER regulations, that unit shall be promptly shut down.

B. Non-compliance Notification

If, for any reason, the Licensee does not comply with or will be unable to comply with any limitation specified in this certification, the Licensee shall notify the Southeast District Office of the Department of Environmental Regulation by telephone within one working day after said non-compliance occurs and shall confirm this in writing within seventy-two (72) hours of becoming aware of such conditions, and shall supply the following information:

1. A description of the discharge and cause of noncompliance; and

2. The period of noncompliance, including exact dates and times; or if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the noncomplying event.

C. Adverse Impact

The Licensee shall take all reasonable steps to minimize any adverse impact resulting from noncompliance with any limitation specified in this certification, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

(13) POST-CERTIFICATION REVIEW

Further information may be required by these conditions for site-specific or more detailed review and approval to determine compliance with the conditions of certification. Compliance determinations of the Department and other reviewing agencies are subject to review pursuant to Chapters 120, and 403, Florida Statutes.

A. In order to provide adequate lead time for review, such information, as developed, must be submitted for post-certification review at least 180 days prior to the intended commencement date of construction or operation of the feature undergoing review unless otherwise provided herein. Notification of the submittal of the information, and any determinations made pursuant to these COC, shall be provided to the DER Siting Coordination Office for record-keeping purposes.

B. If complete information is submitted or if a written request for additional information is not issued within the thirty day time period, the information will be deemed complete on the day it was received by the agency.

C. The agency will have ninety days from the date on which a complete information submission is received in which to makes its determination regarding compliance.

(14) PROPRIETARY DOCUMENTS OR INFORMATION

Proprietary or confidential data, documents or information submitted or disclosed to any agency shall be identified as such by the Licensee and shall be maintained as such pursuant to applicable Florida law.

(15) COMMENCEMENT OF CONSTRUCTION

At least 30 days prior to the commencement of construction, the Licensee or Project Engineer shall notify the

DER Siting Coordination Office, the DER Southeast District Office, and Affected Agencies of the construction start date. Quarterly construction status reports shall similarly be submitted by the Licensee beginning with the initial construction start date. The report shall be a short narrative describing the progress of construction.

(16) COMMENCEMENT OF OPERATION

At least 30 days prior to the commencement of operation, the Licensee or Project Engineer shall notify the DER Siting Coordination Office and Affected Agencies of the operation start date.

(17) OPERATIONAL CONTINGENCY PLANS

A. Operating Procedures

The Licensee shall develop and furnish the DER Southeast District Office a copy of written operating instructions for all aspects of the operations which are critical to keeping the facility working properly. The instructions shall also include procedures for the handling of suspected hazardous or toxic wastes.

B. Contingency Plans

The Licensee shall develop and furnish the DER Southeast District Office written contingency plans for the continued operation of the system in event of breakdown. Stoppages which compromise the integrity of the operations must have appropriate contingency plans. Such contingency plans shall identify critical spare parts to be readily available.

C. Current Engineering Plans

The Licensee shall maintain a complete current set of modified engineering plans, equipment data books, catalogs and documents in order to facilitate the smooth acquisition or fabrication of spare parts or mechanical modifications.

D. Application Revisions

The Licensee shall furnish appropriate revisions to drawings and site plans submitted as part of the application, including operational procedures for isolation and containment of hazardous wastes.

(18) REVOCATION OR SUSPENSION

This certification may be suspended or revoked for violations of any of its conditions pursuant to Section 403.512, Florida Statutes.

(19) CIVIL AND CRIMINAL LIABILITY

This certification does not relieve the Licensee from civil or criminal penalties for noncompliance with any conditions of this certification, applicable rules or regulations of the Department or Chapter 403, Florida Statutes, or regulations thereunder.

Subject to Section 403.511, Florida Statutes, this certification shall not preclude the institution of any legal action or relieve the Licensee from any responsibilities or penalties established pursuant to any other applicable State Statues, or regulations.

(20) ENFORCEMENT

The Department of Environmental Regulation, as supported by the applicable Affected Agency, may take any and all lawful actions to enforce any condition of this Certification. Any agency which deems enforcement to be necessary shall notify the Secretary of DER of the proposed actions. The affected agency may request the Department to initiate modification of this Certification for any change in any activity resulting from enforcement of this Certification which change will have a duration longer than 60 days.

(21) FIVE-YEAR REVIEW

The certification shall be final unless revised, revoked, or suspended pursuant to law. At least every five years from the date of issuance of certification the Department shall review the project and these conditions of certification and propose any needed modifications.

(22) MODIFICATION OF CONDITIONS

Pursuant to Subsection 403.516(1), F.S., the Board hereby delegates the authority to the Secretary to modify any condition of this certification dealing with sampling, monitoring, reporting, specification of control equipment, related time schedules, emission limitations, conservation easements, transfer or assignment of the Certification or related federally delegated permits, or any special studies conducted, as necessary to attain the objectives of Chapter 403, Florida Statutes.

All other modifications to these conditions shall be made in accordance with Section 403.516, Florida Statutes.

(23) FEDERAL ANNUAL OPERATING FEES AND PERMITS

A. DER Responsibilities

The Department of Environmental Regulation shall

implement the provisions of Title V of the 1990 Clean Air Act for the Indiantown Cogeneration Project by developing Conditions of Certification requiring submission of annual operating permit information and annual pollutant emission fe in accordance with Federal Law and Federal Regulations. The terms of such conditions shall be imposed under the modification provisions of Section 403.516(1), F.S., for which the Board specifically delegates the authority to prescribe said terms.

B. Indiantown Cogeneration L.P. Responsibilities

Indiantown Cogeneration Project shall submit the appropriate annual operating permit application information as well as the appropriate annual emission fees as required by Federal Law to the Department when such Conditions are defined under COC/I-(23)C. below.

C. Annual Operating Permit Application and Fee

(Reserved)

PART II

DEPARTMENT OF ENVIRONMENTAL REGULATION

(1) AIR

The construction and operation of the Indiantown Cogeneration Project (ICP) shall be in accordance with all applicable provisions of Chapter 17-2, 17-256, and 17-702, Florida Administrative Code, except for SO_2 and NOx during startup, shutdown, and malfunciton, then 40CFR60 shall apply.

A. Construction

1. General

a. Construction shall reasonably conform to the plans and schedule given in the application.

b. The permittee shall report any delays in construction and completion of the project which would delay commercial operation by more than 90 days to the DER Southeast District office in West Palm Beach.

2. Equipment Identification

The Licensee shall submit at least four copies of complete information as to the make and model numbers of the selected pulverized coal and auxilliary boilers, all pollution control and continuous emissions monitoring devices, operation and maintenance manuals and calibration procedures, updated process flow diagrams showing mass/energy/heat balances and ammonia injector locations and rates, and related equipment, to the DER Bureau of Air Regulation at least 90 days prior to commencing on-site construction of that particular item.

3. Stack Height and Design

The height of the boiler exhaust stack for ICL shall not be less than 495 ft. above grade. Detailed stack drawings showing sampling locations shall be submitted to the DER Bureau of Air Regulation at least 90 days prior to commencing on-site construction of the affected equipment or feature.

4. Fugitive Dust and Odors

The Licensee shall employ proper odor and dust-control techniques to minimize odor and fugitive dust emissions. Precautions to prevent fugitive particulate emissions during construction shall be to coat the roads and construction sites used by contractors, regrass or water areas of disturbed soils. Control techniques shall be sufficient to prevent nuisance conditions on adjoining property.

5. Open Burning

Open burning in connection with initial land clearin shall be in accordance with Chapter 17-256, F.A.C., Chapter 5I-2, F.A.C., Uniform Fire Code Section 33.101 Addendum, and any other applicable regulations of Martin or Okeechobee Counties, as applicable.

No open burning of construction generated material, after initial land clearing shall be allowed.

B. Operation

1. Boilers

The Pulverized Coal (PC) boiler is permitted to operate at a maximum of 3422 MMBtu/hr heat input (nominal 330 MW). This facility shall be allowed to operate continuously (8,760 hrs/yr). In addition to the PC boiler, the facility has an auxiliary boiler rated at up to 342 MMBtu/hr (#2 Fuel Oil) and 358 MMBtu/hr (Natural Gas or propane) which operates a maximum of 5,000 hours with up to 1000 hrs/yr on #2 Fuel Oil and the balance on natural gas or propane.

2. Emissions Limitations

a. Pulverized Coal Boiler

Based on a permitted heat imput of 3422 MMBTU/h. heat input, the stack emissions from the main boiler shall not exceed any of the following limitations:

i. Combustion Emissions

Pollutant	Basis lb/MMBtu	Emission Limitation lb/hr	TPY
SO_2	0.170	582*	2549
NOx	0.170	582*	2549
PM	0.018	61.6	270
PM_{10}	0.018	61.6	270
CO	0.110	376*	1649
VOC at 7% O_2	0.0036	12.30	54
H_2SO_4	0.0004	1.450	6.350
Beryllium	0.00000273	0.0093	0.041

Mercury	0.0000114	0.039	0.172
Lead	0.0000187	0.064	0.280
Fluorides	0.002	7.26	22.26
Arsenic	0.0000511	0.175	0.765

*24 hour daily block average (midnight to midnight)

ii. NH_3 (Ammonia) - Slip from exhaust gases shall not exceed 50 ppmv.

iii. *VE (Visible Emissions)

- VE from each baghouse exhaust shall not exceed 10% opacity (six minute average).

- No VE during lime silo loading operations (i.e., less than 5% opacity).

- VE from the ash handling baghouse shall not exceed a particulate limit of 0.010 grains/acf and VE of 5% opacity.

b. Auxilliary Boiler

The auxilliary boiler, rated at up to 358 MMBtu/hr (Natural Gas and propane) and 342 MMBtu/hr (#2 Fuel Oil), shall be limited to a maximum of 5000 hours/year with up to 1000 hrs/yr firing #2 fuel oil with 0.05% sulfur, by weight, and the balance firing natural gas or propane. The maximum annual emissions will be as follows when firing #2 fuel oil:

MAXIMUM EMISSIONS

Pollutant	lbs/hr	tons/year
NO_x	68.4	34
SO_2	17.8	9
PM	1.40	0.70
PM_{10}	1.40	0.70
CO	47.30	24
VOC	0.63	0.31
Be	4.1×10^{-5}	2.0×10^{-5}
Hg	5.1×10^{-4}	2.6×10^{-4}
Pb	3.6×10^{-2}	1.8×10^{-2}
As	6.8×10^{-3}	3.4×10^{-3}

c. Particulate emissions from the coal, and limestone handling facilities:

i) All conveyors and conveyor transfer points will be enclosed to preclude PM emissions (except those directly associated with the coal stacker/reclaimer for which an enclosure is operationally infeasible). Fugitive emission shall be tested as specified in conditions 1.B.2.e.

ii) Inactive coal storage piles shall be shaped, compacted, and oriented to minimize wind erosion, and covered.

iii) Water sprays or chemical wetting agents and stabilizers shall be applied to uncovered storage piles, roads, handling equipment, etc. during dry periods and as necessary to all facilities to maintain an opacity of less than or equal to 5 percent, except when adding, moving or removing coal from the coal pile, which would be allowed no more than 20%.

iv) The lime handling system including the lime silos shall be maintained at a negative pressure while operating and the exhaust vented to a control system.

v) The fly ash handling system (including transfer and silo storage) shall be totally enclosed and vented (including pneumatic system exhaust) through fabric filters; and

vi) The Licensee shall submit to the Department, Bureau of Air Regulation in Tallahassee within thirty (30) days after it becomes available, copies of technical data pertaining to the selected particulate emissions control for the coal, and lime handling facilities. These data shall include, but not be limited to guaranteed efficiency and emission rates, and major design parameters such as air/cloth ratio and flow rate. The Department may, upon review of these data, disapprove the use of any such device if the Department determines the selected control device to be inadequate to meet the emission limits specified in COC-(1)B.2.d. below. Such disapproval shall be issued within 30 days of receipt of the technical data.

d. Particulate emissions from bag filter exhausts from the following facilities shall be limited to 0.010 gr/acf: coal, lime and flyash handling systems. A visible emission reading of 5% opacity or less may be used to establish compliance with this emission limit. A visible emission reading greater than 5% opacity will not create a presumption that the 0.010 gr/acf emission limit is being violated. However, a visible emission reading greater than 5% opacity will require the permittee to perform a stacktest, as

set forth in COC-(1)B.3. Verification and recording of the above requirements for particulate emissions shall be done at least annually.

e. Emissions shall not be visible more than 2 minutes in any 15 minute period. Compliance with fugitive emissions limitations from all transfer points will be determined by EPA/DER referenced Method 22 and opacity Method 9 (Appendix A, 40 CFR 60).

f. Coal shall not be burned in the unit unless the spray dryer scrubber, fabric filter baghouse and other air pollution control devices are operating properly except as provided under 40 CFR Part 60, Subpart Da. Any malfunctions of these air pollutions control devices are to be recorded; including duration, cause, and description of repair as specified in condition 1.D.

g. The fuel oil to be fired in the PC boiler and the auxiliary boiler shall be "new oil" which means an oil which has been refined from crude oil and has not been used. The quality of the No. 2 fuel oil used by the auxiliary boiler shall not contain more than 0.05% sulfur, by weight, based on each shipment analysis report.

h. No fraction of flue gas shall be allowed to bypass the air pollution control devices (PCD) system to reheat the gases exiting from the PCD system, if the bypass will cause emissions above the limits specified in COC-(1)B.2. The percentage and amount of flue gas bypassing the PCD system shall be documented and records kept for a minimum of two years available for FDER's inspection.

i. All fuel oil and coal shipments shall have a shipment analysis for sulfur content, ash content, and heating value. In the event continuous emission monitoring of sulfur dioxide is not performed, a daily analysis of coal sulfur content for the purpose of establishing the percentage reduction in potential sulfur emissions shall be made. Such determination shall be in accordance with EPA reference Method 19. Records of all the analyses shall be kept for public inspection for a minimum of two years after the data is recorded.

j. The applicant shall comply with applicable requirements and provisions of the New Source Performance Standard for electric utility steam generating units (40 CFR 60 Part Da).

k. As a requirement of this specific condition, the applicant shall comply with all emissions limits and enforceable restrictions required by the State of Florida Department of Environmental Regulation pursuant to Section 403.511(5), F.S., which may be adopted by regulation and which

are more restrictive, that is lower emissions limits or more strict operating requirements and equipment specifications, than the requirements of COC-II(1)B.2. of these conditions.

3. Stack Testing

a. Within 60 calendar days after achieving the maximum capacity at which the unit will be operated, but no later than 180 operating days after initial startup, the permittee shall conduct performance tests for particulates, SO_2, NO_x, and visible emissions during normal operations near (±10%) 3422 MMBtu/hr heat input and furnish the Department a written report of the results of such performance tests within 45 days of completion of the tests. The performance tests will be conducted in accordance with the provisions of 40 CFR 60.46a and 48a.

b. Compliance with emission limitation standards mentioned in Specific Condition No. 1 shall be demonstrated using EPA Methods, as contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources), or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants), or any other method as approved by the Department, in accordance with F.A.C. Rule 17-2.700. A test protocol shall be submitted for approval to the Bureau of Air Regulation at least 90 days prior to testing.

EPA Method	For Determination of
1	Selection of sample site and velocity traverses.
2	Stack gas flow rate when converting concentrations to or from mass emission limits.
3	Gas analysis when needed for calculation of molecular weight or percent O_2.
4	Moisture content when converting stack velocity to dry volumetric flow rate for use in converting concentrations in dry gases to or from mass emission limits.
5	Particulate matter concentration and mass emissions.
201 or 201A	PM_{10} emissions.
6, 6C, or 19	Sulfur dioxide emissions from stationary sources.
7, 7C, or 19	Nitrogen oxide emissions from stationary

sources.

8	Sulfuric acid mist from stationary source.
9	Visible emission determination of opacity.
	- At least three one hour runs to be conducted simultaneously with particulate testing for the emissions from dry scrubber/baghouse, and ash handling building baghouse.
	- At least one lime vehicle unloading into the lime silo (from start to finish).
22	Fugative emissions from transfer points.
10	Carbon monoxide emissions from stationary sources.
12 or 101A	Lead concentration from stationary sources.
13A or 13B	Fluoride emissions from stationary sources.
18 or 25,	Volatile organic compounds concentration.
101A or 108	Mercury emissions.
104	Beryllium emission rate and associated moisture content.

NOTE: Use EPA draft method or other methods approved by Department to test for ammonia.

c. Performance tests shall be conducted under such conditions as the Department shall specify based on representative performance of the facility. The permittee shall make available to the Department such records as may be necessary to determine the conditions of the performance tests.

d. The permittee shall provide 30 days notice of the performance tests or 15 days notice for stack tests in order to afford the Department the opportunity to have an observer present.

e. Stack tests for particulates (PM and PM_{10}), NO_x and SO_2 and visible emissions shall be performed annually in accordance with COC (1)B.3.b. above.

C. Monitoring and Reporting

1. Air Monitoring Program

a. A flue gas oxygen meter shall be installed for each unit to continuously monitor a representative sample of the flue gas. The oxygen monitor shall be used with automatic feedback or manual controls to continuously maintai air/fuel ratio parameters at an optimum. Performance tests shall be conducted and operating procedures established. The document "Use of Flue Gas Oxygen Meter as BACT for Combustion Controls" may be used as a guide. The permittee shall install and operate continuously monitoring devices for each main boiler exhaust for sulfur dioxide, nitrogen dioxide and opacity, including flue gas O_2 and/or CO_2 content. The monitoring devices shall meet the applicable requirements of Section 17-2, F.A.C., and 40 CFR 60 a minimum of 95% of the time the source is operating.

b. The permittee shall operate two continuous ambient monitoring devices for sulfur dioxide in accordance with DER quality control procedures and EPA reference methods in 40 CFR, Part 53, and two ambient monitoring devices for suspended particulates, and one continuous NO_x monitor. The monitoring devices shall be specifically located at a location approved by the Department's Bureau of Air Regulation. The frequency of operation of the particulate monitors shall be every six days commencing as specified by the Department's Bureau of Air Regulation. During construction and operation, a meteorological station will be operated and data reported with the ambient data.

c. The permittee shall maintain a log of the amounts and types of fuel received and copies of fuel analyse: containing information on sulfur content, ash content and heating values. These logs shall be kept for at least two years.

d. The permittee shall provide stack sampling facilities as required by Rule 17-2.700(4) FAC.

e. The ambient monitoring program shall begin at least one year prior to initial start up of the unit and shall continue for at least one year after commencement of commercial operation.

The Department's Bureau of Air Monitoring and Assessment and the permittee shall review the results of the monitoring program annually and determine the necessity for the continuation of or modifications to the monitoring program.

f. Prior to operation of the source, the permittee shall submit to the Department's Bureau of Air Regulation a plan or procedure that will allow the permittee to monitor emission control equipment efficiency and enable the permittee to return malfunctioning equipment to proper operation as expeditiously as possible.

2. Reporting

a. For the ICL, stack monitoring, fuel usage and fuel analysis data shall be reported to the Department's Southeast District Office on a quarterly basis commencing with the start of commercial operation in accordance with 40 CFR, Part 60, Section 60.7, and 60.49a and in accordance with Section 17-2.08, FAC.

b. Utilizing the SAROAD or other format approved in writing by the Department, ambient air monitoring data shall be reported to the Bureau of Air Monitoring and Assessment of the Department quarterly. Upon commencement of ambient air monitoring, such reports shall be due within 45 days of the end of the quarterly reporting period. Reporting and monitoring shall be in conformance with 40 CFR Parts 53 and 58.

c. Beginning one month after certification, the permittee shall submit to the Department a quarterly status report briefly outlining progress made on engineering design and purchase of major pieces of air pollution control equipment. All reports and information required to be submitted under this condition shall be submitted to the Siting Coordination Office, Department of Environmental Regulation, 2600 Blair Stone Road, Tallahassee, Florida, 32301.

D. Malfunction or Shutdown

In the event of a prolonged (thirty days or more) equipment malfunction or shutdown of air pollution control equipment, operation shall be allowed to resume and continue to take place under appropriate Department order, provided that the Licensee demonstrates such operation will be in compliance with all applicable ambient air quality standards and PSD increments and industrial waste rules. During such malfunction or shutdown, the operation of the ICL shall comply with all other requirements of this certification and all applicable state and federal emission standards not affected by the malfunction or shutdown which is the subject of the Order. Operational stoppages exceeding two hours for air pollution control systems or four hours for other systems or operational malfunctions as defined in the operational contingency plans as specified in COC/I-(17) are to be reported as specified in COC/I-(12). Identified operational malfunctions which do not stop operation but may prevent compliance with emission limitations be reported to DER as specified in COC/I-(12).

(2) WETLANDS

A. The proposed pipeline from the project site to Nubbin Slough shall be routed within the ROW of the

existing CSX Railroad as shown in the siting application.

B. Prior to the submission of any post-certification information to the Department, ICL shall arrange for a site inspection by DER District personnel from the Southeast District office in West Palm Beach or from the Bureau of Wetland Resource Management Jurisdictional Evaluation Section in Tallahassee to determine the extent of jurisdiction on the site and along the proposed pipeline route. At the time of the request, the Department will determine whether jurisdiction can be determined informally by the District office, or whether a binding jurisdictional declaratory statement, pursuant to Rule 17-312.040, F.A.C., is required. The permittee shall flag the outermost limits of construction for the entire pipeline route and shall provide aerial photographs at a scale determined to be appropriate by the Department prior to the site inspection to enable the District personnel to determine if the proposed pipeline will affect jurisdictional wetland areas.

C. At least 90 days prior to the anticipated start of construction, the permittee shall submit fully dimensioned or scaled drawings on 8.5" by 11" paper, signed and sealed by an engineer registered in the state of Florida, that show limits of jurisdictional wetlands that will be affected by the project. The submittal shall also include calculations showing the acreage of affected wetlands by wetland type, a narrative describing construction techniques to be used for the project at both the power plant site and along the alignment of the pipeline, measures proposed to control erosion and turbidity, and a narrative that provides:

1. a detailed description of each wetland impact area;

2. the acreage, type, and quality of all the jurisdictional wetlands that will be affected.

The drawings shall include plan view and cross-section views for each area of jurisdictional wetlands that will be affected by the project, as identified pursuant to Condition No. (2)B. above. In addition to showing the existing and proposed DER jurisdictional limits, the drawing shall depict existing and proposed ground elevations, the limits of construction for the pipeline, and all existing and proposed locations, sizes and invert elevations of structures that may be located in the jurisdictional wetlands.

D. The Department shall review the submittal required by Condition No.(2)C. above for sufficiency within 30 days of receipt of the information, shall

request additional information from the permittee as necessary to make the submittal sufficient and shall determine the appropriateness of mitigation. If mitigation is deemed to be appropriate, ICL shall submit a mitigation plan, as described in Condition No. (2)I. below which also shall be reviewed by the Department for sufficiency. If the Department does not object to the proposed work within 90 days of the date that all of this required information is determined sufficient, the proposed work shall be considered acceptable.

E. All clearing and construction activities shall be confined to the limits of construction as shown on the drawings that are accepted by the Department pursuant to Condition No. (2)C. above. Within 30 days of the completion of construction, ICL shall arrange a site visit by DER District personnel from the Southeast Florida District office in West Palm Beach to verify that no wetland damage has occurred outside the construction limits. If wetland damage occurs outside the construction limits during construction, ICL shall submit to the Bureau of Wetland Resource Management for review a plan to restore the wetland area which was damaged and to provide mitigation for the damage. The plan shall be implemented within 30 days of the Department approval of the restoration and mitigation plan. This condition does not preclude the Department from taking enforcement action if unauthorized activities occur.

F. Prior to initiating construction, ICL shall submit a map and aerial photographs showing the location of all staging areas for the project construction to the Bureau of Wetland Resource Management for review and written approval. These areas shall be upland areas which are not currently providing endangered or threatened species habitat. The staging areas shall not be used prior to receiving DER approval.

G. During construction, best management practices, including but not limited to staked hay bales, filter cloth, and turbidity screens shall be utilized to control erosion and turbidity. All turbidity and erosion control devices shall be properly installed and maintained in good working order until project construction is complete. All side slopes shall be stabilized with grass seed, mulch, or sod within 72 hours of the final grading, and at any other time as necessary to prevent erosion or sedimentation into waters of the State.

H. If it is necessary to clear forested wetland areas during pipeline construction, the forested wetlands shall be cleared using low-impact equipment so as to minimize soil disturbance. Where practicable, the root mats and tree stumps shall be left in place to provide

soil stabilization.

I. If determined to be appropriate by the Department, ICL shall provide mitigation to offset the loss and habitat degradation resulting from the construction of this project in jurisdictional wetlands.

The plan for performing the mitigation shall be submitted and approved by the Department prior to construction. The plan shall include the following information, which is to be submitted to the Bureau of Wetland Resource Management:

1. a detailed description of each wetland impact area;

2. the acreage of the type and quality of wetland being impacted at each site;

3. a narrative, fully scaled or dimensioned drawings, and aerial photographs that show and explain the proposed mitigation;

4. a detailed description of the existing vegetation, habitat, and water quality conditions at the mitigation area;

5. the acreage of the proposed mitigation by wetland type;

6. documentation providing reasonable assurance that the proposed mitigation will be both jurisdictional and successful.

If the mitigation submittal is deemed by the Department to provide insufficient information for review, additional information requested by the Department shall be submitted.

If the Department, upon review of the proposed mitigation, determines that the proposed mitigation is inadequate to offset water quality degradation, wetland loss, and habitat degradation from this project, the permittee shall propose additional mitigation.

If the proposed mitigation plan is deemed acceptable by the Department, the Department shall establish construction conditions, success criteria and monitoring plans to be carried out for the approved mitigation. These conditions, criteria and monitoring plans shall be incorporated into the certification conditions as a minor modification.

No construction within wetland areas shall commence until the Department approves the mitigation plan, and the

mitigation construction conditions, success criteria and monitoring plans are incorporated into the certification conditions.

J. If determined to be appropriate by the Department to prevent future wetland losses or to ensure the success of the mitigation sites, the permittee shall agree to protect designated wetlands through a conservation easement document that is acceptable the Department. If required, the permittee shall record this easement in the public records of the respective counties where the wetlands are located prior to construction and after final approval by the Department.

(3) DISCHARGES TO SURFACE WATERS

A. Stormwater

1. Construction

To control run-off during construction which may reach and thereby pollute Waters of the State, necessary measures shall be utilized to settle, filter, treat or absorb silt-containing or pollutant-laden stormwwater to ensure against spillage or discharge of excavated material that my cause turbidity in excess of 29 Nephelometric Turbidity Units above background in Waters of the State. Control measures may consist of sediment traps, barriers, berms, and vegetation plantings. Exposed or disturbed soil shall be protected and stabilized as soon as possible to minimize silt and sediment laden run-off. The pH of the run-off shall be kept within the range of 6.0 to 8.5. The Permittee shall comply with Florida Administrative Code Chapters 17-25, 40E-2, and 40E-4. The Permittee shall complete the forms required by 17-25.09(1) and 40D-4 and submit those forms and the required information to the SFWMD for any modifications that might occur.

2. Operation

Any discharges from the site stormwater system via the emergency overflow structure which results from an event LESS than a ten-year, 24-hour storm (as defined by the U.S. Weather Bureau Technical Paper No. 40, or the DOT drainage manual, or similar documents) shall meet applicable State Water Quality Standards, Chapter 17-302, F.A.C., the Standards of Chapter 17-25, F.A.C., and Chapter 40-E, F.A.C.

B. Dewatering Operations

The dewatering operations during construction or plant operation shall be carried out in such a manner that all water withdrawn will not affect adjacent site cleanup activities, and all such water shall be detained on site. Any discharge of

dewatering effluent offsite shall meet surface water quality standards and be approved by SFWMD.

C. Wastewater

There shall be no discharge of industrial or domestic wastewaters from the site to waters of the state.

(4) GROUNDWATER

1. Discharges to Groundwaters

Any accidental discharges to groundwaters shall be collected and treated as necessary, or otherwise be of high enough quality, to be able to meet the applicable Water Quality Standards of Sections 17-301.402 and 17-301.404, F.A.C. If monitoring should indicate a violation of the standards, the licensee shall immediately notify the Southeast District office and SFWMD and institute remedial action.

2. Groundwater Monitoring Program

a. A ground water monitoring plan shall be submitted within 180 days of certification in accordance with Rule 17-28.700 F.A.C., for approval by the Southeast District Office. The groundwater monitoring program shall be reviewed and approved in accordance with COC I.13. The complete ground water monitoring plan shall be signed, sealed, and dated by a professional engineer or professional geologist demonstrating competency in the field of ground water monitoring, testing, and analysis. The monitoring plan shall contain the following information:

1. Locations of proposed unaffected natural background and down gradient monitoring wells and construction details of the monitoring wells.

2. Hydrogeological, physical, and chemical data for the site including: direction and rate of ground water flow; background water quality; porosity, horizontal and vertical permeability for the surficial aquifer(s) and the depth to, and lithology of the any confining bed(s); vertical permeability, thickness, and extent of any confining bed(s); topography, soil classification descriptions, and surface drainage systems surrounding the site; and inventory, depth, construction details (well drilling logs), and cones of depression (if known) for any water supply wells located within a one mile radius of the site.

3. Monitoring wells shall be constructed in accordance with Rule 17-532, F.A.C., except as follows: The minimum inside diameter shall be two inches. Flush threaded couplings shall be used to join polyvinyl

chloride (PVC) pipe.

b. Sampling of the shallow aquifer groundwater quality shall be conducted in at least four well clusters in the site vicinity. At least one of these wells shall be up the hydrologic gradient from the coalpile/wastewater pond area to provide current background data. Other wells shall be located down the hydrologic gradient from the ground water discharge areas. Specific location of any new wells or modifications to the monitoring program may be proposed by the applicant, but shall be approved by the Southeast District Office prior to the construction of the new monitoring wells.

c. Upon completion of construction of the groundwater monitoring system, the following information shall be submitted to the Southeast District Office for all ground water monitoring wells and any new well(s) constructed:

Well identification	Drillers log
Latitude/Longitude	Total depth of well
Aquifer monitored	Casing diameter
Screen type & slot size	Casing type and length
Screen length	SFWMD well construction
Elevation at top of pipe	permit numbers
Elevation at land surface	

d. Upon completion of construction of the groundwater monitoring system, but no less than 12 months before the commencement of operation the Permittee shall sample all ground water monitoring wells for the Primary and Secondary Drinking Water parameters included in Chapter 17-550, F.A.C., Public Drinking Water Systems. The specific parameters to be sampled are listed in Part II, Quality Standards, Analytical Methods, Sampling, Sections 17-550.310 and 17-550.320, F.A.C.

e. The field testing, sample collection and preservation and laboratory testing, including quality control procedures, shall be in accordance with Chapters 17-4.246, 17-160, and 17-301.401, F.A.C. Approved methods as published by the Department or as published in Standard Methods, A.S.T.M. or EPA methods shall be used. Approved methods for chemical analyses are summarized in the Federal Register, December 1, 1976 (41FR52780) except that turbidity shall be measured by the Nephelometric Method.

f. All required submittals shall be sent to the Southeast District Office within 60 days of installation of the ground water monitoring system. Upon receipt and review of the required data, quarterly sampling reports shall be submitted to the Southeast District Office commencing 12 months prior to commercial operation of the unit. Any required modifications of the groundwater monitoring system or program shall be made in accordance with the provisions of Condition I(22). The groundwater monitoring program may be reviewed annually.

g. Commencing at least 12 months before the start of commercial operation, the ground water monitoring wells shall be sampled and analyzed on a quarterly basis for the following parameters:

Volatile Organics:

Benzene
Toluene
Ethylbenzene
Xylenes

Acid Extractable Organics

Phenol
Methyl phenols
Dimethyl phenols

Inorganics

Ammonia
Cyanide
pH
Specific conductance
Fluoride
Chloride
Sulfate
Sulfide
Gross Alpha

Base/Neutral Extractable Organics

Acenaphthene
Acenaphthylene
Anthracene
Napthalene
Fluorene
Phenanthrene
1,2-Benzofluorene
1-Methylnaphthalene
2-Methylnaphthalene
Fluoranthene

Metals

Iron
Manganese
Arsenic
Lead
Selenium
Cadmium
Chromium

h. For four quarters commencing at least 12 months before the start of commercial operation all groundwater monitoring wells shall be sampled and the samples analyzed for the parameters on the following list. Thereafter, one downgradient well, as selected by the Department, shall be sampled and analyzed annually for parameters on the following list. Upon demonstration that key indicators such as sulfate, iron, pH or chloride show a significant increase over background levels, all affected wells shall be sampled and analyzed for the following parameters:

Parameters	Storet Codes	Units
Acrolein	034210	ug/l
Acrylonitrile	034215	ug/l
Benzene	034030	ug/l
Bromodichloromethane	032101	ug/l
Bromoform	032104	ug/l
Bromothane	034413	ug/l
Carbon Tetrachloride	032102	ug/l

Chlorobenzene	034301	ug/l
Chloroethane	034311	ug/l
Chloroform	032106	ug/l
2-Chloroethylvinylehter	034576	ug/l
Chloromethane	034418	ug/l
Dibromochloromethane	032105	ug/l
1,2-Dichlorobenzene	034536	ug/l
1,3-Dichlorobenzene	034566	ug/l
1,4-Dichlorobenzene	034571	ug/l
1,1-Dichloroethane	034496	ug/l
1,2-Dichloroethane	034531	ug/l
1,2-Dichloroethene	034501	ug/l
trans-1,2-Dichloroethene	034546	ug/l
1,2-Dichloropropane	034541	ug/l
cis-1,3-Dichloropropene	034704	ug/l
trans-1,2-Dichloropropene	034699	ug/l
Ethylbenzene	034371	ug/l
Methylene chloride	034423	ug/l
1,1,2,2-Tetrachloroethane	034516	ug/l
Tetrachloroethane	034475	ug/l
Toluene	034010	ug/l
1,1,1-Trichloroethane	034506	ug/l
1,1,2-Trichloroethane	034511	ug/l
Trichloroethene	039180	ug/l
Trichlorofluoromethane	034488	ug/l
Vinyl chloride	039175	ug/l
Acenaphtene	034205	ug/l
Acenaphthylene	034200	ug/l
Anthracene	034220	ug/l
Aldrin	039330	ug/l
Benzo (a)anthracene	034034	ug/l
Benzo (b)fluoranthene	034230	ug/l
Benzo (k)fluoranthene	034242	ug/l
Benzo (a)pyrene	034247	ug/l
Benzo (g,h,i)perylene	034521	ug/l
Benzyl Butyl Phthalate	034292	ug/l
beta-BHC	039338	ug/l
delta-BHC	034259	ug/l
Bis (2-chloroethyl) ether	034273	ug/l
Bis (2-chloroethoxy) methane	034278	ug/l
Bis (2-ethylhexyl) phthalate	039100	ug/l
Bis (2-chloroisopropyl) ether	034283	ug/l
4-Bromophenyl phenyl ether	034636	ug/l
Chlordane	039350	ug/l
2-Chloronaphthalene	034581	ug/l
4-Chlorophenyl phenyl ether	034641	ug/l
Chrysene	034420	ug/l
4,4'-DDD	039310	ug/l
4,4'-DDE	039320	ug/l
4,4'-DDT	039300	ug/l
Dibenzo(a,h,)anthracene	034556	ug/l
Di-n-butylphthalate	039110	ug/l
1,2-Dichlorobenzene	034536	ug/l
1,3-Dichlorobenzene	034566	ug/l

1,4-Dichlorobenzene	034571	ug/l
3,3'-Dichlorobenzidine	034631	ug/l
Dieldrin	039380	ug/l
Diethyl phthalate	034336	ug/l
Dimethyl phthalate	034341	ug/l
2,4-Dinitrotoluene	034611	ug/l
2,6-Dinitrotoluene	034626	ug/l
Endosulfan sulfate	034351	ug/l
Edrin aldehyde	034366	ug/l
Fluoranthene	034376	ug/l
Fluorene	034381	ug/l
Heptachlor	039410	ug/l
Heptachlor epoxide	039420	ug/l
Hexachlorobenzene	039700	ug/l
Hexachlorobutadience	034391	ug/l
Hexachloroethane	034396	ug/l
Indeno(1,2,3-cd)pyrene	034403	ug/l
Isophorone	034408	ug/l
Napthanene	034696	ug/l
Nitrobenzene	034447	ug/l
N-Nitrosodi-n-Propylamine	034428	ug/l
PCB-1016	034671	ug/l
PCB-1221	039488	ug/l
PCB-1232	039492	ug/l
PCB-1242	039496	ug/l
PCB-1248	039500	ug/l
PCB-1254	039504	ug/l
PCB-1260	039508	ug/l
Phenanthrene	034461	ug/l
Pyrene	034469	ug/l
Toxaphene	039400	ug/l
1,2,4-Trichlorobenzene	034551	ug/l
4-Chloro-3-methylphenol	034452	ug/l
2-Chlorophenol	034586	ug/l
2,4-Dichlorophenol	034601	ug/l
2,4-Dimethylphenol	034606	ug/l
2,4-dinitrophenol	034616	ug/l
4,6-dinitro-o-cresol	034657	ug/l
2-Nitrophenol	034591	ug/l
4-Nitrophenol	034646	ug/l
Pentachlorophenol	039032	ug/l
Phenol	034694	ug/l
2,4,6-Trichlorophenol	034621	ug/l
Benzidine	039120	ug/l
alpha-BHC	039337	ug/l
gamma-BHC (Lindane)	039340	ug/l
Endosulfan I	034361	ug/l
Endosulfan II	034356	ug/l
Endrin	039390	ug/l
Hexachlorocyclopentadiene	034386	ug/l
N-Nitrosodimethylamine	034438	ug/l
N-Nitrosodiphenylamine	034433	ug/l
Antimony	001097	ug/l
Arsenic	001002	ug/l

Beryllium	001012	ug/l
Cadmium	001027	ug/l
Chromium	001034	ug/l
Copper	001042	ug/l
Cyanide	000720	mg/l
Lead	001051	ug/l
Mercury	071900	ug/l
Nickel	001067	ug/l
Selenium	001147	ug/l
Silver	001077	ug/l
Thallium	001059	ug/l
Zinc	001092	ug/l
2,3,7,8-tetrachlorodibenzo-p-dioxin	034675	ug/l

Water elevations for all wells shall be measured on a quarterly schedule, and submitted to the Department along with the quartrly data and shall be measured in reference to 1929 NGVD for all monitoring wells (1/100 of a foot) and surface waters (1/10 of a foot).

i. Records of monitoring information shall include: the date, exact place, and time of sampling or measurements; the person responsible for performing the sampling or measurements; the date(s) analyses were performed; the person responsible for performing the analyses; analytical techniques or methods used; and results of such analyses.

j. All ground water analysis shall be submitted within 60 days of sampling on DER form 17-1.216(2) with a summary of all exceedances of the MCL's per F.A.C. 17-550 to: Florida Department of Environmental Regulation, Southeast Florida District Office, 1900 South Congress Avenue, West palm Beach, Florida 32399-2400

k. In order to assure that representative samples are obtained, it shall be the responsibility of the permittee to maintain the integrity of the monitoring stations and protect them from destruction or vandalism. Should any of the well clusters be destroyed, the permittee shall notify the Department immediately. The notification shall include pertinent information as to the cause, and what steps are being taken to replace the monitoring station and prevent the recurrence of such problems in the future.

(5) SANITARY WASTES

a. Disposal of sanitary wastes from construction toilet facilities shall be in accordance with applicable regulations of the appropriate local health agency.

b. A complete submittal of plans, drawings and specifications for waste pumps, lift stations, sewage collection systems, and wastewater collection systems in

accordance with appropriate DER rules shall be furnished to the Southeast District Office for approval at least 180 days prior to start of construction for the particular of such component. In order to obtain approval, the receiving sewage treatment plant shall indicate it has available capacity and its acceptance of the proposed connection of the wastewater collection system. Also plans and specifications for connections to off-site sewage and wastewater transmission systems shall be furnished to the Southeast District Office for review in accordance with Condition I(13). Department approval shall be obtained prior to the start of construction.

(6) SOLID/HAZARDOUS WASTES

A. Construction

Solid wastes resulting from construction shall be disposed of in accordance with the applicable regulations of Chapter 17-701, F.A.C. Hazardous waste/materials handling contingency plans shall be submitted to the S.E. District Office for review and approval at least 90 days prior to start of construction.

B. Operation

1. No bottom ash, fly ash, spent acid gas control media, wastewater treatment sludges, or other forms of solid waste shall be disposed of in Florida, except in a licensed off-site landfill in accordance with all applicable portions c Chapters 17-701 and 17-702, F.A.C. Plans of solid waste disposal contingency plans for handling hazardous waste/materials, shall be provided to the Southeast District Office and the Division of Waste Management for review and approval at least 90 days prior to start of operation of the ICL Unit. Review shall be performed in accordance with Condition I(13). The final plans for this facility shall include provisions for the isolated temporary handling of suspected hazardous, or toxic wastes. The ICL shall not be operated until an out of state disposal area or a Florida landfill capable of disposing of plant wastes provides a letter or contract indicating acceptance of such wastes.

2. No suspected or known hazardous, toxic, or infectious wastes as defined by Federal, State or local statutes, rules, regulations or ordinances shall be burned or landfilled at the site.

3. Ash and FGD waste prior to transport to the offsite disposal site shall be stored in an enclosed building on an impervious surface. Final disposal of this solid waste shall not be placed into a landfill in Florida without prior approval of Department. Use of an offsite lined landfill or other method in Florida may be approved by the Southeast

District Office. Any leachate generated within the solidwaste storage area shall be collected and disposed of by a method approved by the Southeast District Office. The Southeast District Office shall notify the SFWMD of the plans and specifications regarding the above referenced method.

4. A report shall be prepared detailing the amount and type (ash, FGD, special wastes, boiler residue, and water treatment sludges, etc.) of materials produced at the site, and the treatment or disposal provided. These reports shall be furnished to the Southeast District Office quarterly, commencing 120 days after the ICL becomes operational and is producing residues.

5. There shall be no discharge to waters of the State of polychlorinated biphenyl compounds.

(7) OPERATIONAL SAFEGUARDS

The overall design and layout of the facilities shall be such as to mitigate potential adverse effects to humans and the environment. Security control measures shall be utilized to prevent exposure of the public to hazardous conditions. The Federal Occupational Safety and Health Standards will be complied with during construction and operation. The safety standards specified under Section 440.56, Florida Statutes, by the Industrial Safety Section of the Florida Department of Commerce will be complied with during operation.

(8) PROTECTION OF VEGETATION

The Licensee shall develop the site so as to retain a buffer of trees or shall plant a buffer of trees sufficient to minimize the aesthetic and noise impacts of the facility. The buffer, as far as practicable, shall be of sufficient height and width suitable for the purpose of mitigating both construction and operational impacts of the facility.

PART III

GAME AND FRESH WATER FISH COMMISSION

(1) No more than 60 days prior to commencement of any clearing activities on the Project Site or in the pipeline right-of-way, respectively, a wildlife survey shall be conducted of the site or the pipeline right-of-way, whichever is applicable, the purpose of which is to update and supplement the survey results presented in the Site Certification Application concerning the presence of listed species (endangered or threatened species, or species of special concern) likely to occur on the site or in the right-of-way based on range and habitat. This survey shall be consistent with methodologies established or accepted by the Florida Game and Fresh Water Fish Commission (FGFWFC). Results of said survey(s) shall be submitted to the FGFWFC and the United States Fish and Wildlife Service within seven days of completion thereof. If the survey indicates that any listed species will be affected by construction of the Project or pipeline, the Permittee and the FGFWFC shall, within 15 days of receipt of the survey by the FGFWFC, consult and determine the appropriate measures necessary to avoid, minimize, mitigate, or otherwise appropriately address such impacts.

(2) ICL shall place or construct culverts or similar structures to facilitate movement of wildlife across or beneath the perimeter access road to and from upland preserve areas of the Project site. The structures shall be located, in reference to the Project's Site layout, as follows:

(a) One structure under the road in the area of the cooling water storage pond;

(b) One structure under the road in the area of Wetland No. 3; and

(c) One structure under the road in the area of Wetland No. 1.

These structures shall be designed to remain dry during a two year storm event and shall be approximately 3 feet high and 5 feet wide.

ICL shall submit detailed designs of the structures and their location to the GFWFC for review and approval 60 days prior to construction of the portions of the access road being culverted.

(3) Existing wetlands shall not be used as stormwater retention areas for run-off from developed areas of the Project site.

(4) At least 60 days before commencement of onsite

construction, ICP shall submit an upland preserve and wetland management plan to the Florida Game and Fresh Water Fish Commission and to Martin County for review and approval. This plan shall present management practices for the seven wetlands and the upland preserve areas, as designated in the Application and the PUD planned unit development (industrial) zoning agreement of Martin County, and illustrated on figure 1. At a minimum, this plan shall include a statement of preserve management objectives; a statement of what habitat functions the preserves are expected to provide; a description of how habitat values will be maintained, including measures such as perimeter staking, and vegetation control; if controlled burning is proposed to control vegetation, a schedule of fire management through a certified burn specialist and including, but not limited to burn conditions, burn frequency, and measures taken to avoid spread of wildfire; measures to be taken to remove exotic vegetation from both uplands and wetlands; legal instrument(s) by which preserve areas and wetlands have been reserved from future developmental uses; and the entity responsible for management.

PART IV

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

A. LEGAL/ADMINISTRATIVE CONDITIONS

1. GENERAL

a. Responsible Entity

The Permittee shall be responsible for compliance with the Certification Conditions. If contractual rights, duties, or obligations are transferred under this Certification, notice of such transfer or assignment, including the identification of the entity responsible for compliance with the Certification, shall immediately be submitted to the Florida Department of Environmental Regulation and the SFWMD by the previous certification holder (Permittee) and the Assignee. Any assignment or transfer shall carry with it the full responsibility for the limitations and conditions of this Certification. The previous Permittee shall be responsible for informing the Assignee of all authorized facilities and uses and the conditions under which they were authorized.

b. Minimum Standards

This Certification is based on the Permittee's submitted information to the SFWMD which reasonably demonstrates that adverse off-site water resource related impacts will not be caused by the authorized activities. The plans, drawings and design specifications submitted by the Permittee shall be considered the minimum standards for compliance.

c. Compliance Requirements

This project must be constructed, operated and maintained in compliance with and meet all non-procedural requirements set forth in Chapter 373, F.S., and Chapters 40E-2 (Consumptive Use), 40E-3 (Water Wells), 40E-4 (Surface Water Management), and 40E-6 (Right-of-Way), F.A.C., and as expressly allowed in these Conditions of Certification.

d. Off-site Impacts

It is the responsibility of the Permittee to ensure that adverse off-site water resource related impacts do not occur during the construction, operation, and maintenance of the project.

e. Liability

The Permittee shall hold and save the SFWMD harmless from any and all damages, claims, or liabilities which may arise by reason of the construction, operation, maintenance and/or use of any facility authorized by this Certification, to the extent allowed under Florida law.

f. Construction, Operation, and Maintenance Responsibilities

The Permittee shall be responsible for the construction, operation, and maintenance of all facilities installed for the proposed project.

g. Access

SFWMD representatives shall have the same rights of access as set forth in Condition I(8) of the Administrative Conditions of this certification.

h. Post Certification Information Submittals

Information submitted to the SFWMD subsequent to Certification, in compliance with the conditions of this Certification, shall be for the purpose of the SFWMD determining the Permittee's compliance with the Certification conditions and the non-procedural criteria contained in Chapters 40E-2, 40E-3, 40E-4, and 40E-6, F.A.C., as applicable, prior to the commencement of the subject construction, operation and/or maintenance activity covered thereunder.

i. Post Certification Permit Modifications

Once this Certification has been issued, the SFWMD will require modification of any permits issued by the SFWMD to any entities whose activities will be affected by the proposed project to reflect the activities authorized by this Certification.

j. Post Certification Construction Notifications

At least 30 days prior to the commencement of construction, the Permittee or Project Engineer shall notify the SFWMD Field Engineering Division (using the appropriate SFWMD Form) of the actual or anticipated construction start date and the expected completion date/duration of construction. Annual construction status reports shall be submitted by the Permittee to the SFWMD Field Engineering Division (using the appropriate SFWMD Form) beginning one year after the initial construction start date.

k. Operation Authorization

Operation of the cogeneration facility shall not begin until

the Florida Department of Environmental Regulation has received an executed agreement between the Permittee and an entity capable of receiving and disposing of the combustion waste products generated by the proposed facility.

1. Enforcement

The SFWMD may enforce this certification pursuant to condition I(20) of the Administrative Conditions of this certification.

2. PROCESSING OF INFORMATIONAL REQUESTS

a. At least ninety (90) days prior to the commencement of construction of any portion of the proposed project, the Permittee shall submit to SFWMD staff, for a completeness and sufficiency review, any pertinent additional information required under the SFWMD's conditions of Certification for that portion proposed for construction. If SFWMD staff does not issue a written request for additional information within thirty (30) days, the information will be presumed to be complete and sufficient.

b. Within sixty (60) days of the determination by SFWMD staff that the additional information is complete and sufficient, the SFWMD shall determine and notify the Permittee in writing whether the proposed activities conform to SFWMD criteria, as required by Chapters 40E-2, 40E-3, 40E-4, and 40E-6, F.A.C., and the Conditions of Certification. If necessary, the SFWMD shall identify what items remain to be addressed. No construction activities shall begin until the SFWMD has determined either in writing, or by failure to notify the Permittee in writing, that the activities are in compliance with the applicable SFWMD criteria.

c. Since this Certification is the only form of permit required from any agency, it is understood that the Permittee and the SFWMD shall strive to resolve disputes by mutual agreement.

d. Objections to modifications of the terms and conditions of certification shall be resolved through the process established in Section 403.516, F.S.

e. Subsequent modifications to the drawings and supporting calculations submitted to the SFWMD which may alter the quantity and/or quality of waters discharged off-site shall be made pursuant to Section 403.516, F.S., and Rule 17-17.211, F.A.C. As part of this process, these modifications shall be reviewed by the SFWMD for a determination that the modifications are in compliance with the non-procedural requirements of Chapters 40E-2, 40E-3, 40E-4, and 40E-6, F.A.C., prior to the commencement of construction.

f. The SFWMD and the Permittee may jointly agree to vary the informational requirements.

B. WATER USE CONDITIONS

1. GENERAL

a. Water Shortage Compliance

In the event of a declared water shortage, the Permittee must comply with any water withdrawal reductions or monitoring requirements ordered by the SFWMD in accordance with the Water Shortage Plan, Chapter 40E-21, F.A.C.

b. Impacts on Existing Legal Uses

The Permittee shall be responsible for mitigating, to the satisfaction of the SFWMD, any adverse impacts on existing legal uses caused by the surface or ground water withdrawals authorized by this Certification. If adverse impacts occur, or are imminent, SFWMD reserves the right to curtail withdrawal rates pursuant to the enforcement provisions of Condition IV.A.1.1 of these conditions. The adverse impacts can include:

(1) A reduction in well water levels that impairs the ability of an adjacent well to produce water (an adjacent well may be a domestic well, lawn irrigation well, public water supply well, etc.);
(2) A significant reduction in water levels in an adjacent water body such as a lake, pond, wetland, or canal system;
(3) Saline water intrusion or induction of pollutants into the water supply of an adjacent water user, resulting in a significant reduction in water quality; and/or
(4) A change in water quality that causes impairment or loss of use of a well or water body.

c. Impacts On Existing Off-Site Land Uses

The Permittee shall be responsible for mitigating, to the satisfaction of the SFWMD, any adverse impacts on existing off-site land uses as a consequence of the surface or ground water withdrawals authorized by this Certification. If the withdrawals cause an adverse impact on existing land uses, the SFWMD reserves the right to curtail future withdrawal rates pursuant to the enforcement provisions of Condition IV.a.1.1 of these conditions.

Adverse impacts can include:

(1) A significant reduction in water levels in an adjacent water body such as a lake, pond, wetland, or canal system;
(2) Land collapse or subsidence caused by a reduction in water levels;

(3) Damage to crops and other vegetation, causing financial harm to the landowner; and/or
(4) Damage to the habitat of rare, endangered or threatened species.

d. Well System Operation

At any time, if there is an indication that the well casing, valves, or controls associated with the on-site backup well system leak or have become inoperative, the Permittee shall be responsible for making the necessary repairs or replacement to restore the well system to an operating condition acceptable to the SFWMD. Failure to make such repairs shall be cause for requiring that the well(s) be filled and abandoned in accordance with the procedures outlined in Chapter 40E-3 (Water Wells), F.A.C.

2. SITE SPECIFIC DESIGN AUTHORIZATIONS

a. Authorized Withdrawals

Source	Maximum Annual Allocation (MGY)	Maximum Daily Allocation (MGD)
L-63N Canal	1484.00	4.69
Upper Production Zone- Upper Floridan Aquifer	38.70	0.1
Lower Production Zone- Upper Floridan Aquifer	336.60	4.46

b. Limitations on Authorized Withdrawals

(1) Withdrawals from the L-63N Canal shall only occur when the water level in the L-63N Canal is at or above 17.50 feet NGVD.
(2) Withdrawals from the Upper and Lower Production Zones of the Upper Floridan aquifer shall only occur when the water level in the L-63N Canal is below 17.50 feet NGVD.
(3) Withdrawals from the L-63N Canal shall be used for cooling, plant processing and irrigation purposes. Withdrawals from the Upper and Lower Production Zones of the Upper Floridan aquifer shall be used for cooling and plant processing purposes.
(4) Any withdrawals from the L-63N Canal or the Upper or Lower Production Zone of the Upper Floridan aquifer in excess of the amounts specified herein shall require prior SFWMD approval.
(5) The authorization of withdrawals from the Upper Floridan aquifer is predicated on the successful completion of the Aquifer Performance Test reuired by Condition IV.B.3.a of this Certification and, if shown to be necessary, the successful implementation of the required mitigation for impacts to existing legal users. If mitigation is required for impacts to Caulkins Citrus Company, the mitigation shall be consistent with the te

of the agreement between the Permittee and Caulkins Indiantown Citrus Company dated July 18, 1991.

(6) The withdrawals from the Upper and Lower Production Zones of the Upper Floridan aquifer are authorized for a period not to exceed 75 days at the specified maximum daily allocation or 90 days at an allocation not to exceed the maximum annual allocation. The permittee shall not exceed a total of 90 withdrawal days from the Floridan aquifer during any consecutive 365 day period without prior approval from the SFWMD.

c. Authorized Withdrawal Facilities

3 - 1,700 GPM Surface Water Pumps in L-63N
1 - 10" X 1340' Flowing Well cased to 500' (existing well)
1 - 10" X 1300' Flowing Well cased to 600'
4 - 14" X 1600' Flowing Wells cased to 1400'

d. Authorized Surface Water Withdrawal Elevation

The intake for the surface water withdrawal facilities in L-63N shall be designed such that surface water withdrawals shall cease when water levels in the canal fall below 17.50' NGVD (See also Condition E.3.a(5)).

e. Artesian Floridan Wells

The maximum installed capacity of any authorized Floridan aquifer well shall be that capacity at which the well is capable of flowing in a free flowing mode relative to the existing land elevation at the well site. Pumping equipment shall not be installed on any well as a means to regain or increase capacity unless otherwise allowed by SFWMD regulations.

f. Modification of Authorized Withdrawals

By January 1, 2005, and every ten years thereafter, unless extended by mutual agreement between the Permittee and SFWMD, the Permittee shall submit to the SFWMD a report on the project's consumptive water use which contains the information required by Chapter 40E-2, F.A.C., as in effect at that time. Within 90 days after receipt of the report, SFWMD shall evaluate the information, and issue a written notification to DER and the Permittee as to whether the maximum annual withdrawals of water for consumptive use authorized by this Certification remain in compliance with the provisions of Chapter 373, F.S., and Chapter 40E-2, F.A.C., as in effect at that time. If the notification indicates that the withdrawals are not in compliance with those provisions, SFWMD shall recommend possible alternatives for bringing the withdrawals into compliance or otherwise meeting the minimum consumptive water use needs of the certified project. If mutual agreement cannot be reached within 180 days after issuance of the written notification on whether the maximum annual withdrawals of water for consumptive use remain in compliance, then the written notification shall be

immediately referred to the Division of Administrative Hearings (DOAH) for resolution in accordance with the procedural provisions of Sections 403.516(1)(c) and 120.57, F.S. In any proceeding conducted pursuant to this Condition of Certification, SFWMD shall demonstrate that the authorized water uses are no longer consistent with SFWMD's non-procedural criteria. The Permittee shall then demonstrate its entitlement to maintaining the authorized water uses by showing that the authorized water use is consistent with the non-procedural criteria of SFWMD for such water uses or that a variance or other relief is warranted. The hearing officer shall submit a recommended order to the Siting Board on whether the authorized water uses should be modified. The Siting Board shall then enter a final order on the matter, which order will constitute final agency action.

3. ADDITIONAL INFORMATION REQUIREMENTS

a. Floridan Aquifer Withdrawals

The authorized withdrawals from the Floridan aquifer are subject to the submittal of the following tests and analyses, a SFWMD evaluation of the results for a determination of compliance with the non-procedural requirements of Chapter 40E-2, F.A.C., and SFWMD's written approval to initiate withdrawals. The following information shall be submitted:

(1) The results of the Aquifer Performance Test (APT) to be conducted at the project site once the on-site water storage pond has been constructed or an alternate disposal method is approved by DER and SFWMD. The test shall be designed to determine the transmissivity and storage of the Upper and Lower production z of the Upper Floridan aquifer and the leakance between the zon A plan which details the APT shall be submitted to the SFWMD for approval at least 30 days prior to the commencement of the test.

(2) An analysis of the potential impacts to existing legal users, which exist on the date of this certification, using the results obtained from the Hydrogeologic Study, previously submitted and accepted by SFWMD, and the APT. The SFWMD shall approve the method for determining adverse impacts. Should adverse impacts be predicted to occur to any existing legal user, the Permittee shall mitigate these impacts, to the satisfaction of the SFWMD, and consistent with the terms of the agreement between the Permittee and Caulkins Indiantown Citrus Company, dated July 18, 1991.

(3) The Aquifer Performance Test results and any impact/mitigation analysis shall be submitted, signed, and sealed by a Florida Registered Professional Geologist.

b. Dewatering Operations

Prior to the commencement of construction of those portions of the project which involve dewatering activities, a detailed

plan for the proposed dewatering activities must be reviewed by the SFWMD for a determination of compliance with the non-procedural requirements of Chapter 40E-2, 40E-3, and 40E-4, F.A.C. The following information shall be submitted:

(1) A detailed site plan which shows the location(s) for each proposed dewatering area;
(2) The method(s) used for each dewatering operation;
(3) The maximum depth for each dewatering operation;
(4) The location and specifications for all proposed wells and/or pumps associated with each dewatering operation;
(5) The discharge method, route, and location of receiving waters generated by each dewatering operation, including the measures (Best Management Practices) that will be taken to prevent water quality problems in the receiving water(s);
(6) The duration of each dewatering operation;
(7) An analysis of the impacts of each proposed dewatering operation which indicates that no significant impacts will occur to any existing on-site and/or off-site legal users, wetlands, or existing plumes of groundwater contamination;
(8) The location of any infiltration trench(es) and/or recharge barriers; and
(9) All plans must be signed and sealed by a Professional Engineer and a Professional Geologist, both registered in the State of Florida.

c. Surface and Groundwater Withdrawal Monthly Reporting Requirements

The Permittee shall submit daily surface water and groundwater withdrawal quantities, separated by source, to the SFWMD on a monthly basis beginning with the month following initiation of construction dewatering and/or construction and operation of the proposed canal and/or the well withdrawal facilities.

d. Surface Water and Groundwater Monitoring Program

Within six months of issuance of this Certification, the Permittee shall develop and implement a surface water and groundwater monitoring program. Within three months of issuance of this Certification, a preliminary proposal shall be submitted to the SFWMD for a determination of compliance with the non-procedural requirements of Chapter 40E-2 and 40E-4, F.A.C. In developing the monitoring program, the Permittee shall consider canal withdrawal facility and well locations, depth and method of construction, types of screens, and frequency of data collection. In addition, the monitoring program shall include the following:

(1) Permittee shall monitor water levels and water quality from the Upper and Lower Production Zones of the Floridan aquifer system. Water quality monitoring from each zone shall include the determination of the chloride ion concentration and specific conductance on a monthly basis during periods of withdrawal.

Water levels shall be collected from each zone monthly and referenced to NGVD. Data shall be submitted to the District in the month following data collection.

(2) Permittee shall collect water level data from the L-63 c adjacent to the pump station on a daily basis. Water levels s be referenced to NGVD and submitted to the District monthly. Permittee shall collect water quality data from the discharge end of the pipeline on a monthly basis. Water quality shall include the determination of the chloride ion concentration, specific conductance, TDS, PH, total phosphorus and total nitrogen. The data shall be submitted to the District on a monthly basis.

(3) Permittee shall monitor the Surficial aquifer for water level (referenced to NGVD) and water quality data during the dewatering operations. The frequency of data collection and water quality constituents to be collected shall be determined by the permittee and approved by District staff prior to commencement of dewatering.

e. New Well Construction

Prior to the construction of the proposed on-site back-up wells, the Permittee shall submit the drilling plans and other pertinent information required by Chapter 40E-3, F.A.C., to the SFWMD for review and approval. If the final well locations are different from those originally proposed in the certification application, the Permittee shall also submit to the SFWMD, for a determination of compliance with the non-procedural requirements of Chapter 40E-2, F.A.C., an evaluation of the impacts of the proposed pumpage from the proposed well location(s) on adjacer existing legal users, pollution sources, environmental features, the saline water interface, and water bodies.

C. SURFACE WATER MANAGEMENT CONDITIONS

1. GENERAL CONDITIONS

a. Professional Engineer Certificate

The operation of the surface water management system authorized under this Certification shall not become effective until a Florida Registered Professional Engineer certifies, upon completion of each phase, that these facilities have been constructed in accordance with the design approved by the SFWMD. Within 30 days after completion of construction of th surface water management system, the Permittee or authorized agent shall submit the engineer's certification and notify the SFWMD Field Engineering Division that the facilities are ready for inspection and approval. Such notification shall include as-buil drawings of the site which shall include elevations, locations, and dimensions of components of the surface water management system.

b. Impacts on Fish, Wildlife, Natural Environment Values and Water Quality

The Permittee shall prosecute the work authorized under this Certification in a manner so as to minimize any adverse impacts of the authorized works on fish, wildlife, natural environment values, and water quality. The Permittee shall institute necessary measures during the construction period, including necessary compaction of any fill materials placed around newly installed structures and/or the use of silt screens, hay bales, seeding and mulching, and/or other similar techniques, to reduce erosion, turbidity, nutrient loading and sedimentation in the receiving waters. Reference: Sections 373.413(1) and 373.416(1) F.S.; Rules 40E4.091(1)(a), 40E-4.301, and 40E-4.381(2)(a), F.A.C.

c. Discharge Structures

Discharge structures, where appropriate, shall include a baffle, skimmer, or other mechanism suitable for preventing oil, grease, or other floatable materials from discharging to and/or from retention/detention areas.

d. Off-site Discharges

Off-site discharges during construction and development shall be made only through the discharge facilities authorized by this Certification. No roadway or building construction, except for the site access road and incidental construction activities, shall commence on-site until completion of the permitted discharge structure and detention areas. All runoff generated by incidential construction activities shall be retained on-site until the discharge facility is operational. Water discharged from the project shall be through structures having a mechanism suitable for regulating upstream water stages. Stages may be subject to operating schedules satisfactory to the SFWMD.

e. Correction of Adverse Impacts Due to Ditch Relocation

The Permittee shall be responsible for correcting in a timely manner any adverse on-site or off-site impacts to water quality, water quantity and/or the environment which may occur as a result of the relocation of the existing on-site drainage ditch and the installation of additional culverts. Reference: Sections 373.413 and 373.414; Rules 40E-4.091, 40E-4.301 and 40E-4.381, F.A.C.

f. Correction of Water Quality Problems

The Permittee shall be responsible for the correction of any sedimentation, turbidity, erosion, shoaling and/or other water quality problems that result from the

construction, operation, and/or maintenance of the works authorized under this Certification.

g. Additional Water Quality Requirements

The Permittee may be required to incorporate additional water quality treatment methods into the surface water management system if such measures are shown to be necessary.

h. Pipeline Access Roads

The Permittee shall, whenever available, utilize adjacent existing roads for access to the water transmission pipeline for construction, operation and/or maintenance purposes. Access roads which must be constructed in areas where an existing road is not available shall be constructed in a manner which does not impede natural drainage flows and minimizes impacts to on-site and adjacent wetlands.

i. Dike Designs for Minor Impoundments

Dike designs for minor impoundments shall be in accordance with commonly accepted engineering principles and State laws. Side slopes shall be no steeper than 2:1 (horizontal to vertical) and top widths no less than five feet.

j. Minimum Freeboard for Minor Impoundments

The minimum freeboard for minor impoundments above the maximum water depth shall be equal to the maximum water de dimensions for a 25 year, 72 but not less than two feet nor mo than three feet.

2. SITE SPECIFIC DESIGN AUTHORIZATIONS

a. Allowable Discharge

The surface water management system for the proposed project shall be designed such that peak post-development discharges from the developed area of the project site meet the following allowable discharges:

BASIN No.	ALLOWABLE DISCHARGE (CFS)	RECEIVING BODY OR USE
1	0	Used in Plant Process
2	1	Discharge into Wetland #6
3	1	Discharge into Wetland #4
4	0	Used in Plant Process
5	0	Used in Plant Process
6	9	Discharges into On-Site Toe Ditch

b. Authorized Discharge Facilities

BASIN 2:

1-0.25'diameter circular orifice with the invert at elevation 33.5' NGV 1-20ø V-notch with the invert at elevation 35.5' NGVD.

1-4.0' wide weir with the crest at elevation 36.5' NGVD and a length of 18" diameter culvert discharging into 20' of rip-rapped spreader swale.

BASIN 3:

1-0.25'diameter circular orifice with the invert at elevation 32.7' NGVD 1-20ø V-notch with the invert at elevation 34.6' NGVD

1-4.0' wide weir with the crest at elevation 36.0' NGVD and a length of 18" diameter culvert discharging into 20' of rip-rapped spreader swale.

BASIN 6:

1-12' wide weir consisting of a 3 sided drop inlet with the crest at 37.5' NGVD.

c. Authorized Receiving Water

C-44 Canal via existing ditch system

d. Authorized Design Elevations

BASIN NO.	CONTROL ELEVATION	MINIMUM ROAD CROWN ELEVATION	MINIMUM FINISHED FLOOR ELEVATION
1	N/A (Lined Basin)	35.7' NGVD	37.3' NGVD
2	33.5' NGVD	35.5' NGVD	36.8' NGVD
3	32.7' NGVD	34.9' NGVD	37.7' NGVD
4	N/A (Lined Basin)	34.4' NGVD	36/2' NGVD
5	N/A (Lined Basin)	N/A	N/A
6	N/A (Lined Basin)	N/A	N/A

e. Revisions to Site Specific Design Authorizations

Any revisions to the above site specific design authorizations proposed by the Permittee subsequent to the issuance of this Certification shall be submitted to the SFWMD for review and approval at least 90 days prior to implementation. The submittal shall include all the information necessary to support the proposed request, including detailed drawings, topographic maps, average wet season water table elevations, calculations and/or any other applicable data. Such requests may be included as part of the surface water management system construction plan

submittals required by this Certification provided they are clearly identified as a requested revision to the previously authorized design.

3. ADDITIONAL INFORMATION REQUIREMENTS

a. Surface Water Management System Construction Plans

Prior to the commencement of construction of any portion of the project which affects the movement of waters, all construction activities for that portion of the proposed project which may obstruct, divert, control, impound or cross waters of the state shall be reviewed by the SFWMD for a determination of compliance with the non-procedural requirements of Chapters 40E-2 and 40E-4, F.A.C. All plans, detail sheets and calculations shall be signed and sealed by a Florida Registered Professional Engineer. For all construction activities, the following information shall be submitted unless previously submitted to and accepted by the District:

(1) Detailed paving, grading and drainage plans which clearly show all on-site water management areas, all on-site and perimeter site grades, all internal and external discharge structures, how runoff will be routed within and discharged from the site, a description of and specific location for a benchmark in the vicinity of the control structure(s), and calculations which demonstrate that the design storm will be held on-site and verify the stage/storage assumptions;
(2) Detailed plans of all proposed roads, parking lots and building pads which demonstrate compliance with Martin County and SFWMD flood protection criteria;
(3) Detailed plans and supporting calculations for the surface water management systems that will serve the proposed on-site access roads and railroad spur which demonstrate compliance with SFWMD flood protection and water quality criteria;
(4) Cross-sections of all proposed control structures which demonstrate compliance with SFWMD water quality and quantity design criteria;
(5) Detailed plans and supporting calculations for the erosion control mechanism and liner to be provided within the relocated drainage ditch which demonstrate that the proposed erosion control mechanism has been designed to form an occlusive seal with the hardpan confining layer in order to prevent seepage of water from the adjacent wetland areas, to prevent scouring of the channel cross-section, and to maintain existing flows through the ditch (See also Condition D.3.a.(3));
(6) If control elevations are revised for any portion of the proposed surface water management system, revised calculations which demonstrate compliance with the SFWMD's retention/detention criteria for both quantity and quality purposes;
(7) If control elevations are revised for any portion of the proposed surface water management system, revised soil

storage calculations; and

(8) If the existing downstream control structure is either removed or modified, detailed calculations which demonstrate that there will be no adverse environmental, flood protection, or water quality impacts upstream or downstream of the structure.

b. Site Access Road Construction Plans

Prior to the commencement of construction of any portion of the proposed Site access road from S.R. 710 to the project site which will be located immediately adjacent to the Caulkins Citrus processing facility site, the final road alignment and any related construction activities shall be reviewed by the SFWMD for a determination of compliance with the non-procedural requirements of Chapters 40E-2 and 40E-4, F.A.C., including Appendix 7 (Isolated Wetlands Rule) of the Basis of Review for Permit Applications within the SFWMD. For all site access road construction activities, the following information shall be submitted:

(1) Documentation, including an aerial photograph at a scale of 1":300' with the alignment clearly indicated, which demonstrates that the proposed access road will not encroach upon or otherwise adversely impact the existing on-site and off-site wetlands located immediately west of the proposed road alignment;

(2) Construction details and cross-sections of the final road alignment and any proposed buffers, including fences;

(3) Documentation (such as a legal instrument) which conveys authority from the adjacent landowner (Caulkins Indiantown Citrus Company) to the Permittee to construct the road within the alignment proposed during the sufficiency review of the Site Certification Application.

c. Water Storage Area (Minor Impoundment) Construction Plans

(1) Prior to the commencement of construction of either of the two proposed on-site minor impoundments (the 26.4 acre cooling water storage pond and the 8.0 acre wastewater storage pond), all proposed construction activities shall be reviewed by the SFWMD for a determination of compliance with the non-procedural requirements of Chapters 40E-2 and Chapter 40E-4, F.A.C., including Appendix 6 (Above Ground Impoundments) of the Basis of Review for Surface Water Management Permit Applications within the SFWMD. All plans, detail sheets, and calculations shall be signed and sealed by a Florida Registered Professional Engineer. The Permittee shall provide the same type of information requested in Condition C.3.a above (Surface Water Management System Construction Plans), including a flood routing analysis for each of the above ground impoundments which routes the 25 year/72 hour and the 100 year/72 hour storm events through each basin and assumes a water elevation in each of the ponds equivalent to the maximum maintained water elevation of each pond.

(2) Upon completion of construction, the Permittee shall

submit a report to the SFWMD on the engineering adequacy of all above ground dikes, levees and berms behind which water will be contained and where failure could impact off-site areas. Such reports shall include proposed techniques and a schedule for repairing any deficiencies noted and shall be signed and sealed by a Florida Registered Professional Engineer.

(3) On an annual basis, in May of each year, beginning no later than one year after construction is completed and certified, the Permittee shall submit a report to the SFWMD on the engineering adequacy of all above ground dikes, levees and berms behind which water will be contained and where failure could impact off-site areas. The reports shall address the following items:

(a) An assessment of vegetative conditions in all impoundments and on all dikes;
(b) An assessment of the structural condition of all dikes, which addresses any erosion, settlement, cracking, and stability impacts;
(c) An assessment of the operational and structural conditions of any structures and pumps that are an integral part of the dike's operation;
(d) Any evidence of encroachment or misuse of land; and
(e) Recommendations for short term repairs and permanent modifications, if necessary.

(4) The Permittee shall submit Interim or more detailed Annual Reports when emergencies or major problems arise that require immediate modifications to the design and/or operation of the dike and/or its structures.

d. Water Pipeline

Prior to the commencement of construction of any portion of proposed water pipeline, all construction activities for that portion of the water pipeline which may obstruct, divert, control, impound or cross waters of the state, either temporarily or permanently, shall be reviewed by the SFWMD for a determination of compliance with the non-procedural requirements of Chapters 40E-2 and 40E-4, F.A.C. "Construction activities" in this situation shall include the placement of access/maintenance roads, culverts, and/or fill materials, excavation activities, and any related activities. All plans, detail sheets and calculations shall be signed and sealed by a Florida Registered Professional Engineer. For all pipeline construction activities, the following information shall be submitted:

(1) A centerline profile of existing topographic features along any proposed access/maintenance road(s);
(2) A preliminary design and typical cross-section of any proposed access/maintenance road(s) with elevations marked;
(3) Specifications showing the location of any access/maintenance road, culvert, and/or other related structure or facility to be constructed, including all areas to be filled or excavated;
(4) Specifications, including supporting assumptions and calculations, showing the type and size of water control structures (pipe, culvert, equalizer, etc.) to be used, with

proposed flowline elevations marked, drainage areas identified, and design capacity verified;

(5) Identification of proposed control elevations for each drainage facility to be constructed, including documentation which demonstrates that the proposed control elevations are sufficient to hydrologically maintain all wetlands to be preserved, enhanced/restored, and/or created within or adjacent to the right-of-way;

(6) A cross-section of all proposed excavation areas showing the proposed depth of excavation and the position of the pipeline;

(7) Documentation that none of the proposed construction and/or excavation activities will adversely impact off-site wetlands;

(8) Calculations and supporting documentation which demonstrate compliance with all applicable criteria, particularly as they relate to allowable discharge;

(9) Identification of wet season water table elevations for each basin in which facilities will be located;

(10) Calculations and supporting documentation which demonstrate that the proposed construction activities will not adversely impact the water quantity and/or quality of existing and/or permitted surface water management systems; and

(11) If construction of the proposed water pipeline contributes to the necessity for future modifications to adjacent/existing roads, consideration of the water quality treatment requirements of the modified roads in the surface water management system design for the water pipeline line.

e. Surface Water Quality Monitoring Program for Surface Water Discharges

Within six months of issuance of this certification, the Permittee shall develop and implement a monitoring program for surface water discharges. Within three months of issuance of this Certification, the Permittee shall submit a preliminary surface water quality monitoring program to the District for a determination of compliance with the non-procedural requirements of Chapter 40E-4, F.A.C. At a minimum, the program shall monitor all off-site discharges from the surface water management system and all surface water management system discharges into the on-site wetlands, specifically where Basin No. 2 discharges into Wetland No. 6 and Basin No. 3 discharges into Wetland No. 4.

(1) While the program may incorporate additional monitoring requirements and parameters required by other agencies, at a minimum, it shall include the following parameters and timeframes.

MONITOR TYPE AND SCHEDULE	PARAMETERS
A. GENERAL (EVERY OTHER MONTH)	TOTAL ORGANIC CARBON, DISSOLVED OXYGEN, PH, TURBIDITY, SPECIFIC

	CONDUCTANCE, CHEMICAL OXYGEN DEMAND, TOTAL SUSPENDED SOLIDS, ALKALINITY.
B. ORGANICS (SEMI-ANNUAL)	OIL AND GREASE, DETERGENTS, EPA METHODS 601 AND 602.
C. METALS (SEMI-ANNUAL)	ALUMINUM, ANTIMONY, ARSENIC, BERYLLIUM, CADMIUM, COPPER, CYANIDE, IRON, LEAD, MERCURY, NICKEL, SELENIUM, SILVER, ZINC.

(2) Water quality samples shall be taken at the above noted locations in accordance with the above schedule during periods of discharge. A laboratory certified by the State of Florida shall be responsible for all water quality analyses under (1)B and (1)C above. Reports shall be submitted to the SFWMD on a semi-annual basis. Initial sampling results shall be reported to the SFWMD no later than six months following the issuance of this Certification.

(3) The SFWMD will evaluate the monitoring results to determine whether the discharge degrades receiving waters and conforms to State water quality standards as defined in Chapter 17-302, F.A.C. If water quality problems develop, the SFWMD reserves the right to require more frequent sampling and more thorough analyses in order to provide assurances that the discharges will not cause additional off-site water quality impacts.

f. Hazardous Materials Management

Prior to the commencement of construction of this project, the Permittee shall submit a copy of the Comprehensive Hazardous Materials and Waste Management Plan for the Indiantown Co-Generation Project to the SFWMD for a determination of compliance with the requirements of Chapter 40E-4, F.A.C. The plan shall provide an adequate level of detail for early warning and detection of hazardous materials within the shallow groundwater. At a minimum, the plan shall include a groundwater monitoring network, including proposed up-gradient and down-gradient locations of monitoring wells, prepared by a hydrogeology consultant.

D. ENVIRONMENTAL CONDITIONS

1. GENERAL

a. Wetland Avoidance

The Permittee shall avoid impacting wetlands within the plant site, water withdrawal facilities, and water transmission line corridor wherever practicable. Where necessary and feasible, the location of the facilities and/or water transmission line alignment shall be varied to eliminate or reduce wetland impacts.

b. Fill Materials

No fill materials shall be obtained from excavated wetlands within the project site, unless in accordance with a mitigation plan submitted in compliance with the conditions of this Certification.

c. Wetlands Mitigation

The Permittee may be required to provide mitigation and/or other measures if wetland monitoring and/or other information demonstrates that adverse impacts to protected, restored, incorporated, and/or mitigated wetlands have occurred as a result of project-related activities.

d. Additional Environmental Review

Any future changes in on-site land use, project design, and/or the treatment of on-site wetlands shall require additional environmental review by SFWMD staff in order to determine whether any additional mitigation activities may be required.

e. Other Wetland Impacts

Any potential impacts to on-site and/or off-site wetlands from the cooling tower drift shall be addressed to the satisfaction of the FDER.

2. SITE SPECIFIC DESIGN AUTHORIZATIONS

a. Minimum Road Grades Adjacent to Wetlands

All roads adjacent to wetland areas, including those located west of Wetland No. 4 and east of the proposed northwest access road from S.R. 710 to the project site, shall have road grade elevations established a minimum of two feet above the wetland control elevation.

b. Erosion Control Mechanism Authorization

Erosion control mechanisms for the wetland water distribution channels shall be constructed in accordance with Drawing COY 0191 of the Site Certification Application Additional Information Submittal dated June 11, 1991. Any proposed changes to the design of the erosion control mechanisms authorized by this Certification shall be reviewed and approved by the SFWMD prior to

construction.

c. Authorized Wetland Control Elevations

Wetland No. 4: 32.7' NGVD
Wetland No. 6: 33.5' NGVD

3. ADDITIONAL INFORMATION REQUIREMENTS

a. Wetlands Protection

Prior to the commencement of construction of any facilities to be located adjacent to the wetlands identified for preservation, the Permittee shall:

(1) Stake and rope off the protected wetlands and buffer zones to prevent encroachment during construction. The stakes and ropes shall remain in place until all adjacent construction activities have been completed. Verification of staked areas by SFWMD staff shall be required prior to the commencement of and upon completion of any construction activities.
(2) Submit documentation to the SFWMD that all protected and/or mitigated areas, including buffer zones, have been legally reserved so that they will be managed in a manner consistent with their proposed use as conservation areas.
(3) Submit manufacturer's specifications for the liner to be installed in the relocated ditch to the SFWMD for review and approval. The liner shall be of sufficient quality to prevent drawdown of the water table of the adjacent wetland into the relocated ditch. (See also Condition C.3.a.(5).)

b. Preserved Wetlands Monitoring Plan

Prior to the commencement of construction, the Permittee shall submit to the SFWMD, for review and approval, a monitoring plan designed to document the condition of the wetlands designated for preservation on the project site. This plan may be part of a monitoring program designed to document the condition of all preserved on-site areas. However, at a minimum, the plan shall include the following:

(1) Provisions for both quantitative and qualitative observations of wildlife and macroinvertebrate utilization;
(2) Weekly water level readings;
(3) Documentation of the condition of the wetlands which shall include panoramic photographs or an equivalent method;
(4) An evaluation of the success of the preservation/enhancement effort; and
(5) An annual report which includes the above and any other relevant information.

c. Future Mitigation Plans

If the construction of the proposed water pipeline and/or changes to the proposed site access road alignment or any other portion of the project design result in impacts to any on-site and/or off-site wetlands, the Permittee shall submit a mitigation and monitoring plan to the SFWMD prior to the commencement of construction for that portion which may affect wetlands for a determination of compliance with the non-procedural requirements of Chapter 40E-4, F.A.C., including Appendix 7 (Isolated Wetlands Rule) of the Basis of Review of Surface Water Management Permit Applications in the SFWMD, in effect at the time of submittal. The plan shall include the following information:

(1) A discussion of the alternatives considered to reduce or avoid wetland impacts, including a statement explaining why there are no feasible alternatives to the proposed design if wetland impacts are unavoidable;
(2) Aerial photographs, at a minimum scale of 1":300', which show the locations of the proposed facilities/alignments and all the wetlands, including those within and adjacent to the project site, the access road right-of-way, and/or the water transmission line alignment, that would be impacted by the proposed construction activities;
(3) A summary which identifies individual and total acres for all existing and impacted wetlands and an evaluation of the condition of all such wetlands;
(4) At a minimum, locations and sizes of all proposed mitigation areas, species to be planted, planting densities, details of the proposed hydrologic regime, cross-sections showing the proposed elevations and water depths, and an estimated time schedule for completion of the construction of the mitigation areas;
(5) At a minimum, provisions for both quantitative and qualitative observations of wildlife and macroinvertebrate utilization, weekly water level readings, documentation of the condition of the mitigation areas which shall include panoramic photographs or an equivalent method, an evaluation of the success of the mitigation effort, and an annual report incorporating this information and any other relevant information.
(6) If mitigation/restoration activities are proposed, a wetland mitigation and/or restoration work schedule which details each specific mitigation task (e.g. grading to proper elevation, mulching, planting, regularly scheduled maintenance and monitoring, etc.) and the calendar dates for the start and completion of each task.
(7) If mitigation shall occur within the areas designated for preservation on the Indiantown Cogeneration Plant site, documentation that sufficient areas have been legally reserved to compensate for the proposed wetland impacts;

E. LAND MANAGEMENT CONDITIONS

1. SITE SPECIFIC DESIGN AUTHORIZATIONS

a. This Certification authorizes the installation, operation and maintenance of dual 30" water withdrawal lines, screens, and an appurtenant intake facility to be located on the L-63N northeasterly Right-of-Way (ROW) at the confluence of L-63N, L-... and C-59.

b. This Certification authorizes the temporary use of the L-63N northeasterly ROW for construction access to the surface water withdrawal facilities to be installed in the L-63N ROW and the pump station site to be located immediately adjacent to the southern boundary of the CSX Railroad ROW. However, the Permittee shall secure permanent access to the pump station site which does not involve the permanent use of SFWMD ROW.

c. This Certification does not authorize the use of SFWMD ROW for the proposed pump station site. The Permittee shall acquire the pump station site through application to the SFWMD for the sale of surplus lands.

2. GENERAL DESIGN CONDITIONS

a. The Permittee shall provide and maintain General Liability Insurance through the term of this certification. The coverage shall be of a comprehensive form on an occurrence basis and shall provide coverage for death, bodily injury, personal injury and property damage that could arise directly or indirectly from the performance of this certification. The limits of coverage shall be:

(1) $5,000,000.00 per occurrence, combined single limit for bodily injury and property damage liability. Coverage shall be no more restrictive than as specified in the latest edition of the Commercial General Comprehensive Liability Policies of the Insurance Services Office (ISO).
(2) Workers' Compensation shall be as prescribed by Florida Statutes, including Employees Liability.
(3) The Permittee shall be identified as the insured on the policy/certificate of insurance and the SFWMD identified as an additional insured as it relates to General Liability.
(4) Where motor vehicles will make use of a SFWMD Project Work, Comprehensive Automobile Liability insurance shall be provided in the same limits as the Comprehensive General Liability insurance.
(5) All insurance shall be written by a company duly authorized to do business in Florida. Certificates of insurance for the coverage amounts required shall be furnished to the SFWMD.

b. The Permittee shall keep all access gates locked when not actually being used to prevent unauthorized public access.

c. The Permittee shall erect a substantial handrail or guardrail along the top of the endwall of the withdrawal facilit...

d. The Permittee is advised that the SFWMD periodically treats the L-63N, L-63S and C-59 canals with herbicides for aquatic weed control. With some herbicides the U.S. Environmental Protection Agency requires that restrictions be placed on the use of treated water for purposes such as watering livestock, irrigation and domestic use for a given period of time. The SFWMD will post a notice in the immediate vicinity of the Permittee's Intake Structure in L-63N whenever this occurs which identifies any restrictions that may be associated with the weed control activities. The Permittee is advised to inquire at the Okeechobee Field Station [(813) 763-2197] if additional information is required regarding any posted notices.

e. All excavations shall be in accordance with DER requirements and silt booms shall be employed where necessary.

f. Backfilling of the pipe trench shall be accomplished in 6" lifts and shall be thoroughly compacted.

g. The Permittee shall be responsible for the correction of any erosion or shoaling attributable to the construction, operation and maintenance of the authorized facilities.

h. The SFWMD is not responsible for any damages to installations located within its ROW.

i. The Permittee shall be responsible for the repair and/or replacement of any existing facilities located within the SFWMD ROW which may be damaged by the Permittee or his agents during the construction, operation or maintenance of the authorized facilities/uses.

j. The Permittee shall restore any canal ROW disturbed during construction, installation and/or maintenance of the authorized facilities to original or better condition.

k. The Permittee shall be solely responsible for any relocations which may be required as a result of this Certification and for any notification or coordination with the owners of previously permitted facilities located within the SFWMD ROW.

l. The Permittee acknowledges that any or all authorized facilities/uses within the SFWMD ROW are, in an emergency situation, subject to immediate alteration, modification or removal by District staff. Any resulting damage shall be the responsibility of the Permittee.

m. Any additional facilities or alterations to existing authorized facilities shall require prior approval from the SFWMD.

n. The SFWMD may request a modification to this Certification if the authorized use of the SFWMD's ROW is later found to be

contrary to SFWMD policies, operational, and/or other uses contrary to SFWMD needs requirements.

3. ADDITIONAL INFORMATION SUBMITTALS

a. Construction Plans for Authorized Uses in SFWMD Right of Way Prior to the commencement of construction of any portion of the withdrawal facilities and associated piping to be located within the SFWMD ROW, the Permittee shall submit complete detailed construction drawings showing the proposed facilities to the SFWMD for a determination of compliance with the non-procedural requirements of Chapter 40E-6, F.A.C. The drawings shall be identical to the plans to be provided to the Permittee's contractor, shall depict the proposed facilities in both plan and profile views and shall show at a minimum:

(1) The canal right of way lines;

(2) The top of the canal bank and its elevation;

(3) The width and elevation of any berms or levees;

(4) Three cross sections of the canal taken adjacent to the water withdrawal facility, 50' upstream and 50' downstream of the water withdrawal facility. The cross sections shall be taken at 10'intervals from top of bank to top of bank and shall be plotted on standard 10 X 10 cross section paper to the same horizontal and vertical scale using NGVD datum. The design section for the channel shall also be plotted on the submitted cross sections;

(5) Design details which demonstrate that withdrawals from the canal cannot occur below elevation 17.50 NGVD (see also Condition B.2.d);

(6) The wall thickness and "schedule" of the pipe, conduit o. culvert;

(7) The design of any concrete endwalls, forebays, rubble and/or sand-cement rip rap;

(8) Any appurtenances such as fences, guardrails, safety barriers or devices, signs, security enclosures, paved areas, meters, valves, blow-off lines, cathodic protection systems, utility or communications lines or services either buried or above ground, etc.;

(9) The location of the proposed facilities in relation to a section line, major road or other prominent well-known landmark by which the facilities have been located in the field.

b. Temporary Use of SFWMD Right of Way During Initial Construction

In order to use the SFWMD ROW for temporary short-term construction activities associated with the construction of the authorized withdrawal facilities and/or access during construction of the pumping station, the Permittee shall submit the following information to the SFWMD for review and approval and/or otherwise comply with the following requirements:

(1) A construction schedule and detailed plan identifying the proposed route, type and number of vehicles to be used and the

frequency of such use;

(2) A document (e.g., map/drawing) which identifies all other proposed uses of the ROW such as work areas, spoil disposal areas, stockpiling or drying areas, materials storage areas, temporary construction or office trailer sites, etc.;

(3) A document (e.g., map/drawing) which identifies any activity (such as trenching for pipe or culvert construction) which could interfere with SFWMD access through the construction site or otherwise interfere with the ability of the SFWMD to operate or maintain project works;

(4) A document (e.g., map/drawing) which identifies any construction activities within the canal similar to but not limited to the installation of coffer dams or fills. The SFWMD reserves the right to prohibit such activities if they are not in the best interest of the SFWMD;

(5) A document (e.g., map/drawing) which identifies the location of any proposed temporary facilities or uses of the SFWMD ROW in relation to a section line, major road or other prominent well-known landmark by which the facilities may be located in the field;

(6) Prior to the use of any portion of the SFWMD ROW, shall post a $25,000.00 surety bond in favor of the SFWMD to ensure restoration of any damages to the SFWMD ROW upon completion of the construction phase and keep it in force until the release of the bond is authorized by the SFWMD;

(7) Shall obtain a SFWMD Key Permit for those portions of the SFWMD ROW for which the Permittee does not currently have keys; pay all associated key fees, and abide by the key permit regulation;

(8) Conduct all use of the SFWMD ROW in accordance with the non-procedural and advance notification requirements of Chapter 40E-6, F.A.C.

PART V

TREASURE COAST REGIONAL PLANNING COUNCIL

1. The Permittee shall implement a program to assist the citizens of the Region to become more energy efficient and reduce their reliance on fossil fuels. The program shall emphasize the use of the latest energy conservation techniques and make available the latest information on producing electricity by means other than burning fossil fuels. The program shall be designed to offer the public assistance in the design, construction, and use of energy saving products and systems. The intent of the program shall be to work toward the reduction of the demand for fossil fuel derived electricity over time by the same amount as that generated by this facility. A plan for the program shall be developed in consultation with Treasure Coast Regional Planning Council (TCRPC) and the Department of Community Affairs (DCA). The program will be implemented prior to operation of the Indiantown Cogeneration Project. The Permittee shall submit annually to TCRPC and DCA a report on the program's progress and on expected activities for the following year.
2. In the event of discovery of any archaeological artifacts during construction of the Indiantown Cogeneration Project, Permittee shall stop construction in that area and immediately notify the Division of Historical Resources, Florida Department of State (DHR). Permittee shall consult with DHR to determine appropriate action. If avoidance is not reasonably possible, the impact will be mitigated through araeological salvage excavation operation or by other methods acceptable to DHR.
3. All Brazilian pepper, Australian pine, and Melaleuca shall be removed from the entire project site, as well as within the water pipeline right-of-way. Removal shall be in a manner that minimizes seed dispersal. The maintenance of these areas shall include continual removal of these species.
4. The Permittee shall use water-saving plumbing fixtures and other water conserving devices in restrooms and employee locker rooms, as specified in the Water Conservation Act, Section 553.14, Florida Statutes.
5. At least 60 days prior to construction, ICP shall submit an upland preserve and wetland management plan to the Florida Game and Fresh Water Fish Commission and to Martin County for review and approval. This plan shall present management practices for the seven wetlands and the upland preserve areas, as designated in the Application and the PUD planned unit development (industrial) zoning agreement of Martin County, and illustrated on Figure 1. At a minimum, this plan shall include a statement of preserve management objectives; a statement of what habitat

functions the preserves are expected to provide; a description of how habitat values will be maintained, including measures such as perimeter staking, and vegetation control if controlled burning is proposed to control vegetation, a schedule of fire management through a certified burn specialist and including, but not limited to, burn conditions, burn frequency, and measures taken to avoid spread of wildfire; measures taken to remove exotic vegetation from both uplands and wetlands; legal instrument by which preserve areas and wetlands have been reserved from future developmental uses; and the entity responsible for management.

6. The Permittee will initiate construction of the southbound right turn lane from State Road 710 into the plant access road concurrent with the start of site development work and will complete construction of the right turn lane prior to the initiation of building construction.

PART VI

DEPARTMENT OF TRANSPORTATION

1. Prior to the delivery of coal to the Project Site, a constant warning time device shall be installed to control the existing railroad warning devices and gates at the crossing of the Plant Access Road and the CSX railroad. The device shall be operated to provide a constant warning time at this crossing for trains of varying speeds.
2. The permittee shall construct and maintain the access road to the pump intake structure in Okeechobee County as a private access road for purposes of crossing the CSX Railroad at this location. The Permittee shall take appropriate measures to prevent public use of this private access road, which may include signs, fencing and cables across the access road.
3. The Permittee shall construct the connection of the intake structure access road to State Road 710 in Okeechobee County at its own expense and shall conform to DOT Design Standards. The Department agrees to process the permit application for this connection within 30 days of submittal.
4. The Permittee shall maintain safe and adequate access to the Project Site during Project construction. During construction, the Permittee shall provide law enforcement officials, at its expense, to monitor left turn traffic from State Road 710 into the Plant Access Road during the AM and PM peak hours to determine if waiting left turning traffic during Project construction impedes north bound traffic on State Road 710. If such traffic is impeded, the Permittee shall provide, at its own expense, law enforcement personnel to direct traffic at the intersection during the AM and PM peak hours. If the Permittee is unable to provide officials to control traffic at this intersection, the Permittee will use other measures at its expense acceptable to DOT to maintain safe turning movements at this intersection. These measures shall be provided until no longer justified by Project construction traffic.
5. During Project construction, the Permittee shall provide public information to the local media as to its construction schedule, the expected level of traffic and any expected traffic delays or interference on local roads.
6. The Permittee is required to construct, at its own expense, a south bound right-turn lane from State Road 710 at the Plant Access Road, conforming to DOT Design Standards, as approved by the District Traffic Engineer. The Permittee shall obtain all necessary approvals and property interests from adjacent property owners, including CSX Railroad, to comply with DOT Design

Standards. The design of the right turn lane shall be compatible with any other planned or permitted improvements at the intersection. The Department agrees to process the permit application within 30 days of submittal of a sufficient application.

7. ICL shall construct at its own expense an additional right-turn lane with increased radius at the intersection of State Road 710 and the existing outlet of the new Plant Access Road. This improvement shall consist of additional paving along the eastbound lane of the Plant Access Road between State Road 710 and the railroad track to allow storage of additional right-turning traffic. These improvements shall conform to DOT Design Standards and the intent of this condition. A " Do Not Stop on Tracks" sign shall be erected at ICL's expense and as per the Manual of Uniform Traffic Control Devices (MUTCD) on the Plant Access Road south of the railroad crossing. The Department agrees to process the permit application for this connection improvement within 30 days of submittal.

PART VII

MARTIN COUNTY

1. Construction and operation of the Indiantown Cogeneration Project shall be undertaken in accordance with the planned unit development (industrial) agreement between the Permittee and Martin County, Florida, dated July 24, 1991. Said agreement is incorporated into these Conditions of Certification by this reference and shall be complied with and enforced as if the provisions of that agreement were contained in these Conditions.
2. In constructing the new site access road, the Permittee shall comply with the standards of Martin County as set forth in Chapter 30 1/2, Article II, Subdivision Regulations, Code of Laws and Ordinances of Martin County, Florida, for roads to be dedicated to Martin County for maintenance. Martin County shall issue a permit for the interconnection of the access road with any road maintained by Martin County within 30 days of the submission of a complete application for such interconnection.

PART VIII

DEPARTMENT OF COMMUNITY AFFAIRS

1. The Permittee shall endeavor to recycle the Project's combustion wastes where practicable. The Permittee shall file an annual report with the Department of Environmental Regulation detailing its progress in marketing these wastes.
2. The Permittee shall take steps to minimize the impact of noise generated during operation and construction which exceeds a day/night weighted average of 55 dBA at the nearest existing residential areas. These steps may include the use of quiet equipment, erection of noise barriers, notification to nearby landowners and daytime scheduling of particularly noisy events, and other measures as feasible.
3. The Permittee will initiate construction of the south bound right turn lane from State Road 710 to the plant access road concurrent with the start of site development work and will complete construction of the right turn lane prior to the initiation of building construction.
4. The Permittee shall assist unemployed and econmically disadvantaged persons in the Indiantown area in finding employment during construction and operation of the Project.
5. The Permittee shall seek to provide innovative arrangements such as referrals to local day care facilities to increase the access of working parents to employment at the Project.
6. At least 60 days prior to construction, ICP shall submit an upland preserve and wetland management plan to the Florida Game and Fresh Water Fish Commission and to Martin County for review and approval. This plan shall present management practices for the seven wetlands and the upland preserve areas, as designated in the Application and the PUD planned unit development (industrial) zoning agreement of Martin County, and illustrated on Figure 1. At a minimum, this plan shall include a statement of preserve management objectives; a statement of what habitat functions the preserves are expected to provide; a description of how habitat values will be maintained, including measures such as perimeter staking, and vegetation control; if controlled burning is proposed to control vegetation, a schedule of fire management through a certified burn specialist and including, but not limited to, burn conditions, burn frequency, and measures taken to avoid spread of wildfire; measures taken to remove exotic vegetation from both uplands and wetlands; legal instrument by which preserve areas and wetlands have been reserved from future developmental uses; and the entity responsible for management.

PART IX

OKEECHOBEE COUNTY

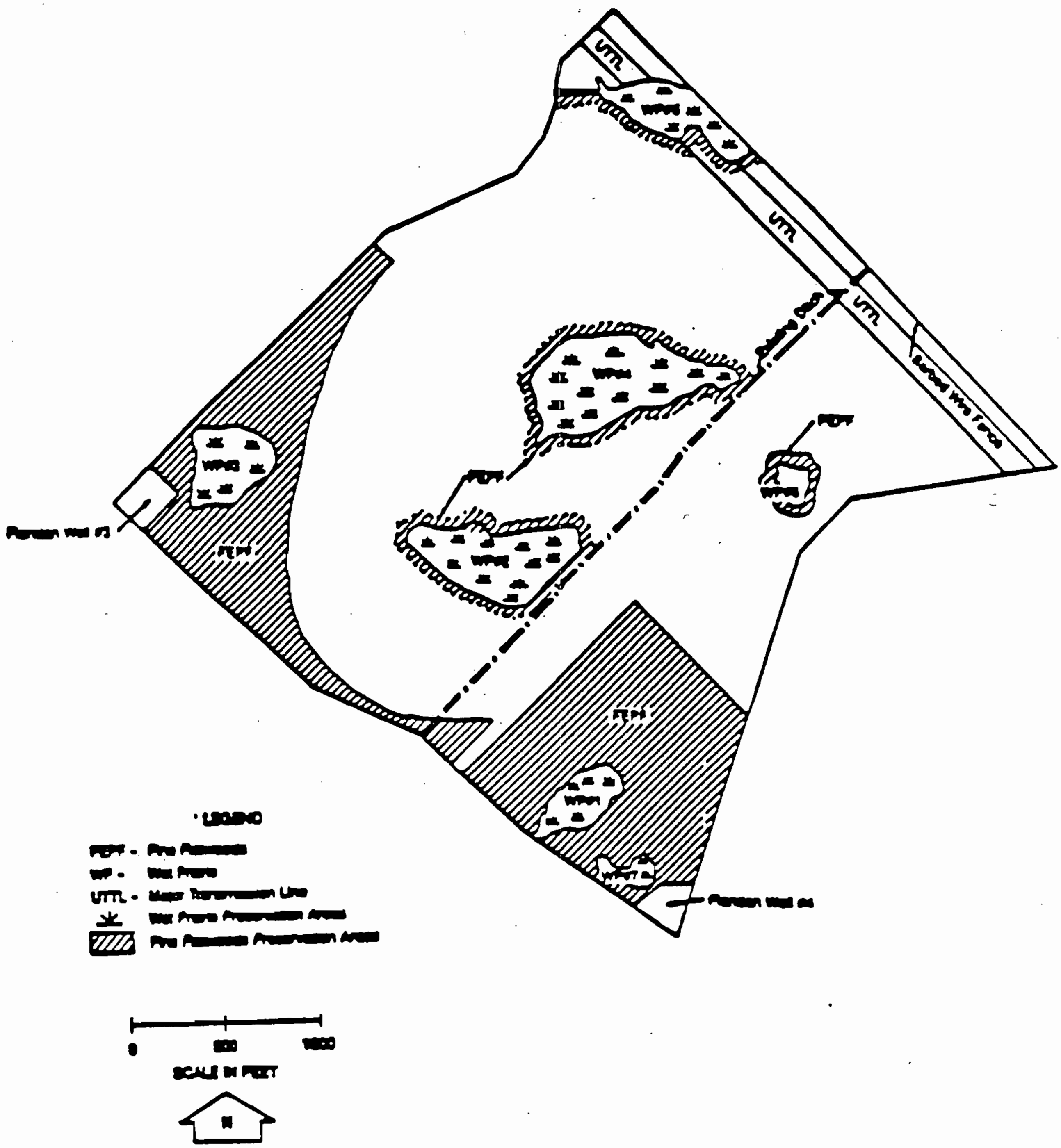
1. In construction the water pipeline across roads under the jurisdiction of Okeechobee county, the permittee shall comply with the standards of Okeechobee County as set forth in Okeechobee County ordinance 86-1, for crossing of county roads. Okeechobee County shall issue a permit for the crossing of any road maintained by Okeechobee County as set forth therein.

PART X

TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND

1. In the event that the facilities, pipeline or improvements constructed or maintained by ICL under this certification are placed on, under, over, or across lands owned by the Board of Trustees of the Internal Improvement Trust Fund, ICL shall first obtain the consent of the Trustees for the use of such lands prior to the construction of those facilities. Such requests for consent shall be made and granted pursuant to Chapter 253, F.S., and Chapter 18-21, F.A.C. The issuance of such consent shall be based upon the information provided during the certification proceeding and such other information necessary to demonstrate compliance with Chapter 253, F.S., and Chapter 18-21, F.A.C.

Figure 1. Upland and wetland preserve areas on the project site.

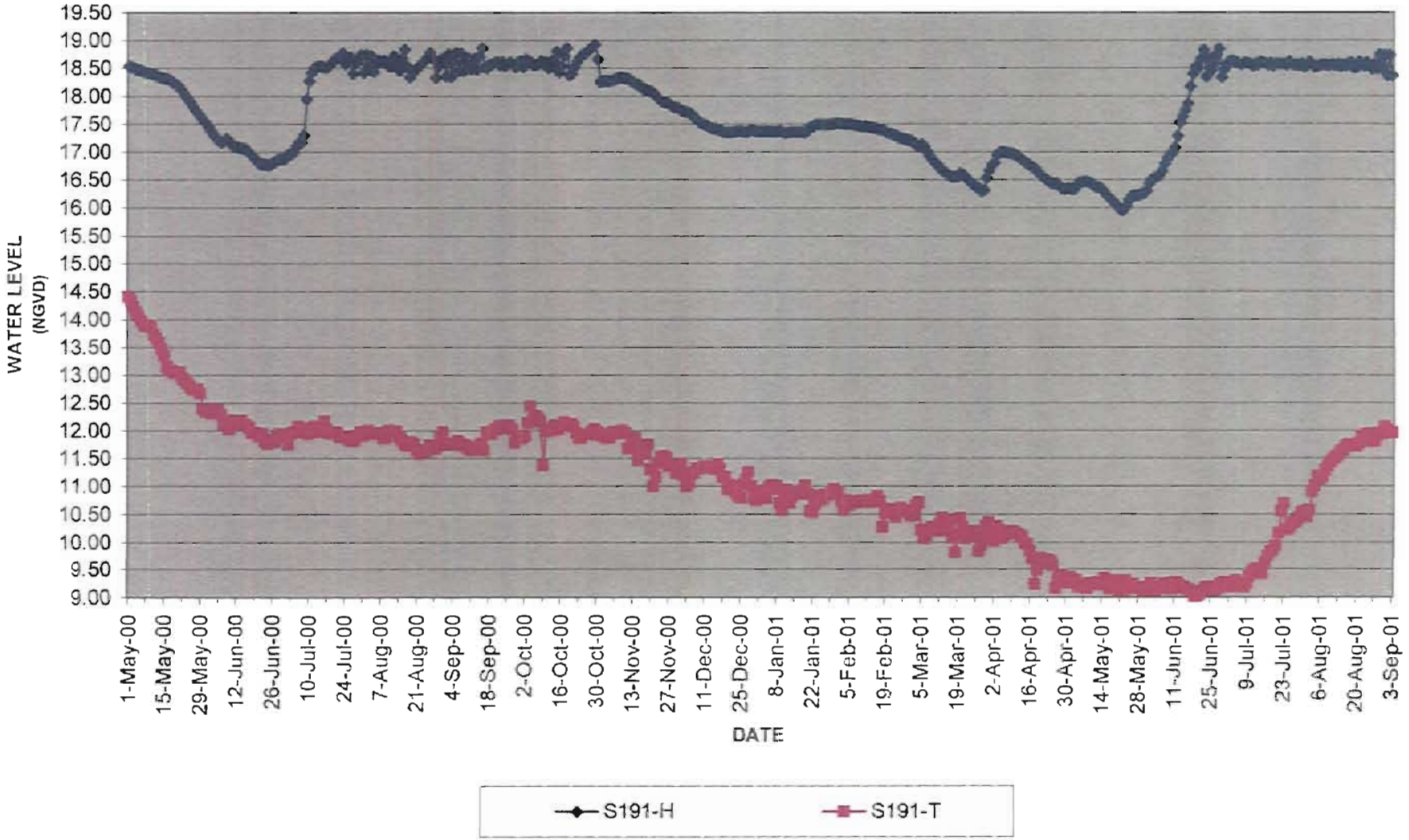


Attachment B

Plot of Taylor Creek Water Levels at Structure 191, May 2000 to September 2001

S-191 WATER LEVELS

(1-May-00 through 3-Sept-01)



S-191 SPILLWAY ON CANAL C-59 AT LAKE OKEECHOBEE

$********** ********** ********** ********** ********** **********

$* STATION S191_H S-191 SPIL WAY ON C ANAL C-59 AT LAKE OKEECHOBEE *

$* SECTION 6 TOWN 38 RANGE 36 *

$* LAT 271131.2 XCOORD 733351.5 BASIN L OKEE QUAD SHEET 27080330 *

$* LONG. 804545.2 YCOORD 1039035.5 COUNTY OKE LAND SURFACE 16.00 FT MSL *

$*

$* DBKEY TYPE UNI S STAT FREC CDR ST RATA REP START END GATE SLOT RANK ALTERNATE ID AGENCY *

$*

$* 15805 STG FEE NGVD29 MEAN DA LE 0 .00 2 21-JUN-199 18-JAN-200 S191-H WMD *

$*

$********** ********** ********** ********** ********** **********

□$

$********** ********** ********** ********** ********** **********

$* STATION S191_T S-191 SPIL WAY ON C ANAL C-59 AT LAKE OKEECHOBEE *

$* SECTION 6 TOWN 38 RANGE 36 *

$* LAT 271131.2 XCOORD 733351.5 BASIN L OKEE QUAD SHEET 27080330 *

$* LONG. 804545.2 YCOORD 1039035.5 COUNTY OKE LAND SURFACE 16.00 FT MSL *

$*

$* DBKEY TYPE UNI S STAT FREC CDR ST RATA REP START END GATE SLOT RANK ALTERNATE ID AGENCY *

$*

$* 15806 STG FEE NGVD29 MEAN DA LE 0 .00 2 21-JUN-199 18-JAN-200 S191-T WMD *

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11/1/00	18.28	11.91
11/2/00	18.28	11.90
11/3/00	18.28	11.86
11/4/00	18.28	11.87
11/5/00	18.29	11.95
11/6/00	18.30	11.98
11/7/00	18.33	11.97
11/8/00	18.34	11.94
11/9/00	18.33	12.00
11/10/00	18.32	11.94
11/11/00	18.31	11.68
11/12/00	18.28	11.70
11/13/00	18.25	11.82
11/14/00	18.22	11.86
11/15/00	18.21	11.47
11/16/00	18.17	11.67
11/17/00	18.13	11.74
11/18/00	18.12	11.58
11/19/00	18.09	11.74
11/20/00	18.09	11.30
11/21/00	18.06	10.99
11/22/00	18.00	11.17
11/23/00	17.96	11.41
11/24/00	17.91	11.51
11/25/00	17.89	11.54
11/26/00	17.88	11.50
11/27/00	17.88	11.36
11/28/00	17.82	11.37
11/29/00	17.80	11.38

$ DATE **	**** DBK	EYS ******
	15805	15806
$	S191-H	S191-T
11/30/00	17.80	11.23
12/1/00	17.77	11.34
12/2/00	17.74	11.40
12/3/00	17.73	11.18
12/4/00	17.71	10.99
12/5/00	17.70	11.06
12/6/00	17.66	11.22
12/7/00	17.61	11.25
12/8/00	17.57	11.32
12/9/00	17.53	11.32
12/10/00	17.50	11.33
12/11/00	17.48	11.36
12/12/00	17.46	11.33
12/13/00	17.43	11.35
12/14/00	17.42	11.33
12/15/00	17.42	11.31
12/16/00	17.40	11.39
12/17/00	17.39	11.30
12/18/00	17.35	11.16
12/19/00	17.34	11.17
12/20/00	17.35	10.95
12/21/00	17.34	11.02
12/22/00	17.35	10.98
12/23/00	17.36	10.90
12/24/00	17.37	10.82
12/25/00	17.37	10.79
12/26/00	17.35	11.03
12/27/00	17.35	11.12
12/28/00	17.37	11.26
12/29/00	17.40	11.00
12/30/00	17.38	10.79
12/31/00	17.36	10.75
1/1/01	17.36	10.91
1/2/01	17.36	10.79
1/3/01	17.36	10.79
1/4/01	17.37	10.78
1/5/01	17.36	10.97
1/6/01	17.36	11.02
1/7/01	17.36	10.94
1/8/01	17.36	11.00
1/9/01	17.38	10.69
1/10/01	17.35	10.57
1/11/01	17.33	10.88
1/12/01	17.34	10.93
1/13/01	17.35	10.70
1/14/01	17.35	10.82
1/15/01	17.35	10.86
1/16/01	17.35	10.86
1/17/01	17.35	10.89
1/18/01	17.34	10.92
19-Jan-01	17.34	11.01
20-Jan-01	17.41	10.86
21-Jan-01	17.44	10.55
22-Jan-01	17.46	10.54
23-Jan-01	17.49	10.68
24-Jan-01	17.49	10.83
25-Jan-01	17.50	10.76
26-Jan-01	17.48	10.75
27-Jan-01	17.49	10.85
28-Jan-01	17.49	10.84
29-Jan-01	17.49	10.90
30-Jan-01	17.50	10.95
31-Jan-01	17.52	10.90
1-Feb-01	17.51	10.86
2-Feb-01	17.51	10.74
3-Feb-01	17.50	10.58
4-Feb-01	17.50	10.75
5-Feb-01	17.50	10.66
6-Feb-01	17.49	10.72
7-Feb-01	17.48	10.72
8-Feb-01	17.47	10.70
9-Feb-01	17.46	10.73
10-Feb-01	17.45	10.74
11-Feb-01	17.46	10.72
12-Feb-01	17.45	10.74
13-Feb-01	17.44	10.71
14-Feb-01	17.44	10.74
15-Feb-01	17.43	10.75
16-Feb-01	17.41	10.82
17-Feb-01	17.40	10.73
18-Feb-01	17.40	10.27

$ DATE **	**** DBK EYS ******	
	15805	15806
$	S191-H	S191-T
19-Feb-01	17.36	10.52
20-Feb-01	17.34	10.58
21-Feb-01	17.33	10.57
22-Feb-01	17.31	10.59
23-Feb-01	17.29	10.45
24-Feb-01	17.26	10.56
25-Feb-01	17.25	10.61
26-Feb-01	17.24	10.55
27-Feb-01	17.22	10.55
28-Feb-01	17.21	10.56
1-Mar-01	17.19	10.47
2-Mar-01	17.16	10.47
3-Mar-01	17.12	10.66
4-Mar-01	17.11	10.71
5-Mar-01	17.13	10.22
6-Mar-01	17.09	10.07
7-Mar-01	17.01	10.12
8-Mar-01	16.93	10.22
9-Mar-01	16.86	10.27
10-Mar-01	16.81	10.26
11-Mar-01	16.76	10.20
12-Mar-01	16.70	10.33
13-Mar-01	16.66	10.43
14-Mar-01	16.64	10.21
15-Mar-01	16.59	10.35
16-Mar-01	16.56	10.38
17-Mar-01	16.55	10.08
18-Mar-01	16.56	9.81
19-Mar-01	16.56	10.15
20-Mar-01	16.62	10.43
21-Mar-01	16.59	10.27
22-Mar-01	16.54	10.07
23-Mar-01	16.49	10.14
24-Mar-01	16.44	10.16
25-Mar-01	16.40	10.20
26-Mar-01	16.37	10.09
27-Mar-01	16.35	9.83
28-Mar-01	16.30	9.94
29-Mar-01	16.31	10.10
30-Mar-01	16.54	10.29
31-Mar-01	16.67	10.35
1-Apr-01	16.77	10.11
2-Apr-01	16.81	10.01
3-Apr-01	16.94	10.29
4-Apr-01	16.99	10.22
5-Apr-01	17.01	10.07
6-Apr-01	17.00	10.10
7-Apr-01	16.99	10.14
8-Apr-01	16.98	10.18
9-Apr-01	16.97	10.20
10-Apr-01	16.95	10.18
11-Apr-01	16.93	10.15
12-Apr-01	16.88	10.12
13-Apr-01	16.85	10.09
14-Apr-01	16.81	9.97
15-Apr-01	16.78	9.96
16-Apr-01	16.75	9.84
17-Apr-01	16.73	9.69
18-Apr-01	16.69	9.23
19-Apr-01	16.63	9.49
20-Apr-01	16.58	9.71
21-Apr-01	16.54	9.64
22-Apr-01	16.51	9.63
23-Apr-01	16.47	9.68
24-Apr-01	16.44	9.65
25-Apr-01	16.43	9.57
26-Apr-01	16.44	9.16
27-Apr-01	16.39	9.30
28-Apr-01	16.35	9.39
29-Apr-01	16.33	9.30
30-Apr-01	16.34	9.32
1-May-01	16.35	9.26
2-May-01	16.33	9.35
3-May-01	16.33	9.29
4-May-01	16.41	9.30
5-May-01	16.45	9.19
6-May-01	16.46	9.22
7-May-01	16.47	9.22
6-May-01	16.47	9.15
9-May-01	16.45	9.24
10-May-01	16.41	9.24

$ DATE **	**** DBK EYS ******	
	15805	15806
$	S191-H	S191-T
11-May-01	16.38	9.22
12-May-01	16.37	9.22
13-May-01	16.35	9.26
14-May-01	16.31	9.22
15-May-01	16.25	9.34
16-May-01	16.20	9.21
17-May-01	16.16	9.14
18-May-01	16.12	9.18
19-May-01	16.07	9.30
20-May-01	16.02	9.15
21-May-01	15.97	9.10
22-May-01	15.95	9.16
23-May-01	16.02	9.29
24-May-01	16.14	8.99
25-May-01	16.20	9.15
26-May-01	16.22	9.24
27-May-01	16.22	9.16
28-May-01	16.23	9.16
29-May-01	16.24	9.18
30-May-01	16.25	9.10
31-May-01	16.30	9.15
1-Jun-01	16.43	9.14
2-Jun-01	16.50	9.25
3-Jun-01	16.53	9.17
4-Jun-01	16.54	9.11
5-Jun-01	16.58	9.18
6-Jun-01	16.66	9.17
7-Jun-01	16.79	9.24
8-Jun-01	16.88	9.19
9-Jun-01	16.95	9.15
10-Jun-01	16.98	9.14
11-Jun-01	17.08	9.25
12-Jun-01	17.28	9.27
13-Jun-01	17.52	9.21
14-Jun-01	17.64	9.17
15-Jun-01	17.75	9.18
16-Jun-01	17.86	9.14
17-Jun-01	18.18	9.13
18-Jun-01	18.40	9.08
19-Jun-01	18.52	9.01
20-Jun-01	18.51	9.02
21-Jun-01	18.66	9.05
22-Jun-01	18.83	9.11
23-Jun-01	18.35	9.17
24-Jun-01	18.67	9.19
25-Jun-01	18.47	9.19
26-Jun-01	18.58	9.12
27-Jun-01	18.74	9.13
28-Jun-01	18.85	9.15
29-Jun-01	18.34	9.23
30-Jun-01	18.47	9.25
1-Jul-01	18.57	9.26
2-Jul-01	18.63	9.23
3-Jul-01	18.64	9.18
4-Jul-01	18.62	9.25
5-Jul-01	18.61	9.29
6-Jul-01	18.57	9.21
7-Jul-01	18.58	9.24
8-Jul-01	18.60	9.19
9-Jul-01	18.59	9.24
10-Jul-01	18.58	9.36
11-Jul-01	18.54	9.43
12-Jul-01	18.59	9.49
13-Jul-01	18.56	9.50
14-Jul-01	18.62	9.51
15-Jul-01	18.60	9.42
16-Jul-01	18.59	9.63
17-Jul-01	18.56	9.74
18-Jul-01	18.59	9.82
19-Jul-01	18.54	9.85
20-Jul-01	18.59	9.93
21-Jul-01	18.58	10.16
22-Jul-01	18.58	10.55
23-Jul-01	18.58	10.68
24-Jul-01	18.56	10.23
25-Jul-01	18.63	10.24
26-Jul-01	18.58	10.31
27-Jul-01	18.56	10.36
28-Jul-01	18.57	10.37
29-Jul-01	18.55	10.43
30-Jul-01	18.59	10.53

$ DATE **	**** DBK EYS ******	
	15805	15806
$	S191-H	S191-T
31-Jul-01	18.52	10.54
1-Aug-01	18.56	10.45
2-Aug-01	18.62	10.58
3-Aug-01	18.58	10.89
4-Aug-01	18.52	11.00
5-Aug-01	18.53	11.18
6-Aug-01	18.57	11.12
7-Aug-01	18.57	11.17
8-Aug-01	18.57	11.29
9-Aug-01	18.55	11.36
10-Aug-01	18.57	11.43
11-Aug-01	18.57	11.48
12-Aug-01	18.55	11.51
13-Aug-01	18.58	11.55
14-Aug-01	18.53	11.62
15-Aug-01	18.57	11.64
16-Aug-01	18.54	11.71
17-Aug-01	18.58	11.74
18-Aug-01	18.60	11.73
19-Aug-01	18.50	11.74
20-Aug-01	18.52	11.72
21-Aug-01	18.61	11.77
22-Aug-01	18.59	11.89
23-Aug-01	18.54	11.88
24-Aug-01	18.61	11.92
25-Aug-01	18.56	11.93
26-Aug-01	18.48	11.79
27-Aug-01	18.58	11.81
28-Aug-01	18.50	11.90
29-Aug-01	18.74	11.94
30-Aug-01	18.49	11.94
31-Aug-01	18.73	12.06
1-Sep-01	18.37	12.00
2-Sep-01	18.73	11.96
3-Sep-01	18.37	11.96

Attachment C

SFWMD Letter of February 14, 2001 Authorizing Drought Period Continued Use of Taylor Creek at Water Levels below 17.5 NGVD

BEST AVAILABLE COPY

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
3301 Gun Club Road, West Palm Beach, Florida 33406 • (561) 686-8800 • FL WATS 1-800-432-2045 • TDD (561) 697-2574
Mailing Address: P.O. Box 24680, West Palm Beach, FL 33416-4680 • www.sfwmd.gov

CON-24-06

February 14, 2001

George K. Allen
Indiantown Cogeneration, L.P.
P.O. Box 1799
Indiantown, Florida 34956

Dear Mr. Allen:

Subject: Site Certification No. PA 90-31
Indiantown Cogeneration, L.P.

Due to the extended and severe drought conditions this year, the District approves Indiantown Cogeneration's request to withdraw water from the Floridan aquifer wells for more than 90 days during the 365-day period ending July 31, 2001. It is anticipated that the return of the rainy season will allow for the plant to return to its normal L-63N Canal withdrawal source. The District appreciates Indiantown Cogeneration's continuing cooperation in submitting water quality and pumpage data from the Floridan wells on a monthly basis during this drought event.

The District also does not have any objections to Indiantown Cogeneration's proposed operational plan to utilize a reduced quantity of water from the L-63N Canal (even when the water level is below 17.5 feet NGVD) to blend with water from the Floridan wells completed in the lower production zone. The volume of water will be limited to that necessary to achieve a blended chloride concentration of 630 mg/L. Indiantown Cogeneration will provide a monthly summary report documenting the volume withdrawn from the L-63N Canal and the calculations showing how the blending ratios were determined. This authorization will expire on July 31, 2001 or the date when the recently proposed Upper Floridan wells are completed and operational, whichever is earlier. Please be advised that the District may find it necessary to request Indiantown Cogeneration to discontinue L-63N Canal withdrawals, if the water levels fall to an elevation which raises concern about the potential for harm to water resources or other existing legal users.

If you have any questions on this matter, please contact me at 1-800-432-2045 x6922 or 561-682-6922.

Sincerely,

Jeffrey Rosenfeld
Senior Supervising Hydrogeologist
Water Use Department

C: Hamilton Oven, FDEP
Nicholas Laryea, ICLP
John Morgan, SFWMD
Lindell Williams, SFWMD

GOVERNING BOARD

Michael Collins, *Chairman*
Michael D. Minton, *Vice Chairman*
Mitchell W. Berger
Vera M. Carter
Gerardo B. Fernandez
Patrick J. Gleason
Nicolas J. Gutierrez, Jr.
Harkley R. Thornton
Trudi K. Williams

EXECUTIVE OFFICE

Frank R. Finch, P.E., *Executive Director*
James E. Blount, *Chief of Staff*

Attachment D

Other Permitted Users Along the Interconnected Canals C-59 and C-63.

Attachment D - Other Permitted Users Along the Interconnected Canals C-59 and C-63

	APP_NO	PERMIT_NO	PROJECT_NAME	LU_CODE	INTAKE ELEV	REC_TOTAL_ANL_ALLOC	NAME	SOURCE_TYPE
C-59	900207-19	47-00272-W	ANCIENT OAKS RV RESORT	LAN		0	SFWMD CANAL (C-59)	SW
	940329-151	56-00129-W	MOOSE JOHN THURSTON	AGR	17	47.1	NSLRWCD Canal (C-59)	SW
	940329-169	56-00152-W	OKEECHOBEE EIGHTY	AGR	14	54.73	NSLRWCD Canal (C-59)	SW
	940329-270	56-00265-W	CLOONCAN GROVE	AGR	15	46.92	NSLRWCD Canal (C-59)	SW
	940329-314	56-00322-W	STRIETER GROVES	AGR	13.5	73.19	NSLRWCD Canal (C-59)	SW
	940329-314	56-00322-W	STRIETER GROVES	AGR	9	73.19	NSLRWCD Canal (C-59)	SW
	940329-433	56-00719-W	BECKER GROVE #B-9	AGR		105.56	NSLRWCD Canal (C-59)	SW
C-63	940329-311	56-00319-W	CITRUS GROVE	AGR		117.29	NSLRWCD Canal (C-63)	SW
	940329-311	56-00319-W	CITRUS GROVE	AGR		117.29	NSLRWCD Canal (C-63)	SW

Source: SFWMD Database query preformed by Rick Bower on 26-Feb-2001

BEST AVAILABLE COPY

QUAD 13 & 17
ITEM 1274 14
fellcostay

South Florida Water Management District

P.O. Box 24680 • 3301 Gun Club Road • West Palm Beach, FL 33416-4680 • (407) 686-8800 • FL WATS 1-800-432-2045

CERTIFIED MAIL NO. P 300 321 710
[illegible]-00272-A (Appl. #900207-19)

March 29, 1990

Mr. William D. Neilly, Jr., President
Ancient Oaks Condominium Association
[illegible] US Hwy 441
[illegible], FL 33474

Dear Mr. Neilly:

SUBJECT: Water Use General Permit: #47-00272-W
Project: Ancient Oaks RV Resort
Type of Use: Irrigation
County: Okeechobee; Sec. 5, Twp. 38S, Rge. 36E.
Permittee: Ancient Oaks Condominium Association

This letter is to notify you of the District's agency action concerning your Notice of Intent to Use Water. This action is taken pursuant to Rule 40E-20.042 and Chapter 40E-20, Florida Administrative Code. Based on the information provided, District rules have been adhered to and a General Water Use Permit is in effect for this project subject to:

1. Not receiving a filed request for a Chapter 120, Florida Statutes, administrative hearing and

2. The attached Limiting Conditions on Exhibit 1.

This permit is for use of 40800 gallons per day on the average or 50000 gallons per day on a maximum day. Surface water withdrawals will be by one 85 GPM surface water pump withdrawing from C-59. Prior to exceeding these quantities, a modification to this permit will be necessary.

Withdrawals will be by a surface water pump only. Prior to any change in withdrawal facilities, a permit modification will be necessary.

This project is for a total of 30 acres, of which 11 acres will be irrigated.

Governing Board
James F. Garner, Chairman - Fort Myers
Doran A. Jason, Vice Chairman - Key Biscayne
J.D. York - Palm City
Arsenio Milian - Miami
Fritz Stein - Belle Glade
Mike Stout - Windermere
Ken Adams - West Palm Beach
Valerie Boyd - Naples
James E. Nall - Fort Lauderdale
John R. Wodraska, Executive Director
Tilford C. Creel, Deputy Executive Director
Thomas K. MacVicar, Deputy Executive Director

Unless otherwise modified or revoked, for each withdrawal authorized herein, the duration of the General Permit shall be for twenty years, determined as follows:

1. For uses in existence on the effective date of this rule, the 20 year period begins on the effective date of this rule (January 29, 1979).

2. For uses not in existence on the effective date of this rule, the 20 year period begins with the date of filing the Notice of Intent to Use Water.

This permit will expire on February 7, 2010.

Should you object to the Limiting Conditions, please refer to the attached "Notice of Rights" which addresses the procedures to be followed if you desire a public hearing or other review of the proposed agency action. Please contact this office if you have questions concerning this matter. If we do not hear from you prior to the date specified in the "Notice of Rights", we will assume that you concur with the District's recommendation.

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a "Notice of Rights" has been mailed to the addressee not later than 5:00 p.m. this 29th day of March, 1990, in accordance with Section 120.60(3), Florida Statutes.

Sincerely,

STEVE LAMB
Director, Water Use Division
Regulation Department

SL:as
Enclosure
c: Ms. Valerie Boyd
bc: Ms. Beth Colavecchio
Regulatory Administration
Water Use
Ms. Ann Marie Superchi
Field Representative
Area Engineer
Enforcement

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
P.O. BOX 24680
WEST PALM BEACH, FL. 33416-4680

RECEIVED
JAN 18 1990
REGULATION DEPT

.....NOTICE OF INTENT TO USE WATER (CHAPTER 40-20 F.A.C.).....

APPLICANT'S NAME ANCIENT OAKS CONDOMINIUM ASSOCIATION

PROPERTY OWNER'S NAME ANCIENT OAKS CONDOMINIUM ASSOCIATION

MAILING ADDRESS 6607 SE US HWY 441

CITY OKEECHOBEE STATE FLORIDA ZIP 33474 PHONE: 813 763-0991

PROJECT NAME ANCIENT OAKS RV RESORT

PROJECT LOCATION CITY N/A COUNTY OKEECHOBEE

SECTION(S) 5 TOWNSHIP(S) 38S RANGE(S) 36E

ADDRESS OF PROJECT 6607 SE US HWY 441

CITY OKEECHOBEE STATE FLORIDA ZIP 33474

USE IS (X) EXISTING ( ) PROPOSED ( ) A PERMIT TO BE MODIFIED

IF EXISTING HOW LONG HAS IT EXISTED? _____

IF PROPOSED, HAS A SURFACE WATER MANAGEMENT PERMIT BEEN APPLIED FOR? YES

ACREAGE IS ( ) OWNED ( ) LEASED NUMBER OF ACRES 11

PURPOSE RESIDENTIAL LAWNS
(PASTURE, GROVE, MOTEL, SWIMMING POOL SUPPLY, ETC.)

TYPE OF WATER USE IRRIGATION
(IRRIGATION, PUBLIC WATER SUPPLY, ETC.)

IF IRRIGATION, ACRES IRRIGATED? 11 ACRES

GIVE ESTIMATED AVERAGE AMOUNT OF WATER TO BE USED 40,800 GPD

GIVE ESTIMATED MAXIMUM AMOUNT OF WATER TO BE USED 50,000 GPD

IF A PUBLIC WATER SUPPLY, WHAT IS THE

TREATMENT PLANT CAPACITY _____

ESTIMATED POPULATION SERVED _____

NUMBER OF UNITS SERVED _____

RECEIVED
FEB 07 1990
REGULATION DEPT

SOURCE DATA

( ) SHALLOW WELLS ( ) FLORIDAN AQUIFER WELLS

( ) PUMPED
( ) FLOWING

( ) LAKE (SPECIFY NAME) _____

(X) CANAL/STREAM (SPECIFY NAME) C-59 APPEASEMENT CANAL

( ) OTHER (SPECIFY) _____

WELL DATA (IF APPLICABLE)

WELL NO.	DIAMETER (INCHES)	DEPTH (FT.)	CASING DEPTH	PUMP TYPE	PUMP INTAKE DEPTH	PUMP CAPACITY (GPM)

SURFACE WATER INTAKE PUMP DATA

PUMP TYPE STA-RITE CENTRIFUGAL PUMP CAPACITY 85 GPM

NOTES:
1. INCLUDE AN ACCURATE MAP SHOWING PROPERTY BOUNDARIES, MAP SCALE, WELL LOCATION(S) AND DISTANCE, IN FEET, FROM KNOWN LANDMARKS
2. INCLUDE A WELL DRILLER'S LOG FOR EACH NEW WELL (FOR A PROPOSED USE THIS SHOULD BE SUBMITTED WITHIN THIRTY DAYS AFTER COMPLETION OF THE WELL). THIS LOG MUST SHOW THE CASED DEPTH.

NAME (PRINT OR TYPE) WILLIAM C NEILLY, JR. PRESIDENT CONDO ASSOCIATION

APPLICANT'S SIGNATURE William C Neilly

DATE 1-12-90

FORM PA-14 (01/85)

Water Management District

WATER USE PERMIT NO. Re-Issue 56-00129-W

(NON-ASSIGNABLE)

DATE ISSUED: October 8, 1987 EXPIRATION DATE April 15, 1991 12/15/07 +3

AUTHORIZING: THE CONTINUATION OF AN EXISTING USE OF GROUNDWATER FROM THE FLORIDAN AQUIFER FOR AGRICULTURAL IRRIGATION SERVING 114.0 ACRES WITH AN ANNUAL ALLOCATION OF 89.14 MILLION GALLONS.

LOCATED IN: ST. LUCIE COUNTY, SECTION 14 TWP. 35S RGE. 38E

ISSUED TO: W. C. Graves, Jr.
(Wasson and Pink Groves)
P. O. Box 517
Vero Beach, Florida 32960

This Permit is issued pursuant to Application for Permit No. XXX dated April 29, 19 87 for the Use of Water as specified above and subject to the Special Conditions set forth below. Said application, including all plans and specifications attached thereto, is by reference made a part hereof.

Upon written notice to the permittee, this permit may be temporarily modified, or restricted under a Declaration of Water Shortage or a Declaration of Emergency due to Water Shortage in accordance with provisions of Ch. 373, Fla. Statutes, and applicable rules and regulations of the South Florida Water Management District.

This Permit may be permanently or temporarily revoked, in whole or in part, for the violation of the conditions of the permit or for the violation of any provision of the Water Resources Act and regulations thereunder.

This Permit does not convey to permittee any property rights nor any privileges other than those specified herein, nor relieve the permittee from complying with any law, regulation, or requirement affecting the rights of other bodies or agencies.

SPECIAL CONDITIONS ARE AS FOLLOWS:

SEE SHEETS 2, 3 AND 4 OF 4 - 19 GROUNDWATER SPECIAL CONDITIONS.

FILED WITH THE CLERK OF THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT
ON 10-12-87 Original signed by:
BY Vern Kaiser
DEPUTY CLERK

SOUTH FLORIDA WATER MANAGEMENT DISTRICT, BY ITS GOVERNING BOARD

Original Signed
By by Thomas E. Huser
Assistant Secretary

TABLE B
DESCRIPTION OF SURFACE WATER PUMPS

Original Submitted 2/17/93 WPB

DRAINAGE DISTRICT	North St Lucie			
PUMP NUMBER	NONE			①
MAP DESIGNATION				
SURFACE WATER BODY				Canal 59
EXISTING OR PROPOSED				Exist
PUMP TYPE				
PUMP MANUFACTURER AND MODEL NUMBER				Hogan Bros.
PUMP CAPACITY (GPM)				8500
PUMP HORSEPOWER				Tractor
PUMP DIAMETER (INCHES)				18"
ELEVATION OF INTAKE (NGVD)				17'
IS PUMP A TWO WAY PUMP?				Yes

Dept. 9/9/93 Exhibit 6 pump station elevation (no info)

EXHIBIT 2

CALCULATION OF IRRIGATION REQUIREMENTS

THIS PROJECT IS LOCATED IN THE ST. LUCIE COUNTY SERVICE AREA

STATION: FT. PIERCE

CROP: CITRUS------ **SYSTEM:** FLOOD

ACREAGE: 114.00 **(SOIL TYPE: 1.5)** **EFFICIENCY:** 0.50

MAXIMUM MONTHLY SUPPLEMENTAL CROP REQUIREMENT: 5.30 INCHES

MAXIMUM MONTHLY SUPPLEMENTAL WATER USE:

5.30 IN X 114.00 AC / 0.50 X .02715 MG/AC-IN = 32.81 MG

AVERAGE ANNUAL SUPPLEMENTAL REQUIREMENT: 14.40 INCHES

AVERAGE ANNUAL SUPPLEMENTAL WATER USE:

14.40 IN X 114.00 AC / 0.50 X .02715 MG/AC-IN = 89.14 MG

CALCULATED MAXIMUM MONTHLY ALLOCATION: 32.81 MG
(100.72 ACRE FEET)

CALCULATED MAXIMUM ANNUAL ALLOCATION: 89.14 MG
(273.66 ACRE FEET)

EXHIBIT 6

FORM 0299
Rev 5/85

South Florida
Water Management District

WATER USE PERMIT NO. Re-Issue and Transfer 56-00152-W

(NON-ASSIGNABLE)

12/15/01

DATE ISSUED: October 8, 1987 EXPIRATION DATE April 15, 1991

AUTHORIZING: THE CONTINUATION OF AN EXISTING USE OF GROUNDWATER AND SURFACE WATER FROM THE FLORIDAN AQUIFER AND NORTH ST. LUCIE RIVER WATER CONTROL DISTRICT'S C-59 FOR AGRICULTURAL IRRIGATION SERVING 70.0 ACRES WITH AN ANNUAL ALLOCATION OF 54.73 MILLION GALLONS.

LOCATED IN: ST. LUCIE COUNTY, SECTION 14 TWP. 35S RGE. 38E

ISSUED TO: Richard Davidson and
James R. Fowler, Jr.
(Okeechobee Eighty)
P. O. Box 367
Ft. Pierce, Florida 34954

This Permit is issued pursuant to Application for Permit No. XXX dated May 12, 19 87 for the Use of Water as specified above and subject to the Special Conditions set forth below. Said application, including all plans and specifications attached thereto, is by reference made a part hereof.

Upon written notice to the permittee, this permit may be temporarily modified, or restricted under a Declaration of Water Shortage or a Declaration of Emergency due to Water Shortage in accordance with provisions of Ch. 373, Fla. Statutes, and applicable rules and regulations of the South Florida Water Management District.

This Permit may be permanently or temporarily revoked, in whole or in part, for the violation of the conditions of the permit or for the violation of any provision of the Water Resources Act and regulations thereunder.

This Permit does not convey to permittee any property rights nor any privileges other than those specified herein, nor relieve the permittee from complying with any law, regulation, or requirement affecting the rights of other bodies or agencies.

SPECIAL CONDITIONS ARE AS FOLLOWS:

SEE SHEETS 2, 3 AND 4 OF 4 - 19 GROUNDWATER AND SURFACE WATER SPECIAL CONDITIONS.

FILED WITH THE CLERK OF THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT
ON 10-12-87 Original signed by: Vern Kaiser
BY _____
DEPUTY CLERK

SOUTH FLORIDA WATER MANAGEMENT DISTRICT, BY ITS GOVERNING BOARD

Original Signed by Thomas E. Huser
By _____
Assistant Secretary

TABLE 8
DESCRIPTION OF SURFACE WATER PUMPS

DRAINAGE DISTRICT	MSLRWCD			
PUMP NUMBER	1			
MAP DESIGNATION	3			
SURFACE WATER BODY	MSLRWCD C-59			
EXISTING OR PROPOSED	E			
PUMP TYPE	Lift			
PUMP MANUFACTURER AND MODEL NUMBER	Couch 4826			
PUMP CAPACITY (GPM)	4000			
PUMP HORSEPOWER	30			
PUMP DIAMETER (INCHES)	14"			
ELEVATION OF INTAKE (NGVD)	N/A			
IS PUMP A TWO WAY PUMP?	YES			

EXHIBIT 5

FORM 0299
Rev 5/85

South Florida
Water Management District

12/15/01

Re-Issue
WATER USE PERMIT NO. 56-00265-W

(NON-ASSIGNABLE)

DATE ISSUED: September 10, 1987 EXPIRATION DATE April 15, 1991

AUTHORIZING: THE CONTINUATION OF AN EXISTING USE OF GROUNDWATER AND SURFACE WATER FROM THE FLORIDAN AQUIFER AND NORTH ST. LUCIE RIVER WATER MANAGEMENT DISTRICT'S C-59 FOR AGRICULTURAL IRRIGATION SERVING 60 ACRES WITH AN ANNUAL ALLOCATION OF 46.92 MILLION GALLONS.

LOCATED IN: ST. LUCIE COUNTY, SECTION 11 TWP. 35S RGE. 38E

ISSUED TO: Edsall-Durrett Groves
(Edsall-Durrett #2)
3915 1st Street SW
Vero Beach, Florida 32962-2415

This Permit is issued pursuant to Application for Permit No. XXX dated April 28, 19 87 for the Use of Water as specified above and subject to the Special Conditions set forth below. Said application, including all plans and specifications attached thereto, is by reference made a part hereof.

Upon written notice to the permitee, this permit may be temporarily modified, or restricted under a Declaration of Water Shortage or a Declaration of Emergency due to Water Shortage in accordance with provisions of Ch. 373, Fla. Statutes, and applicable rules and regulations of the South Florida Water Management District.

This Permit may be permanently or temporarily revoked, in whole or in part, for the violation of the conditions of the permit or for the violation of any provision of the Water Resources Act and regulations thereunder.

This Permit does not convey to permittee any property rights nor any privileges other than those specified herein, nor relieve the permittee from complying with any law, regulation, or requirement affecting the rights of other bodies or agencies.

SPECIAL CONDITIONS ARE AS FOLLOWS:

SEE SHEETS 2, 3 AND 4 OF 4 - 19 GROUNDWATER AND SURFACE WATER SPECIAL CONDITIONS.

FILED WITH THE CLERK OF THE

TABLE B (DESCRIPTION OF SURFACE WATER PUMPS)

DRAINAGE DISTRICT	NSLRWCD			
PUMP NO.	1			
MAP DESIGNATION	EXH.3			
SURFACE WATER BODY	CANAL #59			
EXISTING OR PROPOSED	E			
PUMP MANUFACTURER AND MODEL NO.	B&B			
PUMP TYPE	CENTRIF.			
PUMP CAPACITY	10,000 GPM			
PUMP HORSEPOWER	55 HP			
PUMP DIAMETER	24"			
ELEVATION OF INTAKE (NGVD)	15'			
IS PUMP A TWO WAY PUMP?	YES			

EXHIBIT 5

CALCULATION OF IRRIGATION REQUIREMENTS

THIS PROJECT IS LOCATED IN THE ST. LUCIE COUNTY SERVICE AREA

STATION: FT. PIERCE

CROP: CITRUS------ SYSTEM: FLOOD

ACREAGE: 60.00 (SOIL TYPE: 1.5) EFFICIENCY: 0.50

MAXIMUM MONTHLY SUPPLEMENTAL CROP REQUIREMENT: 5.30 INCHES

MAXIMUM MONTHLY SUPPLEMENTAL WATER USE:

5.30 IN X 60.00 AC / 0.50 X .02715 MG/AC-IN = 17.27 MG

AVERAGE ANNUAL SUPPLEMENTAL REQUIREMENT: 14.40 INCHES

AVERAGE ANNUAL SUPPLEMENTAL WATER USE:

14.40 IN X 60.00 AC / 0.50 X .02715 MG/AC-IN = 46.92 MG

CALCULATED MAXIMUM MONTHLY ALLOCATION: 17.27 MG
(53.01 ACRE FEET)

CALCULATED MAXIMUM ANNUAL ALLOCATION: 46.92 MG
(144.03 ACRE FEET)

EXHIBIT 6

FORM 0299
Rev 5/85

South Florida
Water Management District
WATER USE PERMIT NO. Re-Issue 56-00322-W

(NON-ASSIGNABLE)

DATE ISSUED: September 10, 1987 EXPIRATION DATE April 15, 1991 12/15/01

AUTHORIZING: THE CONTINUATION OF AN EXISTING USE OF GROUNDWATER AND SURFACE WATER FROM THE FLORIDAN AQUIFER AND NORTH ST. LUCIE RIVER WATER MANAGEMENT DISTRICT'S C-59 FOR AGRICULTURAL IRRIGATION SERVING 93.6 ACRES WITH AN ANNUAL ALLOCATION OF 73.19 MILLION GALLONS.

LOCATED IN: ST. LUCIE COUNTY, SECTION 11 TWP. 35S RGE. 38E

ISSUED TO: Strieter Groves
2880 N. Riverside Drive
Indiatlantic, Florida 32903

This Permit is issued pursuant to Application for Permit NXX dated May 6, 19 87 for the Use of Water as specified above and subject to the Special Conditions set forth below. Said application, including all plans and specifications attached thereto, is by reference made a part hereof.

Upon written notice to the permittee, this permit may be temporarily modified, or restricted under a Declaration of Water Shortage or a Declaration of Emergency due to Water Shortage in accordance with provisions of Ch. 373, Fla. Statutes, and applicable rules and regulations of the South Florida Water Management District.

This Permit may be permanently or temporarily revoked, in whole or in part, for the violation of the conditions of the permit or for the violation of any provision of the Water Resources Act and regulations thereunder.

This Permit does not convey to permittee any property rights nor any privileges other than those specified herein, nor relieve the permittee from complying with any law, regulation, or requirement affecting the rights of other bodies or agencies.

SPECIAL CONDITIONS ARE AS FOLLOWS:

SEE SHEETS 2, 3 AND 4 OF 4 - 19 GROUNDWATER AND SURFACE WATER SPECIAL CONDITIONS.

CALCULATION OF IRRIGATION REQUIREMENTS

THIS PROJECT IS LOCATED IN THE ST. LUCIE COUNTY SERVICE AREA

STATION: FT. PIERCE

CROP: CITRUS SYSTEM: FLOOD

ACREAGE: 93.6 (SOIL TYPE 1.5) EFFICIENCY: 0.50

MAXIMUM MONTHLY SUPPLEMENTAL CROP REQUIREMENT: 5.30 INCHES

MAXIMUM MONTHLY SUPPLEMENTAL WATER USE:

5.30 IN X 93.6 AC/0.50 X .02715 MG/AC-IN = 26.94 MG

AVERAGE ANNUAL SUPPLEMENTAL REQUIREMENT: 14.4 INCHES

AVERAGE ANNUAL SUPPLEMENTAL WATER USE:

14.4 IN X 93.6 AC/0.50 X .02715 MG/AC-IN = 73.19 MG

CALCULATED MAXIMUM MONTHLY ALLOCATION: 26.94 MG (82.68 ACRE FEET)

CALCULATED MAXIMUM ANNUAL ALLOCATION: 73.19 MG (224.64 ACRE FEET)

EXHIBIT 6

TABLE B (DESCRIPTION OF SURFACE WATER PUMPS)

DRAINAGE DISTRICT	N.S.L.R.W.M.D.			
PUMP NO.	1	4		
MAP DESIGNATION	EXB.4	EXB.4		
SURFACE WATER BODY	CANAL 59	CANAL 59		
EXISTING OR PROPOSED	E	E		
PUMP MANUFACTURER AND MODEL NO.	HOME MADE	PELICAN		
PUMP TYPE				
PUMP CAPACITY	7,500 GPM	5,000 GPM		
PUMP HORSEPOWER		25 HP		
PUMP DIAMETER	20"	12"		
ELEVATION OF INTAKE (NGVD)	13.5	9		
IS PUMP A TWO WAY PUMP?	YES	NO		

EXHIBIT 5

FORM 0299
Rev 5/85

South Florida
Water Management District

WATER USE PERMIT NO. 56-00719-W

(NON-ASSIGNABLE)

DATE ISSUED: March 9, 1989 EXPIRATION DATE October 15, 1992 2/15/01

AUTHORIZING: THE USE OF GROUND AND SURFACE WATER FROM FLORIDAN AQUIFER AND NORTH ST. LUCIE RIVER CONTROL DISTRICT FOR AGRICULTURAL SERVING 135 ACRES WITH AN ANNUAL ALLOCATION OF 105.56 MILLION GALLONS.

LOCATED IN: ST. LUCIE COUNTY, SECTION 1 TWP. 36S RGE. 38E

ISSUED TO: Becker Holding Corporation
(Becker Grove # B-9)
P.O. Box 1240
Ft. Pierce, Fl. 34954

This Permit is issued pursuant to Application for Permit No. 12208-B dated December 20, 1988 for the Use of Water as specified above and subject to the Special Conditions set forth below. Said application, including all plans and specifications attached thereto, is by reference made a part hereof.

Upon written notice to the permittee, this permit may be temporarily modified, or restricted under a Declaration of Water Shortage or a Declaration of Emergency due to Water Shortage in accordance with provisions of Ch. 373, Fla. Statutes, and applicable rules and regulations of the South Florida Water Management District.

This Permit may be permanently or temporarily revoked, in whole or in part, for the violation of the conditions of the permit or for the violation of any provision of the Water Resources Act and regulations thereunder.

This Permit does not convey to permittee any property rights nor any privileges other than those specified herein, nor relieve the permittee from complying with any law, regulation, or requirement affecting the rights of other bodies or agencies.

SPECIAL CONDITIONS ARE AS FOLLOWS:

SEE SHEET 2,3 OF 3 - 18 LIMITING CONDITIONS.

TABLE B
DESCRIPTION OF SURFACE WATER PUMPS

DRAINAGE DISTRICT	NSLRWCD			
PUMP NUMBER	1			
MAP DESIGNATION	P1			
SURFACE WATER BODY	Header Canal			
EXISTING OR PROPOSED	Existing			
PUMP TYPE	Axial Flow			
PUMP MANUFACTURER AND MODEL NUMBER	Couch Mfg.			
PUMP CAPACITY (GPM)	10,000			
PUMP HORSEPOWER	40			
PUMP DIAMETER (INCHES)	20"			
ELEVATION OF INTAKE (NGVD)	Unknown			
IS PUMP A TWO WAY PUMP?	Yes			

EXHIBIT 6

CALCULATION OF IRRIGATION REQUIREMENTS

THIS PROJECT IS LOCATED IN THE UPPER EAST COAST SERVICE AREA

STATION: FT. PIERCE

CROP: CITRUS------ **SYSTEM:** FLOOD

ACREAGE: 135.00 **(SOIL TYPE:** 1.5) **EFFICIENCY:** 0.50

AVERAGE ANNUAL SUPPLEMENTAL REQUIREMENT: 14.40 INCHES

AVERAGE ANNUAL SUPPLEMENTAL WATER USE:

14.40 IN X 135.00 AC / 0.50 X .02715 MG/AC-IN = 105.56 MG

MAXIMUM MONTHLY SUPPLEMENTAL CROP REQUIREMENT: 5.30 INCHES

MAXIMUM MONTHLY WATER USE:

5.30 IN X 135.00 AC / 0.50 X .02715 MG/AC-IN = 38.85 MG

CALCULATED MAXIMUM ANNUAL ALLOCATION: 105.56 MG
(324.07 ACRE FEET)

ANNUAL ALLOCATION / TOTAL IRRIGATED ACREAGE AVERAGE: 28.80 INCHES/ACRE

CALCULATED MAXIMUM MONTHLY ALLOCATION: 38.85 MG
(119.27 ACRE FEET)

EXHIBIT 2

FORM 0299
Rev 5/85

South Florida
Water Management District
WATER USE PERMIT NO. Re-Issue and Transfer 56-00319-W

(NON-ASSIGNABLE)

DATE ISSUED: February 11, 1988 EXPIRATION DATE April 15, 1991 Dec. 15, 2001

AUTHORIZING: THE CONTINUATION OF AN EXISTING USE OF GROUNDWATER AND SURFACE WATER FROM THE FLORIDAN AQUIFER AND NORTH ST. LUCIE RIVER WATER CONTROL DISTRICT'S C-63 FOR AGRICULTURAL IRRIGATION SERVING 150 ACRES WITH AN ANNUAL ALLOCATION OF 117.29 MILLION GALLONS.

LOCATED IN: ST. LUCIE COUNTY, SECTION 11 TWP. 35S RGE. 38E

ISSUED TO: Milton H. Hatfield, Trustee
Betelgeuse Largesse Condominium Association, Inc.
c/o Cassens Grove Service, Inc.
P. O. Box 613
Fort Pierce, Florida 33454

This Permit is issued pursuant to Application for Permit No. 11187-B dated November 12, 19 87 for the Use of Water as specified above and subject to the Special Conditions set forth below. Said application, including all plans and specifications attached thereto, is by reference made a part hereof.

Upon written notice to the permittee, this permit may be temporarily modified, or restricted under a Declaration of Water Shortage or a Declaration of Emergency due to Water Shortage in accordance with provisions of Ch. 373, Fla. Statutes, and applicable rules and regulations of the South Florida Water Management District.

This Permit may be permanently or temporarily revoked, in whole or in part, for the violation of the conditions of the permit or for the violation of any provision of the Water Resources Act and regulations thereunder.

This Permit does not convey to permittee any property rights nor any privileges other than those specified herein, nor relieve the permittee from complying with any law, regulation, or requirement affecting the rights of other bodies or agencies.

SPECIAL CONDITIONS ARE AS FOLLOWS:

SEE SHEETS 2, 3 AND 4 OF 4 - 19 GROUNDWATER AND SURFACE WATER SPECIAL CONDITIONS.

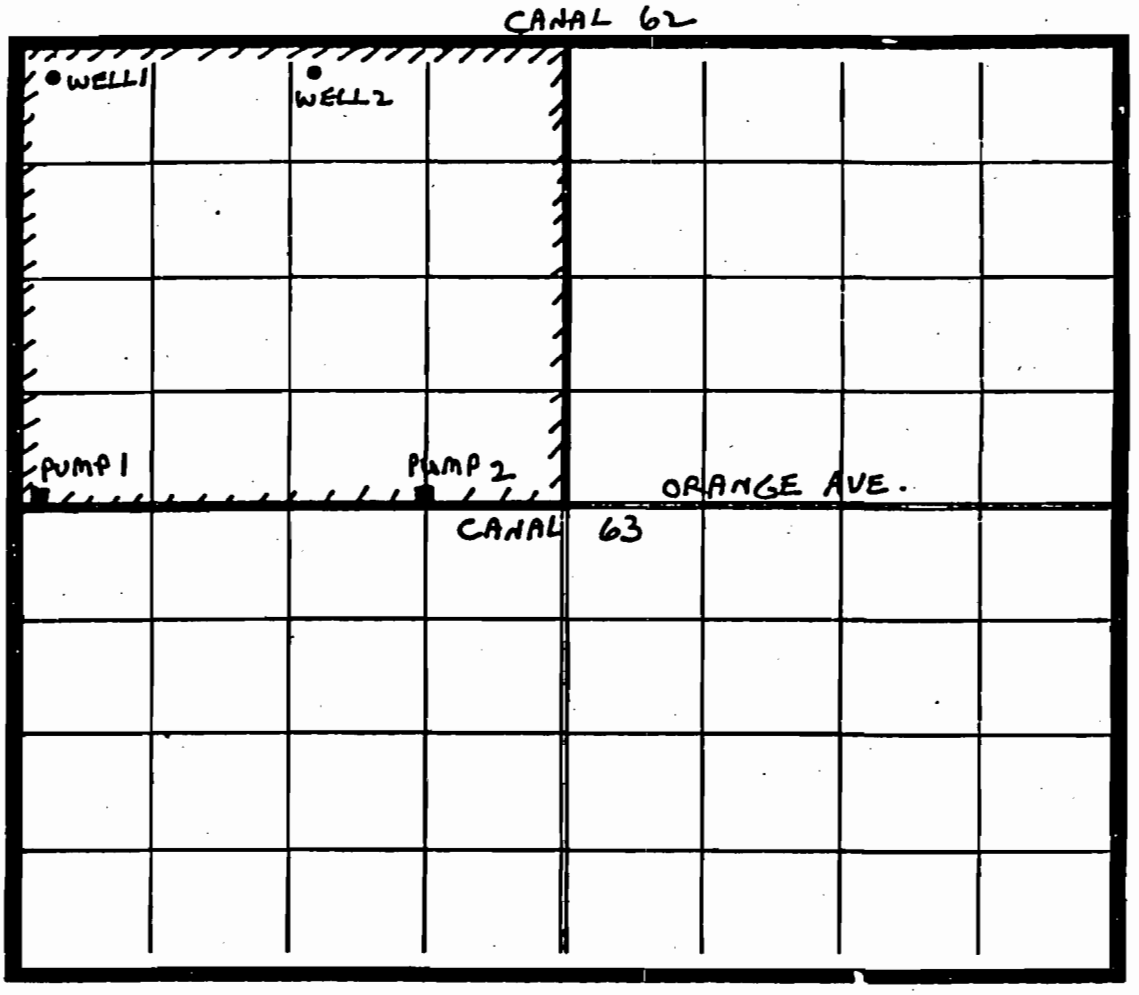
SECTION MAP

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

APPLICATION NO.: 11187-B PERMIT NO.: 56-00319-W

COUNTY : St. Lucie

SECTION: 11 TOWNSHIP: 35 S RANGE: 38 E



SCALE: |——| = 660 FEET

A SECTION OF LAND IS ONE SQUARE MILE AND CONTAINS 640 ACRES.
EACH SMALL SQUARE EQUALS 10 ACRES

EXHIBIT 3

TABLE B (DESCRIPTION OF SURFACE WATER PUMPS)

DRAINAGE DISTRICT	NSLRWCD	NSLRWCD		
PUMP NO.	1	2		
MAP DESIGNATION	PUMP 1	PUMP 2		
SURFACE WATER BODY	NSLRWCD CANAL 63	NSLRWCD CANAL 63		
EXISTING OR PROPOSED	EXIST.	EXIST.		
PUMP MANUFACTURER AND MODEL NO.	B+B	B+B		
PUMP TYPE	PTO			
PUMP CAPACITY	5,000 GPM	10,000 GPM		
PUMP HORSEPOWER	15 HP	30 HP		
PUMP DIAMETER	18"	24"		
ELEVATION OF INTAKE (NGVD)	UNKNOWN	UNKNOWN		
IS PUMP A TWO WAY PUMP?	NO- IRR. ONLY	NO- IRR. ONLY		

EXHIBIT 5

LCULATION OF IRRIGATION REQUIREMENTS

THIS PROJECT IS LOCATED IN THE ST. LUCIE COUNTY SERVICE AREA

STATION: FT. PIERCE

CROP: CITRUS------ **SYSTEM:** FLOOD

ACREAGE: 150.00 **(SOIL TYPE:** 1.5) **EFFICIENCY:** 0.50

MAXIMUM MONTHLY SUPPLEMENTAL CROP REQUIREMENT: 5.30 INCHES

MAXIMUM MONTHLY SUPPLEMENTAL WATER USE:

5.30 IN X 150.00 AC / 0.50 X .02715 MG/AC-IN = 43.17 MG

AVERAGE ANNUAL SUPPLEMENTAL REQUIREMENT: 14.40 INCHES

AVERAGE ANNUAL SUPPLEMENTAL WATER USE:

14.40 IN X 150.00 AC / 0.50 X .02715 MG/AC-IN = 117.29 MG

CALCULATED MAXIMUM MONTHLY ALLOCATION: 43.17 MG
(132.53 ACRE FEET)

CALCULATED MAXIMUM ANNUAL ALLOCATION: 117.29 MG
(360.07 ACRE FEET)

EXHIBIT 6

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