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SENDER: Complete items 1 and 2 when additional servi-	
Put your address in the "RETURN TO", space on the reverse card from being returned to you. The return receipt fee will	provide you the name of the person
I delivered to and the date of delivery. For additional fees the	following services are available. Consult
postmaster for fees and check box(es) for additional service	
1. X Show to whom delivered, date, and addressee's addre	4. Article Number
3. Article Addressed to:	P. 274 010 453
Thomas M. Moses	
Reedy Creek Imporvement Dist.	Type of Service:
P.O. Box 36	Registered Insured COD
Lake Buena Vista, FL 32830	Express Mail
	Always obtain signature of addressee or
	agent and DATE DELIVERED.
5. Signature - Addressee	8. Addressee's Address (ONLY if a
x	requested and fee paid)
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PS Form 3811, Feb. 1986	DOMESTIC RETURN RECEIPT

## P 274 010 453

RECEIPT FOR CERTIFIED MAIL

1.0 INSURANCE GOVERAGE PROVIDED

1.01 FOR INTERNATIONAL MAIL

(See Reverse)

985-480-	Chomas M. Moses  Reedy Creek I provement Dist Street and No P.O. Box 36 P.O. State and ZIP Code Lake Buena Vista, FL 32830 Postage	•
- s.	Certified Fee	
	Special Delivery Fee	
'	Restricted Delivery Fee	
	Return Receipt showing to which and Date Delivered	
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3800.	Posimary or Date	
ps Form 3800. June 1985	Mailed: 02/08/88 Permit: AC 48-137740	

#### 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

February 5, 1988

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. Thomas M. Moses Reedy Creek Improvement District Post Office Box 36 Lake Buena Vista, Florida 32830

Dear Mr. Moses:

Attached is one copy of the Revised Technical Evaluation and Preliminary Determination and proposed permit for Reedy Creek Improvement District to construct a 38 MW natural gas-fired turbine generator and heat recovery system with a total heat input of 450 MMBtu/hr at the Central Energy Plant near Lake Buena Vista, Orange County, Florida.

Please submit, in writing, any comments which you wish to have considered concerning the Department's proposed action to Mr. Bill Thomas of the Bureau of Air Quality Management.

Sincerely,

C. H. Fancy, P.E.

Deputy Chief

Bureau of Air Quality

Management

CHF/ks

Attachments

cc: T. Sawicki, CF District

H. Culp, P.E.

W. Aronson, EPA

M. Flores, NPS

#### BEFORE THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of Applications for Permits by:

Reedy Creek Improvement District DER File No. AC 48-137740 Post Office Box 36 Lake Buena Vista, Florida 32830

#### INTENT TO ISSUE

The Department of Environmental Regulation hereby gives notice of its intent to issue a permit (copy attached) for the proposed project as detailed in the applications specified above. The Department is issuing this Intent to Issue for the reasons stated in the attached Revised Technical Evaluation and Preliminary Determination.

The applicant, Reedy Creek Improvement District, applied on August 6, 1987, to the Department of Environmental Regulation for a permit to construct a 38 MW natural gas-fired turbine generator and a heat recovery system with a rotal heat input of 450 MMBtu/hr, at the Central Energy Plant near Lake Buena Vista, Orange County, Florida.

The Department has permitting jurisdiction under Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-2 and 17-4. The project is not exempt from permitting procedures. The Department has determined that an air construction permit was needed for the proposed work.

Pursuant to Section 403.815, F.S. and DER Rule 17-103.150, FAC, you (the applicant) are required to publish at your own expense the enclosed Notice of Proposed Agency Action on permit applications. The notice must be published one time only in a section of a major local newspaper of general circulation in the county in which the project is located and within thirty (30) days from receipt of this intent. Proof of publication must be provided to the Department within seven days of publication of the notice. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permits.

The Department will issue the permits with the attached conditions unless petition for an administrative proceeding (hearing) is filed pursuant to the provisions of Section 120.57, 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. Petitions must comply with the requirement of Florida Administrative Code Rules 17-103.155 and

28-5.201 (copy enclosed) and be filed with (received by) the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant must be filed within fourteen (14) days of receipt of this intent. Petitions filed by other persons must be filed within fourteen (14) days of publication of the public notice or within fourteen (14) days of receipt of this intent, whichever first occurs. 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, concerning the subject permit application. Petitions which are not filed in accordance with the above provisions will be dismissed.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

C. H. Fancy, P.E.

Deputy Chief

Bureau of Air Quality
Management

Copies furnished to:

T. Sawicki, CF District

H. Culp, P.E.

W. Aronson, EPA

M. Flores, NPS

# RULES OF THE ADMINISTRATIVE COMMISSION MODEL RULES OF PROCEDURE CHAPTER 28-5 DECISIONS DETERMINING SUBSTANTIAL INTERESTS

## 28-5.15 Requests for Formal and Informal Proceedings

- (1) Requests for proceedings shall be made by petition to the agency involved. Each petition shall be printed, typewritten or otherwise duplicated in legible form on white paper of standard legal size. Unless printed, the impression shall be on one side of the paper only and lines shall be double spaced and indented.
- (2) All petitions filed under these rules should contain:
  - (a) The name and address of each agency affected and each agency's file or identification number, if known;
  - (b) The name and address of the petitioner or petitioners;
  - (c) All disputed issues of material fact. If there are none, the petition must so indicate;
  - (d) A concise statement of the ultimate facts alleged, and the rules, regulations and constitutional provisions which entitle the petitioner to relief;
  - (e) A statement summarizing any informal action taken to resolve the issues, and the results of that action;
  - (f) A demand for the relief to which the petitioner deems himself entitled; and
  - (g) Such other information which the petitioner contends is material.

#### CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF INTENT TO ISSUE and all copies were mailed before the close of business on 2-8-68.

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

lerk

Date

# State of Florida Department of Environmental Regulation Notice of Intent

The Department of Environmental Regulation hereby gives notice of its intent to issue a permit to Reedy Creek Improvement District to construct a 38 MW natural gas-fired turbine generator and a heat recovery system with a total heat input of 450 MMBtu/hr, at the Central Energy Plant near Lake Buena Vista, Orange County, Florida. The Department is issuing this Intent to Issue for the reasons stated in the attached Technical Evaluation and Preliminary Determination.

Persons whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative determination (hearing) in accordance with Section 120.57, Florida Statutes. The petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and must be filed (received) in the Department's Office of General Counsel, 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Failure to file a petition within this time period constitutes a waiver of any right such person has to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

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 proposed agency action. Therefore, persons who may not wish to file a petition may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Rule 28-5.207, Florida Administrative Code, at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of Administrative Hearings, Department of Administration, 2009, Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

The application 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:

Dept. of Environmental Regulation Bureau of Air Quality Management 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Dept. of Environmental Regulation Central Florida District 3319 Maguire Blvd., Suite 232 Orlando, Florida 32803-3767

Any person may send written comments on the proposed action to Mr. Bill Thomas at the Department's Tallahassee address. All comments mailed within 30 days of the publication of this notice will be considered in the Department's final determination.

# Revised Technical Evaluation and Preliminary Determination

Reedy Creek Improvement District Lake Buena Vista, Orange County, Florida

Gas Fired Turbine Generator Permit No. AC 48-137740

Florida Department of Environmental Regulation Bureau of Air Quality Management Central Air Permitting

#### Application

#### A. Applicant

Reedy Creek Improvement District Post Office Box 36 Lake Buena Vista, Florida 32830

#### B. Project and Location

The applicant proposes to construct a 38 MW natural gas fired turbine generator and a heat recovery system, with a total heat input of 450 MMBtu/hr, at the Central Energy Plant, Bay Lake location, near Lake Buena Vista, Orange County, Florida. The proposed project will emit the pollutants nitrogen oxides (NOx), sulfur dioxide (SO<sub>2</sub>), particulate matter (PM), carbon monoxide (CO), and volatile organic compounds (VOCs).

The UTM coordinates of this facility are Zone 17, 442 km East and 3139 km North.

#### C. Sources Reviewed

This technical evaluation will review the following sources:

- The proposed GE turbine and its associated duct burner and heat recovery system
- 2) "Black" start Cummins emergency diesel generator
- 3) The two small Orenda turbines and their associated heat recovery systems which are being replaced.

Reedy Creek applied for a construction permit for the proposed project on August 5, 1987, and the application was deemed complete on December 22, 1987.

#### D. Facility Category

Reedy Creek's facility in Lake Buena Vista is classified in accordance with the Standard Industrial Classification (SIC) Code as Major Group 49, Electric, Gas and Sanitary Services; Group No. 493, Electric Gas and Other Services; Industry No. 4931, Electric Services.

The existing facility is classified as major in accordance with Chapter 17-2 of the Florida Administrative Code (FAC).

#### II. Project Description

The applicant proposes to replace two smaller Orenda turbines and their associated heat recovery system with a GE LM5000, 38 MW gas fired, oil stand-by, combustion turbine followed by an integrated heat recovery steam boiler and steam turbine, including an in-line 198 MMBtu/hr capacity gas fired duct burner. An emergency 1800HP diesel generator will also be installed and maintained in a state of readiness.

Both the turbine and downstream duct burner will fire No. 2 oil if natural gas supply is curtailed. The duct burner at low fire rate (normal mode) will have a 23 MMBtu/hr heat input rate and at high fire rate (when turbine is out of service) it will have a heat input rate of upto 198 MMBtu/hr.

NOx emissions will be controlled by water injection while other criteria pollutants (combustion products) will be controlled by good combustion practices.

During the equipment change over period of shutting down the existing Orenda turbines and starting up the GE turbine, the existing No. 1 and 2 turbine installations will be maintained on a standby basis through a six-month project debugging period. The existing No. 1 waste heat boiler will also be kept on standby but the No. 2 boiler will be dismantled to make room for the new GE/Vogt unit. The project will have one main stack and one emergency by-pass stack.

It is anticipated that after a reasonable debugging period the remaining standby Orenda turbines and associated boiler will cease operation.

As background information, it should be noted that the Department's Intent to Issue the permit for the proposed project, dated November 23, 1987, has been retracted in consideration of the applicant's revised permit application. Whereas the initial submittal was subject to a PSD review, the revised application is not because the net emissions increase is no longer significant in accordance with Rule 17-2.500, FAC. However, the self imposed NOx emission limits requested by the applicant to avoid the PSD review are substantially lower than NSPS requirements.

#### III. Rule Applicability

The proposed project will emit the pollutants NOx, SO<sub>2</sub>, PM, CO, and VOCs. It is subject to preconstruction review requirements in accordance with Chapter 403 of the Florida Statutes and Chapters 17-2 and 17-4 of the Florida Administrative Code (FAC).

The proposed project will be located in Orange County, an area designated as nonattainment for ozone and attainment for NOx, SO<sub>2</sub>, PM and CO in accordance with Rule 17-2.410 and 17-2.420, FAC, respectively.

The proposed project is more than a 100 km from the Chassahowitzka National Wilderness Area, a Class I area, in accordance with Rule 17-2.440, FAC.

The proposed project will be a minor modification to a major facility since emission increases are less than significant (17-2, Table 500-2, FAC) and is therefore not subject to a Prevention of Significant Deterioration (PSD) Review in accordance with Rule 17-2.500(2)(d)4, FAC.

The proposed project will not be subject to the New Source Review for Nonattainment Areas in accordance with Rule 17-2.510(2)(d)4, FAC, as emissions of VOC are less than significant (17-2. Table 500-2, FAC).

The proposed project will be subject to 40 CFR 60 Subpart GG - Standards of Performance for Stationary Gas Turbines.

The proposed project will also be subject to 40 CFR 60 Subpart Db - Standards of Performance for Fossil Fuel Fired Steam Generating Units, for the duct burner.

The proposed project will be required to show compliance with the emission limiting standards in accordance with:

- a) Rule 17-2.700, FAC
- b) 40 CFR 60, Subpart GG
- c) 40 CFR 60, Subpart Db

Initial and annual compliance test will be conducted in accordance with the above listed rules for the following:

- 1. NOx and SO<sub>2</sub>, EPA Method 20
- 2. CO, EPA Method 10
- 3. PM, EPA Method 5
- 4. Visible Emissions (VE), EPA Method 9

Other DER approved methods may be used with prior Departmental approval.

#### IV. Emission Limitations

By shutting down existing Orenda turbines the applicant proposes to net out of a PSD review, while bringing the proposed project on line.

Pollutant	Proposed Project Emission (TPY)	Shutdown Project Emissions (TPY)	Net Increase Emissions (TPY)
NO <sub>2</sub>	342	304	38
SO <sub>2</sub>	21	0.4	21
co	51	84	(33)
VOC	26	30	(4)

As reflected by the calculations in the application and more stringent limits than the New Source Performance Standards, the emissions from the combined cycle gas turbine, including the duct burner, will not exceed:

	Gas Fi		Oil F	
Pollutant .	<u>lb/hr</u>	TPY.*	<u>lb/hr</u>	TPY
Nitrogen Oxides (NOx) peak @ 40°F	112		132	
avq.	77	337	100	17
Sulfur Dioxide (SO <sub>2</sub> )	0.2	0.8	118	20
Particulates (PM)	0.8	3.5	9	2
Carbon Monoxide (CO)	11	48	24	4
Volatile Organics (VOCs)	6	26	6	1
Visible Emissions (VE)	5% opa	acity	10% op	
NOx, at 15% O2 dry basis peak	74 pt	omv	82 p	pmv <sup>2</sup>
avg.	78 g	omv	68 p	pmv
SO2, at 15% oxygen dry basis		·	58 p	_

<sup>\*</sup>TPY (tons per year)

The duct burner NOx emissions shall not exceed (corresponding to 0.2 lb/MMBtu) 4.6 lb/hr for gas or oil at 23 MMBtu heat input and 40 lbs/hr for gas or oil at 198 MMBtu/hr.

Since there is a temperature dependence for NOx emissions from the turbine (the winter months will have higher NOx emissions than the summer months), the compliance tests will initially need to be done in a manner which establishes this relationship.

The "TPY" emission limit establishes allowable emission to avoid PSD applicability for NOx.

 $l_{\rm Oil}$  will be fired only when there is natural gas curtailment. It will be fired for no more than 14 days annually.

<sup>&</sup>lt;sup>2</sup>Variation in concentration with variation in ambient air temperature as per compliance plot, as submitted in the application and to be confirmed by initial compliance tests.

The "average lb/hr" emission limit, which will be the average of 12 consecutive 30 day averages as logged by the computerized system, establishes compliance for a time period shorter than a year.

The "peak lb/hr" emission limit reflects the allowable emissions which will be encountered at low ambient temperatures (around  $40^{\circ}F$ ).

The DER District office will formalize the compliance protocol with Reedy Creek prior to initial compliance tests.

#### V. Air Quality Impact Analysis

The technical evaluation of this application determined that air modeling or air monitoring would not be required to provide reasonable assurance that Florida's air quality standards would not be violated.

The ambient air quality impact analysis done in consideration of Reedy Creek's initial submittal, consisting of higher emissions, resulted in the following annual NOx impacts:

Maximum Impact from Proposed Project: 0.9 ug/m<sup>3</sup> Predicted Total Impact (including background): 16.9 ug/m<sup>3</sup> Florida AAQS: 100 ug/m<sup>3</sup>

These are conservative estimates as far as the revised application is concerned.

#### VI. Conclusion

Based on the information provided by Reedy Creek, the Department has reasonable assurance that the proposed project, as described in this evaluation and subject to the conditions proposed herein, will not cause or contribute to a violation of an ambient air quality standard or PSD increment, or any other provision of Chapter 17-2, FAC.

#### 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

PERMITTEE:
Reedy Creek Improvement
District
Post Office Box 36
Lake Buena Vista, FL 32830

Permit Number: AC 48-137740
Expiration Date: December 1, 1988
County: Orange
Latitude/Longitude: 28° 25' 34"N
81° 34' 48"W
Project: GE Gas Fired Turbine
Generator with Heat Recovery
System

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 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:

For the construction of a 38 MW GE LM5000 gas fired turbine generator system with a heat input capacity of 450 MMBtu/hr. The project will include an in-line duct burner, heat recovery boiler and steam turbine, at the Central Energy Plant at Bay Lake, near Lake Buena Vista, Orange County, Florida.

Construction will be in accordance with the permit application and plans, documents, and reference material submitted unless otherwise stated in the General and Specific Conditions herein.

#### Attachments:

- 1. Reedy Creek's application package dated August 5, 1987.
- 2. EPA's letter dated September 3, 1987.
- 3. Letter of incompleteness dated September 4, 1987.
- 4. Reedy Creek's response dated September 18, 1987.
- 5. U.S. Department of the Interior's letter dated September 28,
- 6. EPA's letter dated October 22, 1987.
- 7. Reedy Creek's revised application dated December 21, 1987.
- 8. DER's letter dated January 11, 1988.
- 9. Reedy Creek's letter dated January 22, 1988.
- 10. DER's Technical Evaluation package dated February 4, 1988.

Permit Number: AC 48-137740 Expiration Date: December 1, 1988

#### GENERAL CONDITIONS:

- 1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.
- 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. 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. This permit does not constitute 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, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, 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.

Permit Number: AC 48-137740
Expiration Date: December 1, 1988

#### GENERAL CONDITIONS:

- 6. The permittee shall at all times 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, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:
  - a. Having access to and copying any records that must be kept under the conditions of the permit;
  - Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
  - c. Sampling or monitoring 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 notify and provide the Department with the following information:
  - a. a description of and cause of non-compliance; and
  - b. 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 noncompliance.

Permit Number: AC 48-137740 Expiration Date: December 1, 1988

#### GENERAL CONDITIONS:

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 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 as evidence in any enforcement case arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.
- 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 17-4.12 and 17-30.30, 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 is required to be kept at the work site of the permitted activity during the entire period of construction or operation.
- 13. This permit also constitutes:
  - ( ) Determination of Best Available Control Technology (BACT)
  - ( ) Determination of Prevention of Significant Deterioration (PSD)
  - (x) Compliance with New Source Performance Standards.
- 14. The permittee shall comply with the following monitoring and record keeping requirements:
  - a. Upon request, the permittee shall furnish all records and plans required under Department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the Department, during the course of any unresolved enforcement action.

Permit Number: AC 48-137740 Expiration Date: December 1, 1988

#### GENERAL CONDITIONS:

- b. The permittee shall retain 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), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be at least three years from the date of the sample, measurement, 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 date(s) 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 submitted or corrected promptly.

#### SPECIFIC CONDITIONS:

- 1. The turbine may operate continuously (8760 hrs/yr).
- 2. Only natural gas shall be fired in the turbine and duct burner. No. 2 oil shall be used in periods of curtailed natural cas supply. The duration of oil firing shall not exceed 14 days annually.
- 3. The maximum heat input to the turbine and the duct burner combined shall not exceed 450 MMBtu/hr (normal duct burner heat input rate of 23 MMBtu/hr).

Permit Number: AC 48-137740 Expiration Date: December 1, 1988

#### SPECIFIC CONDITIONS:

4. When the gas turbine is not in operation, the duct burner heat input may be increased up to, but not to exceed, 198 MMBtu/hr.

5. The emissions, from the turbine and duct burner combined, shall not exceed:

	Gas Fired	Oil Fired <sup>l</sup>
Pollutant	1b/hr TPY	* <u>lb/hr TPY</u>
Nitrogen Oxides (NOx) peak @ 40°F	112	132
avg.	77 337	100 17
Sulfur Dioxide (SO <sub>2</sub> )	0.2 0.8	118 20
Particulates (PM)	0.8 3.5	9 2
Carbon Monoxide (CO)	11 48	24 4
Volatile Organics (VOCs)	6 26	6 l
Visible Emissions (VE)	5% opacity	10% opacity
NOx, at 15% O2 dry basis peak	74 ppmv	82 ppmv <sup>2</sup>
avg.	58 ppmv	68 ppmv
SO2, at 15% oxygen dry basis		58 ppmv

<sup>\*</sup>TPY (tons per year)

loil will be fired only when there is natural gas curtailment. It will be fired for no more than 14 days annually.

<sup>2</sup>Variation in concentration with variation in ambient air temperature to be documented by a plot of pollutant concentration versus ambient temperature, as per initial compliance test results.

The average emissions will be calculated using hourly logged averages to obtain a 30 day average and then using 12 consecutive 30 day averages to obtain a annual average. The DER District office may alter this averaging method after due consideration of alternative compliance plans.

The duct burner NOx emissions shall not exceed (corresponding to 0.2 lb/MMBtu) 4.6 lb/hr for gas or oil at 23 MMBtu heat input or 40 lbs/hr for gas or oil at 198 MMBtu/hr.

- 6. The No. 2 oil sulfur content shall not exceed 0.4 percent.
- 7. The "Black Start" Cummins No. 2 oil fired emergency generator, when fired on a normal basis to maintain a state of readiness, shall not be operated beyond the 10 minutes/week check out period.

Permit Number: AC 48-137740 Expiration Date: December 1, 1988

For inventory purposes only, the emergency generator's expected emissions are listed below:

<u>Pollutant</u>	<u>lbs/year</u>
NOx	232
CO	36
VOC	9
PM	8
SO <sub>2</sub>	30

- 8. Water injection shall be utilized for NOx control at a minimum of 0.6/1.0 water to fuel ratio. If compliance testing warrants this ratio to be re-investigated, the ratio at which compliance is maintained shall be incorporated into the permit.
- 9. Initial and annual compliance testing shall be conducted with the fuels used in the preceding 12 month period using:
- 1. EPA Method 20 for NOx and  $SO_2$
- 2. EPA Method 10 for CO
- 3. EPA Method 5 for PM
- 4. EPA Method 9 for VE

Other DER approved methods may be used for compliance testing only after prior Departmental approval. The compliance protocol shall be worked out with DER's District office prior to initial compliance tests.

- 10. The proposed project shall comply with all the applicable requirements of:
  - a) Chapter 17-2, FAC
  - b) 40 CFR 60, Subpart GG, Gas Turbines
  - c) 40 CFR 60, Subpart Db, Industrial Steam Generating Units
- 11. DER's district office shall be notified in writing 15 days prior to source testing. Written reports of the tests shall be submitted to the district office within 45 days of test completion.

The construction shall reasonably conform to the plans and schedule submitted in the application. If the permittee is unable to complete construction on schedule, the Department must be notified in writing 60 days prior to the expiration of the construction permit and submit a new schedule and request for an extension of the construction permit, (Rule 17-2, FAC).

Permit Number: AC 48-137740 Expiration Date: December 1, 1988

#### SPECIFIC CONDITIONS:

To obtain a permit to operate, the permittee must demonstrate compliance with the conditions of the construction permit and submit a complete application for an operating permit, including the application fee, along with compliance test results and Certificate of Completion, to the Department's District office 90 days prior to the expiration date of the construction permit. The permittee may continue to operate in compliance with all terms of the construction permit until its expiration date. Operation beyond the construction permit expiration date requires a valid permit to operate (Rules 17-2 and 17-4, FAC).

- If the construction permit expires prior to the permittee requesting an extension or obtaining a permit to operate, then all activities at the project must cease and the permittee must apply for a new permit to construct which can take up to 90 days to process a complete application (Rule 17-4, FAC).
- 12. Any change in the method of operation, fuels, equipment or operating hours shall be submitted for approval to DER's District office.
- 13. During the new turbine debugging period, not to exceed nine months, the older Orenda power trains shall not be fired unless the new GE turbine is not in operation. After the debugging period is over, the Orenda turbines and their associated equipment shall be dismantled.

Issued thisday of, 19
STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION
Dale Twachtmann, Secretary

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

**REGION IV** 

345 COURTLAND STREET ATLANTA, GEORGIA 30365

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

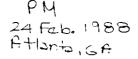
AIR-4

301.88

FYI

Mr. C. H. Fancy, P.E., Deputy Chief
Bureau of Air Quality Management
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

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#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

#### REGION IV

345 COURTLAND STREET ATLANTA, GEORGIA 30365

FED 3 4 1839

APT-APB/gn

C. H. Fancy, P.E., Deputy Chief Bureau of Air Quality Management Florida Department of Environmental Regulation Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400 RECEIVED

FEB 29 1988

DER-BAQM

Re: Reedy Creek (PSD-FL-123)

Dear Mr. Fancy:

This is to acknowledge receipt of your February 5, 1988, preliminary determination and proposed permit for the above-referenced source. We have reviewed your determination and determined that this would be a minor modification not subject to PSD review. Therefore, this determination will not be subject to review under the Region IV Overview of State Programs policy.

Thank you for the opportunity for providing our comments. I also appreciate your efforts in working with the source to step up the source's  $NO_X$  control measures. Cooperation is such an important factor in resolving any issues. We are looking forward to receiving copies of the final determination and permit upon issuance. If you have any additional information or comments, please feel free to contact me or Gary Ng of my staff at (404) 347-2864.

Sincerely yours,

Bruce P. Miller, Chief

Air Programs Branch

Bur Philler

Air, Pesticides, and Toxics

Management Division

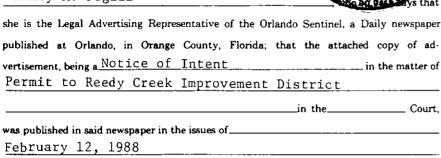
Copied Prodecp Royal ) 311.30 mm

## The Orlando Sentinel

Published Dails Orlando, Orange County, Florida

# State of Florida (

Before the undersigned authority personally appeared Nancy A. Puglia



Affiant further says that the said Orlando Sentinel is a newspaper published at Orlando, in said Orange County, Florida, and that the said newspaper has heretofore been continuously published in said Orange County, Florida, each Week Day and has been entered as secondclass mail matter at the post office in Orlando, in said Orange 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.

Sworn to and subscribed before me this.

12th

Notary Public

February

Notary Public, State of Florida at Large

My Commission System March 4, 10 EORM NO. AD-262

Bondiki Fire Per - A Robyn, Inc.

ADVERTISING CHARGE

State of Florida
Department of Environmental
Regulation
Notice of Intent
The Department of Environmental
Regulation hereby gives
notice of its intent to issue a permit to Reedy Creek Improvement District to construct a 38
MW natural gas-fired turbine
generator and a heat recovery
system with a total heat input of
450 MMBnu/hr, at the Central Energy Plant near Lake Buena Vistia, Orange County, Florida. The
Department is issuing this Intent
to issue for the reasons stated in
the attached Technical Evaluation and Preliminary
Determination.
Persons whose substantial interest are affected by the Department's proposed permitting decision may position for an admiistrative determination (hearing)
in accordance with Section
120.57, Florida Statutes. The petition must conform to the requirements of Chapters 17-103

in accordance with Section 120.57, Florida Statutes. The petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and must be filled (received) in the Department's Office of General Counsel, 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32339-2400, within fourtien (14) days of publication of this notice. Failure to file a petition within this time period constitutes a waiver of any right such person has to request an admininstrative determination (hearing) under Section 120.57. Florida Statutes.

If a petition is filed, the administrative hearing process is de-

(hearng) under Section 120.57. Florida Statutes.

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 proposed agency action. Therefore, persons who may not wish to file a petition may the total petition for intervention must be filed pursuant to Rule 28-5207. Florida Administrative Code, at least five (5) days before the final hearing and be filed with the peritain of Administrative Acons as seen assigned, the petition is to be filed with the Department's Office of General Counset, 2600 Blair Stone Road, Tallahassee, Florida 32392-400. Falure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

The application 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: Dept. of Environmental Regulation Bureau of Air Quality Management 2600 Blair Stone Road

Bureau or Air Culainy
Management
2600 Blair Stone Road
Taliahassee, Florida 32399-2400
Dept. of Erwironmental
Regulation
Central Florida District
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803-3767

Any person may send written comments on the proposed action to Mr. Bill Thomas at the Department's Tallahassee ad-Department's fallanessee address. All comments mailed within 14 days of the publication of this notice will be considered in the Department's final determination.

CL-235 Feb.12,1988

Copied. Prodect Para 112=100

DOUBLING AND	ACTION I	NO
ROUTING AND TRANSMITTAL SLIP	ACTION I	DUE DATE
1. TO: (NAME, OFFICE, LOCATION)		Initial
Bill Thomas		Date
2.		Initial
Bureau of Air Quality Man	99-	Date
	U	[Initial
Department of Environmental Regulation		Date
A TWIN TEWSTS UNITED BUILDING		Initial
2600 Blair Stone Road		Date
Tallahassas, FL 32399-2400		L
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FROM:	DATE	2/19/88
0 00	PHONE	1266

### The Orlando Sentinel

**Published Daily** Orlando, Orange County, Florida

# State of Florida (

Before the undersigned authority personally Nancy A. Puglia o on oath says that she is the Legal Advertising Representative of the Orlando Sentinel, a Daily newspaper published at Orlando, in Orange County, Florida; that the attached copy of advertisement, being a Notice of Intent Permit to Reedy Creek Improvement District in the \_\_\_\_\_ Court, was published in said newspaper in the issues of.... February 11, 1988

Affiant further says that the said Orlando Sentinel is a newspaper published at Orlando, in said Orange County, Florida, and that the said newspaper has heretofore been continuously published in said Orange County, Florida, each Week Day and has been entered as secondclass mail matter at the post office in Orlando, in said Orange 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.

Sworn to and subscribed before me this\_

12th

February

Commission Expires March 4, 1989 Bonded Thru Brown & Brown, Inc. FORM NO. AD-262

ADVERTISING CHARGE.

State of Florida
Department of Environmental
Regulation
Notice of Intent The Department of Environmental Regulation hereby gives notice of its intent to issue a per-

The Department of Environ-; mentis Regulation hereby gives notice of its intent to issue a permit to Reedy Creek Improve-ment District to construct a 38 MW natural gas-fired turbine generator and a heat recovery system with a total heat input of 450 MMBtu/hr, at the Central Energy Plant neer Lake Buena Vista, Orange County, Florida. The Department is issuing this Intent to Issue for the resons stated in the attached Technical Evaluation and Preliminary Determination. Fersions whose substantial intents are affected by the Department's proposed permitting decision may petition for an administrative determination flearing) in accordance with Section 120.57. Florida Statutes. The petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Statutes. The petition flear in the petition of the petition within this time period constitutes a waiver of any right such person has to request an adminimistrative determination (hearing) under Section 120.57. Florida Statutes.

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(hearing) unior section reasons. 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 proposed agency action. Therefore, persons who may not wish to file a petition may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Rule 28-5.207. Florida Administrative Code, at least five Code, at the Division of Administrative Louision of Administrative Hearings, Department of Administrative, 2009 Apalachee Park way, Tellahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the Department's Office of General Coursel, 2600 Blair Stone Road, Tafahassee, Florida 32399-2400, Fallure to petition to Intervene within the allowed time frame constitutes a walver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

The application is available for public Inspection during normal susiness hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal hotidays, at:

Regulation
Bureau of Air Quality Management 2600 Blair Stone Road Tallahassee, Florida 32390-2400 Dept. of Environmental Regulation Central Florida District

Central Florida District 3319 Maguire Bhot, Suite 232 Orlando, Plorida 32903-3767
Any person may send written comments on the proposed action to Mr. Bill Thomas at the Department's Tallahassee address. All comments mailed writhin 30 days of the publication of this notice will be considered in the Department's final determination.

emination. Feb.11,1988

#### DEPARTMENT OF ENVIRONMENTAL REGULATION

ROUTING AND	ACTION I	NO
TRANSMITTAL SLIP	ACTION (	DUE DATE
1. TO: (NAME, OFFICE, LOCATION)		Initial
Bill Thomas		Date
2.		Initial
Bureau of Air Quality	Manag,	Date
3.	The state of the s	Initial
Department of Environmental Regulation	י מ `	Date
4. IVIN COURTS CHANG EUROING	,	Initial
2800 Blair Stone Road		Date
REMARKSalialiasass, PL 32399-2400	INF	ORMATION
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FYI	Rev	iew & File
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-1: 00 line 0,410 30 days)		
This notice gives 30 days? The lost IP when it was invended to 14 days. I herfore, is notice will not be used to DER	Rev	SPOSITION iew & Respond are Response
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FROM:	PHONE	15/88 -1266