



Jeb Bush  
Governor

# Department of Environmental Protection

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

David B. Struhs  
Secretary

January 26, 2000

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

A.K. Sharma, Director of Power Supply  
Kissimmee Utility Authority  
P.O. Box 423219  
Kissimmee, FL 34742-3219

Re: DEP File No. 0970001-003-AC  
Inlet Air Foggers for Existing Combustion Turbine at Roy B. Hansel Plant

Dear Mr. Sharma:

Enclosed is one copy of the Draft air construction permit for the Roy B. Hansel Plant located at 102 Lakeshore Boulevard in Kissimmee, Osceola County, Florida. The Technical Evaluation and Preliminary Determination, the Department's Intent to Issue Air Construction Permit and the Public Notice of Intent to Issue Air Construction Permit are also included.

The Public Notice of Intent to Issue Air Construction Permit 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 Jeff Koerner at 850/414-7268 or Mr. Linero at 850/488-0114.

Sincerely,

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

CHF/AL/jfk  
Enclosures

"More Protection, Less Process"

Printed on recycled paper.

In the Matter of an  
Application for Permit by:

A.K. Sharma, Director of Power Supply  
Kissimmee Utility Authority  
P.O. Box 423219  
Kissimmee, FL 34742-3219

DEP File No. 0970001-003-AC  
Roy B. Hansel Plant  
Osceola County  
CT Inlet Air Foggers

### INTENT TO ISSUE AIR CONSTRUCTION PERMIT

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit (copy of Draft permit attached) for the proposed project, detailed in the application specified above and the enclosed Technical Evaluation and Preliminary Determination, for the reasons stated below.

The applicant, Kissimmee Utility Authority, applied on December 6, 1999, to the Department for an air construction permit for its Roy B. Hansel Plant located at 102 Lakeshore Boulevard in Kissimmee, Osceola County, Florida. The permit is to install an inlet air fogging system to provide evaporative cooling with a corresponding boost in power production. The applicant specifically requested limits on air fogging operation to avoid triggering PSD. 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 an air construction permit is required to install the proposed equipment.

The Department intends to issue this air construction permit 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 Air Construction Permit. 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(fourteen) days from the date of publication of Public Notice of Intent to Issue Air Permit. 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.

  
for 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 Air Construction Permit (including the Public Notice of Intent to Issue Air Construction Permit, Technical Evaluation and Preliminary Determination, and the Draft permit) was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on 1-31-00 to the person(s) listed:

Mr. A.K. Sharma, KUA\*  
Mr. Jerome Guidry, Perigree Technical Services, Inc.  
Mr. Len Kozlov, Central District Office DEP

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) 1-31-00  
(Date)

Is your RETURN ADDRESS completed on the reverse side?

<b>SENDER:</b> ■ Complete items 1 and/or 2 for additional services. ■ Complete items 3, 4a, and 4b. ■ 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. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.	
3. Article Addressed to: A.K. Sharma, PE Kissimmee Utility Auth PO Box 423219 Kissimmee, FL 34742-3219		4a. Article Number 2 031 391 925	
		4b. Service Type <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail <input type="checkbox"/> Insured <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> COD	
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6. Signature: (Addressee or Agent) x/Atanya M. L. Loran			

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PS Form 3811, December 1994 102595-98-B-0229 Domestic Return Receipt

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PS Form 3800, April 1995

0970001-003-AC

**PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT**

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP File No. 0970001-003-AC

Kissimmee Utility Authority  
Roy B. Hansel Plant  
Osceola County

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit to the Kissimmee Utility Authority for the Roy B. Hansel Plant located at 102 Lakeshore Boulevard in Kissimmee, Osceola County, Florida. The applicant proposes to install an inlet air fogging system for the existing combustion turbine to provide evaporative cooling with a corresponding boost in power production. A Best Available Control Technology (BACT) determination was not required pursuant to the Rule 62-212.400, F.A.C. The applicant's mailing address is P.O. Box 423219, Kissimmee, FL 34742-3219.

The applicant specifically requests limits on the operation of the fogging system that would establish this project as a minor modification in accordance with the Prevention of Significant Deterioration (PSD) of Air Quality program. Based on operation of the air fogging system limited to 1255 hours during any consecutive 12 months, the total net potential pollutant emissions increases are summarized in the following table.

Pollutant	Net Emissions Increase Tons/Year	Significant Emissions Rate Tons/Year	PSD Applies?
CO	12	100	No
NOx	36	40	No
PM/PM10	3	25/15	No
SO2	39	40	No
VOC	3	40	No

Based on the proposed Draft Permit, the Department determines that PSD does not apply to this modification. The existing gas turbines continue to be subject to the 40 CFR 60, Subpart GG, the New Source Performance Standards for stationary gas turbines. An air quality impact analysis was not conducted. Emissions from the project 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 proposed project will not change any previous modeling demonstrations.

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 (fourteen) days from the date of publication of this Public Notice of Intent to Issue Air Construction Permit. 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.

**NOTICE TO BE PUBLISHED IN THE NEWSPAPER**

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:

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

Dept. of Environmental Protection  
Central District Office  
Suite 232, 3319 Maguire Boulevard  
Orlando, Florida 32803-3767  
Telephone: 407/894-7555

The complete project file includes the application, technical evaluations, 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 of the 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

TECHNICAL EVALUATION  
AND  
PRELIMINARY DETERMINATION

KISSIMMEE UTILITY AUTHORITY  
ROY B. HANSEL PLANT

Osceola County, Florida

Combustion Turbine No. 1  
ARMS Emissions Unit 001

Facility I.D. No. 0970001

Draft Permit No. 0970001-003-AC

Department of Environmental Protection  
Division of Air Resources Management  
Bureau of Air Regulation  
New Source Review Section

January 25, 2000



1.0 APPLICATION INFORMATION

1.1 Applicant Name and Address

Kissimmee Utility Authority  
P.O. Box 423219  
Kissimmee, FL 34742-3219  
*Authorized Representative:*  
A.K. Sharma, Director of Power Supply

1.2 Reviewing and Processing Schedule

12/06/99 Department received the permit application for a modification.  
12/22/99 Department requested additional information.  
01/21/00 Department received additional information from the applicant; application complete.

2.0 EXISTING FACILITY INFORMATION

2.1 Existing Facility Description

This facility consists of one combined cycle combustion turbine, eight internal combustion engines with electrical generators, and several miscellaneous unregulated and/or insignificant activities.

2.2 Facility Location

KUA - Roy B. Hansel Plant  
102 Lakeshore Boulevard  
Kissimmee, Osceola County, Florida 34741  
*UTM Zone 17, 460.1 km East, 3129.3 km North*  
*Latitude 28°17' 27" North and Longitude 81°24' 25" West*

2.3 Standard Industrial Classification Codes (SIC)

Industry Group No. - 49 - Electric, Gas, and Sanitary Services  
Industry No. - 4911 - Electric Services

2.4 Regulatory Categories

**Power Plant Siting:** Not applicable to this facility.

**Title III – HAP:** Based on the initial Title V permit application, this facility is not a major source of hazardous air pollutants (HAPs).

**Title IV - Acid Rain:** Based on the initial Title V permit application, this facility does not operate emissions units subject to the Federal Acid Rain Program.

**Title V – Major Source:** This facility is classified as a “major” source of air pollution with respect to Title V of the Clean Air Act because emissions of at least one regulated air pollutant, such as carbon monoxide (CO), nitrogen oxides (NOx), particulate matter (PM/PM<sub>10</sub>), sulfur dioxide (SO<sub>2</sub>), or volatile organic compounds (VOC) exceeds 100 tons per year (TPY).

**PSD Major Source:** This facility is a “major facility” with respect to the Prevention of Significant Deterioration (PSD) of Air Quality program because emissions of at least one criteria pollutant are greater than 250 tons per year. Pursuant to Rule 62-212.400, F.A.C., each modification to a PSD major source requires a PSD applicability review and a determination of the Best Available Control Technology

(BACT) if the resulting emissions increases are greater than the Significant Emissions Rates specified in Table 62-212.400-2, F.A.C.

NSPS: The existing combined cycle combustion turbine is subject to 40 CFR 60, Subpart GG, the New Source Performance Standards for stationary gas turbines.

**3.0 PROPOSED PROJECT**

**3.1 Project Description**

The applicant requests a permit to authorize the installation of direct water spray foggers on an existing combustion turbine at KUA’s Roy B. Hansel Plant. Typically, the maximum heat input to a combustion turbine is established on the coldest day of operation because it requires more fuel combustion to achieve the same firing temperatures for the denser air. Denser air means increased mass per unit volume, which results in higher throughput in the rotor or expansion section of the combustion turbine and increased power production. Conversely, the maximum heat input is much lower on hot days because of the lower compressor inlet air density. The proposed foggers will provide evaporative cooling of the compressor inlet air to increase the power output by approximately 2 to 5 MW depending on the initial ambient conditions.

The facility is a PSD major source of air pollution. The proposed project *could* potentially result in significant increases in emissions of carbon monoxide (CO), nitrogen oxides (NOx), particulate matter (PM/PM10), sulfur dioxide (SO2), and/or volatile organic compounds (VOC). This is based on increased fuel consumption as a result of installing foggers, past actual emissions, future potential emissions, and maximum emissions rates. Therefore, the project is subject to an applicability review for the Prevention of Significant Deterioration (PSD) of Air Quality. The applicant has requested a limit on operation of the foggers to *avoid* triggering the significant emissions rates specified in Table 62-212.400-2, F.A.C. and a corresponding determination of the Best Available Control Technology (BACT).

**3.2 Applicant’s Estimated Project Emissions**

The applicant estimated the maximum emissions increases by using the increased heat input associated with a 17° F decrease in compressor inlet temperature. Based on the heat input curve for this unit, a 17° F temperature decrease results in an increase in heat input of 27 mmBTU per hour. Combining these estimates with AP-42 pollutant emission factors provides hourly emissions rates. The following table summarizes the applicant’s predicted net emissions increase for the project based on this analysis and a requested limit of 5800 hours of operation to avoid triggering PSD.

**Table A.** Applicant’s Estimated Net Emissions Increases and Resulting PSD Applicability

Pollutant	Net Emissions Increase (TPY)	Significant Emissions Rate (Tons Per Year)	Significant? (Table 212.400-2)	Subject To BACT?
CO	2.3	100	No	No
NOx	34.3	40	No	No
PM/PM10	4.4	25/15	No	No
SO2	39.5	40	No	No
VOC	0.6	40	No	No

*Note: Based on AP-42 and 5800 hours of fogging.*

The calculated emissions increases reflect only those increases directly related to the addition of inlet fogging. Essential to the applicant’s analysis is the *assumption* that utilization of the peaking combustion turbine will not increase as a result of the ability to achieve greater power output due to the project.

4.0 DEPARTMENT'S ANALYSIS

4.1 Project Discussion

With inlet air fogging, a series of high-pressure spray nozzles add a fine mist to the compressor inlet air. The fine water droplets evaporate absorbing heat from the air molecules during the liquid-to-vapor phase change. The inlet air is cooled and made denser allowing for slightly higher throughput and increased power generation. The maximum heat input continues to be defined by the coldest day because evaporative cooling provides little or no benefit on such days. Therefore, this project does not increase permitted capacity, but attempts to shift operation on warm days up the power output performance curve, but within the original design range of these units. Inlet foggers are routinely included in new combustion turbine projects and have not affected the Department's decisions regarding Best Available Control Technology.

4.2 Department's Estimated Project Emissions

The proposed project requires the installation of equipment that will alter the conditions of the inlet air to the combustion turbine. This change in the method of operation will result in higher fuel consumption rates and corresponding air pollutant emissions during periods of fogging. The Department believes that it is reasonable to evaluate the increase in emissions directly resulting from the use of air foggers. This is consistent with the Department's previous determinations for similar fogger projects. However, critical to this analysis is the assumption that the fogger project will not increase the availability or utilization of the existing combustion turbine over that of recent years. To establish the recent operating history for the combustion turbines, the Department reviewed Annual Operating Reports submitted by the applicant over the last five years, as summarized in the following table.

Table B. Operating History for Previous 5-Years

Year	Annual Operating Hours 1994 - 1998				
	1994	1995	1996	1997	1998
Gas Turbine	6695	1158	453	779	1257

The past actual operation for the last two years averaged 1018 hours per year. The Department disagreed with the applicant's use of AP-42 emissions factors as representing the best available emissions data for this unit. Instead, the Department based the estimated net increase in emissions on the maximum emission rates provided in the original application and 1018 hours per year, as summarized in the following table.

Table C. Department's Estimated Net Emissions Increases

Pollutant			Increase ONLY	Past Actuals*	Future Potentials*	Net Increase
	mmBTU/hr ----->	hr/yr ----->				
	lb/hr	lb/mmBTU	TPY	TPY	TPY	TPY
CO	80	0.20	2.75	37.97	50.20	12.23
NOx	234.9	0.59	8.07	111.49	147.40	35.91
PM10	22	0.06	0.76	10.44	13.81	3.36
SO2	255	0.64	8.76	121.03	160.01	38.98
VOC	19	0.05	0.65	9.02	11.92	2.90

Note: SO2 is the limiting pollutant for oil firing at 1255 hours/year. NOx is the limiting pollutant for gas firing at 1280 hours per year.

Based on the Department's analysis, inlet air fogging for no more than 1255 hours during any consecutive 12 months would not trigger PSD for the proposed project.

#### 4.3 PSD Review

As a PSD major source, a modification or change in method of operation of the combustion turbine resulting in **significant net emissions increases** is subject to PSD review. A significant net emissions increase is defined in Rule 62-212.400, F.A.C as follows:

*"Significant Net Emissions Increase" – A significant net emissions increase of a pollutant regulated under the Act is a net emissions increase equal to or greater than the applicable significant emission rate listed in Table 212.400-2, Regulated Air Pollutants – Significant Emission Rates.*

The significant emission rates are included Tables A and B above. The meaning of a net emissions increase is given in Rule 62-212.400, F.A.C. as follows:

*"Net Emissions Increase" - A modification to a facility results in a net emissions increase when, for a pollutant regulated under the Act, the sum of all of the contemporaneous creditable increases and decreases in the actual emissions of the facility, including the increase in emissions of the modification itself and any increases and decreases in quantifiable fugitive emissions, is greater than zero.*

The definition of actual emissions is given in Rule 62-210.200, F.A.C. (definitions) as follows:

*"Actual Emissions" - The actual rate of emission of a pollutant from an emissions unit as determined in accordance with the following provisions:*

- (a) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during a two year period which precedes the particular date and which is representative of the normal operation of the emissions unit. The Department may allow the use of a different time period upon a determination that it is more representative of the normal operation of the emissions unit. Actual emissions shall be calculated using the emissions unit's actual operating hours, production rates and types of materials processed, stored, or combusted during the selected time period.*
- (b) The Department may presume that unit-specific allowable emissions for an emissions unit are equivalent to the actual emissions of the emissions unit provided that, for any regulated air pollutant, such unit-specific allowable emissions limits are federally enforceable.*
- (c) For any emissions unit (other than an electric utility steam-generating unit specified in subparagraph (d) of this definition) which has not begun normal operations on a particular date, actual emissions shall equal the potential emissions of the emissions unit on that date.*

The term "normal operations" appears to be undefined and subject to some interpretation. Potential emissions are defined in Rule 62-210.200, F.A.C. (definitions) as follows:

*"Potential Emissions or Potential to Emit" - The maximum capacity of an emission unit or facility to emit a pollutant under its physical and operational design. Any enforceable physical or operational limitation on the capacity of the emission unit or facility to emit a pollutant, including any air pollution control equipment and any restrictions on hours of operation or on the type or amount of material combusted, stored, or processed shall be treated as part of its design provided that, for any regulated air pollutant, such physical or operational limitation is federally enforceable.*

As shown in the operating history presented above, the combustion turbine has begun normal operations and recently has served as more of a peaking unit. Therefore, a comparison of future to past actual emissions would be based on potential emission after installation of the foggers to past actual emissions before the project. If a larger unit were replacing the existing unit, such a comparison would undoubtedly

result in a determination that PSD is applicable, unless the company took an extreme limitation in hours of operation. If a like-kind replacement were being made, the same comparison would also result in a determination that PSD is applicable. For purposes of comparison with the proposed project, this last case was addressed in the Puerto Rican Cement Decision. This is the watershed decision made by the Federal Circuit Court of Appeals that upheld the past actual to future potential emission comparison for modernization projects. The following excerpt from this decision is of interest with regard to the present project:

*"One can imagine circumstances that might test the reasonableness of EPA's regulation. An electricity company, for example, might wish to replace a peak load generator -- one that operates only a few days per year -- with a new peak load generator that the firm could, but almost certainly will not, operate every day. And, uncertainties about the precise shape of future electricity peak demand might make the firm hesitate to promise EPA it will never increase actual emissions (particularly since EPA insists, as a condition of accepting the promise and issuing the NAD, that the firm also promise not to apply for permission for an actual increase under the PSD review process). Whatever the arguments about the "irrationality" of EPA's interpretation in such circumstances, however, those circumstances are not present here. The Company is not interested in peak load capacity; it operated its old kilns at low levels in the past; its new, more efficient kiln might give it the economic ability to increase production; consequently, EPA could plausibly fear an increase in actual emissions were it to provide the NAD. Thus, this seems the very type of case for which the regulations quoted above were written. We can find nothing arbitrary or irrational about EPA applying those regulations to the Company's proposal."*

The current fogger project is yet another step removed from the modernization project described in the above like-kind replacement example. The combustion turbine will not be replaced at all. The modification and its effects can be isolated and directly estimated. The combustion turbine has begun normal operation and emissions prior to the project should be based on past actual emissions. However, air inlet fogging has not yet begun normal operation and future actual emissions should be based on potential emissions including any restrictions on the operation of the foggers.

The applicant has specifically requested a permit restriction to avoid triggering PSD applicability and a corresponding BACT determination. The Department's analysis also considered net emissions increases directly related to the foggers and a permit limitation to achieve this objective. The Draft Permit includes a condition limiting inlet air fogging to no more than 1255 hours during any consecutive 12 months. The Department believes this limit provides a realistic operating scenario for the use of fogging equipment and prevents the project from triggering PSD. Therefore, this project is considered a minor modification with respect to PSD.

#### 4.4 Air Quality Impact Analysis

Because this project is permitted to avoid PSD, no air quality impact analysis was conducted. The Department concludes that, because the proposed air inlet foggers should not result in an increase in the maximum hourly emission rates, there would be no change in the maximum emissions rates or corresponding predicted ambient impacts. Also, inlet air fogging would have a negligible impact on the combustion turbine exhaust temperature. Therefore, issuance of this permit would not adversely affect the results of any previous modeling scenarios.

## 6.0 CONCLUSION

Based on the Department's technical review of the complete application, the reasonable assurances provided by the applicant, and the conditions specified in the Draft Permit, the Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations. The proposed project, as permitted, will not result in significant annual net emissions increases nor

**TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION**

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increase the maximum actual hourly emissions rates. The Department's conclusion is specific to the proposed project and does not set a precedent for any future projects or other types of physical changes to combustion turbines such as compressors, combustors, rotors, etc. The Department's determination does not constitute an interpretation of the EPA rules under 40 CFR 52.21, Prevention of Significant Deterioration or 40 CFR 60, New Source Performance Standards. Jeff Koerner, P.E., is the permitting engineer responsible for reviewing the application and drafting the permit.

# DRAFT PERMIT

## PERMITTEE

Kissimmee Utility Authority  
P.O. Box 423219  
Kissimmee, FL 34742-3219

ARMS Permit No.	0970001-003-AC
Facility ID No.	0970001
SIC No.	4911
Expires:	(DRAFT)

### *Authorized Representative:*

A.K. Sharma, Director of Power Supply

Project: Inlet Air Foggers

## PROJECT

This permit is issued pursuant to the preconstruction review requirements of Chapter 62-212, F.A.C. The facility is an electric power generating plant that is a major source of air pollution with respect to Rule 62-212.400, F.A.C., the Prevention of Significant Deterioration (PSD) of Air Quality program. The proposed project will increase actual emissions of an existing combustion turbine. However, restrictions in this permit limit the net emissions increases to less than the significant emission rates in Table 62-212.400-2, F.A.C. that would trigger PSD applicability for the project.

## LOCATION

This permit is for the installation of inlet air foggers on the existing combined cycle combustion turbine (Emissions Unit 001) at the Roy B. Hansel Plant located at 102 Lakeshore Boulevard in Kissimmee, Osceola County, Florida. The map coordinates are: UTM Zone 17, 460.1 km East, 3129.3 km North; and Latitude: 28° 17' 27" North and Longitude: 81° 24' 25" West.

## STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to install the proposed equipment in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department. This permit does not alter any requirements from previously issued air permits for the subject emissions unit.

## APPENDICES

The following appendices are attached as part of this permit.

- Appendix A - Terminology
- Appendix B - Summary of the PSD Applicability Determination
- Appendix GC - Construction Permit General Conditions

(DRAFT)

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Howard L. Rhodes, Director  
Division of Air Resources Management

**SECTION I. FACILITY INFORMATION (DRAFT)**

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**FACILITY DESCRIPTION**

This facility consists of one combined cycle combustion turbine, eight internal combustion engines with electrical generators, and several miscellaneous unregulated and/or insignificant activities.

**PROJECT**

The proposed project adds an inlet air fogging system to the following existing emissions unit.

<b>ARMS ID No.</b>	<b>EMISSION UNIT DESCRIPTION</b>
001	Combined cycle combustion turbine No. 1

**REGULATORY CLASSIFICATION**

**Power Plant Siting (PPS):** The facility is not subject to a PPS certification.

**Title III – HAP:** The facility is a major source of hazardous air pollutants.

**Title IV - Acid Rain:** The facility is not subject to the Federal Acid Rain Program.

**Title V – Major Source:** The facility is classified as a “major” source of air pollution with respect to Title V of the Clean Air Act because emissions of at least one regulated criteria air pollutant exceeds 100 tons per year.

**PSD Major Source:** Because facility emissions of at least one criteria pollutant are greater than 250 tons per year, the facility is “major facility” with respect to the Prevention of Significant Deterioration (PSD) of Air Quality. Pursuant to Rule 62-212.400, F.A.C., each modification to a PSD major source requires a PSD applicability determination. The Department determined that PSD did not apply to the project as permitted.

**NSPS:** The existing combined cycle combustion turbine is subject to 40 CFR 60, Subpart GG, the New Source Performance Standards for stationary gas turbines.

**RELEVANT DOCUMENTS**

- Permit application received on 12/06/99.
- Additional information received on 01/21/00.



## SECTION II. ADMINISTRATIVE REQUIREMENTS (DRAFT)

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### GENERAL AND ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: All documents related to applications for permits to construct or modify this emissions unit shall be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (DEP), at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 and phone number 850/488-0114.
2. Compliance Authorities: All documents related compliance activities such as reports, tests, and notifications should be submitted to the Central District Office at 3319 Maguire Boulevard, Suite 232 in Orlando, Florida 32803-3767. The phone number is 407/894-7555 and the fax number is 407/897-2966.
3. Terminology: The terms used in this permit have specific meanings as defined in the applicable chapters of the Florida Administrative Code. *Appendix A* lists frequently used abbreviations and explains the format used to cite rules and regulations in this permit.
4. PSD Applicability Determination: *Appendix B* summarizes the Department's determination of PSD applicability for this project.
5. General Conditions: The owner and operator are subject to, and shall operate under, the attached General Conditions listed in *Appendix GC* of this permit. General Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]
6. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of this project shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403 of the Florida Statutes (F.S.); Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
7. Permit Expiration: For good cause, the permittee may request that this air construction permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation at least sixty (60) days prior to the expiration of this permit. [Rules 62-4.070(4), 62-4.080, and 62-210.300(1), F.A.C.]
8. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
9. Modifications: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
10. Title V Permit: This permit authorizes construction of the proposed project and initial operation to determine compliance with Department rules. Upon completion of construction of this project, a Title V operation permit revision is required for regular operation of the new equipment. The permittee shall apply for and receive a revised Title V operation permit prior to expiration of this permit. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the Department's Central District Office at 3319 Maguire Boulevard, Suite 232 in Orlando, Florida 32803-3767. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

EU 001 – COMBINED CYCLE COMBUSTION TURBINE

The proposed project adds an inlet air fogging system to the following existing emissions unit.

ARMS ID NO.	EMISSION UNIT DESCRIPTION
001	<b>Combustion Turbine No. 1</b> consists of a 30.9 MW combined cycle combustion turbine with an unfired heat recovery steam generator and two 9.5 MW steam turbines. Water injection combined with low-nitrogen fuels control emissions of NO <sub>x</sub> . A high-pressure, direct water spray system may be used to provide evaporative cooling of the compressor inlet air.

*Permitting Note:* Although the inlet fogging equipment does not directly emit pollutants, this equipment alters the compressor inlet air conditions for the combustion turbines. Fogging decreases the inlet air temperature allowing a higher mass flow rate and slight increase in power production of approximately 2 to 5 MW. The increased power production is realized by increasing the fuel consumption of the combustion turbine, which results in increased actual emissions. Therefore, installation of this equipment requires a construction permit.

**ADMINISTRATIVE REQUIREMENTS**

1. Previous Permit Conditions: Issuance of this permit *does not* alter any requirements from previously issued air construction or Title V operation permits.

**INSTALLATION OF EQUIPMENT**

2. Inlet Air Foggers: The permittee is authorized to install a high pressure, direct water spray fogging system to provide evaporative cooling of the compressor inlet air. [Applicant Request]

**PERFORMANCE RESTRICTIONS**

3. Hours of Operation: The permittee shall operate the inlet air foggers no more than 1255 hours during any consecutive 12 months. [Design; Rule 62-212.400, F.A.C. (BACT); Rule 62-210.200, F.A.C. (Definitions - PTE)]
4. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of this permit due to breakdown of equipment or destruction by fire, wind or other cause, the owner or operator shall notify the Compliance Authority as soon as possible, but at least within one (1) working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; the steps being taken to correct the problem and prevent future recurrence; and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit and the regulations. [Rule 62-4.130, F.A.C.]

**EMISSIONS CONTROLS**

5. Circumvention: The permittee shall not circumvent any air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]
6. Unconfined Particulate Emissions: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering, enclosing, applying water or chemicals to the affected areas, or any combination of techniques, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

### SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

#### EU 001 – COMBINED CYCLE COMBUSTION TURBINE

##### EXCESS EMISSIONS

7. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction, shall be prohibited. [Rule 62-210.700, F.A.C.]

##### EMISSIONS PERFORMANCE TESTING

8. Special Compliance Tests: The existing combustion turbine remains subject to all performance testing provisions specified in any previously issued air construction and Title V operation permits. No additional testing requirements are specified as the result of this project. However, when the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]

##### COMPLIANCE DEMONSTRATIONS

9. Records: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to DEP representatives upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2., F.A.C.]
10. Monthly Operations Summary: By the fifth calendar day of each month, the permittee shall record the following information in a written log for the previous month of operation and for the previous 12 months of operation: the number of hours of gas firing; the number of hours of oil firing; and the number of hours of inlet air fogging. The Monthly Operations Summary shall be maintained on site in a legible format available for inspection at the Department's request. [Rule 62-4.160(15), F.A.C.]

##### REPORTS

11. Excess Emissions Reporting: If excess emissions occur due to malfunction, the permittee shall notify the Compliance Authority within (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. [Rules 62-4.130 and 62-210.700(6), F.A.C.]
12. Annual Operating Report: The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. [Rule 62-210.370(2), F.A.C.]

**SECTION IV.**

**APPENDIX A - TERMINOLOGY**

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**ABBREVIATIONS AND ACRONYMS**

<b>°F</b>	- Degrees Fahrenheit
<b>DEP</b>	- State of Florida, Department of Environmental Protection
<b>DARM</b>	- Division of Air Resource Management
<b>EPA</b>	- United States Environmental Protection Agency
<b>F.A.C.</b>	- Florida Administrative Code
<b>F.S.</b>	- Florida Statute
<b>SOA</b>	- Specific Operating Agreement
<b>UTM</b>	- Universal Transverse Mercator
<b>CT</b>	- Combustion Turbine
<b>DB</b>	- Duct Burner
<b>HRSG</b>	- Heat Recovery Steam Generator
<b>DLN</b>	- Dry Low-NOx Combustion Technology
<b>SCR</b>	- Selective Catalytic Reduction
<b>OC</b>	- Oxidation Catalyst Technology for CO Control

**RULE CITATIONS**

*The following examples illustrate the methods used in this permit to abbreviate and cite the references of rules, regulations, permit numbers, and identification numbers.*

Florida Administrative Code (F.A.C.) Rules:

*Example:* [Rule 62-213.205, F.A.C.]

*Where:* 62 - refers to Title 62 of the Florida Administrative Code (F.A.C.)  
62-213 - refers to Chapter 62-213, F.A.C.  
62-213.205 - refers to Rule 62-213.205, F.A.C.

Facility Identification (ID) Number:

*Example:* Facility ID No. 099-0001

*Where:* 099 - 3 digit number indicates that the facility is located in Palm Beach County  
0221 - 4 digit number assigned by state database identifies specific facility

New Permit Numbers:

*Example:* Permit No. 099-2222-001-AC or 099-2222-001-AV

*Where:* AC - identifies permit as an Air Construction Permit  
AV - identifies permit as a Title V Major Source Air Operation Permit  
099 - 3 digit number indicates that the facility is located in Palm Beach County  
2222 - 4 digit number identifies a specific facility  
001 - 3 digit sequential number identifies a specific permit project

Old Permit Numbers:

*Example:* Permit No. AC50-123456 or AO50-123456

*Where:* AC - identifies permit as an Air Construction Permit  
AO - identifies permit as an Air Operation Permit  
123456 - 6 digit sequential number identifies a specific permit project

## SECTION IV.

### APPENDIX B - SUMMARY OF THE PSD APPLICABILITY DETERMINATION

Project Description: The applicant requested a permit to authorize the installation of direct water spray foggers on an existing combustion turbine at KUA's Roy B. Hansel Plant, which would provide an increase power output of approximately 2 to 5 MW depending on the initial ambient conditions. With inlet air fogging, a series of high-pressure spray nozzles add a fine mist to the combustion turbine inlet air. The fine water droplets evaporate absorbing heat from the air molecules during the liquid-to-vapor phase change. The inlet air is cooled and made denser allowing for slightly higher throughput and increased power generation. The maximum heat input continues to be defined by the coldest day, because evaporative cooling provides little or no benefit on such days. Therefore, this project does not increase permitted capacity, but attempts to shift operation on warm days up the power output performance curve, but within the original design range of these units. Inlet foggers are routinely included in new combustion turbine projects and have not affected the Department's decisions regarding Best Available Control Technology.

The facility is a PSD major source of air pollution and the proposed project could potentially result in significant increases in pollutant emissions of CO, NO<sub>x</sub>, PM/PM<sub>10</sub>, SO<sub>2</sub>, and/or VOC. This is based on increased fuel consumption as a result of installing foggers, past actual emissions, future potential emissions, and maximum emissions rates. Therefore, the project is subject to review for the Prevention of Significant Deterioration (PSD) of Air Quality. The applicant has requested a limit on operation of the foggers to avoid triggering the significant emissions rates specified in Table 62-212.400-2, F.A.C. and a corresponding determination of the Best Available Control Technology (BACT).

Summary of the PSD Applicability Review: The project proposes installation of an air fogging system that will alter the conditions of the inlet air to the combustion turbine. This change in the method of operation will result in higher fuel consumption rates and corresponding air pollutant emissions during periods of fogging. The Department believes that it is reasonable to evaluate the increase in emissions directly resulting from the use of air foggers. This is consistent with the Department's previous determinations for similar fogger projects. However, critical to this analysis is the assumption that the fogger project will not increase the availability or utilization of the existing combustion turbine over that of recent years. After a review of the operating history for this unit, the Department established a limit for inlet air fogging of 1255 hours per year that would avoid triggering PSD for the proposed project. The Department believes that the modification and resulting effects can be isolated and directly estimated. Emissions from the existing combustion turbine were based on past actual emissions. Emissions resulting from inlet air fogging were based on future potential emissions, including the restriction on hours of air fogging. The Department believes the permit limit provides a realistic operating scenario for the use of fogging equipment and prevents the project from triggering PSD. Therefore, this project is considered a minor modification with respect to PSD. See the Technical Evaluation and Preliminary Determination for complete details of this determination.

Air Quality Impact Analysis: Because this project is permitted to avoid PSD, no air quality impact analysis was conducted. The Department concluded that, because the proposed air inlet foggers should not result in an increase in the maximum hourly emission rates, there would be no change in the maximum emissions rates or corresponding predicted ambient impacts. Also, inlet air fogging would have a negligible impact on the combustion turbine exhaust temperature. Therefore, issuance of this permit would not adversely affect the results of any previous modeling scenarios.

**SECTION IV.**

**APPENDIX GC - CONSTRUCTION PERMIT GENERAL CONDITIONS**

- G.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.
- G.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 or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- G.3 As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and 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 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.
- G.4 This permit conveys no title to land or water, does not constitute State recognition or acknowledgment 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.
- G.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.
- G.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.
- G.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 and 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.

- G.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.

- G.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 involving the permitted

## SECTION IV.

### APPENDIX GC - CONSTRUCTION PERMIT GENERAL CONDITIONS

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.

- G.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.
- G.11 This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, 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.
- G.12 This permit or a copy thereof shall be kept at the work site of the permitted activity.
- G.13 This permit also constitutes:
- (a) Determination of Best Available Control Technology (not applicable to project);
  - (b) Determination of Prevention of Significant Deterioration (not applicable to project); and
  - (c) Compliance with New Source Performance Standards (not applicable to project).
- G.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 or this permit. These materials shall be retained 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:
    - 1. The date, exact place, and time of sampling or measurements;
    - 2. The person responsible for performing the sampling or measurements;
    - 3. The dates analyses were performed;
    - 4. The person responsible for performing the analyses;
    - 5. The analytical techniques or methods used; and
    - 6. The results of such analyses.
- G.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.

# Memorandum

# Florida Department of Environmental Protection

---

TO: ~~Clair Faney, Chief, BAR~~ *CF*

FROM: Jeff Koerner, New Source Review Section, BAR *JK CF 1/24*

DATE: January 24, 2000

SUBJECT: Kissimmee Utility Authority – Roy B. Hansel Plant  
Inlet Air Fogging for Existing Combustion Turbine

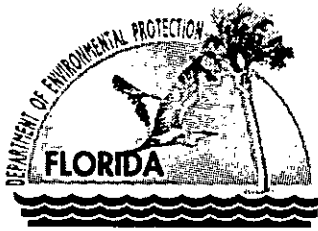
Attached is the public notice package for the installation of a compressor inlet air fogging system for the existing combustion turbine at the Roy B. Hansel Plant. To ensure that the project remained minor with respect to PSD, the applicant agreed to a limit of 1255 hours of inlet fogging during any consecutive 12 months. The Draft Permit authorizes installation of the equipment and establishes this limit on operation. Requirements of all other air construction and Title V operation permits remain unchanged.

Day #74 is 04/03/2000. I recommend your approval of the attached Intent to Issue package for this project.

JFK

Attachments





Jeb Bush  
Governor

# Department of Environmental Protection

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

David B. Struhs  
Secretary

## P.E. CERTIFICATION STATEMENT

### PERMITTEE

Kissimmee Utility Authority  
P.O. Box 423219  
Kissimmee, FL 34742-3219

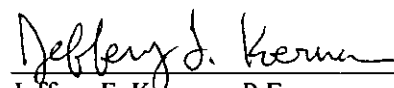
ARMS Permit No.	097-0001-003-AC
Facility ID No.	0970001
SIC No.	4911

### PROJECT DESCRIPTION

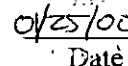
The applicant requested authorization to install a compressor inlet air fogging system for the existing combustion turbine at the Roy B. Hansel Plant. This equipment will provide evaporative cooling and a corresponding increase in power production. To ensure that the project remained minor with respect to PSD, the applicant agreed to a limit of 1255 hours of inlet fogging during any consecutive 12 months. The Draft Permit authorizes installation of the equipment and establishes this limit on operation. Requirements of all other air construction and Title V operation permits remain unchanged.

### CERTIFICATION

*I hereby certify that the engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4 and 62-204 through 62-297. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including but not limited to the electrical, mechanical, structural, hydrological, and geological features).*



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