

Florida Department of
Environmental Protection

Memorandum

To: Joseph Kahn, Division of Air Resource Management
Through: Trina Vielhauer, Bureau of Air Regulation
From: Jeff Koerner, New Source Review Section
Date: December 8, 2009
Subject: Final Minor Source Air Construction Permit
Project No. 0090196-010-AC
RRI Energy Florida, LLC, Indian River Power Plant
Revised Maximum Heat Input Rates

The final permit for this project is attached for your approval and signature. The project requires a minor air construction permit to specify the maximum heat input rates for existing units 1 - 3 based on a 4-hour average. The existing Indian River Power Plant is located in Brevard County at 7800 South U.S. Highway #1 in Titusville, Florida. The project is not considered a new source review reform project.

The attached Final Determination summarizes the publication and comment process. There are no pending petitions for administrative hearings or extensions of time in which to file a petition for an administrative hearing. I recommend your approval of the attached final permit for this project.

Attachments

TLV/jfk

FINAL DETERMINATION

PERMITTEE

RRI Energy Florida, LLC
7800 South U.S. Highway #1
Titusville, Florida 32780

PERMITTING AUTHORITY

Florida Department of Environmental Protection (Department)
Division of Air Resource Management
Bureau of Air Regulation, New Source Review Section
2600 Blair Stone Road, MS #5505
Tallahassee, Florida 32399-2400

PROJECT

Air Permit No. 0090196-010-AC
Indian River Power Plant
Revised Maximum Heat Input Rates for Units 1 - 3
Brevard County, Florida

The project establishes 4-hour averages for the maximum heat input rates for Units 1, 2 and 3 at the existing Indian River Power Plant.

NOTICE AND PUBLICATION

The Department distributed a draft minor air construction permit package on November 5, 2009. The applicant published the Public Notice in the Florida Today on November 9, 2009. The Department received the proof of publication on November 16, 2009. No requests for administrative hearings or requests for extensions of time to file a petition for administrative hearing were received.

COMMENTS

No comments on the Draft Permit were received from the public or the EPA Region 4 Office. On November 20, 2009, the Department received comments from the applicant. The applicant made no comments on any conditions in the draft permit. The applicant did comment on the Department's Technical Evaluation and Preliminary Determination, which is part of the Department's project file. The applicant noted that Units 1 – 3 do not continuously monitor the flue gas flow rate, but measure fuel consumption and report flow rates in accordance with the Appendix D procedures in Part 75, Title 40 of the Code of Federal Regulations. The Department notes this correction. Primarily, the applicant disagreed with the Department's rationale for not accepting the requested increase in heat input rates. Nevertheless, the applicant finds the conditions of the draft permit acceptable and endorses finalization of the permit as drafted.

CONCLUSION

The final action of the Department is to issue the permit with the minor changes, corrections and clarifications as described above.



Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

PERMITTEE

RRI Energy Florida, LLC
7800 South U.S. Highway #1
Titusville, Florida 32780

Authorized Representative:
Mr. Dennis Shaulis, General Manager

Project No. 0090196-010-AC
Expires: December 9, 2010
Minor Air Construction Permit
Indian River Power Plant
Revised Maximum Heat Input Rates
Existing Units 1 - 3
Brevard County, Florida

PROJECT

This is the final air construction permit, which revises the maximum heat input rates for Units 1, 2 and 3 at the existing Indian River Power Plant, which is categorized as Standard Industrial Classification No. 4911. The existing power plant is located in Brevard County at 7800 South U.S. Highway #1 in Titusville, Florida. The UTM coordinates are Zone 17, 521.5 km East and 3151.6 km North.

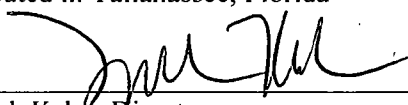
This final permit is organized into the following sections: Section 1 (General Information); Section 2 (Administrative Requirements); Section 3 (Emissions Unit Specific Conditions); Section 4 (Appendices). Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit. As noted in the Final Determination provided with this final permit, only minor changes and clarifications were made to the draft permit.

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 conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida



Joseph Kahn, Director
Division of Air Resource Management

12/11/09

(Date)

FINAL PERMIT

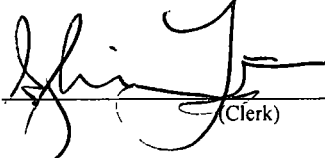
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit with Appendices) was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on 12/11/09 to the persons listed below.

- Mr. Dennis Shaulis, Reliant Energy (dshaulis@rrienergy.com)
- Mr. Gary Mauzy, Reliant Energy (gmauzy@rrienergy.com)
- Ms. Michelle F. Duncan, Reliant Energy (mfduncan@rrienergy.com)
- Mr. Michael Ballenger, Trinity Consultants (mballeng@trinityconsultants.com)
- Ms. Aimee Andrews, Trinity Consultants (aandrews@trinityconsultants.com)
- Ms. Caroline Shine, DEP Central District Office (caroline.shine@dep.state.fl.us)
- Ms. Kathleen Forney, EPA Region 4 (forney.kathleen@epa.gov)
- Ms. Heather Abrams, EPA Region 4 (abrams.heather@epa.gov)
- Ms. Ana M. Oquendo, EPA Region 4 (oquendo.ana@epa.gov)
- Ms. Vickie Gibson, DEP BAR Reading File (victoria.gibson@dep.state.fl.us)

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.



(Clerk)

12/11/09
(Date)

SECTION 1. GENERAL INFORMATION

FACILITY DESCRIPTION

The existing facility consists of three electric utility steam generating units, a lime storage silo and miscellaneous unregulated and insignificant emissions units and activities.

PROPOSED PROJECT

Only the following existing emissions units are affected by this air construction permit.

Facility ID No. 0090196	
ID No.	Emission Unit Description
001	Electric utility steam generating Unit 1 rated at a nominal 87 megawatt (MW)
002	Electric utility steam generating Unit 2 rated at a nominal 188 MW
003	Electric utility steam generating Unit 3 rated at a nominal 328 MW

FACILITY REGULATORY CLASSIFICATION

- The facility is a major source of hazardous air pollutants (HAP).
- The facility operates units subject to the acid rain provisions of the Clean Air Act.
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. **Permitting Authority:** The permitting authority for this project is the Bureau of Air Regulation, Division of Air Resource Management, Florida Department of Environmental Protection (Department). The Bureau of Air Regulation's mailing address is 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400.
2. **Compliance Authority:** All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Air Resources Section of the Department's Central District Office at 3319 Maguire Boulevard, Suite 232, Orlando, Florida 32803-3767.
3. **Appendices:** The following Appendices are attached as a part of this permit: Appendix A (Citation Formats and Glossary of Common Terms) and Appendix B (General Conditions).
4. **Applicable Regulations, Forms and Application Procedures:** Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.
5. **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.]
6. **Modifications:** The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be 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.]
7. **Source Obligation:**
 - (a) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.
 - (b) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.[Rule 62-212.400(12), F.A.C.]
8. **Application for Title V Permit:** This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V air operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V air operation permit no later than 180 days after issuance 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 appropriate Permitting Authority with copies to the Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Electric Utility Steam Generating Units 1 – 3 (EU-001 – EU-003)

This section of the permit addresses the following emissions units.

ID No.	Emission Unit Description
001	Electric utility steam generating Unit 1 rated at a nominal 87 MW
002	Electric utility steam generating Unit 2 rated at a nominal 188 MW
003	Electric utility steam generating Unit 3 rated at a nominal 328 MW

PERFORMANCE RESTRICTIONS

1. Permitted Capacity. Based on a 4-hour rolling average, the maximum heat input rates are:

Unit No.	Heat Input Rates (MMBtu/hour)	
	Gas	Oil
1	865.5	832.2
2	2248.7	2016.5
3	3208.5	3048.8

The heat input rates shall be determined by fuel flow rates and the higher heating value of the fuel. [Application No. 0090196-010-AC; and Rules 62-4.070(3), 62-4.160(2), 62-204.800, 62-210.200 (PTE), and 62-296.405, F.A.C.]

MONITORING REQUIREMENTS

2. Fuel Monitoring: The permittee shall calibrate, operate and maintain devices to continuously monitor and record the fuel flow rate and heat input rates. [Application No. 0090196-010-AC and Rule 62-4.070(3), F.A.C.]

RECORDS

3. Fuel Monitoring Data: The permittee shall demonstrate compliance with the maximum heat input rate for each unit by maintaining records of the hourly fuel flow rate, the higher heating value of each fuel and the heat input rate. Written records shall be made available within three days of a request by the Department. If the actual heat input rate exceeds the permitted maximum heat input rate, the permittee shall notify the Compliance Authority within one working day of discovery. [Application No. 0090196-010-AC and Rule 62-4.070(3), F.A.C.]

SECTION 4. APPENDICES

Contents

Appendix A. Citation Formats and Glossary of Common Terms

Appendix B. General Conditions

SECTION 4. APPENDIX A

Citation Formats and Glossary of Common Terms

CITATION FORMATS

The following illustrate the formats used in the permit to identify applicable requirements from permits and regulations.

Old Permit Numbers

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

Where: “AC” identifies the permit as an Air Construction Permit
“AO” identifies the permit as an Air Operation Permit
“123456” identifies the specific permit project number

New Permit Numbers

Example: Permit Nos. 099-2222-001-AC, 099-2222-001-AF, 099-2222-001-AO, or 099-2222-001-AV

Where: “099” represents the specific county ID number in which the project is located
“2222” represents the specific facility ID number for that county
“001” identifies the specific permit project number
“AC” identifies the permit as an air construction permit
“AF” identifies the permit as a minor source federally enforceable state operation permit
“AO” identifies the permit as a minor source air operation permit
“AV” identifies the permit as a major Title V air operation permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: “PSD” means issued pursuant to the preconstruction review requirements of the Prevention of Significant Deterioration of Air Quality
“FL” means that the permit was issued by the State of Florida
“317” identifies the specific permit project number

Florida Administrative Code (F.A.C.)

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

Means: Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

Code of Federal Regulations (CFR)

Example: [40 CFR 60.7]

Means: Title 40, Part 60, Section 7

GLOSSARY OF COMMON TERMS

° F: degrees Fahrenheit

µg: microgram

AAQS: Ambient Air Quality Standard

acf: actual cubic feet

acfm: actual cubic feet per minute

ARMS: Air Resource Management System
(Department’s database)

BACT: best available control technology

bhp: brake horsepower

Btu: British thermal units

CAM: compliance assurance monitoring

CEMS: continuous emissions monitoring system

cfm: cubic feet per minute

CFR: Code of Federal Regulations

SECTION 4. APPENDIX A

Citation Formats and Glossary of Common Terms

CAA: Clean Air Act	NESHAP: National Emissions Standards for Hazardous Air Pollutants
CMS: continuous monitoring system	NO_x: nitrogen oxides
CO: carbon monoxide	NSPS: New Source Performance Standards
CO₂: carbon dioxide	O&M: operation and maintenance
COMS: continuous opacity monitoring system	O₂: oxygen
DARM: Division of Air Resource Management	Pb: lead
DEP: Department of Environmental Protection	PM: particulate matter
Department: Department of Environmental Protection	PM₁₀: particulate matter with a mean aerodynamic diameter of 10 microns or less
dscf: dry standard cubic feet	ppm: parts per million
dscfm: dry standard cubic feet per minute	ppmv: parts per million by volume
EPA: Environmental Protection Agency	ppmvd: parts per million by volume, dry basis
ESP: electrostatic precipitator (control system for reducing particulate matter)	QA: quality assurance
EU: emissions unit	QC: quality control
F: fluoride	PSD: prevention of significant deterioration
F.A.C.: Florida Administrative Code	psi: pounds per square inch
F.A.W.: Florida Administrative Weekly	PTE: potential to emit
F.D.: forced draft	RACT: reasonably available control technology
F.S.: Florida Statutes	RATA: relative accuracy test audit
FGD: flue gas desulfurization	RBLC: EPA's RACT/BACT/LAER Clearinghouse
FGR: flue gas recirculation	SAM: sulfuric acid mist
ft²: square feet	scf: standard cubic feet
ft³: cubic feet	scfm: standard cubic feet per minute
gpm: gallons per minute	SIC: standard industrial classification code
gr: grains	SIP: State Implementation Plan
HAP: hazardous air pollutant	SNCR: selective non-catalytic reduction (control system used for reducing emissions of nitrogen oxides)
Hg: mercury	SO₂: sulfur dioxide
I.D.: induced draft	TPD: tons/day
ID: identification	TPH: tons per hour
kPa: kilopascals	TPY: tons per year
lb: pound	TRS: total reduced sulfur
MACT: maximum achievable technology	UTM: Universal Transverse Mercator coordinate system
MMBtu: million British thermal units	VE: visible emissions
MSDS: material safety data sheets	VOC: volatile organic compounds
MW: megawatt	

SECTION 4. APPENDIX B

General Conditions

The permittee shall comply with the following general conditions from Rule 624.160, F.A.C.

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in subsections 403.987(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in this permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
 - a. Have access to and copy any records that must be kept under conditions of the permit;
 - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
 - c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.
8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - a. A description of and cause of noncompliance; and
 - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time then noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.
9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

SECTION 4. APPENDIX B

General Conditions

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. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, F.A.C., shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.
11. This permit is transferable only upon Department approval in accordance with 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.
12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
13. This permit also constitutes:
 - a. Determination of Best Available Control Technology (not applicable);
 - b. Determination of Prevention of Significant Deterioration (not applicable); and
 - c. Compliance with New Source Performance Standards (not applicable).
14. The permittee shall comply with the following:
 - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - c. Records of monitoring information shall include:
 - (a) The date, exact place, and time of sampling or measurements;
 - (b) The person responsible for performing the sampling or measurements;
 - (c) The dates analyses were performed;
 - (d) The person responsible for performing the analyses;
 - (e) The analytical techniques or methods used;
 - (f) The results of such analyses.
15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.



121 Champion Way
Canonsburg, PA 15317

RECEIVED

NOV 23 2009

BUREAU OF AIR REGULATION

Via e-mail and overnight mail

November 20, 2009

Ms. Trina Vielhauer, Chief
Bureau of Air Regulation
2600 Blair Stone Road,
MS #5505
Tallahassee, FL 32399-2400

RE: Indian River Power Plant, Minor Air Construction Permit #0090196-010-AC

Dear Ms. Trina Vielhauer:

RRI Energy (formerly Reliant Energy) appreciates the opportunity to comment on the Draft Minor Air Construction Permit (Project No. 0090196-010-AC). We find the conditions in the draft permit acceptable in regard to the averaging period for heat input limits and endorse finalization of the draft permit as published. In addition, we are compelled to address several statements and conclusions made by the Department in the Technical Evaluation & Preliminary Determination document.

RRI Energy submitted the air construction permit application at the request of FDEP in response to several attempts to correct the heat input limits contained in Indian River Power Plant's Air Operating Permit. In the construction permit application, RRI Energy requested a change in heat input limits to accurately reflect the actual capacity of Units 1 and 3, and an averaging period to demonstrate compliance with those limits. The construction permit application was not prompted by any physical or operational change and included a PSD applicability analysis to demonstrate that the correction of permit limits would not trigger NSR/PSD requirements.

FDEP requested additional information and RRI Energy complied with the request by providing more data and a revised NSR/PSD emissions analysis. Based on the Technical Evaluation & Preliminary Determination document, the Department agrees that the current permitted heat input rates should not be instantaneous limits. However, the Department believed it was inappropriate to correct the heat input limits. The Department apparently reviewed the application from the perspective of the plant's *need* to operate the units at their design capabilities. It was RRI Energy's intent with this construction permit application to operate the units at their maximum capacity to provide the highest generation during periods of peak electrical system demand. Both the existing heat input permit limits and the interpretation that they limit the units' hourly production to MCR values prohibit peak production from Units 1 and 3. As such, while applying an appropriate averaging period does provide additional flexibility to operate closer to the

units' capacity, it does not correct the limits that are prohibiting RRI Energy from operating the units at their maximum capacity.

FDEP presents an analysis that focuses on Indian River's compliance with the existing permit limits, reduced utilization, alleged inefficiency and age of the units to deny the requested permitted heat input limit change in the construction permit application. RRI Energy's comments to specific statements and conclusions in the Technical Evaluation & Preliminary Determination are presented in the following.

3. DEPARTMENT REVIEW

Existing Unit Descriptions

Unit 1 is a nominal 87 megawatt (MW) electric utility steam generating unit manufactured by Combustion Engineering, which originally started up in 1960. No control equipment is installed on the unit. Authorized fuels include No. 6 residual fuel oil (maximum sulfur content of 2.5% by weight), No. 2 distillate oil (maximum sulfur content of 0.3% by weight), natural gas and on-specification used oil. The unit is limited to 8400 hours of operation per year. The stack is equipped with continuous emissions monitoring systems (CEMS) to continuously measure and record opacity, carbon dioxide, nitrogen oxides and the flue gas flow rate.

Unit 3 is a nominal 328 MW electric utility steam generating unit manufactured by Combustion Engineering, which originally started up in 1974. No control equipment is installed on the unit. Authorized fuels include No. 6 residual fuel oil with maximum sulfur content of 2.5% by weight, No. 2 distillate oil (maximum sulfur content of 0.3% by weight), natural gas and on-specification used oil. The unit is limited to 8400 hours of operation per year. The stack is equipped with CEMS to continuously measure and record opacity, carbon dioxide, nitrogen oxides and the flue gas flow rate.

RRI ENERGY COMMENT

Units 1 and 3 use CEMS to measure NO_x and CO₂. There is no flue gas flow rate CEMS. Fuel use and heat input are monitored and reported using certified fuel flow meters in accordance with EPA Part 75 Appendix D procedures.

Department's Conclusion

- The applicant suggests that the condition of "over-pressure" occurs approximately 10% of the time, but could not provide any actual operational data to show when this was a problem. In fact, it appears that the operator instituted controls to ensure compliance with the maximum permitted heat input rates. In other words, the operator was able to manage the over-pressure periods to comply with the permit requirement.*

- *The plant has operated the units to comply with the maximum permitted heat input rates for more than 14 years. The applicant was unable to provide any data collected prior to 1995 that showed operation at the higher capacity during operations or even the problems caused by over-pressure periods.*

RRI ENERGY COMMENT

RRI Energy managed the Units 1 and 3 to comply with operating permit restrictions and the Department's interpretation. Managing to operate in compliance with the permit limits simply means that the facility limited production of the units when unrestricted operation would have produced higher peak generation. A history of compliance with the existing permit conditions and the Department's interpretation is unjustly being used as an argument against the proposed change in the construction permit application.

- *Units 1 and 3 are now 49 and 35 years old, respectively. When initially constructed, the expected useful life was approximately 40 years. This table shows the gradual decrease in actual operation of Units 1 and 3. It also appears that the amount of heat input needed to produce the same amount of electricity has greatly increased, which could show that the aging units are much less efficient. The Department believes it is inappropriate at this point in the life of these units to increase the maximum heat input rates.*

RRI ENERGY RESPONSE

The subject Electrical Generating Units (EGUs) began operation on the dates listed by the Department. EGUs, in general, have an industry record of high standards of design and maintenance. Many EGUs are performing, as designed, at ages well in excess of their design life. The design life of an EGU should not be used by the Department as rationale for denying a requested permit change through a construction permit application. FDEP also concludes that the units' efficiency is substantially degraded based on a table of total annual heat input and net electrical production. **The data presented does not accurately reflect the units' true operating efficiency.** Specifically, there is not enough information presented in the table to evaluate actual unit efficiency. Contrary to the Department's allegations, neither the current heat input required for electrical production nor the units' current efficiency is greatly changed from historical conditions.

Annual MMBtu/Net MWh is significantly influenced by the unit service hours. Electricity consumed by the facility counts against the total net generation. The longer units remain idle or in reserve shutdown, more MWh are consumed to keep vital equipment in service and the referenced unit statistics are skewed by this factor. Unit degradation or loss of efficiency can only appropriately be determined by comparing the actual operating or test data. A comparison of actual operating data and design data is presented below.

Comparison of Unit Efficiencies

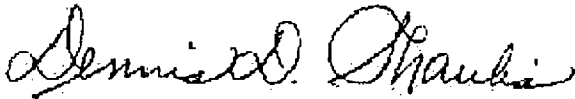
Unit	Average SERC Report Data from 1976 to 1999 (Btu/KWh)	Average Full Load Data from 2003 to 2009 (Btu/KWh)	July 2009 Dependable Capacity Tests (Btu/KWh)	Full Load Design (Btu/KWh)
Unit 1	10,636	10,879	10,708	9,931
Unit 3	10,200	9,943	9,354	9,655

This table demonstrates that the units' current efficiency is relatively unchanged from historical or design data. In any case, recent actual operational data dispels assertions of loss of performance from equipment degradation.

In summary, RRI Energy appreciates FDEP's review and supports issuance of the draft permit to incorporate an appropriate averaging period for the heat input limits for Units 1 and 3 at Indian River Power Plant. However, we disagree with FDEP's assessment of the heat input change request and the basis for denying that portion of the construction permit application, as outlined in the Technical Evaluation & Preliminary Determination document.

Please contact Keith Schmidt at 724 597 8193 or Michelle Duncan at 724 597 8631 if you have comments concerning this submittal.

Sincerely,



Dennis D. Shaulis
General Manager, Indian River Power Plant

cc: Jeff Koerner, FL DEP
Gary Mauzy
Keith Schmidt
file

Livingston, Sylvia

From: Livingston, Sylvia
Sent: Friday, December 11, 2009 3:52 PM
To: 'dshaulis@rrienergy.com'
Cc: 'GMauzy@rrienergy.com'; 'mfduncan@rrienergy.com'; 'mballeng@trinityconsultants.com'; 'aandrews@trinityconsultants.com'; Shine, Caroline; 'forney.kathleen@epa.gov'; 'abrams.heather@epa.gov'; 'oquendo.ana@epa.gov'; Gibson, Victoria; Koerner, Jeff; Walker, Elizabeth (AIR)
Subject: Reliant Energy FLorida, LLC - Reliant Indian River Plant; 0090196-010-AC
Attachments: 0090196-010-AC_Signatures.pdf

Dear Sir/ Madam:

Attached is the official **Notice of Final Permit** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Click on the following link to access the documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0090196.010.AC.F_pdf.zip

Owner/Company Name: RELIANT ENERGY FLORIDA, L.L.C.

Facility Name: RELIANT INDIAN RIVER PLANT

Project Number: 0090196-010-AC

Permit Status: FINAL

Permit Activity: CONSTRUCTION

Facility County: BREVARD

Processor: Jeff Koerner

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other project documents using the "*Air Permit Documents Search*" website at <http://www.dep.state.fl.us/air/eproducts/apds/default.asp>.

Project documents that are addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Bureau of Air Regulation at (850)488-0114.

Sylvia Livingston
Bureau of Air Regulation
Division of Air Resource Management (DARM)
Department of Environmental Protection
850/921-9506
sylvia.livingston@dep.state.fl.us

Livingston, Sylvia

From: Shaulis, Dennis D [DShaulis@rrienergy.com]
Sent: Monday, January 04, 2010 2:31 PM
To: Livingston, Sylvia
Subject: RE: Reliant Energy FLorida, LLC - Reliant Indian River Plant; 0090196-010-AC

Sylvia,

I have received and can read the attachment.

Denny Shaulis
GM
Indian River Power Plant

From: Livingston, Sylvia [mailto:Sylvia.Livingston@dep.state.fl.us]
Sent: Tuesday, December 22, 2009 1:43 PM
To: Shaulis, Dennis D
Subject: FW: Reliant Energy FLorida, LLC - Reliant Indian River Plant; 0090196-010-AC

Dear Mr. Shaulis:

We have not received confirmation that you were able to access the documents attached to this December 11th e-mail. Please confirm receipt by opening the attachment and sending a reply to me.

The Division of Air Resource Management is sending electronic versions of these documents rather than sending them Return Receipt Requested via the US Postal service. Your "receipt confirmation" reply serves the same purpose as tracking the receipt of the signed "Return Receipt" card from the US Postal Service. Please let me know if you have any questions.

Sylvia Livingston
Bureau of Air Regulation
Division of Air Resource Management (DARM)
Department of Environmental Protection
850/921-9506
sylvia.livingston@dep.state.fl.us

The Department of Environmental Protection values your feedback as a customer. DEP Secretary Michael W. Sole is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on [this link to the DEP Customer Survey](#). Thank you in advance for completing the survey.

From: Livingston, Sylvia
Sent: Friday, December 11, 2009 3:52 PM
To: 'dshaulis@rrienergy.com'
Cc: 'GMauzy@rrienergy.com'; 'mfduncan@rrienergy.com'; 'mballeng@trinityconsultants.com'; 'aandrews@trinityconsultants.com'; Shine, Caroline; 'forney.kathleen@epa.gov'; 'abrams.heather@epa.gov'; 'oquendo.ana@epa.gov'; Gibson, Victoria; Koerner, Jeff; Walker, Elizabeth (AIR)
Subject: Reliant Energy FLorida, LLC - Reliant Indian River Plant; 0090196-010-AC

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Owner/Company Name: RELIANT ENERGY FLORIDA, L.L.C.

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Sylvia Livingston
Bureau of Air Regulation
Division of Air Resource Management (DARM)
Department of Environmental Protection
850/921-9506
sylvia.livingston@dep.state.fl.us

Note: The attached document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: <http://www.adobe.com/products/acrobat/readstep.html> .

Livingston, Sylvia

From: Michael Ballenger [MBalleng@trinityconsultants.com]
Sent: Friday, December 11, 2009 4:38 PM
To: Livingston, Sylvia
Subject: Re: Reliant Energy FLorida, LLC - Reliant Indian River Plant; 0090196-010-AC

I received the email and was able to view the attached permit.

Thank you,

Michael Ballenger, P.E.
4767 New Broad Street
Orlando, FL 32814
(407) 514-2632
Fax: (407) 641-8911

From: "Livingston, Sylvia" <Sylvia.Livingston@dep.state.fl.us>
To: <dshaulis@rrienergy.com>
Cc: <GMauzy@rrienergy.com>, <mfducan@rrienergy.com>, <mballeng@trinityconsultants.com>, <aandrews@trinityconsultants.com>, "Shine, Caroline" <Caroline.Shine@dep.state.fl.us>, <forney.kathleen@epa.gov>, <abrams.heather@epa.gov>, <oquendo.ana@epa.gov>, "Gibson, Victoria" <Victoria.Gibson@dep.state.fl.us>, "Koerner, Jeff" <Jeff.Koerner@dep.state.fl.us>, "Walker, Elizabeth \ (AIRI)" <Elizabeth.Walker@dep.state.fl.us>
Date: 12/11/2009 03:55 PM
Subject: Reliant Energy FLorida, LLC - Reliant Indian River Plant; 0090196-010-AC

Dear Sir/ Madam:

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