

### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

#### REGION IV

345 COURTLAND STREET, N.E. ATLANTA, GEORGIA 30365 NOV ~ 1 1991

4APT-AEB

Mr. Clair H. Fancy, P.E., Chief Bureau of Air Regulation Florida Department of Environmental Regulation Twin Towers Office Building 2600 Blair Stone Road

Tallahassee, Florida 32399-2400

RECEIVED

NOV 6 1991

Division of Air Resources Management

RE: OUC Indian River Plant (PSD-FL-173)

Dear Mr. Fancy:

MO, - 1 [99]

This is to acknowledge receipt of your preliminary determination and draft Prevention of Significant Deterioration (PSD) permit for the proposed modification to the above referenced source. The modification will consist of the addition of two 129 MW simple-cycle combustion turbines to the existing facility (units C and D). Your determination of BACT for NO<sub>x</sub> emissions consists of the utilization of low-NO<sub>x</sub> burners to achieve emissions levels of 25 ppm when firing natural gas and 42 ppm when firing fuel oil. This determination is consistent with other recent determinations in Florida.

In addition, SO<sub>2</sub> emissions will be limited through the requirement for low sulfur (0.3%) fuel oil and a limit on the hours of operation by the turbines when firing fuel oil. We have reviewed this package as requested and have no adverse comments.

Thank you for the opportunity to review and comment on this package. If you have any questions on these comments, please contact Mr. Gregg Worley of my staff at (404) 347-5014.

Sincerely yours,

Jewell/A. Harper, Chief Air Enforcement Branch/

Air, Pesticides, and Toxics

Management Division

ce: a. zahm

BA S sow when receive: 11-1-91 RAL
PL 3 11-1-91 RAL
ML 3

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY - REGION IV
AIR, PESTICIDES & TOXICS MANAGEMENT DIVISION
345 Courtland Street, N. E.
Atlanta, Georgia 30365
Fax Number: FTS 257-5207 or 404/347-5207

### FACSIMILE TRANSMISSION SHEET

| DATE: Nov. 1, 1991 NUMBER OF PAGES                                    | (Including this sheet)     |
|---|----------------------------|
| TO: Clair Fancy   | PHONE:                     |
| ADDRESS: FDER   | FAX NUMBER: (904) 922-6979 |
| FROM: Gregg Worley  | PHONE: (404) 347-5014      |
| If the following pages are received at PTS 257- 5014 or 404/347- 5014 |                            |
| SPECIAL INSTRUCTIONS FOR RECEIVER:                                    |                            |
|   |                            |
|   |                            |

### TELECOPY

### TRANSMITTAL SHEET

### ORLANDO UTILITIES COMMISSION

| PAGES SENT INCLUDING TRANSMITTAL SHEET: 4  SENT TO: Mr. G. Preston Lewis, P.E. Review Engineer  Air Permitting and Standards Section | TIME: 10:30 am |  |  |
|--|----------------|--|--|
| Mr. G. Preston Lewis, P.E. Review Engineer   |                |  |  |
|  | <del></del>    |  |  |
| COMPANY: Florida Department of Environmental Regulation  | <u>n</u>       |  |  |
| CITY: Tallahassee, FL  |                |  |  |
| PELECOPY NUMBER: (904) 922-6979  |                |  |  |
| FROM: Jim Crall Ext. 14  | 11             |  |  |
| COMMENTS:  |                |  |  |
|  |                |  |  |
|  |                |  |  |

ORLANDO UTILITIES COMMISSION

TELECOPY NUMBER: (407) 236-9616

FOR PROBLEMS OR QUESTIONS CONCERNING THIS TRANSMITTAL CALL (407) 423-9100 - EXT. 2049



## ORLANDO UTILITIES COMMISSION

500 SOUTH ORANGE AVENUE . P. O. BOX 3193 . ORLANDO, FLORIDA 32802 . 407/423-9100

SENT VIA FAX (904) 922-6979

October 15, 1991

Mr. G. Preston Lewis, P. E. Review Engineer Air Permitting and Standards Section Florida Department of Environmental Regulation 2600 Blair Stone Road Tallahassee, FL 32399-2400

Dear Mr. Lewis:

Enclosed are the comments we discussed for inclusion into the Final Construction Permit for the Orlando Utilities Commission's Indian River facility.

The proposed changes are minor and help to make the Permit a more accurate and complete document and correct typographical errors. Copies of the pages with suggested changes are enclosed.

you have any questions or comments concerning modifications, please contact me at 407/423-9141.

J. S. Crall

Director

Environmental Division

JSC:rc Enclosure

cc: K. P. Ksionek

T. D. Slepow

AND CONTRACT TO A CARTA THE DESCRIPTION OF THE PROPERTY OF THE

PERMITTEE:

Permit Number: AC 05-193720

PSD-FL-173

Expiration Date: Dec. 31, 1992

SPECIFIC CONDITIONS:

Orlando Utilities Commission

| Draft<br>Pollutant  | Accept<br>8- hr | cable Ambient Concentra<br>24-hr | tions ug<br>Annual         |        |     |
|---|-----------------|----------------------------------|----------------------------|--------|-----|
| Beryllium<br>Lead   | 0.02<br>1.5     | 0.005<br>0.36                    | <del>0.004</del> 0<br>0.09 | 0.0004 |     |
| Inorganic Mercury<br>Compounds all forms<br>of Vapor, as Hg | HAP<br>D.1      | O, OZY.                          | NA<br>NA                   |        | 111 |

3. Visible emissions shall not exceed 20 percent opacity at anytime nor exceed 10% during full load.

### Operating Rates

- 4. This source is allowed to operate continuously (4,380 hours per years).
- 5. This source is allowed to use natural gas as the primary fuel and No. 2 distillate oil as the secondary fuel (limited as shown in Specific Condition 6 below).
- The permitted materials and utilization rates for each simple cycle gas turbine shall not exceed the values as follows:
  - -- Maximum No. 2 fuel oil consumption shall not exceed either of the following limitations: 10,282 gals/hr; 22,517,580 gals/yr.

-- Maximum annual firing using No. 2 fuel oil shall not exceed 2,190 hours per year.

-- Maximum sulfur (S) content in the oil shall not exceed 0.30 percent by weight. -- Maximum heat input shall not exceed 1,354 MMBtu/hr

(gas) or 1,346 MMBtu/hr (oil).

-- Maximum annual firing on any fuel combination shall not exceed 4,380 hours per year.

7. Any change in the method of operation, equipment or operating hours shall be submitted to the DER's Bureau of Air Regulation office for approval.

TABLE 1
ALLOWABLE EMISSION LIMITS
Simple Cycle Combustion Turbine

|                 | Stang                               | Gas Turbine  |                |                    |                  |  |
|-----------------|-------------------------------------|--|----------------|--------------------|------------------|--|
| Pollutant       | Gas Firing/20 F                     | No. 2 Fuel Oil Firing/20 F                                       | Tons Per Year* |                    | Basis            |  |
| 102140          | ,                                   | · · · ·  | Gas Oil        |                    |                  |  |
| NO X            | 25 ppm at 15% oxygen on a dry basis | 42 ppmv at 15 percent oxygen on a dry basis                      | 591.5          | 506                | BACT             |  |
| so <sub>2</sub> | Natural gas as fuel                 | 0.3 percent S by weight  | 2.1            | 953                | BACT             |  |
| pw/pw           | 0.003 lb/MMBtu                      | 0.08 lb/HMBtu  | 19.5           | 237                | Performance Data |  |
| VOC 10          | -                                   | <u>-</u>   | 37             | 112                | 12 R             |  |
| CO              | -                                   | -  | 313            | 159                | E9 M             |  |
| Mercury (Hg)    |                                     | $3.0 \times 10^{-6}$ lbs/MMBtu<br>$2.8 \times 10^{-6}$ lbs/MMBtu | -              | 0.01               | Est. by Appl.    |  |
| Lead (Pb)       | ,<br>_                              | 2.8 x 10 1.bs/MMBtu  | -              | 9+03 <sup>r2</sup> | 0.08 " "         |  |
| Beryllium ()    | he) -                               | 2.5 x 10 lbs/MMBtu   | -              | 0.01               | ц •              |  |
| Sulfuric        | <i>pc</i>                           | •  | 0.07           |                    |                  |  |
|                 | Natural gas as fuel                 | Low sulfur content oil   | 0-05°          | 28.5               | н ч              |  |

<sup>129</sup> MW \* Emissions rates for both  $\Lambda$  turbines are based on a 50 percent capacity factor with a maximum of 25 percent attributed to oil firing.



# ORLANDO UTILITIES COMMISSIONES DE 1991

500 SOUTH ORANGE AVENUE . P. O. BOX 3193 . ORLANDO, FLORIDA 32802 Division of Management Resources Management

September 27, 1991

Mr. C. H. Fancy, P. E. Chief, Bureau of Air Regulation Florida Department of Environmental Regulation 2600 Blair Stone Road Tallahassee, FL 32399-2400

Re: Four-Unit Combustion Turbine Facility at Indian River Plant AC 05-193720 and PSD-FL-173 Units C and D.

Dear Mr. Fancy:

Attached is a copy of the proof of publication from the <u>Florida</u> <u>Today</u> newspaper for Combustion Turbines C and D at OUC's Indian River Plant in Brevard County.

Sincerely,

J. \$. Crall Director

**Environmental Division** 

JSC:rc Attachment

cc: Mr. Preston Lewis - DER



| EEDERAL.   | OUESTIONS? CALL 800-238-5355 TO   | LL FREE.                         | AIRL<br>PACK<br>TRACKING  | MGE LAC  | 11712145                                 |
|--|---|----------------------------------|---|--|--|
| 690 L 1080   | 1712145   |                                  |   |  |  |
| From (Your Name) Please Print  | <b>9/27/91</b>  | imber (Very Important)           | To (Recoveri's Name) Please Print   | CIPIENT'S CO   | sciplent's Phone Number (Very Important) |
| J. S. Crall Company NDC UTILITI  | ES COMMISSION   | 423-9100<br>Department/Floor No. | Mr. C.H/Fanc  | of Air Regulat   | 04 488-4807<br>Department/Floor No.      |
| STOR ANGE AV   |   |                                  | Plorida Dept. of<br>act Street Address (in Canal Dave<br>2600 Blair Stone | Road Road  | Regulation                               |
| ANDO   | / FL 3.2  | 8 0 1                            | Tallahassee   | State  | ZIP Required 32399-2400                  |
| YOUR INTERNAL BILLING REFERENCE INFORMATION OF STATES OF THE STATES OF T | ATION (First 24 characters will appeal on invoice.  |                                  | IF HOLD FOR PION Street Address   | (-UP, Print FEDEX Address Here   |  |
| AYMENT 1 Bull Sender 2 Bull Recipient's  | Feder Atom No. 3 W Bill 3rd Perly Feder Acot No.  | Bill Credit Card                 | City  | State  | ZIP Required                             |
| SERVICES (Check only one box)  Priority Overnight Standard Overnight   | DELIVERY AND SPECIAL HANDLING   | MEGATT 9 North                   | HOUR DECLARSE ONE EMD. NO.  SEZZ Cash Received  Return Shomen             | Date   | Federal Express Use<br>Base Charges      |
| Service Service (Delivery by next business morning†) business afferroon†)  | POLD FOR PICK-UP (FB is Box is)  2  DELIVER WEEKDAY  2  DELIVER SATURDAY (Fairs charge)   |                                  | ☐ Third Party Street Address  | Chig To Del Chig T   | O Hold Declared Value Charge             |
| 16 FEDEX LETTER * 56 FEDEX LETTER *  12 FEDEX PAK * 52 FEDEX PAK *   | 4 DAMSERIOUS GOODS (Euro charge) (CSS not available to Damperous Goods Shipman)  5 CONSTAINT SURVELLANCE SUC. (CSS) (Filtra charge) (Persons Symans Not Applicable) | Total -Tetal                     | City  | State Zip  | Other 1<br>Other 2                       |
| 13 FEDEX BOX 53 FEDEX BOX 14 FEDEX TUBE 54 FEDEX TUBE  | 6 DRY ICE   | DIM SHIPMENT (Heavywo            | Received By.  | The state of the s | Total Charges                            |
| Economy Service Heavyweight Service (for Extra Large or any package over 150 bb.)  | 8 SATURBAY PICK-UP  | Received                         | Date/Time Receiv  | red FedEx Employee Numb  | PART #119601 FXEM 2/90 FORMAT #014       |
| (Delviny by second   Dusiness day 1)   70   NEAVYWEIGHT **  30   ECONOMY   80   DEFRINED   NEAVYWEIGHT **  | 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  | 2 00 Car Sup                     | 4 D B S C Release Signature:  |  | 01.4<br>• 1809 F.L.C<br>PRINTED IN       |
| †Delivery commitment may be later in some areas. **Call for delivery schedute.   | 12 MOLIONY DELIVERY (N offeried) (Extra change)   | FedEx<br>Emp. No                 | Date/Time   |  | USA.                                     |

# CAPE PUBLICATIONS ENCEIVED

### The Times

Published Weekly on Wednesday

### THE TRIBUNE

SEP ? 6 1995TAR-ADVOCATE

Published Weekly on Wednesday

Division of Air Published Weekly on Wednesday



Resources Management

Published Daily

### STATE OF FLORIDA **COUNTY OF BREVARD**

|  |  | y personally appeared   |   | -b  |
|--|--|---|---|---|
| oath says  | that he/she is   | Legal A   | dvertising Cle  | <u>rk</u>   |
| of the   | FLORIDA  | TODAY   | , a newspaper publ  | ished in Brevard County   |
| Florida; th                                      | at the attached copy o   | of advertising being a  |   |   |
|  | Notice of Int  | ent   |   |   |
|  |  | in the matt   | er of   |   |
|  | Department of  | Environmental and Ac-05   | Regulation / p  | ermit #'s (AC-  |
|  |  | in the  |   | 0001  |
|  |  |   |   |   |
|  |  | EL OBIDA T  | ODAY NEWSF  | APFR  |
|  |  |   | ODAT NEWS   | A: L::  |
| in the issu                                      | es of Septembe   | r 24, 1991  |   |   |
|  |  |   |   |   |
| Affiant fu                                       | ther says that the sa  | FLORID  | A TODAY NEV   | /SPAPER   |
|  |  |   |   | e said newspaper ha   |
|  | орароп располот п  |   |   |   |
|  | e heen continuously  | nublished in said Brev  | zard County. Florida re   | gularly as stated above   |
|  |  |   |   |   |
| and has t  | een entered as seco  | ond class mail matter   | at the post office in   | COCOA   |
| and has t  | een entered as seco  | ond class mail matter   | at the post office in   | COCOA   |
| and has t  | peen entered as seconard County, Florida                       | ond class mail matter<br>for a period of one ye   | at the post office inear next preceeding th   | COCOA e first publication of th   |
| and has t<br>said Brev<br>attached               | peen entered as secondard County, Florida copy of advertisemen | ond class mail matter<br>for a period of one ye<br>nt; and affiant further s  | at the post office inear next preceeding the says that he has neithe                            | COCOA  e first publication of the repaid nor promised and   |
| and has t<br>said Brev<br>attached<br>person, fi | rard County, Florida copy of advertisement                     | ond class mail matter<br>for a period of one ye<br>nt; and affiant further s  | at the post office inear next preceeding the says that he has neithe mmission or refund for     | COCOA  e first publication of the repaid nor promised an  |
| and has t<br>said Brev<br>attached<br>person, fi | rard County, Florida copy of advertisement                     | ond class mail matter<br>for a period of one year<br>trant; and affiant further so<br>try discount, rebate, co                      | at the post office inear next preceeding the says that he has neithe mmission or refund for     | gularly as stated above COCOA  e first publication of the paid nor promised and the purpose of securing |
| and has t<br>said Brev<br>attached<br>person, fi | rard County, Florida copy of advertisement                     | ond class mail matter<br>for a period of one year<br>trant; and affiant further so<br>try discount, rebate, co                      | at the post office inear next preceeding the says that he has neithe mmission or refund for     | COCOA  e first publication of the repaid nor promised an  |
| and has t<br>said Brev<br>attached<br>person, fi | rard County, Florida copy of advertisement                     | ond class mail matter<br>for a period of one year<br>int; and affiant further s<br>by discount, rebate, co<br>tion in said newspape | at the post office inear next preceeding the says that he has neithe mmission or refund for er. | COCOA  e first publication of the repaid nor promised and   |
| and has t<br>said Brev<br>attached<br>person, fi | rard County, Florida copy of advertisement                     | ond class mail matter<br>for a period of one year<br>trant; and affiant further so<br>try discount, rebate, co                      | at the post office inear next preceeding the says that he has neithe mmission or refund for er. | COCOA  e first publication of the repaid nor promised an  |

day of SEPTEMBERD. 19 91

State A Périda at Lorga

ilardi: 20, 1902

My Commiss

J. Harper, EPA

Management

In the second process of the sec

Department of Environmental Regulation Central District 7 1319 Maguire Boulevard Suite 232 Orlando, FL 32803-3767

Orlando, FL 32003-3767

Any person may send writtencomments on the proposed action to Mr. Barry Andrews at
the Department's Tallahassee
address. All comments received within 30 days of the
publication of this notice will be
considered in the Department's
final determination.
Further, a public hearing can
be requested by any person.
Such requests must be submitted within 30 days of this
notice.

FLORIDA TODAY/USA TODAY

P.O. Box 363000 Melbourne, Florida 32936-3000

24 MP /991



Preston Lewis

Florida Department of Environmental Regulation 2600 Blair Stone Rd Tallahassee, Fl 32399-2400

Foid at line over top of envelope to the right of the return address

CERTIFIED

P 527 807 057

MAIL

հոհոհեն հենուն անձահեն հենուն հե

# CAPE PUBLICATIONS ENCEIVED

The Times Published Weeks of Wednesday



THE TRIBUNE SEP ? 6 1995 AR-ADVOCATE

Published Weekli on Wednesday

Division of Affibiated Weekli on Wednesday

Hosources Management

Published Daily

STATE OF FLORIDA COUNTY OF BREVARD

|   | personally appeared Sandra N. Thomas who on   |
|---|---|
| oath says that hershe is  | Legal Advertising Clerk   |
| FLORIDA   | TODAY , a newspaper published in Brevard County   |
| Florida: that the mitached copy of Notice of Inte   | advertising being a   |
|   | in the matter of  |
| Department of   | Environmental Regulation / permit #'s (AC-05-14 - and Ac-05-146751)   |
| ves published in the  | FLORIDA TODAY NEWSPAPER   |
| n the issues of September   | 24, 1991  |
| s a newspaper published in  | said Brevard County, Florida and that the said newspaper has  |
| neretolore been continuously p<br>and has been entered as secon<br>said Brevard County, Florida to<br>attached copy of advertisement<br>person, firm or corporation any | ublished in said Brevard County, Florida regularly as stated above, and class mail matter at the post office in |
| neretatore been continuously p<br>and has been entered as secon<br>said Brevard County, Florida k<br>attached copy of advertisement                                     | ublished in said Brevard County, Florida regularly as stated above, and class mail matter at the post office in |



## Florida Department of Environmental Regulation

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

September 20, 1991

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. J. S. Crall Orlando Utilities Commission 500 South Orange Avenue P.O. Box 3193 Orlando, Florida 32802

Re: Four-unit Combustion Turbine Facility at Indian River Plant AC 05-193720 and PSD-FL-173 Units C and D

Dear Mr. Crall:

Attached is the <u>CORRECTED</u> page from the BACT which you asked to be modified in order to clarify the capacity factors when firing natural gas and fuel oil. You will also notice that we have corrected the copies distribution list and provided the Central District, Alan Zahn, a copy of the Technical Evaluation and Preliminary Determination.

Sincerely,

for C. H. Fancy, P.E.

Chief

Bureau of Air Regulation

CHF/PL/qpl

Attachments

c: Alan Zahn, Central District Jewell Harper, EPA S. M. Day, P. E., B&V

| SENDER: Jaso wish to receive tems? land/or 12 for ladditional services \ Jaso wish to receive tems?  | 2. 104. 13.1.4. 139.7 |
|--|-----------------------|
| Complete items 3, and 4a & b.  | niextra)              |
| that (we can return this card to you that the front of the mailpiece, or on the it.)  Addressee's Addr | dress                 |
| back if space does not permit his particle Deliving Awrite Return Receipt Requested on the mailpiece next to   | CAT DISTANCE          |
| the article number 1 Consult postmaster for 1 3 Varticle Addressed to 2 41 Article Number (1997)   | <u>86. (6.5.)</u>     |
| Mr. Fy. S. Crall 46. Service Type  |                       |
| Orlando Utilitles Commission (a) Registered D Insured  |                       |
| P. O. Box 3193 Beturn Reco   | aipt for              |
| Orlando, FI 32802  |                       |
| 5 Signature (Addressee) 8. Addressee a Addressee (Addressee)   | aguested 5            |
| 5 Signature (Addressee) and fee is paid to   |                       |
| 6 T Signature (Agent)  |                       |
| PS Form 3811, October 1990 4 U.S. GPO 1990 273-861 DOMESTIC RETURN R   | ECEIPT                |
|  | 是最多是,                 |

|                                 | _ P 832 5  | 38 678  |
|---------------------------------|--|---|
| ·.                              | Do not use for the state of the | Mail Receipt<br>Coverage Provided<br>r International Mail |
|                                 | Mr. J. S. Cral   | 1, OUC  |
|                                 | P. O. Box 3193   |   |
|                                 | Orlando, FL 328  | 302<br><b>\$</b>  |
|                                 | Certified Fee Special Delivery Fee   | Ψ   |
| ٠                               | Restricted Delivery Fee  |   |
| 066                             | Return Receipt Showing to Whom & Date Delivered  |   |
| June 1                          | Return Receipt Showing to Whom, Date, & Address of Delivery  |   |
| 8                               | TOTAL Postage<br>& Fees  | \$  |
| PS Form <b>3800</b> , June 1990 | Postmark or Date  Mailed: 9-20-91  Permit: AC05-19  PSD-FL-  | 3720  |