FLORIDA ELECTRICAL POWER PLANT SITING ACT APPLICABILITY DETERMINATION CPV Atlantic Power Generating Facility

The meaning of electrical power plant, for the purpose of certification under the act "does not include any steam or solar electrical generating facility of less than 75 megawatts in capacity unless the applicant for such a facility elects to apply for certification under this act." [403.503(13), F.S.]

The provisions of the act shall apply to any electrical power plant as defined herein, except that the provisions of this act shall not apply to any electrical power plant or steam generating plant of less than 75 megawatts in capacity" [403.506(1), F.S.]

A combined cycle plant consists of two cycles. The first is the gas turbine cycle, also known as the *Brayton Cycle*. The second is the steam turbine or *Rankine Cycle*. [Steam, its Generation and Use, Babcock & Wilcox, 1992]

For combined cycles, the Department considers the act to apply only to electricity generated from the electrical generator operated on the Rankine cycle and not the separate electrical generator operated on the Brayton cycle.

In past permitting actions, the Department has accepted operational limitations on the gross electrical output from the steam turbine-electrical generator as the measure of capacity. [Okeelanta Cogeneration, Destec Tiger Bay]

The Department requires a clear description of the manner by which electrical power from the steam turbine-electrical generator will be limited to less than 75 MW (gross) on a 1-hour average.

In its application received by the Department on December 29, 2000, CPV stated the following:

"The steam turbine generator (STG) output will be limited to less than 75 MW. Control of STG output will be monitored and controlled to ensure the 75 MW output limit is not exceeded. A number of control options have been investigated and the most probable are described below.

"When ambient temperature is at 59°F or greater, excess steam generated in the HRSG will be extracted from the HRSG, bypassing the steam turbine, and injected into the CTG. This mode of operation is referred to as power augmentation. Since there is a limit on the quantity of steam that may be injected into the CTG, it may be necessary to further reduce flow to the STG to limit output or to reduce steam turbine output by other means.

"Bypass of a portion of heat exchanger surface in the HRSG is an effective method of reducing steam production by reducing the heat recovered from the combustion turbine flue gas. The proposed design will make use of a low temperature economizer bypass to limit steam production by allowing more of the heat generated by the combustion turbine to be discharged to the atmosphere with the flue gas. This will limit STG output.

"In many cases, application of both of these control modes will reduce steam output to the turbine to the required quantity. If additional reduction in STG output is required, raising STG discharge pressure by raising the condenser operating temperature will reduce turbine efficiency, reducing electrical

output. Output of the STG may be tuned to the desired value by turning cooling tower cells on and off as necessary.

"When ambient temperature falls below 59 °F the manufacturer does not recommend injection of steam into the combustion turbine. If the low temperature economizer bypass combined with an increase cooling water temperature does not reduce STG output sufficiently, excess steam may bypass the steam turbine and be sent directly to the condenser.

"Output of the STG will be controlled automatically utilizing the methods described above to ensure that the electrical power produced from steam does not exceed 74.9 MW".

By memorandum to the Department on April 26, 2001, CPV appended the following to the above description:

"This will be accomplished through a digital control system (DCS) that will be programmed by the Engineering Procurement Construction (EPC) engineer to limit the steam turbine output to 74.9 MW. The 74.9 MW limit on electrical power production from steam will be maintained on a rolling one hour average basis. The necessary logic to automatically control steam injection to the gas turbine, cooling tower fan speed, HRSG economizer bypass control, steam bypass control, or reduce gas turbine load will be incorporated in the DCS.

"The DCS will also be programmed to monitor and store hourly average steam injection rates and/or electrical power produced. The plant operator can manually lower the steam turbine output value but cannot raise the number beyond the programmed set point limit or alter the DCS logic. Depending on the DCS platform purchased, the logic and set point will either be protected by password or keylock. If the logic or set point must be changed after the plant is in commercial operation, only an authorized DCS representative or a qualified DCS engineer can make the modifications. These modifications can be made using the DCS engineering work station, which will be located in the plant control room. A shutdown of the facility is not required since the changes can be made while the plant is on-line".

The Department accepts CPV's operational description and concludes that the project is not subject to the Florida Electrical Power Plant Siting Act.

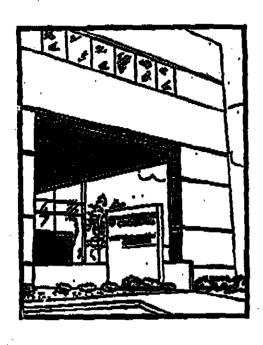
A. A. Linero, P.E. Administrator New Source Review Section

Hamilton Oven, P.E. Administrator

Hamilton S. Que

Power Plant Siting Office

FAX COVER SHEET



FAX NUMBER: 850-922-6979

COMPANY: Florida DEP

ADDRESS: Tallahassee, Florida

FROM: Mike Anderson

CHARGE NUMBER: 28365-0030-00600

NUMBER OF PAGES 10

Including this one):

DATE: 4/0/01 TIME: G:15 PM

CPV Atlantic's responses to EPA Region It's comments on the CPV Atlantic draft air penmit.

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April 20, 2001

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APR 3 0 2001

BUREAU OF AIR REGULATION

Mr. Alvaro Linero
Administrator, New Source Review Section
Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blairstone Road
Tallahassee, FL 32399

Re: Response to Comments Submitted by U.S. Environmental Protection Agency, Region IV, on CPV Atlantic PSD Permit, DEP File No. 1110101-001-AC (PSD-FL-312).

Dear Mr. Linero:

This letter is provided in response to the comments dated March 21, 2001 submitted by the U.S. Environmental Protection Agency (EPA) Region IV to the Florida Department of Environmental Protection, Bureau of Air Regulation, on the draft Prevention of Significant Deterioration (PSD) Air Construction Permit proposed to be issued for the CPV Atlantic electrical power plant, DEP File No. 1110101-001-AC (PSD-FL-312). Specifically, this is provided in response to Comment No. 3 a. through e. of EPA's letter.

Comment 3.a.

EPA requested CPV Atlantic to perform a SCONOx cost-effectiveness analysis for a controlled nitrogen oxides (NOx) emission level of 2 ppmvd. Please find attached as Table E-2 (Exhibit 1A to this letter) the cost-effectiveness analyses for SCONOx at the 2 ppmvd level, performed using EPA's assumptions. Additionally, the original determination of the cost-effectiveness of SCR at 3.5 ppmvd is attached as Table E-1 (Exhibit 1B to this letter). Note: using EPA's assumptions for determining the cost-effectiveness of SCONOx is conservative, in that it projects the lowest cost for SCONOx. Using EPA's assumptions for calculating cost-effectiveness, the cost per ton of NOx removed by SCONOx at 2 ppmdv is \$15,702 per ton. In comparison, the originally calculated cost per ton of NOx removed by SCR at 3.5 ppmvd is \$2,835 per ton. Even when using EPA's

conservative assumptions for calculating the cost-effectiveness for SCONOx, and using less conservative assumptions for calculating the cost-effectiveness for SCR, the use of SCR for this project clearly is more cost-effective than the use of SCONOx.

Comment 3.b. through 3.e.

In comments 3.b through 3.e., EPA requested that CPV Atlantic revise its cost-effectiveness calculations for the use of an oxidation catalyst to control carbon monoxide (CO) emissions. In comment 3.b., EPA requested CPV Atlantic to revise the capital recovery cost analysis for the oxidation catalyst to deduct catalyst cost from the Total Capital Investment when calculating capital recovery. CPV Atlantic concurs with EPA's request regarding the capital recovery cost analysis. The results of the implementation of all of EPA's comments are depicted on Table E-3 (Exhibit 2 to this letter). The environmental basis (cost per ton of CO removed) using all of EPA's requests, including the revised capital recovery cost analysis method, is \$2,856 per ton to remove CO using an oxidation catalyst. This table demonstrates that the requirement for use of an oxidation catalyst for CPV Atlantic is not cost-effective.

Comment 3.c.

EPA requested CPV Atlantic to use a 3% contingency fee, rather than a 20% contingency fee, for the determination of cost-effectiveness for the use of an oxidation catalyst, unless the use of a 20% contingency could be justified. In Table E-3, attached as Exhibit 3, all of EPA's comments have been incorporated into the cost-effectiveness calculations for the oxidation catalyst, except that CPV Atlantic has retained the 20% contingency, because CPV Atlantic believes this level of contingency is appropriate given the level of activity and uncertainty in the generating industry at this time. The revised calculations result in a \$3,107 per ton cost for CO removal using an oxidation catalyst (see Table E-3, attached as Exhibit 3). This table demonstrates that the use of an oxidation catalyst is not cost-effective for this project.

Comment 3.d.

EPA requested CPV Atlantic to omit the "Pressure Drop Derate" from the cost analysis for the oxidation catalyst to control CO emissions, on the grounds that lost revenue should not be included in the cost analysis. CPV Atlantic disagrees with this position. Determination of BACT, by definition, takes into account energy, environmental, and economic factors. Lost revenues due to

pressure drop resulting from the use of an oxidation catalyst are an appropriate economic consideration in the determination of the cost-effectiveness of a given control technology. Accordingly, in Table E-3, Exhibit 4 to this letter, all of EPA's comments concerning the oxidation catalyst have been incorporated, but the Pressure Drop Derate has been retained. This results in a cost estimate of \$3.576 per ton to remove CO using an oxidation catalyst. This table demonstrates that the requirement for use of an oxidation catalyst is not cost-effective for this project.

Comment 3.e.

EPA requested CPV Atlantic to use a 7% interest rate, rather than an 8% interest rate, in calculating the cost-effectiveness of the use of an oxidation catalyst to control CO emissions. All of EPA's comments have been incorporated into the determination of the cost-effectiveness depicted on Table E-3, Exhibit 5 to this letter, except that the 8% interest rate has been retained because CPV Atlantic believes this is an appropriate representation of the rates available to merchant generating facilities. The revised calculations result in a cost estimate of \$2,904 per ton of CO removed using an oxidation catalyst. This table demonstrates that the requirement for use of an oxidation catalyst is not cost-effective for this project.

We appreciate the opportunity to submit these comments. If FDEP has any questions regarding these revisions, please do not hesitate to contact me at (781) 848-0253.

Sincerely, Mile Challes of Peter J. Podurgiel

Director, Project Development

CPV Atlantic, Ltd.

Cc: Teresa Heron, DEP

Cathy Sellers, Moyle, Flanigan

Mike Anderson, TRC

Exhibit 1A

Table E-2. CPV Atlantic SCONOX to achieve 2 ppm NOx		
COST COMPONENT AND	COST	
DIRECT COSTS Purchased Equipment Costs		
SCONOX System	14,000,000	
Sales Tax (6% of equipment costs) Freight (4% of equipment costs)	840,000 560,000	
Subtotal-Purchased Equipment Costs (PEC)	15,400,000	
Direct Installation Costs Construction	1,700,000	
TOTAL DIRECT COSTS (TDC)	17,100,000	
INDIRECT INSTALLATION COSTS Engineering Costs	200,000	
CONTIGENCY (3% of PEC)	462,000	
TOTAL CAPITAL INVESTMENT (TCI)	17,762,000	
DIRECT ANNUAL COSTS Maintenance Materials and Labor Regeneration Natural Gas and Steam Catalyst Pressure Derate Catalyst Replacment (assume 3 year service life) TOTAL ANNUAL DIRECT COSTS INDIRECT ANNUAL COSTS Overhead (60% of maintenance materials and labor)	331,400 406,400 0 190,000 927,800	
Property Tax (1% of TCI) Insurance (1% of TCI) Administration (2% of TCI) TOTAL INDIRECT ANNUAL COSTS	177,620 177,620 355,240 <i>909,320</i>	
TOTAL ANNUAL INVESTMENT	1,837,120	
CAPITAL RECOVERY FACTOR, CFR = (i * (1+i)n)/((1+i)n - 1) 10 Equipment Life (years) 7% Interest Rate 0.1424 Capital Recovery Factor CAPITAL RECOVERY COSTS TOTAL CAPITAL REQUIREMENT MINUS CATALYST COST TOTAL CAPITAL REQUIREMENT MINUS CATALYST COST TOTAL CAPITAL REQUIREMENT MINUS CATALYST COST	17,762,000 -498,620 17,263,380 2,528,909	
TOTAL ANNUALIZED COST (Total annual O&M cost and annualized capital cost)	4,366,029	
BASELINE POTENTIAL NO, EMISSIONS (TPY) FROM TURBINE (emissions based on 100% load at 72°F) Controlled (Based on 2 ppmvd NOx) ANNUAL TONS OF NOx REMOVED	345 67 278	
COST-EFFECTIVENESS ENVIRONMENTAL BASIS (\$ per ton of NO _x removed)	15,702	

Table E-1. CPV Atlantic		
SCR to achieve 3.5 ppm NOx		
「ACL TOTAL TOTAL COST COMPONENT TO THE TENS LINE TO ENGINE	i COST	
DIRECT COSTS Purchased Equipment Costs		
SCR Catalyst System	950,000	
Sales Tax (6% of equipment costs)	57,000	
Freight (4% of equipment costs)	38,000	
Subtotal-Purchased Equipment Costs (PEC)	1,045,000	
TOTAL DIRECT COSTS (TDC)	1,045,000	
INDIRECT INSTALLATION COSTS Engineering Costs (5% of PEC)	52,250	
CONTIGENCY (20% of Direct and Indirect Costs)	219,450	
TOTAL CAPITAL INVESTMENT (TCI)	1,316,700	
DIRECT ANNUAL COSTS		
Maintenance Materials and Labor (2% of TCI)	26,334	
Ammonia Cost	27,763	
Catalyst Pressure Derate	145,697	
Catalyst Replacment (based on total SCR catalyst replacement cost every 3 years)	173,333	
Catalyst Disposal (Amortized Over 5 Year Period)	8,333	
TOTAL ANNUAL DIRECT COSTS	381,460	
INDIRECT ANNUAL COSTS		
Overhead (60% of maintenance materials and labor)	15,800	
Property Tax (1% of TCI)	13,167	
Insurance (1% of TCI)	13,167	
Administration (2% of TCI)	26,334	
TOTAL INDIRECT ANNUAL COSTS	68,468	
TOTAL ANNUAL INVESTMENT	449,929	
CAPITAL RECOVERY FACTOR, CFR = (i * (1+i)n)/((1+i)n - 1) Equipment Life (years) = 10		
Interest Rate (%) = 8 Capital Recovery Factor	0.1490	
CAPITAL RECOVERY COSTS	5.7.122	
TOTAL CAPITAL REQUIREMENT	1,316,700	
TOTAL ANNUAL CAPITAL REQUIREMENT	196,227	
TOTAL ANNUALIZED COST (Total annual O&M cost and annualized capital cost)	646,156	
BASELINE POTENTIAL NO. EMISSIONS (TPY) FROM TURBINE		
emissions based on 100% load at 72°F) Uncontrolled	345	
Controlled	117	
ANNUAL TONS OF NOX REMOVED	228	
COST-EFFECTIVENESS		
ENVIRONMENTAL BASIS		
(\$ per ton of NO _x removed)	2,835	
	·	

Table E-3. CPV Atlantic		
CO Catalyst		
を できた Cost Component: a to in the cost component to the cost component to the cost cost cost cost cost cost cost cost	COST -	
DIRECT COSTS Purchased Equipment Costs CO Catalyst (Engelhard Budgetary Quote) Sales Tax (6% of purchased equipment costs) Freight (4% of purchased equipment costs)	\$560,000 \$33,600 \$22,400	
Subtotal-Purchased Equipment Costs (PEC)	\$616,000	
Direct Installation Costs Installation/Foundation (35% of Catalyst Capital Cost)	\$196,000	
Subtotal-Direct Installation Costs	\$196,000	
TOTAL DIRECT COSTS (TDC)	\$812,000	
INDIRECT INSTALLATION COSTS Engineering Costs (5% of PEC) Contingency (3% of PEC per pg 3-50 of EPA 453/B-96-001)	\$30,800 \$18,480	
TOTAL INDIRECT COSTS	\$49,280	
TOTAL CAPITAL INVESTMENT (TCI)	\$861,280	
DIRECT ANNUAL COSTS 100% Capacity factor 8,760 Equivalent Operating Hours per Year (per CTG) 720 Oil-Fired operating hours/year Maintenance Materials and Labor (2% of TCI) Replacement Catalyst (3 Year Service Life) \$ 480,000 Replacement catalyst 3 Guaranteed catalyst life 7% Interest rate	\$17,226 \$182,905	
0.381 Capital recovery factor Pressure Drop Derate (Lost Revenue From Sale Of Power) Fuel Penalty (Increase Fuel Consumption due to back pressure heat rate impact) 1.807E+09] Annual CTG output, kW-hr 9 Btu/kW-hr 16,265 mmBtu/yr natural gas 2.25 \$/mmBtu natural gas	\$0 \$36,596	
Catalyst Disposal \$ 50.000 at the end of catalyst guaranteed life	\$16,667	
TOTAL DIRECT ANNUAL COSTS	\$253,393	
INDIRECT ANNUAL COSTS Overhead (60% of labor and maintenance materials) Property Tax (1% of TCI) Insurance (1% of TCI) Administration (2% of TCI) TOTAL INDIRECT ANNUAL COSTS	\$10,335 \$8,613 \$8,613 \$17,226 \$44,787	
TOTAL ANNUAL COSTS	\$298,179	
10 Equipment Life (years) 7% Interest Rate 0.142 Capital Recovery Factor CAPITAL RECOVERY COSTS (Catalyst replaced cost subtracted) TOTAL CAPITAL REQUIREMENT CATALYST REPLACEMENT COST TOTAL CAPITAL REQUIREMENT MINUS CATALYST REPLACEMENT COST TOTAL ANNUALIZED CAPITAL REQUIREMENT	\$861,280 -\$480,000 \$381,280 \$54,286	
TOTAL ANNUALIZED COST (Total annual O&M cost and annualized capital cost)	\$352,465	
BASELINE POTENTIAL CO EMISSIONS (TPY) FROM TURBINE Uncontrolled General Electric 7FA Turbine Emissions = 9 ppm on gas for 6,040 hr/yr (no power augmentation)/ 15 ppm on gas for 2,000 hr/yr (power augmentation)/20 ppm on oil for 720 hr/yr TONS OF CO REMOVED PER YEAR Controlled General Electric 7FA Turbine Emissions = assume 80% control efficiency	154	
COST-EFFECTIVENESS ENVIRONMENTAL BASIS (\$ per ton of CO removed)	\$2,856	

Table E-3. CPV Atlantic CO Catalyst	
The Art of the Control Policy of the Control	ELECTION OF THE
DIRECT COSTS	
Purchased Equipment Costs	
CO Catalyst (Engelhard Budgetary Quote) Sales Tax (6% of purchased equipment costs)	\$560,000
Freight (4% of purchased equipment costs)	\$33,600 \$22,400
Subtotal-Purchased Equipment Costs (PEC)	\$616,000
Direct Installation Costs	
Installation/Foundation (35% of Catalyst Capital Cost)	\$196,000
Subtotal-Direct Installation Costs TOTAL DIRECT COSTS (TDC)	\$196,000 \$812,000
	\$512,000
INDIRECT INSTALLATION COSTS Engineering Costs (5% of PEC)	\$30,800
Contingency (20% of TDC)	\$162,400
TOTAL INDIRECT COSTS	\$193,200
TOTAL CAPITAL INVESTMENT (TCI)	\$1,005,200
DIRECT ANNUAL COSTS	
100% Capacity factor 8.760 Equivalent Operating Hours per Year (per CTG)]
720 Oil-Fired operating hours/year	
Maintenance Materials and Labor (2% of TCI)	\$20,104
Replacement Catalyst (3 Year Service Life)	\$182,905
\$ 480,000 Replacement catalyst 3 Guaranteed catalyst life	
7% Interest rate	
0.381 Capital recovery factor	
Pressure Drop Derate (Lost Revenue From Sale Of Power)	\$0
Fuel Penalty (Increase Fuel Consumption due to back pressure heat rate impact) 1.807E+09 Annual CTG output, kW-hr	\$36,596
9 Btu/kW-hr	
16,265 mmBtu/yr natural gas	
2.25 \$/mmBtu natural gas	
Catalyst Disposal	\$16,667
\$ 50,000 at the end of catalyst guaranteed life	\$10,007
TOTAL DIRECT ANNUAL COSTS	\$256,271
	\$250,E71
INDIRECT ANNUAL COSTS	£10.000
Overhead (60% of labor and maintenance materials) Property Tax (1% of TCI)	\$12,062 \$10,052
Insurance (1% of TCI)	\$10,052
Administration (2% of TCI)	\$20,104
TOTAL INDIRECT ANNUAL COSTS	\$52,270
TOTAL ANNUAL COSTS	\$308,541

10 Equipment Life (years) 7% Interest Rate	
0.142 Capital Recovery Factor	
CAPITAL RECOVERY COSTS (Catalyst replaced cost subtracted) TOTAL CAPITAL REQUIREMENT	\$1,005,200
CATALYST REPLACEMENT COST	-\$480,000
TOTAL CAPITAL REQUIREMENT MINUS CATALYST REPLACEMENT COST	\$525,200
TOTAL ANNUALIZED CAPITAL REQUIREMENT	\$74,777
	†
TOTAL ANNUALIZED COST	\$383,318
(Total annual O&M cost and annualized capital cost)	
BASELINE POTENTIAL CO EMISSIONS (TPY) FROM TURBINE	154
Uncontrolled General Electric 7FA Turbine Emissions = 9 ppm on gas for 6,040 hr/yr (no power	
augmentation)/ 15 ppm on gas for 2,000 hr/yr (power augmentation)/20 ppm on oil for 720 hr/yr	-
TONS OF CO REMOVED PER YEAR	123
Controlled General Electric 7FA Turbine Emissions = assume 80% control efficiency	1
COST-EFFECTIVENESS	
ENVIRONMENTAL BASIS	
(\$ per ton of CO removed)	\$3,107

Table E-3. CPV Atlantic	
CO Catalyst	COST
DIRECT COSTS	
Purchased Equipment Costs	
CO Catalyst (Engelhard Budgetary Quote)	\$560,000
Sales Fax (6% of purchased equipment costs) Freight (4% of purchased equipment costs)	\$33,600 \$22,400
	\$616,000
Subtotal-Purchased Equipment Costs (PEC) Direct Installation Costs	φ <u>υ</u> 10,000
Installation/Foundation (35% of Catalyst Capital Cost)	\$196,000
Subtotal-Direct Installation Costs	\$196,000
TOTAL DIRECT COSTS (TDC)	\$812,000
NDIRECT INSTALLATION COSTS	****
Engineering Costs (5% of PEC) Contingency (3% of PEC per pg 3-50 of EPA 453/B-96-001)	\$30,800 \$18,480
TOTAL INDIRECT COSTS	\$49,280
TOTAL CAPITAL INVESTMENT (TCI)	\$861,280
DIRECT ANNUAL COSTS	
100% Capacity factor	
8,760 Equivalent Operating Hours per Year (per CTG)	
720 Oil-Fired operating hours/year	\$17.00c
Maintenance Materials and Labor (2% of TCI) Replacement Catalyst (3 Year Service Life)	\$17,226 \$182,905
\$ 480,000 Replacement catalyst	\$102,500
3 Guaranteed catalyst life	
7% Interest rate	
0 381 Capital recovery factor	£101 179
Pressure Drop Derate (Lost Revenue From Sale Of Power) 0.7 Pressure drop across catalyst, inches H2O	\$101,178
206,300 Full load CTG output (annual average), kW	
275 Output reduction for pressure drop, kW/inch H20	
193 kW derate	
1,686,300 kW-hr output lost per year	
6 cents per kW-hr Fuel Penalty (Increase Fuel Consumption due to back pressure heat rate impact)	\$36,596
1.807E+09 Annual CTG output, kW-hr	\$30,350
9 Btu/kW-hr	
16,265 mmBtwyr natural gas	
2 25 \$/mmBtu natural gas	
Catalyst Disposal	\$16,667
\$ 50,000 at the end of catalyst guaranteed life	
TOTAL DIRECT ANNUAL COSTS	\$354,571
INDIRECT ANNUAL COSTS	
Overhead (60% of labor and maintenance materials)	\$10,335
Property Tax (1% of TCI)	\$8,613 \$8,613
Insurance (1% of TCI) Administration (2% of TCI)	\$17,226
TOTAL INDIRECT ANNUAL COSTS	\$44,787
TOTAL ANNUAL COSTS	\$399,357
10 Equipment Life (years)	
7% Interest Rate 0.142 Capital Recovery Factor	
CAPITAL RECOVERY COSTS (Catalyst replaced cost subtracted)	
TOTAL CAPITAL REQUIREMENT	\$861,280
CATALYST REPLACEMENT COST TOTAL CAPITAL REQUIREMENT MINUS CATALYST REPLACEMENT COST	-\$480,000 \$381,280
TOTAL ANNUALIZED CAPITAL REQUIREMENT	\$561,280 \$54,286
TOTAL ANNUALIZED COST	\$453,643
(Total annual O&M cost and annualized capital cost)	
BASELINE POTENTIAL CO EMISSIONS (TPY) FROM TURBINE	154
Uncontrolled General Electric 7FA Turbine Emissions = 9 ppm on gas for 6,040 hr/yr (no power	
augmentation)/ 15 ppm on gas for 2,000 hr/yr (power augmentation)/20 ppm on oil for 720 hr/yr	
TONS OF CO REMOVED PER YEAR	123
Controlled General Electric 7FA Turbine Emissions = assume 80% control efficiency	
COST-EFFECTIVENESS	
ENVIRONMENTAL BASIS (\$ per top of CO removed)	\$3,676
(\$ per ton of CO removed)	\$3,070

Table E-3. CPV Atlantic		
CO Catalyst	i des coos	
を発生を選択できた。これが、アルシー・アイル・マー・COST COMPONENT:マカーマスス 「中国ではアルディング」と	Mala costenia	
DIRECT COSTS Purchased Equipment Costs CO Catalyst (Engelhard Budgetary Quote) Sales Tax (6% of purchased equipment costs)	\$560,000 \$33,600	
Freight (4% of purchased equipment costs)	\$22,400	
Subtotal-Purchased Equipment Costs (PEC) Direct Installation Costs	\$616,000	
Installation/Foundation (35% of Catalyst Capital Cost)	\$196,000	
Subtotal-Direct Installation Costs	\$196,000	
TOTAL DIRECT COSTS (TDC)	\$812,000	
INDIRECT INSTALLATION COSTS Engineering Costs (5% of PEC) Contingency (3% of PEC per pg 3-50 of EPA 453/B-96-001)	\$30,800 \$18,480	
TOTAL INDIRECT COSTS	\$49,280	
TOTAL CAPITAL INVESTMENT (TCI)	\$861,280	
DIRECT ANNUAL COSTS 100% Capacity factor 8,760 Equivalent Operating Hours per Year (per CTG) 720 Oil-Fired operating hours/year Maintenance Materials and Labor (2% of TCI) Replacement Catalyst (3 Year Service Life) \$ 480,000 Replacement catalyst ife 3 Guaranteed catalyst life 8 Interest rate	\$17,226 \$186,256	
O.388 Capital recovery factor Pressure Drop Derate (Lost Revenue From Sale Of Power) Fuel Penalty (Increase Fuel Consumption due to back pressure heat rate impact) 1.807E+09 Annual CTG output, kW-hr 8tu/kW-hr 16.265 mmBtu/yr natural gas 2.25 \$/mmBtu natural gas	\$0 \$36,596	
Catalyst Disposal \$50,000 at the end of catalyst guaranteed life	\$16,667	
TOTAL DIRECT ANNUAL COSTS	\$256,744	
INDIRECT ANNUAL COSTS Overhead (60% of labor and maintenance materials) Property Tax (1% of TCI) Insurance (1% of TCI) Administration (2% of TCI)	\$10,335 \$8,613 \$8,613 \$17,226	
TOTAL INDIRECT ANNUAL COSTS	\$44,787	
TOTAL ANNUAL COSTS	\$301,530	
10 Equipment Life (years) 8% Interest Rate 0.149 Capital Recovery Factor CAPITAL RECOVERY COSTS (Catalyst replaced cost subtracted) TOTAL CAPITAL REQUIREMENT CATALYST REPLACEMENT COST TOTAL CAPITAL REQUIREMENT MINUS CATALYST REPLACEMENT COST TOTAL ANNUALIZED CAPITAL REQUIREMENT	\$861,280 -\$480,000 \$381,280 \$56,822	
TOTAL ANNUALIZED COST (Total annual O&M cost and annualized capital cost)	\$358,352	
BASELINE POTENTIAL CO EMISSIONS (TPY) FROM TURBINE Uncontrolled General Electric 7FA Turbine Emissions = 9 ppm on gas for 6,040 hr/yr (no power augmentation)/ 15 ppm on gas for 2,000 hr/yr (power augmentation)/20 ppm on oit for 720 hr/yr TONS OF CO REMOVED PER YEAR Controlled General Electric 7FA Turbine Emissions = assume 80% control efficiency	154 123	
COST-EFFECTIVENESS ENVIRONMENTAL BASIS (\$ per ton of CO removed)	\$2,904	

The Law Offices of MOYLE FLANIGAN KATZ RAYMOND SHEEHAN P.A.

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PETER I. BRETON JOHN R. EUBANKS, JR. JOHN F. FLANIGAN MYRA GENDEL MARTIN V. KATZ PAUL A. KRASKER JON C. MOYLE JON C. MOYLE, JR. MARSHALL J. OSOFSKY MARK E. RAYMOND CATHY M. SELLERS THOMAS A. SHEEHAN, III ROBERT J. SNIFFEN MARTA M. SUAREZ-MURIAS WILTON L. WHITE BRIAN L. WOLINETZ

OF COUNSEL: THOMAS A. HICKEY WILLIAM J. PAYNE

April 2, 2001

Mr. Alvaro Linero, P.E. Administrator, New Source Review Bureau of Air Regulation Department of Environmental Protection 111 South Magnolia Drive, Suite 4 Tallahassee, FL 32399

Re: Comments on Draft PSD Permit for CPV Atlantic Power Generating Facility, DEP File No.1110101-001-AC and PSD-FL-312

Dear Mr. Linero:

. . .

Pursuant to the Public Notice of Intent for the above-referenced matter, the permit applicant, CPV Atlantic, Ltd., submits the following comments on the draft PSD permit for the CPV Atlantic Power Generating Facility.

- 1. On page 1 of 19 of the draft Permit and on Page TE-2 of the Technical Evaluation, the facility UTM zone 17 location coordinates are incorrect. The correct location UTM coordinates are Zone 17, 558.2 km E; 3,026.2 km N. The draft Permit should be revised to contain the correct location coordinates.
- 2. On page 2 of 19 of the draft Permit, the Facility Description section, the stack height should be corrected to two hundred (200) feet, from one hundred fifty (150) feet, as currently stated in the Permit.
- 3. On page 9 of 19 of the draft Permit, Condition No. 7 requires the applicant to install, calibrate, tune, operate, and maintain a Speedtronic Mark VI automated gas turbine control system

Mr. Alvaro Linero April 2, 2001 Page 2

for the combined cycle unit. However, page BD-13 of the draft BACT Determination states that the Mark V control system will be used for the combined cycle unit. Accordingly, Page BD-13 should be revised to reference the Speedtronic Mark VI, consistent with the permit condition.

- 4. On page 9 of 19 of the draft Permit, Condition No. 10, the permit condition states that there will be an anhydrous ammonia storage system for the project. However, CPV Atlantic is not going to use anhydrous ammonia or store it onsite. Instead, CPV Atlantic will use and store 19% aqueous ammonia. The draft Permit accordingly should be revised to correct this condition.
- 5. On page 9 of 19 of the draft Permit, Condition No. 6, regarding Hours of Operation, CPV Atlantic requests that the provision stating "[d]istillate oil firing shall not exceed 720 hours during any consecutive 12 months" be revised to state: "distillate oil firing shall not exceed 720 hours per year," consistent with the PSD permit issued for CPV Gulfcoast.
- 6. On page 10 of 19 of the draft Permit, Condition No. 13a., dealing with Performance Tests, the CO emissions rate limit for natural gas firing should be 31.0 pounds per hour, based on the air permit application, instead of 26.0 pounds per hour, as stated in the first paragraph of Condition 13.a. of the draft Permit. Also, based on the information submitted in the air permit application, the CO emissions rate limit for distillate oil firing in the third paragraph of Condition 13.a. should be 83.0 pounds per hour, rather than 70.0 pounds per hour, as stated in the draft Permit.
- 7. On page 13 of 19 of the draft Permit, Condition No. 22 requires annual compliance tests for CO, NOx, ammonia slip, and visible emissions for gas and oil firing. However, Condition No. 20 states that CEM system data may be used to demonstrate compliance with all CO and NOx standards. In order to make clear that additional annual compliance testing is not required for CO and NOx in addition to the CEM system testing, CPV Atlantic requests that Condition No. 22 be clarified to include the sentence: "RATA data can substitute for annual compliance testing for CO and NOx."
- 8. On pages 17 and 18 of the draft Permit, Condition No. 31.g., concerning data availability, requires a 95% NOx and CO monitoring data availability per quarter. CPV Atlantic requests that this condition be revised to include the following sentence: "The NOx and CO monitor availability threshold shall not be less than 95% in any calendar quarter. The report required by this section shall be used to demonstrate monitor availability. In the event 95% availability is not achieved, the owner or operator shall provide the Department with a report identifying the problems

in achieving 95% availability and a plan of corrective actions that will be taken to achieve 95% availability. The owner or operator shall implement the reported corrective actions within the next calendar quarter."

- 9. On page BD-1 of the draft BACT Determination, in the paragraph entitled "Background," the reference to Piney Point should be deleted, and the term "Port St. Lucie" inserted.
- 10. On page BD-1 of the draft BACT Determination, in the paragraph entitled "BACT Application," the date on which the application was received was December 29, 2000, rather than December 29, 2001, as stated in the draft.
- 11. On page BD-3 of the draft BACT Determination, the value for capacity in megawatts for the FPC Hines II power generating facility in the table is missing and should be included.
- 12. On page BD-4 of the draft BACT Determination, on the third line after the table, the word "feet" should be inserted after "100 cubic."
- 13. On page BD-8 of the draft BACT Determination, in the last paragraph on that page, last sentence, in the parenthetical, substitute the word "production" for "combustion."
- 14. On page BD-16 of the draft BACT Determination, in the section entitled "BACT Excess Emissions Approval", the reference to "simple cycle" in hot start should be deleted, since this is a combined cycle facility. The sentence should read "One hour following a shutdown less than or equal to 8 hours.
- 15. On page BD-16 of the draft BACT Determination, in the section entitled "BACT Excess Emissions Approval," in the second sentence of that section, the word "included" should be corrected to "include."
- 16. On page 1 of 4 of Appendix GG, 40 CFR 60 NSPS Requirements for Gas Turbines, in the paragraph numbered 11(a)., the second line refers to the owner or operator being subject to the provisions of this subpart as provided "as specified in paragraph (b) section" and then there is

no section number referenced, so that CPV Atlantic cannot determine the applicable regulation section to which it is subject. This provision should be modified to specify the applicable regulation section so that CPV can determine the regulations with which it must comply.

- 17. On page TE-3 of the Technical Evaluation, in the second paragraph, the last sentence states: "Because present emissions are greater than 100 TPY for CO and NOx, the facility also is a Major Facility with respect to Section 62-212.400, Prevention of Significant Deterioration." Because this is not an existing facility, there are no present emissions. Furthermore, in addition to CO and NOx, the emissions for PM/PM 10 emissions also will exceed 100 TPY. Accordingly, this sentence should be revised to read as follows: "Because **proposed** emissions are greater than 100 TPY for **PM/PM10**, CO and NOx, the facility also is a Major Facility with respect to Section 62-212.400, Prevention of Significant Deterioration."
- 18. On page TE-3 of the Technical Evaluation, in the "Project Description" section, first paragraph following the table, the word "combined" should be inserted before "cycle."
- 19. On page TE-5 of the Technical Evaluation, the third paragraph refers to "peaking" and the last sentence in that paragraph states that peaking is simply running the unit at greater than design fuel output. Since the CPV Atlantic facility will not be a peaking facility, these references are not relevant to the CPV Atlantic air permit application, and, accordingly, CPV Atlantic suggests they be deleted.
- 20. On page TE-7 of the Technical Evaluation, in the table entitled "Facility Emissions (Total TPY) and PSD Applicability," the superscript for the "Oil Firing" column header should be 2 rather than 3, and the superscript for the "Total" column should be 3 rather than 2.
- 21. On page TE-7 of the Technical Evaluation, in the table entitled "Facility Emissions (Total TPY) and PSD Applicability," in the "PSD Significance" column, the value for PM/PM10 should be corrected to "25/15," rather than only "25," as currently stated in the table.
- 22. At the bottom of each page of Appendix GC, the reference to CPV Gulfcoast and the DEP File No. needs to be corrected to reference CPV Atlantic, Ltd. and the DEP Permit File No. 1110101-001-AC (PSD 312), St. Lucie County.

Mr. Alvaro Linero April 2, 2001 Page 5

We appreciate your consideration of these comments and inclusion of the requested revisions in the draft permit.

Sincerely,

Peter Podurgiel,

Director, Project Development

CPV Atlantic, Ltd.

cc: Michael Anderson, TRC Solutions

Cathy M. Sellers, Esq.

Linero, Alvaro

From: Cathy M. Sellers [csellers@moylelaw.com]

Sent: Monday, April 02, 2001 11:31 AM

To: Linero, Alvaro

Cc: Mike Anderson; Peter Podurgiel

Subject: Issues for Today's Conference Call at 2 pm on CPV Atlantic Draft PSD Permit

Al -- per our discussion on Friday afternoon, following are the issues we would like to discuss on today's conference call at 2 pm on the CPV Atlantic draft PSD Permit.

We look forward to talking to you. Again, the call in number is 1-800-427-0014 and the participant code is 716621.

Thank you!

- 1. On page 9 of 19 of the draft Permit, Condition No. 6, regarding Hours of Operation, states "[d]istillate oil firing shall not exceed 720 hours during any consecutive 12 months." CPV Atlantic would like to have this revised, if possible, to state: "distillate oil firing shall not exceed 720 hours per year," which is consistent with the PSD permit issued for CPV Gulfcoast.
- 2. On page 13 of 19 of the draft Permit, Condition No. 22 requires annual compliance tests for CO, NOx, ammonia slip, and visible emissions for gas and oil firing. In light of the requirement to initially test for these emissions in Condition No. 20, dealing with Initial Compliance Tests, CPV Atlantic questions the need for expensive, redundant annual testing, and would request the Department to consider deleting this requirement.
- 3. On pages 17 and 18 of the draft Permit, Condition No. 31.g., concerning data availability, requires a 95% NOx and CO monitoring data availability per quarter. CPV Atlantic believes this standard is too stringent, and wishes to explore other data availability scenarios with the Department.
- 4. On page GC-2 of Appendix GC, General Condition No. G.13. refers to "(X)" after Determination of Best Available Control Technology, Determination of Prevention of Significant Deterioration, and Compliance with New Source Performance Standards. CPV Atlantic seeks clarification on these references.

The information contained in this electronic mail transmission is attorney/client privileged and confidential. It is intended only for the use of the individual or entity named above. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution or copy of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by telephone collect at 850-681-3828. Thank you.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

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4 APT-ARB

BUREAU OF AIR REGULATION

A. A. Linero, P.E. FL Department of Environmental Protection Mail Station 5500 2600 Blair Stone Road Tallahassee, Florida 32399-2400

SUBJ: Preliminary Determination and Draft PSD Permit for CPV-Atlantic, Ltd. (PSD-FL-312) located in St. Lucie County, Florida

Dear Mr. Linero:

Thank you for sending the preliminary determination and draft prevention of significant deterioration (PSD) permit for CPV-Atlantic dated February 19, 2001. The preliminary determination is for the proposed construction and operation of one combined cycle combustion turbine (CT) with an unfired heat recovery steam generator and a total nominal generating capacity of 250 MW to be located near Port St. Lucie, FL. The combustion turbine proposed for the facility is a General Electric (GE), frame 7FA unit. The CT will primarily combust pipeline quality natural gas with No. 2 fuel oil combusted as backup fuel. As proposed, the CT will be allowed to fire natural gas up to 8,760 hours per year and fire No. 2 fuel oil a maximum of 720 hours per year. The CT will be allowed to operate in power augmentation mode for a maximum of 2,000 hours per year. Total emissions from the proposed project are above the thresholds requiring PSD review for nitrogen oxides (NO_x), carbon monoxide (CO), sulfur dioxide (SO₂), and particulate matter (PM/PM₁₀).

Based on our review of the preliminary determination and draft PSD permit, we have the following comments:

1. Condition 31, part d of the draft PSD permit indicates that certain data may be excluded because of startup and shutdown from the block average calculated to demonstrate compliance with the emission standards. Since periods of startup and shutdown are part of normal source operation, we recommend that the Florida Department of Environmental Protection (FDEP) also consider best available control technology (BACT) emission limits taking into account startup and shutdown emissions. Options for such limits include (but are not limited to) maximum NO_x and CO mass emissions in a 24-hour period and future establishment of startup and shutdown emission limits for NO_x and CO derived from monitoring results during the first few months of commercial operation. We further recommend that FDEP include definitions of what constitutes episodes of startup and shutdown as referenced in Condition 31.

f. The SCONOxTM vendor quote provided by Alstom Power indicates a direct capital cost of \$14,000,000 for a SCONOxTM system. Table E-2 uses a direct capital cost of \$16,000,000 for a SCONOxTM system. The vendor quote should be used to determine the cost effectiveness value unless the need for a higher capital cost can be documented.

Thank you for the opportunity to comment on the CPV-Atlantic preliminary determination and draft PSD permit. If you have any questions regarding these comments, please direct them to either Katy Forney at 404-562-9130 or Jim Little at 404-562-9118.

Sincerely,

R. Douglas Neeley

Chief

Air and Radiation Technology Branch

Air, Pesticides and Toxics Management Division

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The Law Offices of MOYLE FLANIGAN KATZ RAYMOND & SHEEHAN P.A.

THE PERKINS HOUSE 118 NORTH GADSDEN STREET TALLAHASSEE, FLORIDA 32301

TELEPHONE (850) 681-3828 FACSIMILE (850) 681-8788

> West Palm Beach Office Telephone (561) 659-7500 Facsimile (561) 659-1789

PETER L. BRETON JOHN R. EUBANKS, JR. JOHN F. FLANIGAN MYRA GENDEL MARTIN V. KATZ PAUL A. KRASKER JON C. MOYLE JON C. MOYLE, JR. MARSHALL J. OSOFSKY MARK E. RAYMOND CATHY M. SELLERS THOMAS A. SHEEHAN, III ROBERT J. SNIFFEN MARTA M. SUAREZ-MURIAS WILTON L. WHITE BRIAN L. WOLINETZ

OF COUNSEL: THOMAS A. HICKEY WILLIAM J. PAYNE

BY HAND DELIVERY

March 9, 2001

RECEIVED

MAR 09 2001

Mr. Alvaro Linero, P.E. Administrator, New Source Review Section Bureau of Air Regulation Department of Environmental Protection

BUREAU OF AIR REGULATION

Re:

Proof of Publication of Public Notice of Intent to Issue Air Construction Permit for CPV Atlantic Power Generating Facility, DEP File No. 1110101-001-AC,

PSD-FL-312

Dear Mr. Linero:

Please find attached the Affidavit of Publication for the Public Notice of Intent to Issue Air Construction Permit for the CPV Atlantic Power Generating Facility, DEP File No. 1110101-001-AC, PSD-FL-312, which was published in the Tribune, St. Lucie County, Florida, on March 3, 2001.

Please call me if you have any questions. Thank you.

Sincerely

(VIII)

cc: Peter Podurgiel, CPV Atlantic

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NPS



THE TRIBUNE ST. LUCIE COUNTY, FLORIDA

P.O. Box 69, Fort Pierce, FL 34954-0069

AFFIDAVIT OF PUBLICATION

STATE OF FLORIDA

COUNTY OF ST. LUCIE

Before the undersigned authority personally appeared. Lynn Ferraro, General Manager. Kathy LeClair, Business Manager or Dorothy Dicks, Advertising Manager of The Tribune, a daily newspaper published at

Fort Pierce in St. Lucie County, Florida; that the attached copy of advertisement was published in The Tribune in the following issues below. Affinnt further says that the said Influine is a newspaper published at For Pierce in said St. Lucie County, Florida and that the said newspaper has herelolore been continuously published in said St. Lucie County, Florida daily and distributed in St. Lucie County. Florida daily and distributed in St. Lucie County. Florida. Jor a period of one year next proceding the first publication of attached copy of advertisement, and attach turther says that he she has neither paid nor promised any person, tirm or corporation any discount repare, commission or refund for the purpose of securing this advertisament for publication in the said newspaper.

The Tribune has been entered as second class matter at the Post Office in Fort Pierce, St. Lucie County, Florida and has been for a period of one year next preceding the first publication of the attached copy of

Ad # Name Date Price Per Day PQ # RICHARD V. NEILL, JR. RICHARD V. NEILL, JR. 03/03/2001 03/03/2001 \$473.48 Total \$473.48

> PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION
> STATE OF FLORIDA
> DEPARTMENT OF ENVIRONMENTAL PROTECTION
> DEP File No. 1110101-001-AC, PSD-FL-312
> CPV Aliantic Power Generating Faculty
> Combined Cycle Power Project St. Lucie County

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit to CPV Atlantic Ltd The permit is to construct a combined cycle electrical power generating plant near Port St. Lucie County. A Best Available Control Technology (BACT) determination was required pursuant to Rule 82-212 400, FA.C., Prevention of Significant Deterioration of of Air Quality (PSD), for emissions of particulate matter (PM/PM10), carbon monoxide (CO), sulfur disorders are CPV Atlantic Ltd., 35 Braintree Hill Office Park, Sulte 107, Braintree, Massachusetts 02184. The project consists of a nominal 170 megawatt General Electric 7FA combustion turbine-electrical generator, an unitied recovery steam generator, a separate sleam-electrical generator, a 200-fool stack, a mechanical draft cooling tower, a 1.0 million getton fuel oil storage tank, and other anciliary equipment. Back-up distillate fuel oil will be controlled by selective catalytic reduction (SCR) to achieve 3.5 parts ber million by volume, dry, at 15 percent open (ppmvd) while burning gas and to lot in the provider of the provider

The following table summarizes the maximum emissions (in lons per year) of regulated air pollulants as a result of this project.

Poliutants Maximum Potential Emissions PSD Significant Emission Rate 102 25/15 Sulfuric acid mist 502 75 126 NOx VOC 100 40 100 15 CO 222 NH3 (non-regulated) NA

An air quality Impact analysis was conducted. Maximum impacts due to proposed emissions from the project are less than the applicable #SD Class II significant impact levels for all applicable politicants. Therefore no increment consumption enalysis was required. Emissions from the facility will not cause or contribute to a violation of any state or lederal ambient air quality standards. The project has no significant impact on the FSD Class I Everglades National Park.

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

The Department will accept written comments and requests for a public meeting concerning the proposed point issuance action for a period of thirty (30) days from the date of public date of including the proposed point issuance action for a period of thirty (30) days from the date of publication of "Public Notice of Intent to Issue Air Construction Parmit." 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. It 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

revise the proposed permit and require, if applicable, enother Public Notice
The Department will issue the permit with the attached conditions unless a timely petition for an
administrative hearing is filed pursuant to Section 120,569 and 120.57 FS. before the deadline for filing
a petition. The procedures for petitioning for a hearing are set forth below. Mediation is not available in

administrative hearing is filed pursuant to Section 120,569 and 120,57 FS. before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below. Mediatron is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120,559 and 120,57 of the Florida Statutes. The petition must contein the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 9900 Commonwealth Boulevard, Mall Statuon #33, Tallahassee. Florida, 2399-3000 Petitions filed by the permit applicant or any of the perfect stated below must be filled within four-teen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120,65(3) however, any person who asked the Department for notice of agency action may file a petition within four-teen days of receipt of that notice, regardless of the date of publication of the public notice or within four-teen days of receipt of that notice, regardless of the date of publication A peritioner shall mail at copy of the petition to the applicant at the address indicated above at the time of filing. The latiture of any person to file a petition within the appropriate time period shall constitute a waiver of that persons right to request an administrative determination (hearing) under sections 120,569 and 120,57.5 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 difficer upon the filing of a motion in compliance with Rule 28,108,205 of the Florida Administrative Code.

A patition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name, address, and telephone number of the petitioner received notice of the period and an explanation of how the petitioner's subs

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RICHARD V. NEILL, JR. 03/03/200 RICHARD V. NEILL, JR. 03/03/2001

\$473.48 Total \$473 48

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION DEP File No. 1110101-001-AC, PSD-FL-312
CPV Atlantic Power Generating Facility
Combined Cycle Power Project St. Lucie County

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit to CPV Atlantic Ltd. The permit is to construct a combined cycle electrical power generating plant near Port St. Lucie in St. Lucie County. A Best Available Control Technology (BACT) determination was required pursuant to Rule 52-212-400, F.A.C., Prevention of Significant Deterioration of Air Quality (PSD), for emissions of particulate matter (PM/PM10), carbon monoxide (CO) sulfur dioxidad. Subscribed and sworn to me before this da

of Air Quality (PSD), for emissions of particulate matter (PM/PM10), carbon monoxide (CO) sulfur dovide (SO2), sulfuric acid mist, and nitrogen oxides (NOx). A maximum achievable control technology (MACT) determination for hezardous air pollutants was not required. The applicants name and address are CPV Atlantic Ltd., 35 Braintree Hill Office Park, Suite 107, Braintree, Massachusetts 02184. The project consists of a nominal 170 megawatt General Electric 7FA combustion turbine-electrical generator, an unfired recovery steam generator, a separate steam-electrical generator, a 20-floot stack, a mechanical draft cooling tower, a 1.0 million gallon fuel oil storage tank, and other ancidary equipment Back-up distillate fuel oil will be burned for a maximum of 720 hours per year. Nox emissions will be controlled by selective catalytic reduction (SCR) to achieve 3.5 parts per million by volume, dry, at 15 percent oxygen (pprmvd) whide burning gas and 10 ppmvd while burning low sulfur distillate fuel oil. Emissions of PM/PM10, SO2, sulfuric acid mist, volatile organic compounds, and hazardous air pollutants (HAP) will be controlled to very low levels by good combustion and use of inherently clean pipeline quality natural gas and flow sulfur (0.05 percent) distillate fuel oil. Ammonia emissions, (NHS) generated due to NOx control will be limited to 5 ppmvd.

The following table summarizes the maximum emissions (in lons per year) of regulated air pollutants as a result of this project.

Pollutants Maximum Potential Emissions PSD Significant Emission Rate 102 12 76 PM/PM10 25/15 Sulturic acid mist SO2 40 NOx VOC CO 126 15 100 40 222 100 NH3 (non-regulated) NA NA HAF

An air quality impact analysis was conducted. Maximum impacts due to proposed emissions from the project are less then the applicable PSD Class II significant impact levels for all applicable pollulants. Therefore no increment consumption analysis was required. Emissions from the lability will not cause or contribute to a violation of any state or lederal ambient air quality standards. The project has no significant impact on the PSD class I Everglades National Park.

The Openfriment 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.

In accordance with the following procedures results in a different decision or significant change or terms or conditions.

The Department will accept written comments and requests for a public meeting concerning the proposed point isauance action for a period of thirty (30) days from the date of publication of "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, Taltahassee, FL 32399-2400, Any written comments the 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 filled pursuant to Section 120,559 and 120,57,55, before the deadline for fring a petition. The procedures for petitioning for a hearing are set forth below. Mediation is not evailable in this proceeding

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120 559 and 120.57 of the Florida Statutes. for an administrative proceeding (hearing) under sections 120 559 and 120.57 of the Florida Statules. The petition must contain the information set forth below and must be flied (received) in the Office of General Course of the Department at 990 Commonwealth Boulevard, Mail Statules 135, 1816 hasses, Florida, 32399-3000. Petitions filled by the permit applicant or any of the parties listed below must be flied within four tender of the process 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 Statules must be flied within four-tend days of publication of the public notice or within four-tend 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 four-tend 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 filling. The fature 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 120.588 and 120.57.5 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 lacts 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 here are none, the petition must so indicate, (e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief; (i) 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 rieff sought by the petitioner, staling 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 Departments 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 filling of a petition means that the Department's final action may be different from the position taken by it in this A petition that disputes the material facts on which the Department's action is based must contain

a pelition 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. dance 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 111 S. Magnola Drive, Suite 4 Tellahassee, Florida 32301 Telephone 650/488-0114 Fax: 850/922-6979

Dept of Environmental Protection
Southeast District Office
400 North Congress Avenue
West Palm Beach Florids 33416-5425
Fleephone 56 1638 1-6800
Fax. 561/891-6755
Fax. 561/898-2815

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, New Resource Review Section at 111 South Magnolia Drive, Suite 4, Taltahassee, Florida 32301 or call 850/488-0114, for additional information. The Department;s technical evaluations and Draft Permit can be viewed at www.dep.state.it us/air/permit-ting.htm by clicking on Utility and Other Facility Permits

Publish: March 3, 2001