STATE OF CALIFORNIA
CA ENERGY COMMISSION
1516 9TH STREET
SACRAMENTO, CA 95814-5504

SACRAMENTO
MAR 29 99

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135667
AL LINERO
FLORIDA DEPT OF ENV PROTECTION
2600 BLAIRSTONE RD - MS 5505
TALLAHASSEE FL 32312

32399/2400

CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET
SACRAMENTO, CA 95814-5512

NOTICE OF CANCELLATION OF A STAFF WORKSHOP FOR THE HIGH DESERT POWER PROJECT APPLICATION FOR CERTIFICATION
(97-AFC-1)

The High Desert Power Project, Limited Liability Company (HDPP) is proposing to construct and operate a 680 to 720 MW natural gas fueled electricity generation power plant. The proposed project is to be located in the northeast corner of the Southern California International Airport (formerly George Air Force Base), in the city of Victorville, in San Bernardino County, California. The power plant and related facilities, such as the electric transmission line, natural gas pipeline and water lines, are under the California Energy Commission's (Energy Commission) siting authority.

On January 21, 1999, the Energy Commission staff published its Staff Assessment. This document contains staff's findings and recommendations on the High Desert Power Project Application for Certification (AFC). Based on the information received to date. A workshop to discuss air quality issues raised in the staff assessment was held on February 4, 1999 and on March 2, 1999. As a result of those discussions, staff will hold another public workshop on air quality to discuss the applicant's interpollutant offset proposal, and other air quality issues as follows:

WORKSHOP CANCELED

CANCELED

~~**Thursday, April 1, 1999**~~
~~**10:00 AM to 4:30 PM**~~
~~**Nevada Conference Room ***~~
~~**U.S. Environmental Protection Agency**~~
~~**75 Hawthorne Street, San Francisco, California**~~

~~(*Please sign in at front desk, conference room may change)~~

~~(See Map On Reverse)~~

The meeting location is wheelchair accessible. If you require special accommodations, contact Robert Sifuentes, at (916) 654-5004, at least five days prior to the workshop. Persons requiring information on how to participate in the Energy Commission's review of the project should contact Roberta Mendonca, the Energy Commission's Public Adviser, at (916) 654-4489, (800) 822-6228, or email pao@energy.state.ca.us. Technical or scheduling questions should be directed to Richard K. Buell, Siting Project Manager, at (916) 653-1614, or email at rbuell@energy.state.ca.us. The status of the project, a copy of the Staff Assessment, and other relevant documents are available on the Energy Commission's Internet page at www.energy.ca.gov/sitingcases/highdesert. News media inquiries should be directed to Assistant Executive Director, Claudia Chandler, at (916) 654-4989.

PROOF OF SERVICE (REVISED _____) FILED WITH ORIGINAL MAILED FROM SACRAMENTO ON 3/29/99

Mailed to List: 707

Nt040199.doc

Eugene Murphy
500 HAMMOCK Rd
Melbourne Vg, FL, 32904

F.D.E.P. Air Resources Dept.
Michael P. Halpin
2600 Blair Stone Rd.
MS No. 5505
Tallahassee, FL, 32399-2600

3.30.99

Mr Halpin,

This is to register my opposition to the proposed Oleander power project to be located west of Cocoa.

We don't want or need the pollution this Maryland Corporation's plant would generate along with electricity.

It's a crime in my opinion, to let a project of this type be placed at this location.

Eugene Murphy

Alfred Hernandez
3717 Bayfield St
Cocoa Fl 32926

FLORIDA PDC FL
PM
1999

FDEP Air Resources Department
Michael P Halpin
2600 Blair Stone ~~Street~~ Road
M.S. No. 5505
Tal[illegible]

Eugene. Murphy
500 HAMMOCK Rd
Melbourne Vlg, FL 32904

F.D.E.P. - Air Resources Dept
Michael D. Halpin
2600 BLAIR STONE Rd MS # 550
TALLAHASSEE, FL, 32399-2400

March 30, 1999

Department of Environmental Protection

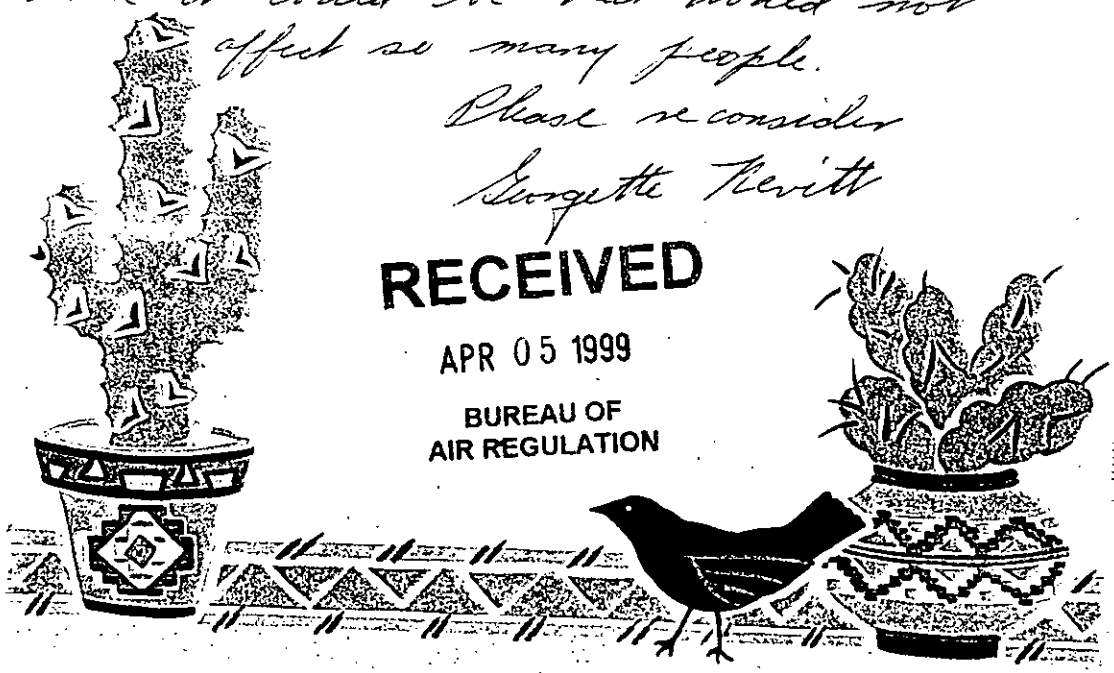
In regards to the Orlando power project, I defiantly suggest that it be put further away from residential areas, then 520 and I 95.

I live within block of that area. Have been here for 20 years. At age 81 there is no way I am going to change residence. I am very active but do have emphazema, and am very worried about this project.

I'm sure that there are areas where it could be that would not affect so many people.

Please reconsider

Georgette Nevitt



FDEP Air Permitting Office
Bruce Kaplan
2600 Blair Stone Road
MS 5505
Tallahassee, FL

Ms. G. Nevitt
4020 Cottonwood Ct.
Cocoa, FL 32926-3220

1999

Dear People,

If the Oleander Plant is built I will be downwind of it a good part of the time and am not happy about. I urge you please reconsider the issuance of the permit. I have read the entire manifesto they sent the Brevard County Commissioners. Even if their statements are true, I would rather live with the attendant pollution of a 200 room hotel rather than breathe the smog from stacks providing power to people outside our county. I already have to look at the dirty stacks at FPL's Canaveral Plant and would rather not look at four more so close to my house.

Sincerely,
Al Henang

[redacted]

FPM
02 APR
1999

USA H
First-Class Rate

FDEP Air Resources Dept.
Att'n: Michael P. Halpin
2600 Blair Stone Road
M.S. No 5505
Tallahassee, FL 32399-2400

32399/6564

Janice Eide
595 Cox Rd
Cocoa Fl 32926

FPM

CHRISTMAS
32 USA

FDEP Air Resources Dept.
Michael P. Halpin
2600 Blair Stone Road
M.S. No. 5505
Tallahassee Fl
32399-2400

April 2, 1999

Janice Eide
595 Cox Rd
Cocoa FL 32926
407-632-6971

Michael P. Halpin
FDEP Air Resources Dept.

Dear Mr. Halpin,

I am writing to protest the building of a third power plant in central Brevard County. We have two plants about ten miles from the proposed site of the Oleander Power Project. We do not need more pollution no matter how minor added to what we have now. I'm sure you've heard the saying: Every Little Bit Hurts!

We were told there would be an air quality test in the area before it is approved.

We have an Auto Auction and a truck terminal in the immediate area. The reefers run all night ~~Boaitting~~ diesel fumes. The auto auction is on Monday night. The cars idle waiting to go through the auction. You can see the pollution hanging in the air.

The Cocoa Auto Auction is at 500 Cox Rd.. The truck terminal is at 480 Cox Rd.. We also have I-95 and S.R. 520 exhaust.

Please consider the people in the Cocoa area when this comes up.

Thank You Sincerely

Janice Eder

4565 State Road 524
Cocoa, FL 32926

April 2, 1999

FDEP Air Resources Department
Att'n: Michael P. Halpin
2600 Blair Stone Road
M.S. No. 5505
Tallahassee, FL 32399-2400

Dear Mr. Halpin:

We are writing to protest the possible placement of a power plant planned for Interstate 95 and State Road 520, which would be positioned in the same wooded area that backs our 2.2-acre home on State Road 524.

The pollution emitted from the burning of gas and oil that would come from the plant would be hazardous, we believe, to the welfare of ourselves and our children, along with our outdoor animals, including our horse.

We strongly believe that the Oleander power project should be prohibited from our area. The burning of oil (when gas is not available) is dirty and polluting, and it is our home that will be most greatly affected. I am certain that if it were in your backyard, you would feel the same way.

Even if the rates are lower than any other similar projects in the state, when the plant is burning oil in your backyard, it's a moot point whether or not the pollution rate is higher or lower than other plants further away from you.

We respectfully protest this proposed power plant and request that you reconsider its positioning in a residential area cherished for its wooded beauty, clean air and tranquility.

Respectfully yours,

Bruce Maurer Susan Maurer

Bruce Maurer Susan Maurer

Peggy Lane
3135 Ipswich Dr.
Cocoa, FL 32926-4430

1999

ORLANDO FL
PM
01 APR
1999

USA
First-Class Rate

FDEP Air Resources Dept
Michael P. Halpin
2600 Blair Stone Road
M.S. No. 5505
Tallahassee, FL
32399-2400

32399/6564

Clarence Rowe
419 Pennsylvania Avenue
Rockledge, Florida 32955

PM
01 APR
1999

UNITED STATES POSTAGE

MAILED FROM ZIP CODE

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

FDEP Air Resources Dept.
Michael P. Halpin
2600 Blair Stone Road
M.S. No. 5505
Tallahassee, FL 32399-2400

Mr Halpin:

RE: Oleander power project, Broward County, FLORIDA

Sir: This project is proposed to be located in a primarily residentially zoned area. The primary sources of all pollution in the state of Florida are now & have been presented to citizens by developers as "pollution-free" and "safe". Once the project is under construction citizens resign themselves to the lies they were told and learn to live — or die — with it. You are in a position to protect people who value their environment from outsiders who come into our state to build, pollute, and leave.

Peggy W. Lane

INTEROFFICE MEMORANDUM

(Draft)

Date: 19-Apr-1999 04:04pm
From: Mike Halpin TAL
Dept:
Tel No:

To: Aspbb (Aspbb@AOL.COM@PMDF@EPIC66)

Subject: Re: Oleander Power Project

Dear Ms. Adams -

I have left your response below for reference.
As a matter of routine, we forward applications to the National Park Service for comments. The U.S. Fish and Wildlife Service's Air Quality Branch is closely associated with the National Park Service's Air Resources Division. Their "permit review" comments regarding sources near Chassahowitzka, Okefenokee, or St. Marks wildernesses are written on U.S. Fish and Wildlife Service (FWS) letterhead, for instance. The NPS, on the other hand, deals with sources near Everglades NP. The review we received on this project was from the Air Quality Branch of the Fish and Wildlife Service and they did not identify the issue you have raised.
I hope that this is helpful to you.

Sincerely,
Michael P. Halpin

Dear Mr. Linero and Mr. Halpin:

Have the potential impacts of the Oleander Power Project on protected migratory birds been carefully scrutinized during the application and review process? I am referring to the very hot (1,114 degree F.), very fast (212 feet per second) invisible gases coming out of (5) 22' wide stacks situated in a row and going east and west. Peninsular Florida is well known as a major migratory corridor for many species of small songbirds, all of which are Federally protected by the Migratory Bird Treaty Act.

If so, what conclusions has the Florida Department of the Environment come to as regards this issue?
Or what mitigation to minimize deaths of migratory birds has the department been able to obtain?

Thank-you for your time,
M. Adams

INTEROFFICE MEMORANDUM

Date: 19-Apr-1999 02:51pm
From: Mike Halpin TAL
HALPIN_M
Dept: Air Resources Management
Tel No: 850/488-0114

To: Rebecca.Scott3@gte.net@in

Subject: Oleander Power Project - Proposed

Ms. Scott -

I have received your e-mail (which was addressed to Governor Bush) and your corresponding comments on the above subject.

Thank you for your interest in this project.

Sincerely,
Michael P. Halpin

PL

CLAIR – PL. HANDLE Howard AIR 4/8

Rebecca "Becky" Scott <rebeccaScott2@juno.net> on 03/08/99 06:35:50 AM

RECEIVED

APR 08 1999

BUREAU OF AIR REGULATION

DEP MIKE HALPIN

To: Florida Governor/EOG
cc:
Subject: Oleander Power Project - Proposed

I attended a public meeting hosted by the Florida Dept. of Env Protection, Division of Air Resources Management, held last week in Cocoa, Florida.

I'm at a loss why the State is even considering allowing a TITLE V power plant to be built here:

1. This power plant is not for the people of Florida - try Baltimore, Maryland.

2. The State doesn't need the tax revenue.

3. No significant number of jobs offerred - if any.

I was very disappointed at the presentation given by the Florida Air Resources Mangement Group. The charts given on air quality were for Cocoa Beach and Winter Park - not the area surrounding the proposed power plant. They didn't talk about total pollution for our area (there is a power plant in the neighboring town of Port St. John). How can they state that this is a Title V power plant, but it won't hurt the environment?

The Florida Department of Environmental Protection has made a decision to approve this request, regardless of the damage to our air quality, it's impact on a lot of our local senior citizens with respiratory problems, and our local real estate values. All to benefit the people of Baltimore. Can you help stop this plant from being built in the State of Florida and send them back to Maryland?

Sincerely,

Rebecca I. Scott
181 Woodsmill Blvd.
Cocoa, FL 32926
407-637-4637

P. S. We're known as the Space Coast - shall we change it to the Power Plant Coast - on all the tourist brochures we can have a power plant pumping out toxic waste logo instead of the Space Shuttle.

INTEROFFICE MEMORANDUM

Date: 05-Mar-1999 05:22pm
From: Aspbb
Aspbb@aol.com@PMDF@EPIC66
Dept:
Tel No:

Subject: Oleander Hours on Oil

Mike Halpin,
If Oleander Power Project receives an air permit based on 3390 hours of operation, 1,000 of which is currently proposed to be on oil, can this company come back, sometime in the future (after they are built), and submit an application to have the hours of operation on oil increased? And how long a period would they have to wait before they could do so?
Thank-you.
Marlene Adams

INTEROFFICE MEMORANDUM

Date: 08-Mar-1999 12:21pm
From: Mike Halpin TAL
HALPIN_M
Dept:
Tel No:

To: Alvaro Linero TAL (LINERO_A)

Subject: FWD: Oleander Hours on Oil

Al -
Can you answer this one? It deals with an issue related to rules. I would appreciate being copied, as I'm not sure of the answer.
Thanks
Mike

INTEROFFICE MEMORANDUM

Date: 08-Mar-1999 12:27pm
From: Mike Halpin TAL
HALPIN_M
Dept: Air Resources Management
Tel No: 850/488-0114

To: Aspbb (Aspbb@aol.com@PMDF@EPIC66)
CC: Kim Tober TAL (TOBER_K)
CC: Alvaro Linero TAL (LINERO_A)

Subject: Re: Oleander Power Project

Ms. Adams -

Thank you for your note.
I currently am awaiting this information from the applicant. I will be happy to forward you a summary of the data as soon as I receive it.

Sincerely,
Mike Halpin

INTEROFFICE MEMORANDUM

Date: 09-Mar-1999 08:19am
From: Mike Halpin TAL
HALPIN_M
Dept: Air Resources Management
Tel No: 850/488-0114

To: Alvaro Linero TAL (LINERO_A)

Subject: Re: Oleander Hours on Oil

Al -
Thanks!
Mike

Ms. Adams. This is in response to your question to Mike Halpin regarding future permit modifications to increase the hours of oil firing. Mike asked me to handle it for him.

Oleander can come back in the future to request an increase in hours of operation on oil. I know of no time requirements prior to making such a request. A request would trigger a similar review, including the same public notice process presently underway and the need to determine Best Available Control Technology.

Feel free to call me at 850/921-9523 or E-Mail me with your number and I'll call you back if you want to discuss the matter in greater detail. Mike continues to handle most other matters related to this application. Thank you.
Al Linero

YOUR MESSAGE READS
Mike Halpin,
If Oleander Power Project receives an air permit based on 3390 hours of operation, 1,000 of which is currently proposed to be on oil, can this company come back, sometime in the future (after they are built), and submit an application to have the hours of operation on oil increased? And how long a period would they have to wait before they could do so?
Thank-you.
Marlene Adams

INTEROFFICE MEMORANDUM

Sensitivity: COMPANY CONFIDENTIAL

Date: 10-Mar-1999 09:25am
From: Alvaro Linero TAL
LINERO_A
Dept:
Tel No:

To: Aspbb (Aspbb@aol.com@PMDF@EPIC66)
CC: Mike Halpin TAL (HALPIN_M)
CC: Steven Palmer TAL (PALMER_S)

Subject: Re: Oleander vs. Duke

Ms. Marlene Adams.

Following are answers to your questions comparing Oleander to Duke - to the extent that I can answer them.

How many hours are they (Duke) requesting to operate?
8760 hours - nonstop.

Are they going to use oil as back-up and for how many hours?
No oil.

How many units and stacks will they have?
Two units, two stacks plus cooling towers.

How tall are the stacks going to be?
150 foot stacks.

What is the breakdown of pollutants in TPY?
NOx 679, CO 339, PM 102, VOC 25, SO2 85, sulfuric acid mist 10.

How many acres is the site?
30.5 acres 0.5 miles NW of SR 44 and I-95

How close is the site to the nearest resident?
I have not checked this out myself. However the Volusia County Comprehensive Plan identifies Samsula as a rural unincorporated community, located approximately 3.5 miles (roughly 5 km) West of the site and characterized by large lot rural, rural residential and agricultural development. There appears to be a parcel that is zoned as low density residential approximately 1 km to the East. It is not possible to say whether there are actually dwellings on it. There seems to be some actual high and low density residential development approximately 2.5 km to the Southeast.

Approximately how many residents are there within a 3.2 km radius?
I don't know the answer to this question.

Is there any public playgrounds within 1/2 mile?
I don't believe so but do not know.

Are there any public schools within a 3.2 km radius?
I do not know.

Is there a freshwater river within 1 mile?
I do not know, but the Indian River is not too far away.

How many employees are needed to operate? 19 employees.

Is the plant classified as a Title V Source of Air Pollution?
Yes.

Are they going to need up to 1.9 million gallons of water to operate?
They will need 3.75 million gallons per day. Initially 2.0 million will be treated effluent from an adjacent wastewater treatment plant.

Will they need potable water to operate?
They will something like 1.75 million gallons per day of untreated wellwater and untreated water from New Smyrna Beach Utilities. I don't see that they will obtain potable water in any meaningful amounts. However both reuse water and groundwater will be filtered and treated on-site. Some of it will be treated to "demineralized water."

What is the difference between combined cycle and simple cycle?
The projects use identical combustion turbines and both make direct power through electrical generators connected directly to the turbines. The simple cycle units exhaust gases to the atmosphere at 1100 degrees Fahrenheit. The combined cycle units have waste heat boilers that transfer that heat to steam. The steam is expanded in a conventional steam turbine that turns another electrical generator to produce 50 percent more electricity than the simple cycle configuration. The exhaust gases from combined cycle units are only 200 degrees.

To what extent does the PSC regulate them?
Duke must (at least) demonstrate the Need for the Power to the PSC. A number of hearings have already been held. I cannot say to what extent Duke or any other utility is regulated.

Did they have to follow the Power Plant Siting Act?
Yes.

You have indeed requested a lot of information. We only handle the air portion. Attached (as E-Mail) is a copy of the Technical Air Report we prepared for the Duke project. There is a five volume set of documents that was submitted by Duke to the Department's Site Certification Office (contact is
Steve Palmer at 850/487-0472). That office is also preparing a staff report

on
the project. Perhaps some of what you want is in the documents submitted by Duke or the staff report. I will fax you the executive summary and Table of Contents of Duke's submittal.

The documents consist of hundreds of pages and the Department might need to charge you to obtain more than a few pages. You can surely get a look at them by going to New Smyrna Beach or possibly Orlando where there should be copies of it at City or DEP offices. Check with Steve for other ideas about this. You might ask him when the administrative hearing will be held on the Site Certification application.

You can obtain more by checking out Volusia County, School District, and City of New Smyrna websites regarding schools, parks, residences, etc.

Thank you for your interest in these projects. Mike Halpin will continue to follow up on matters directly related to the Oleander project. Al Linero.

TECHNICAL EVALUATION

AND

PRELIMINARY DETERMINATION

Duke Energy New Smyrna Beach Power Company LLP

New Smyrna Beach Power Plant
500 Megawatt Combined Cycle Power Plant
New Smyrna Beach, Volusia County

DEP File No. PA 98-39 (PSD-FL-257)
Facility ID No.: 1270152

Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation

January 8, 1999

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

1. APPLICATION INFORMATION

1.1 Applicant Name and Address

Duke Energy New Smyrna Beach Power Company, Ltd., LLP
422 South Church Street, Legal PB05E
Charlotte, North Carolina 28202-1904

Authorized Representative: William L. Sigmon, Jr, Vice-President

1.2 Reviewing and Process Schedule

10-05 98: Date of Receipt of Application
10-14-98: Application found Complete per 403.5066, F.S.
12-01-98: DEP Insufficiency Letter Including BAR Comments
12-28-98: Received Applicant Responses to Insufficiency Questions
01-08-99: Intent Issued

2. FACILITY INFORMATION

2.1 Facility Location

Refer to Figure 1. The proposed New Smyrna Beach Power Project site is approximately 5 miles west of downtown New Smyrna Beach and 0.5 miles northwest of the intersection of State Road 44 and I-95, Volusia County. This site is approximately 155 kilometers (96 miles) from the Chassahowitzka National Wildlife Refuge Class I PSD Area. The UTM coordinates of this facility are Zone 17; 500.30 km E; 3,209.80 km N.

2.2 Standard Industrial Classification Codes (SIC)

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

2.3 Facility Category

The New Smyrna Beach Power Project is a new major facility. The facility identification number (FID No.) in the Department database (ARMS system) is 1270152.

The new facility will be classified as a Major or Title V Source of air pollution because emissions of nitrogen oxides (NO_X), carbon monoxide (CO), and particulate matter (PM/PM_{10}) exceed 100 TPY. The new facility is within an industry included in the list of the 28 Major Facility Categories per Table 212.400-1, F.A.C. Because emissions will be greater than 100 TPY for NO_X, CO and PM/PM_{10}, the facility is also a Major Facility with respect to Rule 62-212.400, F.A.C., Prevention of Significant

Deterioration (PSD) and a determination of Best Available Control Technology (BACT) is required for at least these three pollutants.

As a Major Facility, pollutants emitted in excess of the significant emission rates given in Table 212.400-2 of 40 TPY of sulfur dioxide (SO_2) or volatile organic compounds (VOC), 25/15 TPY of particulate matter (PM/PM_{10}), or 7 TPY of sulfuric acid mist (SAM), also require review per the PSD rules and a BACT determination. This facility is also subject to the Title IV Acid Rain Program, 40 CFR 72 and must apply for an Acid Rain Permit at least 24 months prior to start up.

3. PROJECT DESCRIPTION

This permit addresses the following emissions units:

Emission Unit No.	System	Emission Unit Description
001	Power and Steam Generation	One 165 Megawatt (nominal) Gas Combustion Turbine-Electrical generator with Unfired Heat Recovery Steam Generator (HRSG)
002	Power and Steam Generation	One 165 Megawatt (nominal) Gas Combustion Turbine-Electrical generator with Unfired Heat Recovery Steam Generator (HRSG)
003	Water Cooling	Cooling Tower Consisting of 12 Modules and Fans

Duke Energy New Smyrna Beach Power Company Ltd., LLP (Duke) proposes to construct a nominal 500 megawatt (MW) natural gas-fired combined cycle electrical power generation facility. The project includes: two nominal 165 MW gas combustion turbine-electrical generators; two unfired heat recovery steam generators (HRSG) capable of raising sufficient steam to generate an additional 170 MW in a single steam electrical turbine-generator; two 150-foot stacks; a 12 module cooling tower; a diesel-fired 0.5 MW emergency generator; a 287 HP diesel-fuel fired fire water pump; and ancillary equipment.

Figure 2 - View of Duke New Smyrna 500 MW Combined Cycle Project

This facility will be located adjacent to a new wastewater treatment plant owned and operated by the City of New Smyrna Beach. The wastewater plant will provide treated wastewater for reuse in the facility cooling tower and will accept blowdown from the HRSGs. The City will be entitled to purchase 20-30 MW of electricity but otherwise will not participate in the operation of the new facility which will be fully owned by Duke.

The prime movers and sources of air pollution will be General Electric PG7241FA (7FA) combustion turbine-generators These will be equipped with Dry Low NO_X (DLN-2.6) combustors for the control of NO_X emissions. Only natural gas will be used in these units and there are no provisions for emergency or backup use of fuel oil. An exterior view of a GE MS7001FA (a predecessor of the PG7241FA) is shown in Figure 3. An internal view is shown in Figure 4.

Figure 3 - Photograph of General Electric MS 7001FA Combustion Turbine

Figure 4 - Internal View of General Electric MS 7001FA Combustion Turbine

According to the application, the facility will emit approximately 679 tons per year

(TPY) of NO_X, 339 TPY of CO, 102 TPY of PM/PM_{10}, 85 TPY of SO_2, 25 TPY of VOC, and 10 TPY of SAM. Emission increases of all these pollutants (except VOC) will be greater than their respective significant emission rates per Table 212.400-2, F.A.C. and require review for the Prevention of Significant Deterioration (PSD) and a Best Available Control Technology (BACT) determination.

4. PROCESS DESCRIPTION

Much of the following discussion is from a 1993 EPA document on Alternative Control Techniques for NO_X Emissions from Stationary Gas turbines. Project specific information is interspersed where appropriate.

A gas turbine is an internal combustion engine that operates with rotary rather than reciprocating motion. Ambient air is drawn into the 18-stage compressor of the GE 7FA where it is compressed by a pressure ratio of about 15 times atmospheric pressure. The compressed air is then directed to the combustor section, where fuel is introduced, ignited, and burned. The combustion section consists of 14 separate can-annular combustors.

Flame temperatures in a typical combustor section can reach 3600 degrees Fahrenheit (°F). Units such as the 7FA operate at lower flame temperatures which minimize NO_X formation. The hot combustion gases are then diluted with additional cool air and directed to the turbine section at temperatures of approximately 2400 °F. Energy is recovered in the turbine section in the form of shaft horsepower, of which typically more than 50 percent is required to drive the internal compressor section. The balance of recovered shaft energy is available to drive the external load unit such as an electrical generator.

Figure 5 is a simplified process diagram showing the key plant components. In the Duke project, the unit will always operate in the combined cycle mode, meaning that the hot combustion turbine gases are further utilized rather than exhausted through a bypass stack. In this mode, each gas turbine directly drives an electric generator while the exhausted gases are used to raise steam in each HRSG. Together, the two HRSGs drive a single steam turbine-electrical generator.

Steam exiting the steam turbine is either returned for reheating in the high pressure section of the HRSG or sent to the condenser. Cooling water to the condenser is provided from a mechanical draft cooling tower. Demineralized makeup (well) water is added to the condensed water which is returned to the steam cycle. Cooling tower makeup water is provided from the adjacent wastewater treatment plant and the wellwater supply. Blowdown from the steam cycle is sent to the treatment plant.

In simple cycle mode, the thermal efficiency of the GE 7FA line of combustion turbines is about 35 percent. In combined cycle mode, with all steam used to generate electrical power, efficiencies of 56 percent are possible.

At high ambient temperature, the units cannot generate as much power because of lower compressor inlet density. To compensate for the loss of output (which can be on the order of 20 MW compared to referenced temperatures), an evaporative chiller

may be installed ahead of the combustion turbine inlet. At an ambient temperature of 102 °F (and low relative humidity), roughly 10 MW of power can be regained by using the chillers.

The project includes highly automated controls, described as the GE Mark V Control System. The SPEEDTRONIC Mark V Gas Turbine Control System is designed to fulfill all of the gas turbine control requirements.

Additional process information related to the combustor design, and control measures to minimize NO_X formation are given in the draft BACT determination distributed with this evaluation.

5. RULE APPLICABILITY

The proposed project is subject to preconstruction review requirements under the provisions of 40 CFR 52.21, Chapter 403, Florida Statutes, and Chapters 62-4, 62-17, 62-204, 62-210, 62-212, 62-214, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.).

This facility is located in Volusia County, an area designated as attainment for all other criteria pollutants in accordance with Rule 62-204.360, F.A.C. The proposed project is subject to review under Rule 62-212.400., F.A.C., Prevention of Significant Deterioration (PSD), because the potential emission increases for NO_X, CO, PM/PM_{10}, SO_2, and SAM, exceed the significant emission rates given in Chapter 62-212, Table 62-212.400-2, F.A.C.

This PSD review includes a determination of Best Available Control Technology (BACT) for NO_X, CO, PM/PM_{10}, SO_2, and SAM. An analysis of the air quality impact from proposed project upon soils, vegetation and visibility is required along with air quality impacts resulting from associated commercial, residential, and industrial growth.

The emission units affected by this PSD permit shall comply with all applicable provisions of the Florida Administrative Code (including applicable portions of the Code of Federal Regulations incorporated therein) and, specifically, the following Chapters and Rules:

5.1 State Regulations

Chapter 62-17	Electrical Power Siting
Chapter 62-4	Permits.
Rule 62-204.220	Ambient Air Quality Protection
Rule 62-204.240	Ambient Air Quality Standards
Rule 62-204.260	Prevention of Significant Deterioration Increments

Rule 62-204.800	Federal Regulations Adopted by Reference
Rule 62-210.300	Permits Required
Rule 62-210.350	Public Notice and Comments
Rule 62-210.370	Reports
Rule 62-210.550	Stack Height Policy
Rule 62-210.650	Circumvention
Rule 62-210.700	Excess Emissions
Rule 62-210.900	Forms and Instructions
Rule 62-212.300	General Preconstruction Review Requirements
Rule 62-212.400	Prevention of Significant Deterioration
Rule 62-213	Operation Permits for Major Sources of Air Pollution
Rule 62-214	Requirements For Sources Subject To The Federal Acid Rain Program
Rule 62-296.320	General Pollutant Emission Limiting Standards
Rule 62-297.310	General Test Requirements
Rule 62-297.401	Compliance Test Methods
Rule 62-297.520	EPA Continuous Monitor Performance Specifications

5.2 Federal Rules

40 CFR 52.21	Prevention of Significant Deterioration (PSD)
40 CFR 60	NSPS Subparts GG
40 CFR 60	Applicable sections of Subpart A, General Requirements
40 CFR 72	Acid Rain Permits (applicable sections)
40 CFR 73	Allowances (applicable sections)
40 CFR 75	Monitoring (applicable sections including applicable appendices)
40 CFR 77	Acid Rain Program-Excess Emissions (future applicable requirements)

6. SOURCE IMPACT ANALYSIS

6.1 Emission Limitations

The proposed Units will emit the following PSD pollutants (Table 212.400-2): particulate matter, sulfur dioxide, sulfuric acid mist, nitrogen oxides, volatile organic compounds, carbon monoxide, and negligible quantities of fluorides, beryllium, mercury and lead. The applicant's proposed annual emissions are summarized in the table below and form the basis of the source impact review. The Department's proposed permitted allowable emissions for these Units are summarized in the Draft BACT document and Specific Conditions Nos. 18 through 23 of Draft Permit PSD-FL-257.

6.2 Emission Summary

The emissions for all PSD pollutants as a result of the construction of this facility are presented below:

FACILITY EMISSIONS (TPY) AND PSD APPLICABILITY

Pollutants	Annual Emissions[1]	PSD Significance	PSD REVIEW?
PM/PM_{10}[2]	102	25	Yes
SO_2	85	40	Yes
NO_X	679	40	Yes
CO	339	100	Yes
Ozone(VOC)	25	40	No
Sulfuric Acid Mist	10	7	Yes
Mercury	<<0.1	0.1	No
Lead	<<0.6	0.6	No

2. Based on 8760 hours of operation. Reference ambient temperature is 59 °F.
3. Includes 23 TPY from cooling tower.

6.3 Control Technology

Emissions control will be primarily accomplished by good combustion of clean natural gas. The gas turbine combustors will operate in lean pre-mixed mode to minimize the flame temperature and nitrogen oxides formation potential. The DLN-2.6 combustors will control combustion turbine emissions of NO_X and CO to 9 and 12 ppm respectively @15% O_2 between 50 and 100% of full load under normal operating conditions. Selective catalytic reduction (SCR) is available if the NO_X rates cannot be achieved by DLN technologies, or the guarantee is too expensive, or unforeseen operational problems occur (e.g. frequent tuning). A full discussion is given in the Draft Best Available Control Technology (BACT) Determination (see Permit Appendix BD). The Draft BACT is incorporated into this evaluation by reference.

6.4 Air Quality Analysis

6.4.1 Introduction

The proposed project will increase emissions of five pollutants at levels in excess of PSD significant amounts: PM_{10}, CO, NO_X, SO_2 and sulfuric acid mist. PM_{10}, NO_X and SO_2 are criteria pollutants and have national and state ambient air quality standards (AAQS), PSD increments, and significant impact levels defined for them. CO is a criteria pollutant and has only AAQS and significant impact levels defined for it. SAM is a non-criteria pollutant and has no AAQS or PSD increments defined for it; therefore, no air quality impact analysis was required for SAM

The applicant's initial SO_2, CO and NO_X air quality impact analyses for this project predicted no significant impacts; therefore, further applicable AAQS and PSD increment impact analyses for these pollutants were not required. The nearest PSD Class I area is the Chassahowitzka National Wilderness Area located 155 km west of the project site. Based on the preceding discussion the air quality analyses required by the PSD regulations for this project are the following:

- A significant impact analysis for PM_{10}, CO, NO_X and SO_2;
- An analysis of existing air quality for PM_{10}, CO, NO_X and SO_2;
- A PSD increment analysis for PM_{10};
- An Ambient Air Quality Standards (AAQS) analysis for PM_{10};
- An analysis of impacts on soils, vegetation, and visibility and of growth-related air quality modeling impacts.

Based on these required analyses, the Department has reasonable assurance that the proposed project, as described in this report and subject to the conditions of approval proposed herein, will not cause or significantly contribute to a violation of any AAQS or PSD increment. However, the following EPA-directed stack height language is included: "In approving this permit, the Department has determined that the application

complies with the applicable provisions of the stack height regulations as revised by EPA on July 8, 1985 (50 FR 27892). Portions of the regulations have been remanded by a panel of the U.S. Court of Appeals for the D.C. Circuit in NRDC v. Thomas, 838 F. 2d 1224 (D.C. Cir. 1988). Consequently, this permit may be subject to modification if and when EPA revises the regulation in response to the court decision. This may result in revised emission limitations or may affect other actions taken by the source owners or operators." A more detailed discussion of the required analyses follows.

6.4.2 Analysis of Existing Air Quality and Determination of Background Concentrations

Preconstruction ambient air quality monitoring is required for all pollutants subject to PSD review unless otherwise exempted or satisfied. The monitoring requirement may be satisfied by using existing representative monitoring data, if available. An exemption to the monitoring requirement may be obtained if the maximum air quality impact resulting from the projected emissions increase, as determined by air quality modeling, is less than a pollutant-specific de minimus concentration. In addition, if EPA has not established an acceptable monitoring method for the specific pollutant, monitoring may not be required.

If preconstruction ambient monitoring is exempted, determination of background concentrations for PSD significant pollutants with established AAQS may still be necessary for use in any required AAQS analysis. These concentrations may be established from the required preconstruction ambient air quality monitoring analysis or from existing representative monitoring data. These background ambient air quality concentrations are added to pollutant impacts predicted by modeling and represent the air quality impacts of sources not included in the modeling.

The table below shows that predicted SO_2, CO and NO_x impacts from the project are predicted to be below the appropriate de minimus levels; therefore, preconstruction ambient air quality monitoring is not required for these pollutants. The table below shows that predicted PM_{10} impacts from the project are predicted to be above the de minimus level; therefore, preconstruction ambient air quality monitoring is required for this pollutant. However, previously existing air quality data can be used to satisfy this monitoring requirement and to establish PM_{10} background concentrations of 71 ug/m^3 and 21 ug/m^3, for the 24-hour and annual averaging times, respectively. These background concentration values were used in the AAQS analysis required for PM_{10}.

Maximum Project Air Quality Impacts for Comparison to De Minimus Ambient Levels

Pollutant	Averaging Time	Max Predicted Impact (ug/m^3)	De Minimus Ambient Impact Level (ug/m^3)	Impact Above/Below De Minimus
SO_2	24-hour	1	13	BELOW
PM_{10}	24-hour	26	10	ABOVE
CO	8-hour	14	500	BELOW

NO_2	Annual	0.3	14	BELOW

6.4.3 Models and Meteorological Data Used in the Significant Impact Analysis

The EPA-approved SCREEN3 (screening model) and Industrial Source Complex Short-Term (ISCST3) dispersion models were used to evaluate the pollutant emissions from the proposed project. These models determine ground-level concentrations of inert gases or small particles emitted into the atmosphere by point, area, and volume sources. They incorporate elements for plume rise, transport by the mean wind, Gaussian dispersion, and pollutant removal mechanisms such as deposition. The ISCST3 model allows for the separation of sources, building wake downwash, and various other input and output features. A series of specific model features, recommended by the EPA, are referred to as the regulatory options. The applicant used the EPA recommended regulatory options. Direction-specific downwash parameters were used for all sources for which downwash was considered. The stacks associated with this project all satisfy the good engineering practice (GEP) stack height criteria.

Meteorological data used in the ISCST3 model consisted of a concurrent 5-year period of hourly surface weather observations and twice-daily upper air soundings from the National Weather Service (NWS) stations at Daytona Beach Regional Airport, Florida (surface data) and West Palm Beach, Florida (upper air data). The 5-year period of meteorological data was from 1987 through 1991. These NWS stations were selected for use in the study because they are the closest primary weather stations to the study area and are most representative of the project site. The surface observations included wind direction, wind speed, temperature, cloud cover, and cloud ceiling.

For determining the project's significant impact area, the highest predicted short-term concentrations and highest predicted annual averages were compared to their respective significant impact levels.

6.4.4 Significant Impact Analysis

Initially, the applicant conducts modeling using only the proposed project's emissions at worst load conditions. In order to determine worst-case load conditions the SCREEN3 model was used to evaluate dispersion of emissions from the combined cycle facility for three loads (50%, 75% and 100%) and four ambient temperature conditions (15, 59, 71 and 105 °F). If this modeling at worst-case load conditions shows significant impacts, additional multi-source modeling is required to determine the project's impacts on the existing air quality and any applicable AAQS and PSD increments. Receptors were placed within 10 km of the facility, which is located in a

PSD Class II area. The receptor grid for predicting maximum concentrations in the vicinity of the project was composed mostly of a polar receptor grid centered on the combined cycle facility stacks. Receptors were placed on the site fence line spaced 25 m apart. There were near-field cartesian receptors starting 100 m from the site fence lines and extending out 1,000 m at 100 m spacings. A 500 m spacing for polar coordinate rings was used from 1,000 m to 5,000 m (with 36 receptors per ring at 10° intervals) from the stacks, and a 1,000 m spacing was used from 6,000 m out to 10,000 m from the stacks. For each pollutant subject to PSD and also subject to PSD increment and/or AAQS analyses, this modeling compares maximum predicted impacts due to the project with PSD significant impact levels to determine whether significant impacts due to the project are predicted in the vicinity of the facility. The tables below show the results of this modeling.

Maximum Project Air Quality Impacts for Comparison to the PSD Class II Significant Impact Levels in the Vicinity of the Facility

Pollutant	Averaging Time	Max Predicted Impact (ug/m^3)	Significant Impact Level (ug/m^3)	Significant Impact?
SO_2	Annual	0.04	1	NO
	24-hour	1	5	NO
	3-hour	6	25	NO
PM_{10}	Annual	2	1	YES
	24-hour	26	5	YES
CO	8-hour	14	500	NO
	1-hour	36	2000	NO
NO_x	Annual	0.3	1	NO

The results of the significant impact modeling show that there are no significant impacts predicted for emissions of SO_2, CO, and NO_x from this project. Therefore, no further modeling was required for these pollutants. Modeling results for PM/PM_{10} are addressed in the next section.

6.4.5 PSD Class II Increment Analysis

The PSD increment represents the amount that new sources in an area may increase ambient ground level concentrations of a pollutant. The results of the PSD Class II increment analysis for PM_{10} are presented in the table below. They show that the maximum predicted impacts are less than the allowable increments.

PSD Class II Increment Analysis

Pollutant	Averaging Time	Max. Predicted Impact (ug/m3)	Impact Greater than Allowable Increment?	Allowable Increment ug/m^3
PM_{10}	Annual	3.7	NO	17
	24-hour	23.4	NO	30

6.4.6 AAQS Analysis

For pollutants subject to an AAQS review, the total impact on ambient air quality is obtained by adding a "background" concentration to the maximum modeled

concentration. This "background" concentration takes into account all sources of a particular pollutant that are not explicitly modeled. The results of the AAQS analysis are summarized in the table below. As shown in this table, emissions from the proposed facility are not expected to cause or contribute to a violation of an AAQS.

AMBIENT AIR QUALITY IMPACTS

Pollutant	Averaging Time	Major Sources Impact (ug/m^3)	Background Conc. (ug/m^3)	Total Impact (ug/m3)	Total Impact Greater Than AAQS?	Florida AAQS (ug/m3)
PM_{10}	Annual	3.7	21	24.7	NO	50
	24-hour	23	71	94	NO	150

6.4.7 Impacts Analysis

Impact Analysis Impacts On Soils, Vegetation, And Wildlife

Very low emissions are expected from this natural gas-fired combustion turbine in comparison with conventional power plant generating equal power. Emissions of acid rain and ozone precursors will be very low. The maximum ground-level concentrations predicted to occur for PM_{10}, CO, NO_X, and VOC as a result of the proposed project, including background concentrations and all other nearby sources, will be less than the respective ambient air quality standards (AAQS). Except for PM/PM_{10}, the project impacts are less than the significant impact levels which in-turn are less than the applicable allowable increments for each pollutant. PM/PM_{10} impacts from the project and all other development since the PSD program was implemented, are less than the applicable increment. Because the AAQS are designed to protect both the public health and welfare and the project impacts are less than significant or less than the allowable increment, it is reasonable to assume the impacts on soils, vegetation, and wildlife will be minimal or insignificant.

Impact On Visibility

Natural gas is a clean fuel and will be very efficiently combusted in the gas turbine. This will minimize smoke formation. The low NO_X and SO_2 emissions will also minimize plume opacity. Because no add-on control equipment and no reagents are required, there will be no steam plume or tendency to form ammoniated particulate species. A regional haze analysis was performed which shows that the proposed project will not result in adverse impacts on visibility in the PSD Class I area. There may be a very localized steam plume effect from the cooling tower.

Growth-Related Air Quality Impacts

The applicant projects that there will be only short-term increases in the labor force to construct the project and that it will not result in permanent, significant commercial and residential growth in the vicinity of the project. Operation of the additional unit

will require nineteen permanent employees which will cause no significant impact on the local area.

The project is under review by the Public Service Commission, who have recently approved several power projects to help meet the low electrical reserves throughout the State of Florida. The PSC has not made a specific determination regarding the present project. On a large scale, the project will respond to state-wide and regional growth, accommodate more growth, and probably stimulate some additional growth. There are no adequate procedures under the PSD rules to fully assess these impacts. However, the type of project proposed has the smallest overall physical "footprint," the least water requirements, the lowest capital costs, fewest labor requirements, and the lowest air emissions per unit of electric power generating capacity.

Hazardous Air Pollutants

The project is not a major source of hazardous air pollutants (HAPs) and is not subject to any specific industry or HAP control requirements pursuant to Sections 112 of the Clean Air Act.

7. CONCLUSION

Based on the foregoing technical evaluation of the application and additional information submitted by the applicant, the Department has made a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations, provided the Department's BACT determination is implemented.

A. A. Linero, P.E.
Teresa Heron, Engineer
Cleve Holladay, Meteorologist

INTEROFFICE MEMORANDUM

Date: 10-Mar-1999 01:05pm
From: Aspbb
Aspbb@aol.com@PMDF@EPIC66
Dept:
Tel No:

Subject: Oleander vs Duke and TPY Breakdown

Mr. Linero,
Thank-you for responding so promptly. The Project Description and Impacts of Project Operations, I guess would be of the most interest. (Sections ES.3 and ES.5) So that it can be properly compared with Oleander. How many pages are those sections and can it be faxed? or E-mailed? or mailed?

I had asked about a week ago for the new breakdown of pollutants in TPY for Oleander and have still not received that info from Mike Halpin. Can you check into this for me? So that I can compare that as well. It looks as if the Duke Project is much more efficient. Is that true?

Do you know just where exactly the electricity in Florida has shown a shortage and/or brownouts? I have heard that the PSC states that Florida will need 8,000 more MW sometime in the near future.

Also, I would appreciate notice of when the Dept. plans to issue their intent to issue the permit for OPP.
Thanks again,
M. Adams

INTEROFFICE MEMORANDUM

Sensitivity: COMPANY CONFIDENTIAL

Date: 10-Mar-1999 02:25pm
From: Alvaro Linero TAL
LINERO_A
Dept: Air Resources Management
Tel No: 850/921-9532

To: Aspbb (Aspbb@aol.com@PMDF@EPIC66)
CC: Mike Halpin TAL (HALPIN_M)

Subject: Re: Oleander vs Duke and TPY Breakdown

Ms. Adams:

The sections you want are very short and will be faxed to you today. The details of course, would be in the large documents I mentioned previously.

Regarding you questions:

Mike will handle the question on the emissions from Oleander.

"Are Duke units more efficient than Oleander?"
Based on the amount of energy out compared to the energy in, the Duke units will be roughly 56 percent efficient while the Oleander units will be about 36 percent efficient. They will use the same combustion turbines but will operate differently as described in my previous E-Mail. Among peaking units, the Oleander units (based on the GE PG7241FA turbine) will be the most efficient. It is possible that an even larger Westinghouse unit(501G) is more efficient (maybe 38 percent simple cycle and 58 percent combined cycle), but not by much. It is available in very limited production and will emit much more pollutants. The first prototype will be built in Lakeland.

Do you know just where exactly the electricity in Florida has shown a shortage and/or brownouts? No. But the way electricity is moved around, I think it would be safe to say that shortage is state-wide. Your best bet would be to check out the Public Service Commission website and interact with them on it. I don't recall brown-outs. I think the PSC wants there to be enough reserve margin to prevent brown-outs. That requires permitting and construction of facilities well before the shortages manifest themselves as brown-outs.

I have heard that the PSC states that Florida will need 8,000 more MW sometime in the near future.(?)
I've heard numbers in the thousands of megawatts too. We recently permitted, are reviewing or expect applications on: FPL Fort Myers: 1500 MW, FPL Sanford: 1500 MW, SkyGen (Santa Rosa County): 240 MW, Lakeland: 250 MW, Tallahassee: 250 MW, Kissimmee: 250 MW, Duke New Smyrna: 500 MW, Gulf Power (Escambia County): 500 MW, TECO Polk County: 340 MW, FPC Polk County: 500 MW, Gainesville: 120 MW,

Jacksonville Kennedy: 170 MW, Jacksonville Northside: 600 MW, Jacksonville Brandy Branch: 500 MW, FPC Intercession City (Osceola County): 300 MW, Oleander
Power: 850-950 MW. There are more that I have not even heard of yet. The PSC would have a good idea on them.

Also, I would appreciate notice of when the Dept. plans to issue their intent to issue the permit for OPP.(?)
Will do!

Thank you
Al Linero

INTEROFFICE MEMORANDUM

Date: 10-Mar-1999 01:23pm
From: Mike Halpin TAL
HALPIN_M
Dept: Air Resources Management
Tel No: 850/488-0114

To: Alvaro Linero TAL (LINERO_A)

Subject: Re: FWD: Oleander vs Duke and TPY Breakdown

Re: Your message below
I responded to Ms. Adams, telling her that I would provide her the data as soon as I have it. I am awaiting the revised submittal from Golder which reflects the 1000 hours on oil rather than the 1500.
If you think it is appropriate, I could estimate those emissions and send it out before I receive Golder's submittal. Ken Kosky told me that he expected to get it out by the end of this week.
Let me know.
Mike

Hey Mike. Here is another E-Mail from Marlene Adams. I handled the stuff on Duke and will try to answer the efficiency question and get her a copy of the relevant pieces of the Duke Certification application, etc. Please send her whatever it is she asked for on Oleander when you have it. Thanks.

INTEROFFICE MEMORANDUM

Date: 10-Mar-1999 04:18pm
From: Mike Halpin TAL
HALPIN_M
Dept: Air Resources Management
Tel No: 850/488-0114

To: Aspbb (Aspbb@aol.com@PMDF@EPIC66)
CC: Alvaro Linero TAL (LINERO_A)

Subject: Re: Oleander Power Project

Ms. Adams -

Since it may be a few more days before I receive the calculations from the applicant's registered engineer, I have taken the liberty of doing the calculations myself in order to provide you with an expeditious answer. In the event that there are any significant discrepancies between what I am providing to you and what is provided by the applicant's engineer, I will pass those along.

Here are the maximum potential pollutants in Tons Per Year reflecting an assumed 1000 hours per year of oil operation (out of the 3390 hours of operation requested). I am providing the oil data separate from the gas data for your use.

1000 hours of Oil operation: NOx 861, CO 253, SO2 258, VOC 38.5, PM 110
2390 hours of Gas operation: NOx 374, CO 409, SO2 33, VOC 46.6, PM 54
3390 hours of combined operation: NOx 1235, CO 662, SO2 291, VOC 85, PM 164

Sincerely,
Mike Halpin

INTEROFFICE MEMORANDUM

Date: 11-Mar-1999 00:29am
From: Aspbb
Aspbb@aol.com@PMDF@EPIC66
Dept:
Tel No:

To: HALPIN_M (HALPIN_M@A1@DER)
To: LINERO_A (LINERO_A@A1@DER)

Subject: Re: Oleander Power Project

In a message dated 99-03-10 17:38:54 EST, you write:

<< 3390 hours of combined operation: NOx 1235, CO 662, SO2 291, VOC 85, PM 164
>>

Mike Halpin,

Thank you for the response. I had the opportunity to attend an information workshop Oleander put on this evening, and they had the breakdown as follows on a slide show they were showing the public.
NOx 1235, CO 412, SO2 291, VOC 64, PM 96

It appears you were quite accurate with the NOx and SO2. However, the CO is quite a bit off (you were 250 higher) and the VOC (you were 21 higher), and the PM (you were 68 higher).

I would appreciate it greatly if you would recalculate to see if you were really that far off or if they were.

Thank-you for your time,
M. Adams

INTEROFFICE MEMORANDUM

Date: 11-Mar-1999 08:32am
From: Mike Halpin TAL
HALPIN_M
Dept: Air Resources Management
Tel No: 850/488-0114

To: Aspbb (Aspbb@aol.com@PMDF@EPIC66)
CC: Alvaro Linero TAL (LINERO_A)

Subject: Re: Oleander Power Project

Ms. Adams -
Thank you for your reply. I was hesitant to provide you with my estimates (pending their submittal to me) for these kinds of reasons (it can cause confusion). I will need to see their calculations to understand the differences. When I receive that, I will forward the data to you.
Sincerely,
Mike Halpin

INTEROFFICE MEMORANDUM

Date: 18-Mar-1999 04:42pm
From: Mike Halpin TAL
HALPIN_M
Dept: Air Resources Management
Tel No: 850/488-0114

To: Aspbb (Aspbb@aol.com@PMDF@EPIC66)
CC: Alvaro Linero TAL (LINERO_A)
CC: Cleve Holladay TAL (HOLLADAY_C)

Subject: Re: Oleander Power Project

Ms. Adams -

I had committed that I would get back with you on your request to specifically review the differences between what I had estimated on CO, VOC and PM emissions as compared to what you heard at an Oleander workshop you attended. I've left your note (below) for reference.

The applicant had originally requested limits which allowed them the ability to select either GE or Westinghouse as vendors and (as you might imagine) since vendor guarantees are rarely identical, they felt compelled to request the higher of the two guarantees for each individual pollutant to maintain that flexibility. Now, however the applicant has selected the vendor (GE) which provides them lower emission guarantees than originally requested for CO, VOC and PM (on oil) and have correspondingly reduced the requested emission rates; thus the differences. I am including my revised estimates of the facility-wide emissions which incorporate the applicant's newly requested emission rates and they are nearly identical to what you heard at the workshop you referenced. So, to directly respond to your request:

"I would appreciate it greatly if you would recalculate to see if you were really that far off or if they were.",

I would have to say that both calculations are correct but are based upon different requested emission rates. They would be permitted for annual tonnages very close to what is shown here (and what you had referenced from the workshop you attended).

I hope that this helps.

1000 hours of Oil operation: NOx 861, CO 168, SO2 258, VOC 28.9, PM 42.5
2390 hours of Gas operation: NOx 374, CO 245, SO2 33, VOC 35, PM 54
3390 hours of combined operation: NOx 1235, CO 413, SO2 291, VOC 64, PM 96.5

Sincerely,
Mike Halpin

YOUR MESSAGE:

In a message dated 99-03-10 17:38:54 EST, you write:

<< 3390 hours of combined operation: NOx 1235, CO 662, SO2 291, VOC 85, PM 164 >>

Mike Halpin,

Thank you for the response. I had the opportunity to attend an information workshop Oleander put on this evening, and they had the breakdown as follows on a slide show they were showing the public.
NOx 1235, CO 412, SO2 291, VOC 64, PM 96

It appears you were quite accurate with the NOx and SO2. However, the CO is quite a bit off (you were 250 higher) and the VOC (you were 21 higher), and the PM (you were 68 higher).

I would appreciate it greatly if you would recalculate to see if you were really that far off or if they were.

Thank-you for your time,
M. Adams

INTEROFFICE MEMORANDUM

Date: 18-Mar-1999 07:25pm
From: Aspbb
Aspbb@aol.com@PMDF@EPIC66
Dept:
Tel No:

To: HALPIN_M (HALPIN_M@A1@DER)
To: LINERO_A (LINERO_A@A1@DER)

Subject: Re: Oleander Power Project

Dear Mr. Halpin,

Thank-you for your response. However, I am a little confused.

Is Oleander Power Project required by DEP to actually use the (GE) turbines, after you issue an air permit, because they have, in fact, chosen that route? Or, because they originally requested a choice of turbines (GE or Westinghouse), is it ok for them to promote the lower TPY emissions, whether or not they use the more efficient (GE) turbines? In other words, after DEP has issued their permit, can they, in turn, use Westinghouse or other more inefficient turbines?

Sincerely,
M. Adams

INTEROFFICE MEMORANDUM

Date: 19-Mar-1999 08:48am
From: Mike Halpin TAL
HALPIN_M
Dept: Air Resources Management
Tel No: 850/488-0114

To: Aspbb (Aspbb@aol.com@PMDF@EPIC66)
CC: Alvaro Linero TAL (LINERO_A)
CC: Cleve Holladay TAL (HOLLADAY_C)

Subject: Re: Oleander Power Project

Ms. Adams -

I have again left your note below my response for reference. The permit would be issued based upon the lower emission limit guarantees which they have obtained from GE. From my perspective, Oleander will simply be required to comply with the permitted emission limits. That does not necessarily preclude them from being able to procure a Westinghouse turbine should they be able to acquire the same guarantees.

Should the applicant decide (after receiving a permit based upon these lower emission limits) to go with a vendor which cannot meet the limits issued in their permits, they would be taking a huge risk since they would not be allowed to exceed their permitted limits. Only by permit revision (which requires another application, additional public notice and meetings and several months of time) may conditions be changed.

I hope that this answers your question.

Sincerely,
Michael Halpin

Thank-you for your response. However, I am a little confused.

Is Oleander Power Project required by DEP to actually use the (GE) turbines, after you issue an air permit, because they have, in fact, chosen that route? Or, because they originally requested a choice of turbines (GE or Westinghouse), is it ok for them to promote the lower TPY emissions, whether or not they use the more efficient (GE) turbines? In other words, after DEP has issued their permit, can they, in turn, use Westinghouse or other more inefficient turbines?

Sincerely,
M. Adams