



Department of Environmental Protection

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MAY 15 2006

Division of Air Resource Management

DIVISION OF AIR RESOURCES MANAGEMENT

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Air Construction Permit - Use this form to apply for any air construction permit at a facility operating under a federally enforceable state air operation permit (FESOP) or Title V air permit. Also use this form to apply for an air construction permit:
• For a proposed project subject to prevention of significant deterioration (PSD) review, nonattainment area (NAA) new source review, or maximum achievable control technology (MACT) review; or
• Where the applicant proposes to assume a restriction on the potential emissions of one or more pollutants to escape a federal program requirement such as PSD review, NAA new source review, Title V, or MACT; or
• Where the applicant proposes to establish, revise, or renew a plantwide applicability limit (PAL).
Air Operation Permit - Use this form to apply for:
• An initial federally enforceable state air operation permit (FESOP); or
• An initial/revised/renewal Title V air operation permit.
Air Construction Permit & Title V Air Operation Permit (Concurrent Processing Option) - Use this form to apply for both an air construction permit and a revised or renewal Title V air operation permit incorporating the proposed project.

To ensure accuracy, please see form instructions.

Identification of Facility

1. Facility Owner/Company Name: Orlando Utilities Commission
2. Site Name: Curtis H. Stanton Energy Center
3. Facility Identification Number: 0950137
4. Facility Location...
Street Address or Other Locator: 5100 South Alafaya Trail
City: Orlando County: Orange Zip Code: 32831
5. Relocatable Facility? [] Yes [x] No
6. Existing Title V Permitted Facility? [x] Yes [] No

Application Contact

1. Application Contact Name: Denise M. Stalls, Vice President Environmental Affairs
2. Application Contact Mailing Address...
Organization/Firm: Orlando Utilities Commission
Street Address: P.O. Box 3193
City: Orlando State: FL Zip Code: 32802
3. Application Contact Telephone Numbers...
Telephone: (407) 737-4236 ext. Fax: (407) 384-4062
4. Application Contact Email Address: dstalls@ouc.com

Application Processing Information (DEP Use)

1. Date of Receipt of Application:
2. Project Number(s):
3. PSD Number (if applicable):
4. Siting Number (if applicable):

APPLICATION INFORMATION

Purpose of Application

This application for air permit is submitted to obtain: (Check one)

Air Construction Permit

- Air construction permit.
- Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL).
- Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL), and separate air construction permit to authorize construction or modification of one or more emissions units covered by the PAL.

Air Operation Permit

- Initial Title V air operation permit.
- Title V air operation permit revision.
- Title V air operation permit renewal.
- Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.
- Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)

- Air construction permit and Title V permit revision, incorporating the proposed project.
- Air construction permit and Title V permit renewal, incorporating the proposed project.

Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:

- I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

Application Comment

Air construction permit to accept a NO_x ton per year limit on existing Stanton Unit 1 and Unit 2 to establish emission decreases from these units to use in a netting analysis for the Stanton B Project. A detailed description is provided in the letter submittal provided with this application.

APPLICATION INFORMATION

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Proc. Fee

Application Processing Fee

Check one: Attached - Amount: \$ _____ Not Applicable

APPLICATION INFORMATION

Owner/Authorized Representative Statement

Complete if applying for an air construction permit or an initial FESOP.

1. Owner/Authorized Representative Name : Frederick F. Haddad, Jr.
2. Owner/Authorized Representative Mailing Address... Organization/Firm: Orlando Utilities Commission Street Address: P.O. Box 3193 City: Orlando State: FL Zip Code: 32802
3. Owner/Authorized Representative Telephone Numbers... Telephone: (407) 244-8732 ext. Fax: (407) 275-4120
4. Owner/Authorized Representative Email Address: <u>fhaddad@ouc.com</u>
5. Owner/Authorized Representative Statement: <i>I, the undersigned, am the owner or authorized representative of the facility addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other requirements identified in this application to which the facility is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit.</i>  Signature 5/10/06 Date

APPLICATION INFORMATION

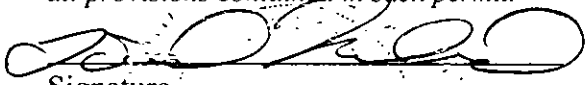
Application Responsible Official Certification

Complete if applying for an initial/revised/renewal Title V permit or concurrent processing of an air construction permit and a revised/renewal Title V permit. If there are multiple responsible officials, the "application responsible official" need not be the "primary responsible official."

1. Application Responsible Official Name:
2. Application Responsible Official Qualification (Check one or more of the following options, as applicable): <input type="checkbox"/> For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C. <input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively. <input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. <input type="checkbox"/> The designated representative at an Acid Rain source.
3. Application Responsible Official Mailing Address... Organization/Firm: Street Address: City: State: Zip Code:
4. Application Responsible Official Telephone Numbers... Telephone: () - ext. Fax: () -
5. Application Responsible Official Email Address:
6. Application Responsible Official Certification: <i>I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.</i> _____ Signature _____ Date

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: Larry Todd Newland Registration Number: 64188
2. Professional Engineer Mailing Address... Organization/Firm: Black & Veatch Street Address: 11000 Regency Parkway, Suite 100 City: Cary State: North Carolina Zip Code: 27511
3. Professional Engineer Telephone Numbers... Telephone: (919) 462-7415 ext. Fax: (919) 468-9212
4. Professional Engineer Email Address: newlandlt@bv.com
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> <i>(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and</i> <i>(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.</i> <i>(3) If the purpose of this application is to obtain a Title V air operation permit (check here <input type="checkbox"/> , if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.</i> <i>(4) If the purpose of this application is to obtain an air construction permit (check here <input checked="" type="checkbox"/> , if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here <input type="checkbox"/> , if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.</i> <i>(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here <input type="checkbox"/> , if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.</i>  Signature <u>5.8.06</u> Date (seal):

* Attach any exception to certification statement.

Orlando Utilities Commission
500 South Orange Avenue
P.O. Box 3193
Orlando, Florida 32802
Phone: 407.423.9100
Administrative Fax: 407.236.9616
Purchasing Fax: 407.384.4141
Website: www.ouc.com



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May 10, 2006

Mr. Al Linero, P.E.
South Permitting Section
Bureau of Air Regulation
Division of Air Resource Management
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RECEIVED

MAY 11 2006

Subject: OUC Stanton B Netting Submittal

BUREAU OF AIR REGULATION

Dear Mr. Linero:

The purpose of this letter submittal is to notify the Florida Department of Environmental Protection (FDEP) that Orlando Utilities Commission (OUC) and Southern Company would like to net out of prevention of significant deterioration (PSD) for NO_x for the Stanton B Project. This submittal provides the basis for the netting analysis and demonstrates that the net emissions increase of NO_x associated with the Stanton B project will be less than the prevention of significant deterioration (PSD) significant emission rate (SER) for NO_x and thereby avoid NO_x PSD major modification permitting for Stanton B. With this submittal, OUC is requesting a new combined Stanton Unit 1 and Unit 2 8,300 tons per year (tpy) NO_x emissions limit to be effective on the first day of the month that Stanton B commences operation. This requested limit will be used to establish an emissions decrease from Units 1 and 2 used in a netting analysis to demonstrate that the net emissions change relating to Stanton B construction will be less than the PSD SER for NO_x. As such, Stanton B will not be subject to PSD permitting for NO_x, avoiding the requirement for use of best available control technology (BACT) for NO_x emissions control and the need for an ambient air quality impact analysis for NO_x. The following provides the basis for the requested combined Stanton Unit 1 and Unit 2 tpy NO_x emissions limit and the Stanton B netting analysis.

Baseline Actual Emissions

The baseline actual emissions (BAE) for existing Stanton Unit 1 and Unit 2 are used to determine the emissions decrease associated with OUC accepting a ton per year (tpy) emission limit on these units. From 62-210.200(34), F.A.C., baseline actual emissions means the average rate, in tons per year, at which the unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 5-year period immediately preceding the date a complete application is received by the Department." Therefore the 5-year "look-back period" used to determine the BAE is May 2001 through April 2006. Acid Rain emissions information was used to determine

the appropriate baseline actual emissions for Units 1 and 2 as shown in Table 1. OUC has chosen the calendar year 2004 through 2005 24-month period to establish the combined Unit 1 and 2 BAE NO_x emissions level of 9,325.4 tpy.

Based on discussions with FDEP personnel, it was agreed that it would be appropriate to use the Acid Rain data to determine the BAE for a netting analysis. It is also understood that tracking of emissions to demonstrate compliance with the new tpy limit will be based on the Acid Rain continuous emission monitoring system (CEMS) data. Note that the acid rain database emissions differ from the emissions information provided in the annual operating reports (AORs) submitted to FDEP. The AORs are based on an annual average lb/mmBtu emission rate derived from the Acid Rain CEMS data multiplied by the heat input rate for each type of fuel used in the unit. The annual heat input for each fuel type is calculated as the total quantity of the fuel used in that year multiplied by the fuel heating value (annual average). This is done separately for each type of fuel used during the reporting year. This is done because the AOR requires reporting of a separate emissions value for each fuel type.

Unit 1 and 2 NO_x Emissions Decrease

With the BAE established as 9,325.4 tpy of NO_x, the next step is to determine the emissions decrease associated with OUC accepting a combined Stanton Unit 1 and Unit 2 tpy NO_x emissions limit. This emissions decrease is calculated as the potential to emit after the new combined Stanton Unit 1 and Unit 2 tpy NO_x emissions limit becomes effective less the BAE. Note that the BAE used in this application conservatively does not include the concept of accounting for excludable emissions, emissions that result from natural demand growth, in the calculation. As part of this submittal OUC is requesting that combined Stanton Unit 1 and Unit 2 NO_x emissions be limited by permit to 8,300 tpy on a rolling 12-month basis, effective the first day of the month that Stanton B commences operation. The first compliance date for the new limit would be 12 months after the effective date. This limit establishes the combined Unit 1 and Unit 2 potential to emit to use in the net emissions decrease calculation. As such the emissions decrease is 1,025.4 tpy.

Note that while the netting analysis must include all contemporaneous emission increases and decreases that were not relied upon in issuance of a PSD permit, there were no other facility modifications that resulted in NO_x emission increases or decreases during the netting contemporaneous period.

OUC is currently conducting a study to ascertain the optimum methods to affect NO_x reductions from Stanton Units 1 and/or Unit 2. Because this study has not been completed, OUC is not ready at this point to provide a detailed description of the NO_x control technology(s) that will be used to reduce NO_x emissions from Units 1 and/or 2. However, OUC is committed to achieving the level of NO_x emission reductions presented in this submittal. The following provides a brief discussion of the types of NO_x reduction technologies being considered for Stanton Unit 1 and Unit 2.

The following types of NO_x controls are being considered for Stanton Unit 1, which has no existing NO_x controls: Low-NO_x burners (LNB), Overfire air (OFA), selective non-catalytic reduction (SNCR), and selective catalytic reduction (SCR). These technologies may be used separately or in combination to achieve the targeted emission reductions. The use of LNB is a combustion control technology whereby NO_x formation is limited by controlling the stoichiometric and temperature profiles of combustion in each burner zone. OFA systems reduce NO_x formation by creating a fuel-rich combustion zone. The OFA is introduced above the main combustion zone where fuel burnout can be completed at a lower temperature. SCR is a post-combustion NO_x emissions reduction system. In SCR systems, vaporized ammonia (ammonia may be generated from urea conversion system) injected into the flue gas stream acts as a reducing agent in the presence of a catalyst, achieving the desired NO_x reduction. The NO_x and ammonia reagent react to form nitrogen and water. SNCR is another post-combustion control technology that uses a reagent such as ammonia or urea to control NO_x emissions. SNCR systems rely on an appropriate reagent injection temperature, good reagent-gas mixing, and adequate reaction time rather than a catalyst to achieve NO_x reductions.

Further NO_x control being considered for Stanton Unit 2, which already employs the use of LNB and SCR, include an upgrade to the existing LNBs and upgrading the existing SCR. Upgrades to the SCR may include increasing catalyst volume, changing catalyst formulation, improving fluegas/ammonia distribution in the SCR, etc. These upgrades may be implemented separately or in combination to achieve the targeted emission reductions.

NO_x Net Emissions Change For the Stanton B Project

The combined Unit 1 and Unit 2 NO_x emissions decrease discussed above, in combination with the NO_x emission increases from the new Stanton B Project are used in determining the Stanton B net emissions increase to determine PSD applicability. If the net emissions increase is less than the NO_x PSD major modification SER of 40 tpy, then the Stanton B project will not be a PSD major modification for NO_x and will not be subject to PSD for NO_x. The Stanton B Project potential to emit as provided in this submittal and as will be established through the construction permit for Stanton B is 1,006.2 tpy {Phase 1 as given in the 3/17/06 revision to the Stanton B application}. This increase in NO_x emissions in combination with the combined Unit 1 and Unit 2 NO_x emissions decrease as described above results in a net NO_x emissions **decrease** of 19.2 tpy. Therefore, through the requested new combined Unit 1 and Unit 2 tpy NO_x emissions limit, the emissions change from the Stanton B netting analysis is not only below the PSD SER levels but also results in a decrease in facility NO_x emissions of approximately 19 tpy.

Summary

In summary, this submittal provides requested permit limits and a netting demonstration that shows that the net emissions increase of the Stanton B Project, when considering the emission decreases from existing Stanton Unit 1 and Unit 2 are less than the PSD SER

for NO_x, and actually show a decrease in NO_x emissions. As such, the Stanton B project will not be subject to PSD for NO_x emissions, thereby avoiding the need to implement BACT emission controls and an ambient air quality impact analysis for NO_x.

If there are any questions regarding this submittal please contact me at 407-737-4236.

Sincerely,



Denise M. Stalls
Vice President
Environmental Affairs
OUC

DMS

Table 1 -- Stanton Units 1 and 2 Combined Baseline Actual Emissions

Year	Month	Unit 1 NO _x Emissions (tons)	Unit 2 NO _x Emissions (tons)	Combined Unit 1 and Unit 2 NO _x Emissions (tons)	Rolling 24-month annual average NO _x emissions (tpy)
2001	5	672.7	265.6	938.3	
2001	6	652.0	249.9	901.9	
2001	7	670.3	258.7	929.0	
2001	8	679.0	267.9	946.9	
2001	9	666.0	250.3	916.3	
2001	10	388.0	269.5	657.5	
2001	11	224.0	251.2	475.2	
2001	12	625.2	235.3	860.5	
2002	1	584.7	227.6	812.3	
2002	2	510.0	192.4	702.4	
2002	3	647.1	121.1	768.2	
2002	4	649.3	113.5	762.8	
2002	5	580.9	205.0	785.9	
2002	6	353.8	202.2	556.0	
2002	7	524.2	226.2	750.4	
2002	8	637.6	166.2	803.8	
2002	9	699.1	165.9	865.0	
2002	10	471.6	231.9	703.5	
2002	11	203.8	222.0	425.8	
2002	12	631.6	274.8	906.4	
2003	1	615.4	253.0	868.4	
2003	2	580.0	170.4	750.4	
2003	3	620.7		620.7	
2003	4	607.7	39.8	647.5	9,177.6
2003	5	569.4	239.8	809.2	9,113.0
2003	6	526.1	204.5	730.6	9,027.4
2003	7	566.2	265.7	831.9	8,978.8
2003	8	558.1	297.9	856.0	8,933.4
2003	9	561.0	279.7	840.7	8,895.6
2003	10	479.5	279.7	759.2	8,946.4
2003	11	144.0	238.8	382.8	8,900.2
2003	12	546.9	250.4	797.3	8,868.6
2004	1	536.4	211.9	748.3	8,836.6
2004	2	535.5	160.3	695.8	8,833.3
2004	3	601.1	38.3	639.4	8,768.9
2004	4	707.0	209.0	916.0	8,845.5
2004	5	662.5	255.4	917.9	8,911.5
2004	6	607.7	248.2	855.9	9,061.5
2004	7	563.6	238.9	802.5	9,087.5
2004	8	529.8	216.3	746.1	9,058.7
2004	9	409.4	233.1	642.5	8,947.4
2004	10		252.1	252.1	8,721.7
2004	11	128.9	247.2	376.1	8,696.9
2004	12	578.2	255.2	833.4	8,660.4
2005	1	565.5	246.7	812.2	8,632.3
2005	2	537.4	228.5	765.9	8,640.0
2005	3	706.1	33.3	739.4	8,699.4
2005	4	607.7	144.4	752.1	8,751.7
2005	5	417.8	247.5	665.3	8,679.7
2005	6	590.1	261.6	851.7	8,740.3
2005	7	676.5	267.8	944.3	8,796.5
2005	8	642.9	280.8	923.7	8,830.3
2005	9	641.9	260.8	902.7	8,861.3
2005	10	635.1	239.8	874.9	8,919.2
2005	11	717.4	232.2	949.6	9,202.6
2005	12	794.3	248.7	1043.0	9,325.4

The look-back period is May 2001 through April 2006.
 Data was downloaded from the USEPA Clean Air Markets Web Site. The 2005 data is listed as preliminary in the data base.
 Data for January 2006 through April 2006 was not available from the USEPA Clean Air Markets Web Site.
 The highest 24-month annual average of 9,325.4 tpy is for the January 2004 through December 2005 period.



ENVIRONMENTAL PROTECTION DIVISION

Lori Cunniff, Manager

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APR 04 2006

BUREAU OF AIR REGULATION

March 30, 2006

CERTIFIED MAIL RECEIPT NUMBER: 7003 1680 0001 1714 8339

Mr. Alvaro Linero, P.E.
Professional Engineering Administrator, Air Permitting South
Florida Department of Environmental Protection
Division of Air Resource Management
2600 Blair Stone Road MS 5500
Tallahassee, Florida 32399-2400

Subject: Site certification and PSD permitting issues regarding Stanton Energy Center Unit B

Dear Mr. Linero:

Attached are the Orange County Environmental Protection Division (EPD) comments after reviewing the Stanton Energy Center Unit B Supplemental Site Certification Application (SSCA), which includes the Prevention of Significant Deterioration (PSD) air permit application. We have some general concerns about the proposed project and a number of technical concerns about the application.

1. Orange County is currently an air quality attainment maintenance area for ozone (Rule 62-204.340(4)(a)1). EPD is concerned that Orange County may soon exceed the 8-hour ozone National Ambient Air Quality Standard (NAAQS). A number of our 2004 and 2005 8-hour average ambient ozone concentrations have exceeded the NAAQS standard for ozone. In fact, if our fourth highest 8-hour average ozone concentration in 2006 exceeds 94 ppb, Orange County will have exceeded the 0.08 ppm ozone NAAQS standard in a rolling three-year average, and may be reclassified as a non-attainment area. Ambient ozone concentrations vary with the weather, and are hard to predict. However, we believe that you should consider the possibility that Orange County could be a non-attainment area by the time Unit B is built, and even by the time this project is evaluated for final approval later this year. Reclassifying Orange County, as a non-attainment area would not only affect the public health and our tourism economy, it would also affect how the applications are reviewed as stated in Rule 62-212.500. We saw no discussion of Orange County's high current ozone concentrations in the application. We also note that Orlando Utilities Commission (OUC) chose ambient pollutant data that does not accurately reflect current and past ozone exceedances. The data presented in SSCA Volume II Table 8-1 is for years 2000 through 2004. This data set omits years 1997 through 1999 and 2005, during which a number of exceedances of the current 8-hour ozone standard were measured in the county. We view the application as insufficient in that regard,

and request that OUC present and discuss all publicly available air quality data for the county for the past 10 years. For the past 10 years we have recorded at least one 8-hour average ozone reading above 80 ppb every year. We also note that Orange County's ambient PM2.5 levels have been below the NAAQS, but EPA is proposing to lower the PM2.5 NAAQS effective as soon as September 2006. In that case, EPD may also be concerned about non-attainment status for PM2.5, depending on the final standard.

2. The Stanton Unit B project is advertised as a technology demonstration project in partnership with the Department of Energy. EPD questions the wisdom of locating a technology demonstration project in an area that will be adversely affected by increased NOx. Also, the county does not want to set a precedent of being a test area for power plants. We believe that we cannot afford the resulting NOx emissions, and their effect on ambient ozone concentrations. Demonstrating and developing integrated gasification clean coal technology may someday be beneficial for everyone. But, locating such a technology demonstration facility in an area concerned about ozone non-attainment status appears unwise to EPD. Orlando Utilities Commission may claim the electrical power from Unit B is required for the expected growth in the county. However, EPD believes that it would be best to generate the needed electricity outside the county and its area of influence, and to bring electricity into Orange County on the existing electrical grid.
3. NOx is the pollutant of highest concern due to its effects on ozone concentrations that are critical in Orange County. Yet OUC has not presented sufficient engineering data to show the program NOx emission goals using syngas can be met. In addition, the NOx Best Available Control Technology (BACT) analysis appears confusing and uncertain for the following reasons:
 - The PSD application states that the combustion turbine (CT) vendor will only guarantee 40 ppm NOx when using syngas. Adding a natural gas-fired duct burner (DB) will raise the NOx level above 40 ppm.
 - OUC proposes to test a selective catalytic reduction (SCR) system with unspecified combustion tuning to reduce NOx to 20 ppm in Phase I. Yet OUC repeatedly states that sulfur in the syngas (even at concentrations as low as 2 ppm) is likely to react with ammonia from the SCR, creating ammonium bisulfate that will foul the heat recovery steam generator (HRSG) heat exchanger. And, they repeatedly state that this is the first application of selective catalytic reduction (SCR) to coal-derived syngas-fueled integrated gasification combined-cycle (IGCC) units. They argue strongly against using a selective catalytic reduction (SCR), then propose using one anyway, adding confusion to complex technical problems. If someone has test data to indicate that the SCR will work with syngas, that

someone has test data to indicate that the SCR will work with syngas, that data should be added to the application to provide reasonable assurance that the program goals can be met.

- OUC states that they will do unspecified combustion tuning during Phase I to help reduce NO_x. Test data proving that any combustion tuning will significantly reduce NO_x should be added to the application, and they should guarantee the reduced NO_x emission.
 - Permit limits should be based on sound engineering data. The application does not contain engineering data to substantiate the project goals of 20 ppm NO_x in Phase I and 12 ppm in Phase II. Without that data, one should set the NO_x permit limit for the worst possible case for syngas operation. That worst possible case appears to be above 40 ppm (with DB) using syngas. The analyses should be repeated using this worst condition, and the results used to determine whether or not the project should be built. This would appear to increase the maximum Unit B NO₂ impact above the annual significance level shown in SSCA Volume I Table 5.6-3.
 - OUC insists the SCR does not work with syngas. If correct, OUC proposes to fire both the CT and DB with natural gas, and use the SCR to get the desired NO_x emissions. Whatever the technology, any major expansion at Stanton, even a gas fired CT/DB, adds significant NO_x emissions that can adversely affect Orange County's air quality.
4. The structure of this project is unusual in that the permittee is proposing a four-year research and development project, to build and develop and prove new equipment and new operating procedures, to determine operating permit limits for a large power plant expansion. How will compliance and enforcement be done during the research and development phase? Central District will likely do the compliance and enforcement, but how will exceedances be handled? Who determines steps to be taken to correct deficiencies in the equipment or procedures? What recourse does Orange County have during this period, and what options are open to us, to correct deficiencies in the equipment, procedures, permits, and other aspects of this project?
 5. The applications use data dated prior to year 2000, including housing price data that has changed significantly in the past few years. Please update application to reflect the latest available information.
 6. During the presentation by Stanton on January 18, 2006, Southern Company led us to believe that NO_x emissions would be 15 ppm or less, without SCR. The application states that the goal for Phase I is 20 ppm with SCR. NO_x emissions in the application are less than 15 ppm only using natural gas and SCR.

16. On SSCA Volume II pages 20-22 of the PSD application, NOx allowable emissions are given for Phase I, Phase II and gas-fired operation. All of these cases appear to be for the CT with DB operating only. Sections for other pollutants give allowable emissions for operation with and without DB operation. Are you not proposing NOx allowable emissions for operation without the DB, or will the allowable emissions apply with or without the DB?
17. It appears that the SCR will operate with an ammonia slip of 5 ppm. How much ammonia will this amount to in TPY? What is the odor threshold for ammonia, and is an ammonia odor ever noticed from other units at Stanton that use an SCR?
18. Why, on SSCA Volume II pages 34 and 38 of the PSD application, does field 3 contain "Pipeline Natural Gas" but the comment implies that field 3 should contain an allowable emission?
19. The PSD application requests a visible emissions limit of 20% opacity. This is higher than the permit limit of 10% for Unit A. Please explain why Unit B opacity should be higher than Unit A.
20. Emission unit section 3 (EU032) of the PSD application calls the emission unit "Unit B Gasifier Startup Stack". This emission unit should be called the Unit B Gasifier System, and should include all potential fugitive emissions from piping, vents and other system operations, as well as point source emissions from the startup stack and other possible locations. The PSD application does not appear sufficient because it does not address emissions from the entire gasifier system, only from the startup stack.
21. There is no description of the control equipment for emission unit section 3, though a particulate filter, sulfur and ammonia removal and recovery systems, and mercury control system for this emission unit is described elsewhere (e.g., SSCA Volume II Fig. 2-5) in the application. No PM/PM10 removal efficiency is given for the filter, and no engineering data is provided for the other control systems. We view the application as insufficient in that regard.
22. No stack discharge gas conditions are given for the gasifier startup stack.
23. Mercury will be in the gas from the startup stack and the flare, yet it is omitted from the list of pollutants from both.
24. SSCA Volume II Section 5.2.3 proposes a 5% opacity limit for the coal handling operation but the PSD application requests a 20% opacity limit. Please explain the discrepancy.

25. SSCA Volume II Table 5-3 proposes a PM/PM10 BACT limit of 0.013 lb/MMBTU for syngas operation, yet Table 5-1 shows that the best available control technology achieved by the average syngas combined cycle plant is 0.010 lb/MMBTU, and the best is 0.007 lb/MMBTU. The proposed PM/PM10 BACT limit for Unit B on syngas appears to be too high. The proposed PM/PM10 BACT limit for natural gas operation is 0.017 lb/MMBTU. This appears comparable to pulverized coal boilers presented in Table 5-2, and also appears too high. For reference, Orlando Cogen facility ID 0950203 is a natural gas-fired CT/DB cogeneration plant with a PM/PM10 permit limit of 0.01 lb/MMBTU, below the proposed BACT for Unit B.
26. SSCA Volume II Table 5-6 proposes a CO BACT limit of 0.050 lb/MMBTU for syngas operation with DB, yet Table 5-4 shows that the best available control technology achieved by the average syngas combined cycle plant is 0.023 lb/MMBTU, and the best is 0.007 lb/MMBTU. The proposed CO BACT limit for Unit B on syngas appears to be too high. The proposed Unit B CO BACT limit for natural gas operation is 0.060 lb/MMBTU, which also appears too high. Again referencing Orlando Cogen, it has a CO emission of approximately 0.034 lb/MMBTU, below the proposed BACT for Unit B.
27. SSCA Volume II Table 5-6 proposes a VOC BACT limit of 0.011 lb/MMBTU for syngas operation with DB, yet Table 5-4 shows that the best available control technology achieved by the average syngas combined cycle plant is 0.0048 lb/MMBTU, and the best is 0.0017 lb/MMBTU. The proposed VOC BACT limit for Unit B on syngas appears to be too high. The proposed Unit B VOC BACT limit for natural gas operation is 0.013 lb/MMBTU, which also appears too high. Orlando Cogen has a VOC emission of approximately 0.0066 lb/MMBTU, below the proposed BACT for Unit B.
28. SSCA Volume II Section 6.1 states that Orange County is designated an attainment area for all criteria pollutants. Rule 62-204.340(4)(a)1 designates Orange County as an air quality maintenance area for the air pollutant ozone.
29. Orange County spot-checked OUC's air quality screening analysis with the TSCREEN model. We duplicated their results for that part of their screening analysis, using their NOx emission rate and stack parameters. No sample modeling input or output data was provided, which would be helpful to verify the modeling.
30. The solid waste disposal unit must comply with the design criteria for a Class I landfill and the requirements included in Chapter 32, Article V of the Orange County Code for this solid waste management facility. The wastes to be disposed

are sulfur and ashes, which are considered industrial wastes, and activated carbon contaminated with mercury, which is considered a hazardous waste.

31. Regarding the Clean Air Interstate Rule (CAIR), EPD opposes emissions trading by OUC that would allow OUC to emit excessive pollutants and buy emissions credits from another facility.

We have not seen the Environmental Impact Statement, even the draft, and we expect to review all environmental impact evaluations carefully and submit comments to EPA and FDEP.

EPD wants to review the Public Service Commission ruling on the need for the Stanton Unit B expansion that was submitted February 22, 2006.

We also note the following Insufficiency Items:

1. We saw no discussion of Orange County's high current ozone concentrations in the application. We also note that OUC chose ambient pollutant data that does not accurately reflect current and past ozone exceedances. We view the application as insufficient in that regard, and request that OUC present and discuss all publicly available air quality data for the county for the past 10 years.
2. We consider the application insufficient because adequate engineering data supporting the program's NOx emissions goals on syngas has not been presented.
3. The PSD application does not appear sufficient because it does not address emissions from the entire gasifier system, only from the startup stack. No PM/PM10 removal efficiency is given for the filter, and no engineering data is provided for the other control systems.

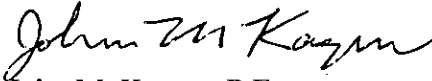
In summary, EPD is concerned about the general location of Stanton Unit B and about technical details in the site certification application and the PSD permit application. We would like the project relocated outside Orange County and far enough away to avoid impacting our ambient ozone and other pollutant levels. If the project cannot be relocated, we must have our technical concerns addressed and we would seek NOx and other emission offsets from Orlando Utilities Commission. These offsets would have to be negotiated with OUC, but we would consider the following options:

- Financial and other support for light rail or other mass transit so gross county NOx and other emissions would not be increased;
- Reductions in NOx emissions from the existing plant using SCR, SNCR or other technology, so there is no net increase in actual plant-wide NOx emissions over 2003;
- Financial and other support for improvements in roadways in southeast Orange County so that there would be no net increase in NOx emissions;

- Financial and other support for other pollution reduction programs in the county, such as expansion of the county's existing school bus retrofit program to reduce children's exposure to air pollution, or a program to retrofit Lynx buses in the county for reduced diesel exhaust emissions.

Thank you for this opportunity to express Orange County's concerns about the proposed project. We look forward to working with FDEP and OUC to supply Orange County with the electricity needed for the County's growth, while protecting the county's air quality and the health and well being of our citizens. If you have any questions or comments, please call me at (407) 836-1443 or e-mail me at John.Kasper@ocfl.net.

Sincerely,



John M. Kasper, P.E.
Engineer II



(4) JK/JD/HP/DW:na

c: Lori Cunniff, Manager, Orange County EPD
Melvin Pittman, Director, Community and Environmental Services, Orange County
Anthony Cotter, Assistant County Attorney, Orange County
Hamp Pridgen, Air Program Administrator, Orange County EPD