



Orlando CoGen Limited, L.P.  
8275 Exchange Drive  
Orlando, FL 32809

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DIVISION OF AIR  
RESOURCE MANAGEMENT

28 February 2011

Florida Department of Environmental Protection  
Division of Air Resource Management, MS5500  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400  
Phone: (850) 921-9504

**Re:** Orlando CoGen Limited, L.P.  
Facility ID: 0950203; ORIS Code: 54466; Title V Permit: 0950203-009-AV  
CO/NOx Emissions Report - 2010

To Whom It May Concern:

Per the requirements of Condition C.26. of Permit 0950203-009-AV, Orlando CoGen Limited, L.P. hereby submits the third of the required five year annual report.

If you have any questions regarding this submittal, please contact me at (407) 851-1350 or [jim.murray@nsgen.com].

Thank you.

Sincerely,

James Murray, Plant Manager  
Orlando CoGen Limited, L.P.

Attachment

Cc: David Kellermeyer, NSGS  
OCL File

**Annual Report  
CO and NOx Emissions Demonstration  
Permit No. 095023-009-AV  
Northern Star Generation Services  
Orlando CoGen Limited, L.P.**

Orlando Cogen Limited, L.P. was issued a Final Permit Project No.: 0950203-007-AC by the Florida Department of Environmental Protection, Division of Air Resources Management, Bureau of Air Regulation, Title V section. The permit authorized Orlando Cogen to install a gas turbine upgrade to improve the thermal efficiency of the unit. This permit was incorporated into a renewal of Title V Air Operation Permit No. 0950203-009-AV with an effective date of January 1, 2009. Facility identification information is shown on Table 1.

**Table 1  
Facility Identification Information**

1. Facility Owner/Company Name:  <b>Northern Star Generation Services</b>	
2. Site Name:  <b>Orlando CoGen Limited, L.P.</b>	3. County:  <b>Orange County</b>
4. Title V Air Operation Permit No./ Facility ID No.:  <b>Title V Air Operation Permit No.: 095023-009-AV Facility ID No.: 0950203</b>	
5. Name of Person to Contact: (if there are any questions about the information provided)  <b>Mr. David Kellermeyer</b>	6. Contact's Telephone No.:  <b>(713) 580-6368</b>

Permit Condition C.26 of the Title V Air Operation Permit, "CO/NOx Emissions Reports," requires that for a period of five years following completion of the gas turbine upgrade authorized in Permit No. 0950203-007-AC, Orlando Cogen must submit an annual report demonstrating that the project did not result in a significant increase in CO and NOx emissions. The permit established baseline emissions for operation prior to the project at 3 tons per year of CO and 232 Tons per year of NOx.

The plant is permitted to emit emissions at rates such that the plant is considered a major source of emissions under the Prevention of Significant Deterioration (PSD) rules. Once considered a major source, an emissions increase is considered significant if it exceeds the significance level for a regulated air contaminant as defined in the PSD rules. For CO and NOx, the significance levels are 100 tons per year and 40 tons per year, respectively. The increase in emissions is based on the difference in actual emissions for the current year (2010) and the established baseline emissions.

An Annual Operating Report (AOR) has been completed based on actual emissions for the plant for the calendar year 2010. Table 2 is a comparison of the actual emissions for calendar year 2010, as reported in the AOR, to the baseline emissions, as defined in the permit, for CO and NOx.

**Table 2**  
**Comparison of 2010 Annual Emissions to Baseline Emissions**  
**(tons per year)**

Air Contaminant	Baseline Emissions	2010 Actual Total Emissions*	Net Emissions Change	Significance Level	Permitted Allowable (Total)
CO	3	5.3	+2.3	100	114.6
NOx	232	185.89	(-46.11)	40	273.9

\* Ref: For details with regard to the estimation of annual emissions, please see the AOR for CY2010.

As shown on Table 2, the change in actual emissions from the plant compared to the baseline emissions did not equal or exceed the significance levels as defined in the PSD rules. In addition, the 2010 actual emissions are less than the combined emissions limitations for the combustion turbine/duct burner system as established in the permit. Therefore, the gas turbine upgrade did not result in a significant increase in CO and NO<sub>x</sub> emissions for calendar year 2010.