

*Preliminary*

## Relative Accuracy Determination

Test Performed For:  
Progress Energy Florida  
Intercession City  
P11  
Pt. 75 RATA, Subpart GG Compliance on Oi  
Date: 3/17/05

Test Performed By:  
C.E.M. Solutions, Inc.  
7990 W. Gulf to Lake Hwy.  
Crystal River, FL 34429  
Ph: 352-564-0441

Run Number	Date of Run	Start Time	Stop Time	Unit Load MW	NO <sub>x</sub> RM lbs/mmBtu	CEM lbs/mmBtu	Difference Like lbs/mmBtu
Run 1	17-Mar	9:06:00	10:22:00	156	0.151	0.145	0.006
Run 2	17-Mar	10:41:00	11:02:00	156	0.151	0.146	0.005
Run 3	17-Mar	11:14:15	11:35:15	156	0.149	0.146	0.003
Run 4	17-Mar	11:48:00	12:09:00	156	0.149	0.146	0.003
Run 5	17-Mar	12:26:00	12:47:00	156	0.150	0.147	0.003
Run 6	17-Mar	13:02:00	13:23:00	156	0.149	0.147	0.002
Run 7	17-Mar	13:36:00	13:57:00	156	0.150	0.147	0.003

Average: 156 0.150 0.146 0.004 lbs/mmBtu

Bias Test (pass/fail): Failed  
Bias Adjustment Factor: 1.024  
Method of RA Determination: Part 75, Standard Emitter

Standard Deviation: 0.0014  
Confidence Coefficient: 0.0013  
T-Factor: 2.447  
Number of runs Reported: 7

Note:  
All ppm values are corrected to lbs/mmBtu NO<sub>x</sub>  
using RM CO2 and CEM CO2 as diluents

Relative Accuracy:  
Maximum RA 3.246  
RA Status 10.00 Passed

# EPA VISIBLE EMISSION OBSERVATION FORM 1

Method Used (Circle One)  
 Method g 203A 203B Other: \_\_\_\_\_

Form Number \_\_\_\_\_ Page \_\_\_\_\_ Of \_\_\_\_\_  
 Continued on VEO Form Number \_\_\_\_\_

Company Name PROGRESS ENERGY - TC  
 Facility Name INTERSECTION CITY  
 Street Address \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Process COMBUSTION TURBINE Unit # 11 Operating Mode 158 MW  
 Control Equipment \_\_\_\_\_ Operating Mode \_\_\_\_\_

Describe Emission Point  
STACK

Height of Emiss. Pt. Start 100 End 100 Height of Emiss. Pt. Rel. to Observer Start 100 End 100  
 Distance to Emiss. Pt. Start 300 End 300 Direction to Emiss. Pt. (Degrees) Start \_\_\_\_\_ End \_\_\_\_\_

Vertical Angle to Obs. Pt. Start \_\_\_\_\_ End \_\_\_\_\_ Direction to Obs. Pt. (Degrees) Start \_\_\_\_\_ End \_\_\_\_\_  
 Distance and Direction to Observation Point from Emission Point Start 010 UP End \_\_\_\_\_

Describe Emissions  
 Start STEADY End \_\_\_\_\_  
 Emission Color Start BROWN End \_\_\_\_\_  
 Water Droplet Plume Attached  Detached  None

Describe Plume Background  
 Start SKY End SKY  
 Background Color Start GREY End GREY Sky Conditions Start OVERCAST End OVERCAST  
 Wind Speed Start 0-3 End 0-3 Wind Direction Start SW End SW  
 Ambient Temp. Start 80° End 80° Wet Bulb Temp. \_\_\_\_\_ RH Percent \_\_\_\_\_

Source Layout Sketch

Draw North Arrow  TN  MN

Longitude \_\_\_\_\_ Latitude \_\_\_\_\_ Declination \_\_\_\_\_

Min	Sec				Comments
	0	15	30	45	
39	1	5	5	5	
40	2	5	5	5	
41	3	5	5	5	
42	4	5	5	5	
43	5	5	5	5	
44	6	5	5	5	
45	7	5	5	5	
46	8	5	5	5	
47	9	5	5	5	
48	10	5	5	5	
49	11	5	5	5	
50	12	5	5	5	
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30					

Observer's Name (Print) GARY KUBISKI  
 Observer's Signature Gary Kubiski Date 3/17/05  
 Organization FDEP  
 Certified By JTD Date 2/7/06

Additional Information \_\_\_\_\_

# EPA VISIBLE EMISSION OBSERVATION FORM 1

Method Used (Circle One)  
 Method 9      203A      203B      Other: \_\_\_\_\_

Company Name  
**PROGRESS ENERGY IC**

Facility Name

Street Address

City      State      Zip

Process      Unit #      Operating Mode

Control Equipment      **2,9**      **NATURAL GAS**  
 Operating Mode

Describe Emission Point  
**STACK**

Height of Emiss. Pt.      Height of Emiss. Pt. Rel. to Observer

Start      End      Start **40**      End

Distance to Emiss. Pt.      Direction to Emiss. Pt. (Degrees)

Start      End      Start **NE**      End

Vertical Angle to Obs. Pt.      Direction to Obs. Pt. (Degrees)

Start      End      Start      End

Distance and Direction to Observation Point from Emission Point

Start      End

Describe Emissions

Start **HEAT**      End

Emission Color      Water Droplet Plume

Start **NONE**      End      Attached       Detached       None

Describe Plume Background

Start **SIM**      End

Background Color      Sky Conditions

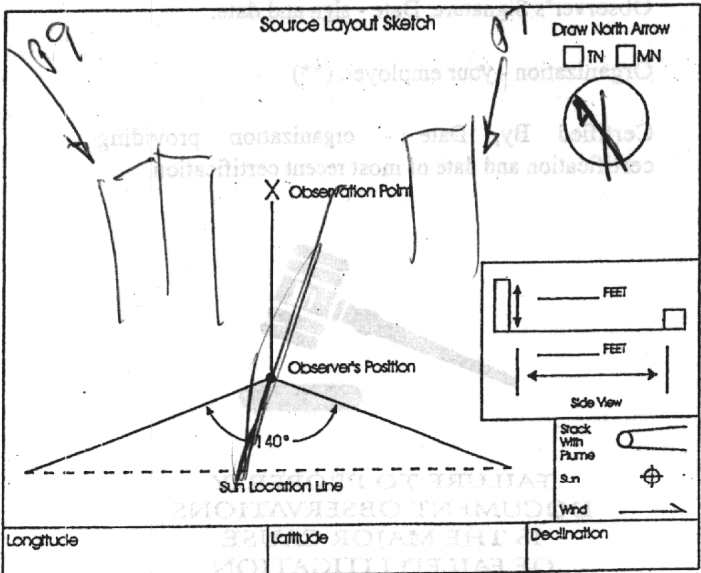
Start **GREY**      End      Start **P.C.I.**      End

Wind Speed      Wind Direction

Start **6-3**      End      Start **S**      End

Ambient Temp.      Wet Bulb Temp.      RH Percent

Start **95**      End



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Observation Date	Time Zone	Start Time	End Time	Comments						
<b>8/22/05</b>		<b>3:00</b>	<b>3:12</b>	Sec	0	15	30	45	97	
Min	0	15	30	45						
001	0	0	0	0						
012	0	0	0	0						
023	0	0	0	0						
034	0	0	0	0						
045	0	0	0	0						
056	0	0	0	0						
067	0	0	0	0						
078	0	0	0	0						
089	0	0	0	0						
0910	0	0	0	0						
1011	0	0	0	0						
1112										
1213					99					
1314	0	0	0	0						
1415	0	0	0	0						
1516	0	0	0	0						
1617	0	0	0	0						
1718	0	0	0	0						
1819	0	0	0	0						
1920	0	0	0	0						
2021	0	0	0	0						
2122	0	0	0	0						
2223	0	0	0	0						
2324	0	0	0	0						
2425										
2526										
2627										
2728										
2829										
2930										

Observer's Name (Print)  
**GARY KUBERSKI**

Observer's Signature

Date  
**8/22/05**