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June 15, 2012

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DIVISION OF AIR
RESOURCE MANAGEMENT

Mr. Jeff Koerner, P.E.
Administrator, Office of Permitting and Compliance
Florida Department of Environmental Protection
Division of Air Resource Management
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301

Project No. 1010025-019-AC

Re: Seminole Electric Cooperative, Inc.
Seminole Generating Station Units 1 and 2

Request for Permit Modification - Removal of Petroleum Coke, New SO<sub>2</sub> Limit

Dear Mr. Koerner:

Seminole Electric Cooperative, Inc. (SECI) operates two solid fuel-fired electrical generating units (EGUs) at its Seminole Generating Station (SGS) located near Palatka, Putnam County, Florida. Operation of SGS Units 1 and 2 is currently authorized by Florida Department of Environmental Protection (FDEP) Title V Final Permit No. 1070025-017-AV, issued with an effective date of January 1, 2010, and an expiration date of December 31, 2014.

Pursuant to a request by FDEP, SECI submitted a Reasonable Progress analysis for SGS Units 1 and 2 to the Department on May 30, 2012. This analysis indicated that SECI would seek a permit modification to remove petroleum coke as an approved fuel for Units 1 and 2. Removal of petroleum coke as an authorized fuel will reduce the potential sulfur dioxide (SO<sub>2</sub>) loading to the flue gas desulfurization (FGD) control systems resulting in lower potential outlet SO<sub>2</sub> emissions rates.

In its RP submittal, SECI also committed to upgrading the existing flue gas desulfurization (FGD) emissions controls to achieve a minimum sulfur dioxide (SO<sub>2</sub>) removal efficiency of 95 percent or, alternatively, an equivalent SO<sub>2</sub> emissions rate of no more than 0.25 pound per million British thermal units (lb/MMBtu) of SO<sub>2</sub> on a 30-day rolling average basis for both limits. The upgrades to the existing FGD emissions controls will be completed no later than March 1, 2016. Since Seminole is making these commitments as a cooperative effort to assist in the development of FDEP's Regional Haze SIP, however, the removal of the authority to burn petcoke and the upgrades to the FGD system should only become effective after EPA approves FDEP's Regional Haze SIP in this regard.

Accordingly, SECI requests revisions to the following permit conditions of Title V Air Operation Permit No. 1070025-017-AV and concurrently to previously issued Air -Construction Permit No. Air Construction Permit No. PSD-FL-018(A), which would only become effective after EPA approves FDEP's Haze SIP:

### (1) Title V Permit Condition A.2 - Allowable Fuels

**A.2.** Methods of Operation – Allowable Fuels.

a. The units fire coal as the primary fuel.

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b. The units may fire a blend of coal with a maximum of up to 30% petroleum coke by weight not to exceed 186,000 pounds of petroleum coke per hour averaged over 24 hours. The maximum sulfur content of petroleum coke shall not exceed 7.0% by weight, dry basis.

be. The units may fire No. 2 fuel oil.

 $\underline{cd}$ . (1) through (4) – no change

[Rule 62-213.410(1), F.A.C.; 40 CFR 271.20(e)(3); 40 CFR 279.11; PSD-FL-018(A); and Application No.1070025-013-AV]

(2) <u>Title V Permit Condition A.9 – NO<sub>x</sub> Emissions – Prorated Coal with Petroleum Coke</u>

A.9. NOx Emissions - Prorated Coal with Petroleum Coke.

Delete Condition A.9.

- (3) Title V Permit Condition A.12 SO<sub>2</sub> Emissions Coal
  - c. 95 percent removal or, alternatively, an equivalent SO<sub>2</sub> emissions rate of no more than 0.25 pound per million British thermal units (lb/MMBtu) of SO<sub>2</sub> on a 30-day rolling average basis for both limits. These limits become effective on March 16, 2016, and only if EPA approves Florida's Regional Haze SIP in this regard.
- (4) Title V Permit Condition A.15 SO<sub>2</sub> Emissions Prorated Coal with Petroleum Coke

A.15. SO<sub>2</sub> Emissions - Prorated Coal with Petroleum Coke.

Delete Condition A.15.

- (5) <u>Title V Permit Condition A.34 Reporting Schedule</u>
  - A.34. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Conditions	
Quarterly Excess Emissions Report, NSPS Subpart A and Da	Within 30 days following calendar quarter	Appendices NSA and NSDa	
Annual Summary of On- Specification Used Oil	April 1st of each year	A.36	
Annual Report of Maximum Petroleum Coke in Coal Blend	April 1st of each year	A.37	

(6) <u>Title V Permit Condition A.37 – Petroleum Coke – Reporting and Recordkeeping</u>

A.37. Petroleum Coke - Reporting and Recordkeeping.

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Delete Condition A.37.

In support of this request for operating and construction permit condition revisions, a completed Application for Air Permit - Long Form (Application Information section only, including Responsible Official and Professional Engineer certifications) is enclosed.

Please contact Juan Ramirez (813) 739-1219 if there are any questions regarding this permit revision request.

Sincerely,

William M. Roddy

Director of Environmental Affairs

without M. A.M.

Attachments:

Seminole Generating Station--Application for Air Permit - Long Form



# Department of Environmental Protection

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# Division of Air Resource Management DIVISION OF AIR RESOURCE MANAGEMENT APPLICATION FOR AIR PERMIT - LONG FORM

#### I. APPLICATION INFORMATION

Air Construction Permit – Use this form to apply for an air construction permit:

- For any required purpose at a facility operating under a federally enforceable state air operation permit (FESOP) or Title V air operation permit;
- For a proposed project subject to prevention of significant deterioration (PSD) review, nonattainment new source review, or maximum achievable control technology (MACT);
- To assume a restriction on the potential emissions of one or more pollutants to escape a requirement such as PSD review, nonattainment new source review, MACT, or Title V; or
- 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

1. Facility Owner/Company Name: Seminole Electric Cooperative, Inc.

• An initial, revised, or renewal Title V air operation permit.

# To ensure accuracy, please see form instructions.

# **Identification of Facility**

2.	Site Name: Seminole Generating Station
3.	Facility Identification Number: 1070025
4.	Facility Location:
	Street Address or Other Locator: 890 North U.S. Highway 17
	City: Palatka County: Putnam Zip Code: 32177-9647
5.	Relocatable Facility?  6. Existing Title V Permitted Facility?
	☐ Yes ☐ No ☐ Yes ☐ No
Ar	plication Contact
1.	Application Contact Name: Juan Ramirez, Senior Environmental Engineer
2.	Application Contact Mailing Address
	Organization/Firm: Seminole Electric Cooperative, Inc.
	Street Address: 16313 North Dale Mabry Highway
	City: Tampa State: FL Zip Code: 33618-1427
3.	Application Contact Telephone Numbers
	Telephone: (813) 739-1219 ext. Fax: (813) 264-7906
4.	Application Contact Email Address: jramirez@seminole-electric.com
Ap	plication Processing Information (DEP Use)
1.	Date of Receipt of Application: 6-29-12 3. PSD Number (if applicable):
2.	Project Number(s): 10700 25 ()14 AC-4. Siting Number (if applicable):

1

DEP Form No. 62-210.900(1) – Form

Effective: 3/11/2010

#### Purpose of Application

This application for air permit is being 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**

Operation of the Seminole Generating Station (SGS) is currently authorized by Florida Department of Environmental Protection Title V Air Operation Permit No. 1070025-017-AV issued with an effective date of January 1, 2010 and an expiration date of December 31, 2014.

This application requests revisions to current Title V air operation permit conditions and to previously issued Air Construction Permit No. PSD-FL-018(A) to remove petroleum coke as an authorized fuel for SGS Units 1 and 2 and request an additional  $SO_2$  emission limit for coal.

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DEP Form No. 62-210.900(1) – Form

Effective: 3/11/2010

# **Scope of Application**

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Processing Fee
001	Steam Electric Generator No. 1	N/A	N/A
002	Steam Electric Generator No. 2	N/A	N/A
			-
			·

Application Processing Fee	*
Check one: Attached - Amount: \$	Not Applicable
Note: SGS has been issued Final Title V Operation Perapplication processing fee is not required pursuant to	

3

Effective: 3/16/08

Owner/Authorized Representative Statement NOT APPLICABLE
Complete if applying for an air construction permit or an initial FESOP.

1.	Owner/Authorized Representative	Name:	
2.	Owner/Authorized Representative Organization/Firm:	e Mailing Address	
	Street Address:		
	City:	State:	Zip Code:
3.	Owner/Authorized Representative	Telephone Number	S
	Telephone: ( ) - ext.	Fax: ( ) -	
4.	Owner/Authorized Representative	E-mail Address:	
5.	Owner/Authorized Representative	Statement:	
	this air permit application. I here reasonable inquiry, that the statem complete and that, to the best of mapplication are based upon reason pollutant emissions units and air pwill be operated and maintained sof air pollutant emissions found in Department of Environmental Pro	by certify, based on ments made in this apply knowledge, any estimable techniques for collution control equivalent to as to comply with a the statutes of the State to the facility is sufficted the facility is sufficted the department of the department.	stimates of emissions reported in this calculating emissions. The air sipment described in this application all applicable standards for control state of Florida and rules of the s thereof and all other requirements bject. I understand that a permit, if out authorization from the
	Signature		Date

DEP Form No. 62-210.900(1) – Form

Effective: 3/16/08 4

# **Application Responsible Official Certification**

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

metal need not be the primary	<u> </u>	
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Application Responsible Of options, as applicable):	ficial Qualification (Chec	k one or more of the following
charge of a principal business decision-making functions for person if the representative is a manufacturing, production, or Chapter 62-213, F.A.C.  For a partnership or sole propr  For a municipality, county, sta	function, or any other person the corporation, or a duly at responsible for the overall of operating facilities applying dietorship, a general partner of te, federal, or other public a	n who performs similar policy or athorized representative of such peration of one or more for or subject to a permit under or the proprietor, respectively.
<del></del>		R source, or Hg Budget source.
Street Address: 16313 North	h Dale Mabry Highway	
City: Tampa	State: FL	Zip Code: <b>33618-1427</b>
Application Responsible Official Telephone: (813) 739 - 1224	•	264-7906
Application Responsible Officia	l E-mail Address: wmro	ddy@seminole-electric.com
Application Responsible Officia	l Certification:	
permit application. I hereby reasonable inquiry, that the scomplete and that, to the best this application are based up air pollutant emissions units application will be operated standards for control of air p Florida and rules of the Depand all other applicable requisource is subject. I understat transferred without authorizate department upon sale or legation policable requirements to we applicable requirements to we	certify, based on informal statements made in this application of my knowledge, any element on reasonable techniques and air pollution control and maintained so as to collutant emissions found artment of Environmental irements identified in this and that a permit, if grante ation from the departmental transfer of the facility of lity and each emissions uphich they are subject, exceptions of the subject, exceptions are subject, exceptions and the subject, exceptions are subject, exceptions and the subject of the subject, exceptions are subject, exceptions and the subject, exceptions are subject, exceptions are subject, exceptions and the subject of the subject, exceptions are subject, exception	ation and belief formed after oplication are true, accurate and estimates of emissions reported in for calculating emissions. The equipment described in this omply with all applicable in the statutes of the State of Protection and revisions thereof application to which the Title V d by the department, cannot be and I will promptly notify the r any permitted emissions unit.
	Application Responsible Official organization/Firm: Seminole E Street Address: 16313 North City: Tampa  Application Responsible Official Application Responsible Official I, the undersigned, am a responsible inquiry, that the scomplete and that, to the best this application will be operated standards for control of air p Florida and rules of the Department upon sale or legar Finally, I certify that the facia applicable requirements to well applicable requirements applicable requirements to well applicable requirements applicable requirements applicable requirements app	William M. Roddy, Director of Environmental Affair Application Responsible Official Qualification (Checoptions, as applicable):  For a corporation, the president, secretary, treasurer, or violation of a principal business function, or any other person decision-making functions for the corporation, or a duly at person if the representative is responsible for the overall of manufacturing, production, or operating facilities applying Chapter 62-213, F.A.C.  For a partnership or sole proprietorship, a general partner of For a municipality, county, state, federal, or other public a officer or ranking elected official.  The designated representative at an Acid Rain source, CAll Application Responsible Official Mailing Address  Organization/Firm: Seminole Electric Cooperative, Inc. Street Address: 16313 North Dale Mabry Highway  City: Tampa  State: FL  Application Responsible Official Telephone Numbers

DEP Form No. 62-210.900(1) - Form

Effective: 3/16/08

# **Professional Engineer Certification**

1.	Professional Engineer Name: Thomas W. Davis
	Registration Number: 36777
2.	Professional Engineer Mailing Address
	Organization/Firm: Environmental Consulting & Technology, Inc.
	Street Address: 3701 NW 98 <sup>th</sup> Street
	City: Gainesville State: Florida Zip Code: 32606-5004
3.	Professional Engineer Telephone Numbers
	Telephone: (352) 248 - 3351 ext. Fax: (352) 332 - 6722
	Professional Engineer E-mail Address: tdavis@ectinc.com
5.	Professional Engineer Statement:
	I, the undersigned, hereby certify, except as particularly noted herein*, that:
	(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
	(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.
	(3) If the purpose of this application is to obtain a Title $V$ air operation permit (check here $\square$ , 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.
	(4) If the purpose of this application is to obtain an air construction permit (check here [ ], 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 \infty, 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.
	(5) If the purpose of this application is to obtain an initial air operation permit or operation permit
4 = 4	revision or renewal for one or more newly constructed or modified emissions units (check here Siffsh) [ I further certify that, with the exception of any changes detailed as part of this application,
19.00	each such emissions unit has been constructed or modified in substantial accordance with the
	Cinformation given in the corresponding application for air construction permit and with all
N	pravisions, contained in such permit.
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5	Stighature : W = Date
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C*(0A	ttach any exception to certification statement.
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