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August 15, 2012

AUG 17 2012

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

Midule AB110-AC AB111-AV

Re:

Hardee Power Station - Facility ID 0490015

Request for Air Construction Permit – Modification of Permit Conditions

Dear Mr. Koerner:

Project No! 0490015-015-AC /0490015-016-AL

ers, Limited (HPP) Hardee Power State

PSD - 1400 The Hardee Power Partners, Limited (HPP) Hardee Power Station (HPS) is located at 6695 North County Road 663 in Bowling Green, Hardee County, Florida. The HPS is a nominal 370 megawatt (MW) electrical generation facility comprised of: (a) two dual-fuel combined-cycle combustion turbine (CT) and heat recovery steam generator (HRSG) units (Emission Unit ID Nos. 001 and 002), (b) and two dual-fuel simple-cycle CTs (Emission Unit ID Nos. 003 and 005), water treatment facilities, ancillary support equipment, as well as a variety of insignificant and unregulated emission units and activities.

Operation of the HPS is currently authorized by Florida Department of Environmental Protection (FDEP) Title V Air Operation Permit No. 0490015-013-AV, issued with an effective date of January 1, 2010, and an expiration date of December 31, 2014.

HPP requests a revision to the following permit condition of Title V Air Operation Permit No. 0490015-013-AV and concurrently to previously issued Air Construction Permit No. Air Construction Permit No. PSD-FL-140C:

(1) Title V Permit Condition No. B.15 – Annual Performance Tests

B.15. Annual Performance Tests: Annual compliance tests shall be conducted during each federal fiscal year (October 1st to September 30th) for CO and visible emissions from the combustion turbine shall be conducted when firing natural gas. The permittee shall conduct the annual compliance test for each fuel that is fired for more than 400 hours per year in the preceding federal fiscal year. In addition, the permittee shall conduct the annual compliance tests for CO and visible emissions when firing low sulfur distillate oil if low sulfur distillate oil is fired for more than 400 hours in the preceding federal fiscal year. Tests required on an annual basis shall be conducted at least once during each federal fiscal year (October 1st to September 30th). The CEMS data shall be used to demonstrate continuous compliance with the concentration-based NO_x emissions standards. If requested by the Department, the permittee shall determine the NO_x mass emission rate (lb/hour) from CEMS data to demonstrate compliance with the corresponding permit limits. [Rule 62-297.310(7)(a)4., F.A.C. and Permit No. PSD-FL-140C]

Currently, annual performance testing for CT2B is required when firing natural gas regardless of how many hours the CT operated during the prior federal fiscal year. This request to revise Condition B.15. will make annual performance testing requirements for CT2B consistent with those for the remaining HPS CTs; i.e., CT-1A, CT-1B, and CT-2A.

Mr. Jeff Koerner, P.E. Florida Department of Environmental Protection August 7, 2012 Page 2

The Department authorized excess emissions associated with tuning of CT-2B combustion system in correspondence to HPP dated May 6, 2010. As requested in the Department's approval, HPP requests revision of Title V Air Operation Permit No. 0490015-013-AV Condition B.12. as follows:

B.12. Excess Emissions.

- a. Excess Emissions Allowed. Excess emissions resulting from startup, shutdown, or malfunction of the combustion turbine shall be permitted provided that best operational practices are adhered to and the duration of excess emissions shall be minimized. Excess emissions resulting from startup to simple cycle mode shall not exceed one hour. In no case shall excess emissions from startup, shutdown, and malfunction exceed two hours in any calendar day. If excess emissions occur due to malfunction, the owner or operator shall notify the Compliance Authority within one working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and, the actions taken to correct the problem. [Rule 62-210.700, F.A.C. and PSD-FL-140C]
- b. Excess Emissions Prohibited. Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction, shall be prohibited. These emissions shall be included in the calculation of the 24-hour NOx averages for compliance determinations. [Permit No. PSD-FL-140A]
- c. Combustion System Tuning. Excess emissions resulting from combustion system tuning of the combustion turbine shall be permitted provided that best operational practices are adhered to and the duration of excess emissions shall be minimized. Excess emissions shall not exceed a total of 15 hours per tuning session. The FDEP's Southwest District Office shall be notified of the schedule for conducting each tuning session at least 15 days prior to the tuning session. Within 45 days of completing each tuning session, a report summarizing the hourly nitrogen oxides (NO_x) emissions for the tuning session shall be submitted.

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

Please feel free to contact Matt Drennan at (863) 375-3266, Ext. 227 (email at MDrennan@invenergyllc.com) or Tom Davis at (352) 248-3351 (email at tdavis@ectinc.com) if you have any questions regarding this permit conditions revision request.

Sincerely,

Tim Frost Plant Manager

Enclosure

cc: Tom Davis, P.E., ECT

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Department of Environmental Protection

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Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORMRESOURCE MANAGEMENT

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

To ensure accuracy, please see form instructions.

1. Facility Owner/Company Name: Hardee Power Partners 2. Site Name: Hardee Power Station 3. Facility Identification Number: 0490015 4. Facility Location: Street Address or Other Locator: 6695 North County Road 663 City: Bowling Green County: Hardee Zip Code: 33834-6817 5. Relocatable Facility? 6. Existing Title V Permitted Facility?

☐ Yes ⊠ No ⊠ Yes □ No **Application Contact** 1. Application Contact Name: Matt Drennan, Operations Superintendent 2. Application Contact Mailing Address Organization/Firm: Hardee Power Partners Limited Street Address: 6695 North County Road 663 City: Bowling Green State: Florida Zip Code: 33834-6817 3. Application Contact Telephone Numbers... Telephone: (863) 375-3266 ext. 227 Fax: (please email) 4. Application Contact E-mail Address: MDrennan@invenergyllc.com Application Processing Information (DEP Use) 1. Date of Receipt of Application: 8-17-12 3. PSD Number (if applicable):

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

Effective: 3/11/2010

CIUNI 000 1

2. Project Number(s): 0490015-015-AC-4. Siting Number (if applicable):

0490015 -016 -AV

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 Hardee Power Station (HPS) is currently authorized by Florida Department of

Environmental Protection (FDEP) Title V Air Operation Permit No. No. 0490015-013-AV issued with an effective date of January 1, 2010, and an expiration date of December 31, 2014.

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This application requests revisions to a current Title V air operation permit condition and to previously issued Air Construction Permit No. PSD-FL-140C.

Effective: 3/11/2010

Scope of Application

Emissions Unit ID Number	Description of Emissions	Unit	Air Permit Type	Air Permit Processing Fee
005	Combustion Turbine CT	-2B	N/A	N/A
				_
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Application Pro	cessing Fee Attached - Amount: \$	⊠ N	ot Applicable	
Note: HPS has b	peen issued Final Title V Operations	on Permit Nu	mber 049001	5-013-AV. An

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DEP Form No. 62-210.900(1) – Form

Effective: 3/16/08

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

l.	Owner/Authorized Representativ	e Name:	
2.	Owner/Authorized Representativ Organization/Firm:	e Mailing Address	
	Street Address:		
	City:	State:	Zip Code:
3.	Owner/Authorized Representativ	e Telephone Number	S
	Telephone: () - ext.	Fax: () -	
1 .	Owner/Authorized Representativ	e E-mail Address:	
5.	Owner/Authorized Representativ	e Statement:	
	this air permit application. I here reasonable inquiry, that the state complete and that, to the best of application are based upon reason pollutant emissions units and air will be operated and maintained of air pollutant emissions found it. Department of Environmental Pressions	eby certify, based on ments made in this apmy knowledge, any es phable techniques for pollution control eques o as to comply with a the statutes of the Stotection and revisions hich the facility is substituted the transferred with a tify the department	timates of emissions reported in this calculating emissions. The air ipment described in this application all applicable standards for control tate of Florida and rules of the sthereof and all other requirements bject. I understand that a permit, if out authorization from the
	Signature	-	Date

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Effective: 3/16/08

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."

1.	Application Responsible Official Name: Ralph E. Randall, Regional Plant Director
2.	Application Responsible Official Qualification (Check one or more of the following options, as applicable):
	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.
	For a partnership or sole proprietorship, a general partner or the proprietor, respectively. For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.
	The designated representative at an Acid Rain source, CAIR source, or Hg Budget source.
3.	Application Responsible Official Mailing Address: Organization/Firm: Hardee Power Partners Limited
	Street Address: 6695 North County Road 663
	City: Bowling Green State: Florida Zip Code: 33834-6817
	Application Responsible Official Telephone Numbers Telephone: (863) 375-3266 ext. Fax: (863) 375-2092
5.	Application Responsible Official E-mail Address: rrandall@invenergyllc.com
6.	Application Responsible Official Certification:
	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.
	Signature $\frac{8/15/2}{Date}$

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 th 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 \boxtimes , 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
	revision or renewal for one or more newly constructed or modified emissions units (check here (fig. 5), Thursher certify that, with the exception of any changes detailed as part of this application,
28 C	graph 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
	7/16/2012
77 °	Signature OF Date
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<u>, ~;^</u> *^,^	thach, any exception to certification statement.
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DEP Form No. 62-210.900(1) – Form

Effective: 3/16/08 6