## \* \* \* \* \* PCB 2006-122 \* \* \* \* \*

### BEFORE THE ILLINOIS POLLUTION CONTROL BOARD OF THE STATE OF ILLINOIS

SOUTHERN ILLINOIS POWER COOPERATIVE	)	
Rothemuhle Electrostatic Precipitator	)	
	)	
	)	PCB 06-
	)	(Tax Certification)
PROPERTY IDENTIFICATION NUMBER	)	
10-26-200-002	)	

#### **NOTICE**

TO: Dorothy Gunn, Clerk
Illinois Pollution Control Board
State of Illinois Center
100 W. Randolph Street, Suite 11-500
Chicago, Illinois 60601

Richard G. Myott Southern Illinois Power Coop 11543 Lake of Egypt Road Marion, Illinois 62959-8500

Steve Santarelli Illinois Department of Revenue 101 West Jefferson P.O. Box 19033 Springfield, Illinois 62794

PLEASE TAKE NOTICE that I have today filed with the Office of the Pollution Control Board the <u>APPEARANCE and RECOMMENDATION</u> of the Illinois Environmental Protection Agency, a copy of which is herewith served upon the applicant and a representative of the Illinois Department of Revenue.

Respectfully submitted by,
/s/
Robb H. Layman
Assistant Counsel

Date: December 30, 2005

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY 1021 North Grand Avenue East P.O. Box 19276 Springfield, IL 62794-9276 Telephone: (217) 524-9137

## \* \* \* \* \* PCB 2006-122 \* \* \* \* \*

### BEFORE THE ILLINOIS POLLUTION CONTROL BOARD OF THE STATE OF ILLINOIS

)	
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)	PCB 06-
)	(Tax Certification)
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)	
	) ) ) ) ) )

#### **APPEARANCE**

I hereby file my Appearance in this proceeding on behalf of the Illinois Environmental Protection Agency.

Respectfully submitted by,

Robb H. Layman
Assistant Counsel

Date: December 30, 2005

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 North Grand Avenue East

P.O. Box 19276

Springfield, Illinois 62794-9276 Telephone: (217) 524-9137

## \* \* \* \* \* PCB 2006-122 \* \* \* \* \*

## BEFORE THE ILLINOIS POLLUTION CONTROL BOARD OF THE STATE OF ILLINOIS

SOUTHERN ILLINOIS POWER COOPERATIVE	)	
Rothemuhle Electrostatic Precipitator	)	
	)	
	)	PCB 06-
	)	(Tax Certification)
PROPERTY IDENTIFICATION NUMBER	)	
10-26-200-002	)	

#### **RECOMMENDATION**

NOW COMES the ILLINOIS ENVIRONMENTAL PROTECTION AGENCY ("Illinois EPA"), through its attorneys, and pursuant to 35 Ill. Adm. Code 125.204 of the ILLINOIS POLUTION CONTROL BOARD'S ("Board") procedural regulations, files the Illinois EPA's Recommendation in the above-referenced request for tax certification of pollution control facilities. In support thereof, the Illinois EPA states as follows:

- 1. On August 22, 2005, the Illinois EPA received a request and supporting information from SOUTHERN ILLINOIS POWER COOPERATIVE ("SIPC") concerning the proposed tax certification of certain air emission sources and/or equipment located at its power plant in Williamson County, Illinois. A copy of the relevant portions of the application is attached hereto. [Exhibit A].
  - 2. The applicant's address is as follows:

Southern Illinois Power Cooperative 11543 Lake of Egypt Road Marion, Illinois 62959-8500

3. The subject matter of this request consists of the Rothemuhle Electrostatic Precipitator that produces an electric charge through which ash particles from the flue gas of the Unit No. 4 solid fuel coal-fired boiler are collected and removed. The system

# \* \* \* \* PCB 2006-122 \* \* \* \* \*

generally consists of a "gas distribution system, collecting and discharge systems, acoustic horn system, heating, purge air/sealing air system and ash handling system." The device is designed to collect and reduce dust and ash particles, thereby reducing contaminants emitted into the atmosphere.

4. Section 11-10 of the Property Tax Code, 35 ILCS 200/11-10 (2004), defines "pollution control facilities" as:

"any system, method, construction, device or appliance appurtenant thereto, or any portion of any building or equipment, that is designed, constructed, installed or operated for the primary purpose of: (a) eliminating, preventing, or reducing air or water pollution... or (b) treating, pretreating, modifying or disposing of any potential solid, liquid, gaseous pollutant which if released without treatment, pretreatment, modification or disposal might be harmful, detrimental or offensive to human, plant or animal life, or to property."

- 5. Pollution control facilities are entitled to preferential tax treatment, as provided by 35 ILCS 200/11-5 (2004).
- 6. Based on information in the application and the underlying purpose of the Rothemuhle Electrostatic Precipitator to prevent, eliminate or reduce air pollution, it is the Illinois EPA's engineering judgment that the described project and/or equipment may be considered as "pollution control facilities" in accordance with the statutory definition and consistent with the Board's regulations at 35 Ill: Adm. Code 125.200. [Exhibit B].
- 7. Because the Rothemuhle Electrostatic Precipitator satisfies the aforementioned criteria, the Illinois EPA recommends that the Board **grant** the applicant's requested tax certification.

## \* \* \* \* \* PCB 2006-122 \* \* \* \* \*

Respectfully submitted by,

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

/s/ Robb H. Layman Assistant Counsel

DATED: December 30, 2005

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY 1021 North Grand Avenue East P.O. Box 19276 Springfield, Illinois 62794-9276 Telephone: (217) 524-9137

## \* \* \* \* \* PCB 2006-122 \* \* \* \* \*

#### CERTIFICATE OF SERVICE

I hereby certify that on the 30<sup>th</sup> day of December, 2005, I electronically filed the following instruments entitled **NOTICE**, **APPEARANCE** and **RECOMMENDATION** with:

Dorothy Gunn, Clerk Illinois Pollution Control Board 100 West Randolph Street Suite 11-500 Chicago, Illinois 60601

and, further, that I did send a true and correct copy of the same foregoing instruments, by First Class Mail with postage thereon fully paid and deposited into the possession of the United States Postal Service, to:

Steve Santarelli Illinois Department of Revenue 101 West Jefferson P.O. Box 19033 Springfield, Illinois 62794 Richard G. Myott Southern Illinois Power Coop 11543 Lake of Egypt Road Marion, Illinois 62959-8500

/s/\_ Robb H. Layman Assistant Counsel

### PCB 2006-122



August 19, 2005

Mayer, Brown, Rowe & Maw LLP 71 South Wacker Drive Chicago, Illinois 60606-4637

> Main Tel (312) 782-0600 Main Fax (312) 701-7711 www.mayerbrownrowe.com

Patrick J. McNerney Direct Tel (312) 701-7609 Direct Fax (312) 706-8747

pmonemey@mayerbrownrowe.com

#### VIA UPS

Mr. Donald E. Sutton Manager, Permit Section, Bureau of Air Illinois Environmental Protection Agency 1021 N. Grand Ave. East Springfield, IL 62794-9276

Re: Southern Illinois Power Cooperative ("SIPC") Application for Certification of Pollution Control Facility Electrostatic Precipitator

Dear Mr. Sutton:

Enclosed please find an original Application for Certification of Pollution Control Facility of SIPC's existing Electrostatic Precipitator located at the Marion Power Generating Facility in Marion, Illinois. The B&W Rothemuhle Electrostatic Precipitator is a device that is designed and operated primarily to reduce and collect dust and ash particles from the flue gas of solid fuel coal-fired generating unit 4 located at the Facility and therefore qualifies as a pollution control device under Section 11-10 of the Property Tax Code (35 ILCS 200/11-10 West 2005).

On behalf of SIPC, we respectfully request that you cause your staff to review the enclosed Application and recommend certification of the Electrostatic Precipitator as a pollution control device to the Illinois Pollution Control Board.

Thank you for your attention to this matter. Please contact me if you need any additional information or documentation to support the enclosed Application.

Very truly yours.

Exhibit A

PJM:mg

RECEIVED

Enclosure

AUG 2 2 2005

cc: Ms. Stephanie L. Oxford

IEPA - DAPC - SPFLD

Berlin Brussels Charlotte Chicago Cologne Frankfurt Houston London L Independent Mexico City Correspondent: Jaur.

Mayer, Brown, Rowe & Maw LLP operates in combination with our associated English limited liability partnership in the offices listed above.

\* \* \* \* \* PCB 2006-122 \* \* \* \* \*

### SOUTHERN ILLINOIS POWER COOPERATIVE

**Application for Certification (Property Tax Treatment) Pollution Control Facility** 

**B&W** Rothemuhle Electrostatic Precipitator

Mayer, Brown, Rowe & Maw LLP 71 South Wacker Drive Chicago, IL 60606

### \* \* \* \* \* PCB 2006-122 \* \* \* \* \*

APPLICATION FOR CERTIFICATION (PROPERTY TAX TREATMENT)
POLLUTION CONTROL FACILITY
AIR WATER

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY P. O. Box 19276, Springfield, IL 62794-9276 This Agency is authorized to request this information under Illinois Revised Statues, 1979, Chapter, 120, Section 502a-5. Disclosure of this information is voluntary. However, failure to comply could prevent your application from being processed or could result in denial of your application for certification.

	FOR AGENCY USE	
File No.	Date Received Certification I	No. Date
Sec. A	Company Name Southern Illinois Power Cooperative	2
. }	Person Authorized to Receive Certification	Person to Contact for Additional Details
· ·	Mr. Richard G. Myott	Mr. Patrick J. McNerney
. 1	Street Address	Street Address
	11543 Lake of Egypt Road	71 S. Wacker Drive
74	Municipality, State & Zip Code Marion, IL 62959-8500	Municipality, State & Zip Code Chicago, IL 60606
APPLICANT	Telephone Number (618) 964-1448	Telephone-Mumber 09
	Location of Facility	Municipality Township
·	Quarter Section Township Range 26 105 2E	Marion
	Street Address 11543 Lake of Egypt Road	County Book Number Williamson
	Property Identification Number	Parcel Number
	10-26-200-002	
Sec. B	Nature of Operations Conducted at the Above Location Southern Illinois Power Cooperative	("SIPC") generates electricity
,	through the process of carbon combu	
	through the process of carbon comba	301011
ÿ.,		
CTURII	Water Pollution Control Construction Permit No.	Date Issued
MANUFACTURING OPERATIONS	NPDES PERMIT No.	Date Issued Expiration Date
3ē !	Air Pollution Control Construction Permit No. C 4 10 052 (See Exhibit A attached)	Date Issued December 10, 1975
	Air Pollution Control Operating Permit No.	Date Issued
Sec. C	Describe Unit Process	
	See narrative description of Unit Pr	ocess attached as Exhibit B
_	See Hallacive description of	
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ANUFACTURING PROCESS	Materials Used in Process	
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Sec. D	Describe Pollution Abatement Control Facility	
	See narrative description of Electro	ostatic Precipitator as Exhibit C
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POLLUTION CONTROL FACULTY DESCRIPTION	·	AUG 22 2005
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IL 532-0222 APC 151 (Rev. 8/00) Tax Certification for Pollution Control Facilities
Page 1 of 2
8/00

## \* \* \* \* \* PCB 2006-122 \* \* \* \* \*

Sec. E	(1) Na	ture of Contaminants or Pollutar	nts				
ACILITY - CONTAMINANTS	Material Retained, Captured or Recovered						
	Contar	ninant or Pollutant	DESCRIPTION		DISPOSAL OR USE		
	Ash, dust		Ash, dust			deposited	
			particulate	into st	orage	hoppers	
			matter				
				<u> </u>			
	(0) 0	W. 2. (14/		<u></u>			
٦. ١.	(2) Pol	nt(s) of Waste Water Discharge					
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				Yes X	1140		
		Date installation completed	status of installation	on date of a			
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Š.	<del>``</del>		NSIDERED REAL PROPERTY:		\$	0	
SNI .						<del>- 0</del>	
N			AL INCOME OF CONTROL FACILITY	:	\$		
22	,		INCOME OF CONTROL FACILITY:		\$	U	
		. PERCENTAGE CONTROL FA	CILITY BEARS TO WHOLE FACILITY	VALUE:	%		
SIGNATURE 38	knowled Illimois	dge, is true and correct. The facilities of the	ccordance with the Illinois Property Tales claimed herein are spollution control				
	Signat	ura U	Title				
	0.7	OI 6	11/16				
Sec. G			CTIONS FOR COMPILING AND FILING AF	PLICATION	- <u></u>		
	General water of	INSTRUC Separate applications must be comp perations are related, file two application	CTIONS FOR COMPILING AND FILING AF deted for each control facility claimed. Do ns. If attachments are needed, record them	not mix types ( n consecutively	on an inde	x sheet.	
Sec. G	General	INSTRUCT: Separate applications must be comporations are related, file two application information refers to applicant as list facilities. Define facility location by:	CTIONS FOR COMPILING AND FILING AF	not mix types ( n consecutively contacted for fi map location is	on an inde	x sheet.	
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\*Completion of this section is not an acknowledgment that the property constitutes real property for ad valorem property tax purposes.

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P. 02/03

Telephone217/782-2113

alianmille :

Richard H. Brichland, Director



## Hinvingonumæmtan IPreatæction

2200 Churchill Road, Springfield, Illinois 62706 A COMPINED

December 10, 1975

SOUTHERN ILLINOIS POWER COOPERATIVE, INC.

Route 4

Marlon, Illinois 62959

Attention:

Mr. Thomas Clevenger Goneral Manager

Reference

Application No. - C 4 10 052

I. D. No. - 199 856 AAC #4 STM GN

Received - November 7, 1975

Construction of - Steam-Blockric Generating Unit #4

Location - Route 4

Marion, Illinois

County Williamson

Goutlemen:

Permit is hereby granted to construct the above-referenced equipment. This permit is granted subject to the following conditions:

- 1. Standard conditions attached herete and incorporated herein by reference.
- 2. The following special condition:
  - a. Within 30 days of commencement of operation, the particulate matter concentrations in the offluent stream shall be measured by an approved independent testing service. The measurements must be conducted using the procedures described in the "Stack Sampling Manual Methods and Procedures," as filed by the Agency, pursuant to the PCB Regs., Chapter 2, Part I, Rule 106(b), with the Secretary of State's Office on June 16, 1975 and as revised from time to time. The results of these tests, in triplicate, will be forwarded to the Agency immediately after the test results are compiled and finalized. The Agency may witness these tests. The Agency's regional office:

Environmental Protection Agency Division of Air Pollution Control 2209 W. Main Street Marion, Illinois 62959

is to be notified a minimum of thirty (30) days prior to the expected date of these tests and further notified a minimum

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Southern Highest Power Co Os Marlon, Its

## AUG-18-05 THU 03:14 PM S I PCB 2006-A1226189641867

P. 03/03

SOUTHERN ILLINOIS POWER COOPERATIVE, INC. -2-

December 10, 1975

of five (5) working days prior to the test of the exact date, time and place of these tests.

Within 30 days of commencement of operation, the sulfur dioxide concentrations in the effluent stream shall be measured, using the procedures described in the Rule 204(g)(1) of Chapter 2, Air Pollution Rules and Regulations of Illinois Pollution Control Board, by an approved independent testing service. The results of these tests, in triplicate, will be forwarded to the Agency immediately after the test results are compiled and finalized. The Agency may witness these tests. The Agency is to be notified a minimum of thirty (30) days prior to the expected date of these tests and further notified a minimum of five (5) working days prior to the test of the exact date, time and place of these tests.

Very truly yours

Keith J. Conklin, P.E. Manager, Permit Section

Division of Air Pollution Control

ORD:br

\* \* \* \* \* PCB 2006-122 \* \* \* \* \*

Exhibit B

#### Section C - Describe Unit Process

Southern Illinois Power Cooperative ("SIPC") operates a B&W Rothemuhle Electrostatic Precipitator which produces an electric charge on ash particles to be collected from flue gas produced in the operation of SIPC's Unit-4 solid fuel coal-fired boiler. The Electrostatic Precipitator consists of a gas distribution system, collecting and discharge systems, acoustic horn system, heating, purge air/sealing air system and ash handling system.

## \* \* \* \* \* PCB 2006-122 \* \* \* \* \*

Exhibit C

#### Section D - Describe Pollution Abatement Control Facility

Southern Illinois Power Cooperative ("SIPC") formerly operated four solid fuel coal-fired generating units. SIPC replaced coal-fired units 1-3 with a new Circulating Fluidized Bed Boiler ("CFB"), which was certified as a low sulfur dioxide emission coal fueled device, as defined in Title 25, Subtitle A, Chapter 1, Section 125.200(b)(1) of the Illinois Administrative Code and in Section 11-40 of the Illinois Property Tax Code (35 ILCS 200/11-40 West 2005), on January 6, 2005. The remaining solid fuel coal-fired generating unit ("Unit 4") includes three systems that are designed and utilized primarily to reduce or eliminate emissions of pollutants into the air: (1) a Selective Catalytic Reduction ("SCR") system on existing Unit 4 to significantly reduce nitrogen oxide (NOx) emissions (associated with acid rain) from the existing steam boiler; (2) a scrubber designed to remove sulfur dioxide (SO<sub>2</sub>) from the flue gas of Unit 4; and (3) a B&W Rothemuhle Electrostatic Precipitator ("Precipitator") designed to reduce and collect dust and ash particles from the flue gas of Unit 4.

#### Electrostatic Precipitator Overview

The Precipitator services Unit 4 as a pollution control device by producing an electric charge on the particles (including ash) to be collected and propels them by electrostatic forces to the collecting plates. Precipitator operation involves four basic steps:

- 1. An intense, discharging field is maintained between the discharge electrode and the collecting plates.
- 2. The carrier gases are ionized by the intense, discharging field. These gas ions, in turn, charge the entrained particles.
- 3. The negatively charged particles, still in the presence of an electrostatic field, are attracted to the positively (grounded) charged collecting plates.
- 4. The collected dust is discharged into storage hoppers through use of acoustic horn.
- 5. Collected ash is removed from storage hoppers by a pneumatic conveying system and discharged into a large storage silo.

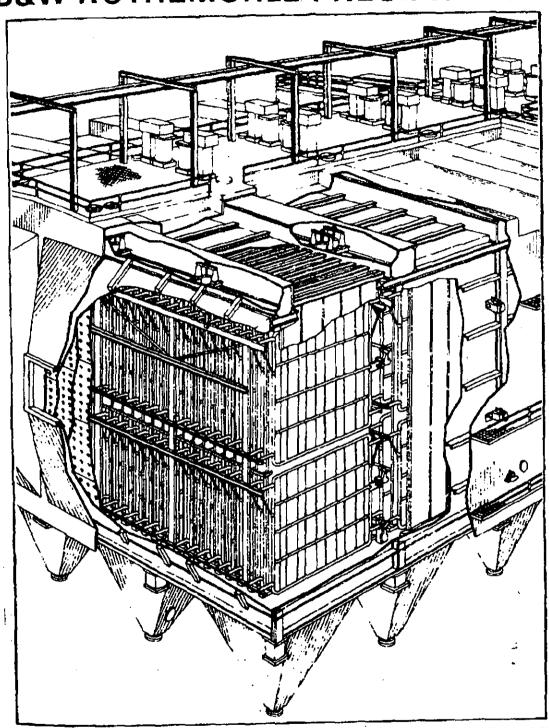
To establish the electrostatic field, voltages are stepped up to high average voltages in a transformer and then rectified to a negative unfiltered D.C. voltage. This negative power is connected to a series of high voltage electrodes which are electrically insulated from the grounded precipitator casing and collecting plates. The discharge electrodes are uniformly spaced halfway between the collecting plates thereby developing an electrostatic field perpendicular to gas flow.

The Electrostatic Precipitation consists of a gas distribution system, collecting system, discharge system, acoustic horn system, heating system, purge air/sealing air system and ash handling system.

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# \* \* \* \* Properting Of the Properties of the state of the

## **B&W ROTHEMUHLE PRECIPITATOR**



Babcock & Wilcox Power Generation Group

### \* \* \* \* \* Illinois Enviro



1021 NORTH GRAND AVENUE EAST, P.O. BOX 19506, SPRINGFIELD, ILLINOIS 62794-9506 -- ( 217) 782-2113 ROD R. BLAGOJEVICH, GOVERNOR DOUGLAS P. SCOTT, DIRECTOR

#### Memorandum

#### **Technical Recommendation for Tax Certification Approval**

Date:

October 27, 2005

To:

Robb Layman

From:

Don Sutton

Subject: Southern Illinois Power Cooperative TC-05-08-22B

This Agency received a request on August 22, 2005 from Southern Illinois Power Cooperative for a Rothemuhle Electrostatic Precipitator pursuant to 35 III. Adm. Code 125.200(b)(1). I offer the following recommendation.

The air pollution control facilities in this request include the following:

The Rothemuhle Electrostatic Precipitator is a device which reduces and collects dust and ash particles from the flue gas of solid fuel coal-fired generating unit 4. Because the primary purpose of this unit is to reduce or eliminate air pollution, it is certified as a pollution control facility.

This facility is located at 11543 Lake of Egypt Rd, Marion The property identification number is 10-26-200-002

Based on the information included in this submittal, it is my engineering Judgement that the proposed facility may be considered "Pollution Control Facilities" under 35 IAC 125.200(a), with the primary purpose of eliminating, preventing, or reducing air pollution. or as otherwise provided in this section, and therefore eligible for tax certification from the Illinois Pollution Control Board. Therefore, it is my recommendation that the Board issue the requested tax Certification for this facility.

