

**South Point Biomass Generation, LLC
65 Avenue of the Champions
Nicholasville, Kentucky 40356**

January 15, 2010

Ms. Anne Goodge
Energy & Environment Department
Public Utilities Commission of Ohio
180 E. Broad Street
Columbus, OH 43215

RE: **Case No. 09-1043-EL-REN
South Point Biomass Generation Plant**

RESPONSES TO THE FIRST SET OF STAFF INTERROGATORIES

Question 1: Is the generation facility, including the seven stoker boilers and the steam turbine generator, a new facility or a facility used previously that will be modified or retrofitted to use a qualified renewable resource? If the facility is being modified, please provide the original placed-in-service date of the facility, and check the appropriate option in H, in addition to the projected in-service date indicated.

Answer 1: South Point Biomass Generation LLC (SPBG) will be purchasing and constructing seven new stoker boilers and a new steam turbine generator and related new equipment. The site itself is a "brownfields" location with a long history of industrial activity including cogeneration. SPBG will utilize some of the existing site infrastructure. Originally, on the site there was a generation facility built and placed into service circa 1942 to supply steam and electricity to a large industrial complex for manufacturing explosives for the U.S. war effort. Subsequently, the explosives manufacturing facilities were decommissioned and removed but the power generation plant was retained. In the 1980s, an ethanol plant was built on the manufacturing site and its steam and electric loads were served by the generation facility. The ethanol plant was subsequently decommissioned and removed. By closing and disassembling the then existing generation facility, SPBG received from the EPA air emission rights which it used to permit the new generation facility.

Question 2: If the facility will be modified or retrofitted, please provide a detailed description of all of the modifications or retrofits that will be made to the facility, equipment, or process, including fuel use handling and processing, that will render it eligible for consideration as a qualified renewable energy resource. Please include this description as an exhibit and identify the subject matter in the heading of the exhibit.

Answer 2: SPBG will be making use of part of the abandoned buildings, but all of the equipment required to make steam from the waste wood, the environmental equipment to control the emissions from boilers and the electric generators themselves are new. A list of the buildings and structures that will remain on the property and will house the new equipment are listed below in Exhibit A. None of the steam production or generation equipment used by the ethanol or munitions plant will be used to make steam or generate electricity.

Question 3: In G.1, please include a description of the biomass fuel handling, processing, and storage.

Answer 3: See Exhibit A

Question 4: What is the expected heat content (BTU/lb.), moisture, ash and sulfur content of the biomass resource, and what is the source and process for determining these values?

Answer 4: The heat content of the wood waste will fall in a range of 5,500 Btu/lb HHV (at 33.1% by weight moisture and 1.36% by weight ash) to 4,960 Btu/lb HHV (at 40% by weight moisture and 1.22% by weight ash). Sulfur content will be approximately 0.02% by weight.

Fuel specifications for boiler purchase are:

Table 1 Wood Fuel Analysis

	Constituent	Guarantee Fuel	Alternate Fuel
		Percent by Weight	Percent by Weight
1	Carbon	34.19	30.63
2	Hydrogen	4.29	3.85
3	Oxygen	26.74	23.99
4	Nitrogen	0.29	0.26
5	Sulfur	0.02	0.02
6	Chlorine	0.01	0.01
7	Water	33.10	40.00
8	Ash	1.36	1.22
9	Total	100	100
10	Fuel HHV	5,531 Btu/lb	4,961 Btu/lb

Table 2 Required Wood Size Distribution Range

WOOD FUEL – SIZE DISTRIBUTION (at inlet to fuel distributors on each boiler)	
MESH SIZE - INCHES	RANGE WEIGHT % PASSED
3	100
2	80 - 100
1	65 - 85
1/2	40 - 60
1/4	20 - 40
1/8	10 - 30
1/16	5 - 20

SPBG has performed sampling of fuel from committed resources to determine fuel characteristics. Once operational, the project will utilize a sampling and testing program to ensure fuel specifications are consistent with the boiler requirements.

Question 5: Please describe the content (fully characterize the fuel material) and sources of the biomass resource.

Answer 5: The biomass to be used in the Project will consist of wood waste from electric transmission line right-of-way clearing, forest clearing waste and lumber mill waste. A small amount of the wood waste will include sawdust but most will be chipped to 3" top size. The logging and forestry products industries, and tree trimming and coal mining operations in the tri-state (Ohio, Kentucky and West Virginia) region produce abundant available wood waste residue for which there is little alternative use. Independent expert consultants have confirmed that the amount of wood waste in the vicinity is consistent with the supply needs of the Project over the expected useful life of the Project.

In order to source fuel supply, the Project plans to utilize a combination of wood waste supply contracts with local suppliers, existing stockpiles of wood waste, as well as the commercial opportunities offered by the activities of coal producers and timber management organizations. The Project's fuel plan provides for a reliable contracted supply, anchored around a 5-year renewable supply contract with a major utility right-of-way clearing contractor for approximately 45% of projected annual usage, supplemented by 30-40 additional supply contracts.

To date SPBG has entered into wood waste agreements with approximately 30 independent companies, local businesses and municipalities to provide wood waste to the Project. Major coal producers in the region have indicated a willingness to enter arrangements to grant the SPBG access to mine timber clearing operations for wood waste once commercial timber harvesting on their properties has been completed. In addition, the Project is pursuing wood waste supply arrangements with timber improvement management organizations (TIMOs), and landowners. Another 98 potential suppliers, located in the Tri-State Area (with many in close proximity to the Project) and producing approximately 25,000 tons of wood waste weekly have also been identified as replacement or future sources of wood waste resource.

Question 6: Please indicate the frequency with which the generation (MWh) of the renewable biomass resource will be calculated and reported to the GATS tracking agency.

The PJM GATS system automatically uploads generation data from PJM Market Settlements on a monthly basis. The data is sourced directly from facility meters. The Project will be directly connected to the PJM interconnect and therefore generation data will automatically be uploaded to GATS by the 10th day of the following calendar month. Any other variable data that the system may require but does not automatically upload will be self reported on a monthly basis.

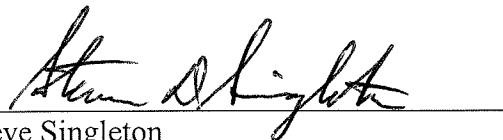
Question 7: Please indicate the status of the siting and environmental permits that are required for the facility.

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Answer 7: The material air emissions and water discharge permits necessary to construct the Project have been obtained. The Ohio EPA Permit to Install (“PTI”) related to air emissions was originally issued on July 15, 1998 and most recently extended on October 3, 2007. The Ohio EPA National Pollutant Discharge Elimination System (“NPDES”) permit related to wastewater discharge was issued March 3, 2005 and extended in September 2009. A separate NPDES permit related to storm water associated with construction activity was issued on September 2, 2008.

Attestation

1. I am the duly authorized representative of South Point Biomass Generation Plant.
2. I have personally examined and am familiar with all information contained in the foregoing responses, including any exhibits and attachments, and that based upon my inquiry of those persons immediately responsible for obtaining the information contained in the responses; I believe that the information is true, accurate and complete.
3. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.



Steve Singleton
President, South Point power Generation, LLC
January 8, 2010

EXHIBIT A

DESCRIPTION OF FACILITY MODIFICATIONS

The power plant originally consisted of seven coal-fired boilers and two 9,000 kW steam turbine generators and associated auxiliaries in a powerhouse structure. In the 1980s, a new baghouse and 300 foot high chimney were added for pollution control. Equipment was present for receiving coal and delivering it to the boilers. All of this original equipment except the chimney either has been or will be demolished and will not be reused in the new facility.

The following major items will be retained and used in the new facility:

1. The main powerhouse structure will become the new boiler building. This will be stripped of old siding and roofing. The height will be extended to accommodate seven new wood waste fired boilers. New siding and roofing will be provided and certain new plant equipment will be installed as discussed below.
2. Existing coal bins will be removed and new conveyors, bins and feeders installed for delivering wood chips to the boilers.
3. A single existing one (1) million gallon elevated water storage tank will be cleaned and piping added to serve as storage for treated raw water from the Ohio River. Some new equipment will be installed in small buildings adjacent to the tank.
4. An ash silo will be cleaned and new equipment installed for handling fly ash from the new boilers and Air Quality Control System (AQCS.)
5. The new wood waste fired boilers will exhaust flue gas through the new AQCS and into the existing 300 foot high chimney. The chimney itself requires only minor repair to the brickwork, upgrading and reconnection of aircraft warning lights and installation of connections for emission monitoring equipment required under the Facility's Air Permit.
6. A large exists on the property. This was not a part of the former power plant but was used in the past to store ammonium nitrate and feed material for the ethanol plant. This building may be used for storing some of the drier wood waste fuel for the Project using mobile material handling equipment.
7. Existing Ohio River intake and outfall structures.

Except for the reuse of existing items discussed above, the power plant will be comprised of new equipment, piping, wiring and control systems. New equipment includes:

1. New fuel handling system as described in separate section below.
2. Seven (7) new pinhole grate single drum boilers, each rated at about 230,000 lb/hr of steam at 1400 psig, 900F with forced draft and induced draft fans.
3. Air Quality Control system (AQCS) including sorbent (Trona) injection for each boiler, 3 Electrostatic Precipitators (ESPs), catalyst tower (with CO oxidizing catalyst and Selective Catalytic Reduction using ammonia), baghouse and associated flue gas ductwork.

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4. Flue gas Heat Transfer Fluid (HTF) heat recovery system with Heat Recovery Unit, seven (7) combustion air heaters (one for each boiler), pumps and expansion tank.
 5. Continuous Emission Monitoring System.
 6. Bottom ash and fly ash collection, storage and truck loading systems.
 7. One (1) new Steam Turbine Generator rated at about 200 MWe in a new turbine building with bridge crane.
 8. One (1) condenser with wet cooling tower and cooling water pumps.
 9. Condensate pumps and boiler feedwater pumps.
 10. Low pressure feedwater heaters, deaerator and high pressure feedwater heaters.
 11. Boiler feedwater demineralization system with makeup water storage tank.
 12. Boiler feedwater and cooling water chemical injection systems.
 13. New river water pumps and screens with buried pipeline approximately 2,000 feet to site.
 14. Clarifier, thickener and belt press for raw (Ohio River) water treatment.
 15. Fire pump skid with diesel, electric and jockey pumps.
 16. 18 kV generator breaker, step-up transformer (18/138 kV) and 138 kV switch.
 17. 138 kV 3 breaker ring bus switchyard.
 18. Approximately one mile of double circuit 138 kV transmission line for interconnection to existing grid.
 19. Two (2) 18/4.16 kV plant auxiliary transformers.
 20. Plant electrical distribution transformers, switchgear, Variable Frequency Drives (VFDs), motor control centers, lighting panels, etc.
 21. Standby diesel generator, batteries and Uninterruptible Power Supply (UPS) system.
 22. Distributed Control System.
 23. Building and control room HVAC systems.
 24. Wastewater treatment/fuel storage area runoff ponds.

BIOMASS FUEL HANDLING, PROCESSING AND STORAGE

The wood waste receiving, handling and forwarding system is designed with redundant trains and spare capacity to insure reliable operation. The system includes the following major component:

1. Weighing and sampling system
2. Four (4) truck dumpers
3. Two (2) fuel receiving hoppers with power spike rolls to maintain material flow
4. Disc screens and magnets to remove oversize material and metals
5. Belt scales
6. Two (2) sets of conveyors to transfer fuel from the hoppers to the storage yard
7. Two (2) fuel yard stackout conveyors with trippers
8. Two fuel yard underpile drag chain reclaimers
9. Two (2) sets of 100% capacity conveyors from the reclaimers to the top of the boiler building

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10. Chute and diverter arrangement at the top of the boiler building to feed two (2) conveyors supplying the north and south boilers
 11. Seven (7) Kamengo bins with moving hole feeders to forward a measured fuel flow to each boiler
 12. Each boiler scope includes four (4) air distributor feeders to distribute fuel across the pinhole grate
 13. Dust control and fire protection
 14. Foundations and support structures
 15. Electrical power distribution
 16. Instrumentation and control systems

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Case No(s). 09-1043-EL-REN

Summary: Response Responses of South Point Biomass Generation Plant to the First Set of Staff Interrogatories electronically filed by Howard Petricoff on behalf of South Point Biomass Generation, LLC