

Estill County Energy Partners, LLC

Application for Certificate to Construct a
Merchant Electric Generating Facility



Submitted June 11, 2004 to the
Kentucky State Board on Electric
Generation and Transmission Siting

**LAW OFFICES OF
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June 11, 2004

Mr. Mark David Goss, Chairman
Kentucky State Board on Electric Generation and Transmission Siting
211 Sower Boulevard
P.O. Box 615
Frankfort, KY 40602

RE: Application for Certificate to Construct a Merchant Electric Generating Facility in Case No. 2002-00172

Dear Mr. Goss:

Estill County Energy Partners, LLC ("ECEP") proposes to construct a 110 MW electric generating facility in Estill County, Kentucky. A Notice of Intent to File was submitted on May 16, 2002 and ECEP was assigned Case No. 2002-00172.

ECEP is submitting with this letter an original and ten (10) paper copies of an application for a Certificate to Construct a Merchant Electric Generating Facility ("Application") and a certified check in the amount of \$110,000.00 as required by KRS 278.706. The Application will also be filed electronically on this date. This letter should be considered part of the Application.

Please do not hesitate to contact me if you have any questions concerning this Application.

Sincerely,



Lisa E. Underwood
Attorney for Estill County Energy Partners, LLC

Table of Contents

1. Name and Contact Information – KRS 278.706(2)(a)
Contact Person: Lisa Underwood
2. Description of the proposed site – KRS 278.706(2)(b)
Contact Person: Dell Jagers
3. Evidence of public notice – KRS 278.706(2)(c)
Contact Person: Lisa Underwood
4. Statement regarding local ordinances and regulations – KRS 278.706(2)(d)
Contact Person: Gerry Mack
5. Statement regarding set back requirements – KRS 278.706(2)(e).
Contact Person: Dell Jagers
6. Report of public involvement activities – KRS 278.706(2)(f)
Contact Person: Gerry Mack
7. Summary of efforts to locate the proposed facility on a site where existing electric generating facilities are located – KRS 278.706(2)(g)
Contact Person: Gerry Mack
8. Proof of service – KRS 278.706(2)(h)
Contact Person: Lisa Underwood
9. Analysis of the proposed facility’s projected effect on the electricity transmission system in Kentucky – KRS 278.706(2)(i)
Contact Person: Gerry Mack

Estill County Energy Partners, LLC
Application for Certificate to Construct Merchant Electric Generating Facility

- 10.** Analysis of the proposed facility's economic impact on the affected region of the state – KRS 278.706(2)(j)
Contact Person: Lisa Underwood
- 11.** Listing of violations – KRS 278.706(2)(k)
Contact Person: Lisa Underwood
- 12.** Site assessment report – KRS 278.706(2)(l) and KRS 278.708
Contact Person: Dell Jagers
- 13.** List of Permits – KRS 278.704(1)
Contact Person: Gerry Mack

EXHIBITS

- Exhibit A 2 Mile Vicinity Map**
- Exhibit B Site Boundaries**
- Exhibit C Land Use Map**
- Exhibit D 2000 Foot Site Vicinity Map**
- Exhibit E Viewshed Cross-Section Location Map and Viewshed Cross
Sections**
- Exhibit F List of Required Permits**
- Exhibit G Facility Site Layout Drawing**
- Exhibit H Noise Level Study**
- Exhibit I Real Property Value Impact Study**
- Exhibit J Traffic Study**
- Exhibit K Economic Impact Assessment**
- Exhibit L Natural Gas Supply Letter**
- Exhibit M Interconnection Evaluation Study**
- Exhibit N Interconnection Facility Study Report**

Estill County Energy Partners, LLC
Application for Certificate to Construct Merchant Electric Generating Facility

- Exhibit O Interconnection and Operating Agreement**
- Exhibit P Letters to Landowners and Notice to General Public**
- Exhibit Q Local Ordinance Letter from Estill County Judge Executive**
- Exhibit R Proof of Service on Estill County Judge Executive**
- Exhibit S Water Availability Letter**
- Exhibit T Public Involvement Program**
- Exhibit U Transmission Line Corridor**

Estill County Energy Partners, LLC
Application for Certificate to Construct Merchant Electric Generating Facility

- 1. The name, address, and telephone number of the person proposing to construct and own the merchant electric generating facility; – KRS 278.706(2)(a)**

Estill County Energy Partners, LLC
6000 Sulphur Well Road
Lexington, KY 40509
(859) 263-1652
ecep-siting@earthlink.net

The principal contact person for this application is:

Lisa Underwood
314 Holiday Road
Lexington, KY 40502
(869) 269-5487

All other contact persons listed in the Table of Contents should be contacted through the ECEP email address listed above.

- 2. A full description of the proposed site, including a map showing the distance of the proposed site from residential neighborhoods, the nearest residential structures, schools, and public and private parks that are located within a two (2) mile radius of the proposed facility; – KRS 278.706(2)(b)**

2.1 Proposed Electric Generating Facility

Estill County Energy Partners, LLC (“ECEP”) proposes to build a merchant electric generating facility in Estill County, Kentucky. ECEP’s proposed facility (the “Facility”) will be located on the 505 acre site (the “Site”) of a former coal processing plant. The Facility will be constructed on a 28 acre portion of the Site where the former coal processing facility is currently located. The remainder of the Site contains piles of waste coal generated by operation of the former coal processing plant. This on-Site waste coal will be used as a fuel source for the Facility.

The Facility will be nominally rated at 110 MW net and will be primarily fueled with waste coal reclaimed from the Site. ECEP has based the Facility design on conventional proven technologies including a circulating fluidized bed boiler designed for waste coal, a steam turbine generator, condenser, cooling towers, exhaust stack, coal and ash storage and handling equipment, electric transformer and switchgear, emissions control equipment and all necessary balance of plant equipment. The Facility will be designed, constructed and operated to meet all relevant air, water, solid waste and other environmental permit requirements.

The siting statute provides at KRS 278.710(2) that in considering the application for a construction certificate, the siting board may consider the policy of the General Assembly to encourage the use of coal as a principal fuel for electricity generation as set forth in KRS Section 152.210. The Facility will utilize on-Site

waste coal as its principal fuel for electricity generation and the applicant hereby requests that the Siting Board consider this coal use in making its decision.

2.2 Site Location

The Site address is 898 Coal Wash Road, Irvine, KY 40336. The Facility exhaust stack is located at 37°43'23" latitude and 84°0'24" longitude. Please refer to the Two Mile Vicinity Map attached as Exhibit A and the Site Boundaries attached as Exhibit B. The Facility will not be located within the boundary of Irvine, KY or any other city.

The Site is owned by Fox Trot Properties, LLC, an affiliate of ECEP. The Site will be leased to ECEP prior to the start of construction.

2.3 Site Conditions

The Site has been extensively developed since 1957 to support operation of a large-scale coal processing plant. The Site is crossed and served by a railroad main line owned by CSX Transportation. Existing Site development includes a coal preparation building, thermal dryers, coal storage yard, conveyors, conveyor tunnels, railcar dump facility, truck scales, river water intake structure, river water discharge structure, rail sidings, maintenance shops, warehouses, administration buildings and a former private airstrip which is no longer in use. ECEP will dismantle those existing heavy industrial structures as necessary to construct the Facility. The former private airstrip will not be used in the future and will be eliminated through recovery of waste coal upon which the airstrip was constructed. Some existing structures such as warehouses, maintenance shops,

river water intake structure, rail car unloading facility, conveyor tunnels and administration buildings may be reconditioned for use as part of the Facility.

Existing structures not required to be dismantled or reconditioned for the Facility may be available to be leased to the Estill County Industrial Development Authority or for other industrial development.

During operation of the former coal processing plant on the Site, from 35 to 100 people were employed, and up to 200 railcars of coal per day were delivered. The former coal processing plant generated more than 30 million tons of waste coal refuse. Waste coal will be recovered from the Site and used as the primary fuel source for the Facility. Due to the expected variability of the waste coal quality, additional regional coal may be delivered, stockpiled and blended at times with the waste coal to assure a consistent boiler fuel. As the waste coal is burned by the Facility, portions of the Site will be reclaimed and will be permitted as a disposal area for ash from the Facility.

The Estill County Industrial Park is adjacent to the Site as shown on Exhibit A. A Carhartt, Inc. sewing facility is located in the Estill County Industrial Park. ECEP hopes to attract additional industry to the Estill County Industrial Park by development of the Site by ECEP and by the ongoing reclamation of the Site associated with operation of the Facility.

2.4 Site Vicinity

Please refer to the 2 Mile Vicinity Map attached as Exhibit A and the 2,000 Foot Vicinity Map attached as Exhibit D. Distances expressed from the Facility are measured from the Facility's exhaust stack location.

Residential Neighborhoods

There are residential neighborhood areas located within a two mile radius of the Facility. The closest residential neighborhood is located 3,100 feet south of the Facility. This closest residential neighborhood is beyond the 2,000 foot statutory setback requirement.

Residential Structures

The nearest residential structure not owned by Fox Trot Properties, LLC is located 2,170 feet south of the Facility across the Kentucky River. There are two residential properties located within the Site which are owned by Fox Trot Properties, LLC. These two residential properties existed on the Site when the coal preparation plant was in operation. There is no statutory setback requirement for individual residences.

Schools

Estill County Middle School is located 7,000 feet from the Facility. Estill County High School is located 7,500 feet from the Facility. West Irvine Elementary School is located 9,200 feet from the Facility. Estill Springs Elementary School is located 10,700 feet from the Facility. These schools are beyond the 2,000 foot statutory setback requirement.

Hospitals and Nursing Home Facilities

Marcum & Wallace Memorial Hospital is located 9,500 feet from the Facility. There are no nursing home facilities closer to the Facility. This hospital is beyond the 2,000 foot statutory setback requirement.

Estill County Energy Partners, LLC
Application for Certificate to Construct Merchant Electric Generating Facility

Parks

The nearest boundary of the Daniel Boone National Forest is located 6,700 feet from the Facility. Rising Park, in Irvine, KY, is located 12,200 feet from the Facility. There is no statutory setback requirement for parks.

- 3. Evidence of public notice that shall include the location of the proposed site and a general description of the project, state that the proposed construction is subject to approval by the board, and provide the telephone number and address of the Public Service Commission; – KRS 278.706(2)(c)**

3.1 Letter to Landowners Whose Property Borders the Proposed Site

The letters attached as Exhibit P were sent by certified mail on May 18, 2004 to each landowner whose property borders the Site

3.2 Published Notice

The Facility will be located completely within Estill County, KY. Estill County's newspaper of general circulation is the Citizens Voice & Times. The notice attached as Exhibit P was published on May 20, 2004

- 4. A statement certifying that the proposed plant will be in compliance with all local ordinances and regulations concerning noise control and with any local planning and zoning ordinances. The statement shall also disclose setback requirements established by the planning and zoning commission as provided under KRS 278.704(3); – KRS 278.706(2)(d)**

There are no local ordinances or regulations concerning noise control, no planning and zoning ordinances and no setback requirements established by local planning and zoning commissions which are applicable to the Facility or the Site. Please refer to the letter dated April 5, 2004 from the Estill County Judge Executive attached as Exhibit Q.

- 5. If the facility is not proposed to be located on site of a former coal processing plant and the facility will use on-site waste coal as a fuel source or in an area where a planning and zoning commission has established a setback requirement pursuant to KRS 278.704(3), a statement that the proposed site is at least one thousand (1,000) feet from the property boundary of any adjoining property owner and two thousand (2,000) feet from any residential neighborhood, school, hospital, or nursing home facility, unless facilities capable of generating ten megawatts (10MW) or more currently exist on the site. If the facility is proposed to be located on site of a former coal processing plant and the facility will use on-site waste coal as a fuel source, a statement that the proposed site is compatible with the setback requirements provided under KRS 278.704(5). If the facility is proposed to be located in a jurisdiction that has established setback requirements pursuant to KRS 278.704(3), a statement that the proposed site is compatible with those established setback requirements; – KRS 278.706(2)(e)**

The Facility is proposed to be located on site of a former coal processing plant and the Facility will use on-Site waste coal as a fuel source.

The Facility exhaust stack will be at least 2,000 feet from any residential neighborhood, school, hospital or nursing home facility and the Facility will therefore meet the setback requirements of KRS 278.704(5) and KRS 278.704(2).

The Facility will be located completely within Estill County. There are no setback requirements established by any local planning and zoning commissions which are applicable to the Facility or the Site. Please refer to the letter dated April 5, 2004 from the Estill County Judge Executive attached as Exhibit Q.

- 6. A complete report of the applicant's public involvement program activities undertaken prior to the filing of the application, including any use of media coverage, direct mailing, fliers, newsletters, public meetings, establishment of a community advisory group, and any other efforts to obtain local involvement in the siting process; – KRS 278.706(2)(f)**

During the past year, ECEP representatives met on several occasions with the Estill County Judge Executive and staff, the Estill County Magistrates, and the Estill County Industrial Development Authority to discuss the Facility development.

On May 27, 2004, ECEP held an open house at the Estill County Courthouse to inform the public about the generating plant project. The open house was widely publicized and approximately 200 persons attended. A copy of the open house flyer and the informational booklet are attached in Exhibit T.

During the month of May, 2004, ECEP representatives spoke with reporters from the Citizen Voice & Times, the Estill County Tribune, the Lexington Herald-Leader and the Richmond Register. Articles about the ECEP power plant were published in each newspaper near the time of the open house and are attached in Exhibit T.

7. A summary of the efforts made by the applicant to locate the proposed facility on a site where existing electric generating facilities are located; – KRS 278.706(2)(g)

ECEP has proposed to locate the Facility on the Site because the benefits provided by the Site would not be available at alternative locations. The Site has been extensively developed for industrial purposes and, although there are no existing electric generating facilities on the Site, construction and operation of the Facility on the Site will improve the use of the Site and will provide net benefits to the surrounding communities.

Existing electric generating facilities nearest to the Site are located in Clark County. The Facility will use on-Site waste coal which can not be economically transported to these nearest existing electric generating facilities. Construction of the Facility on the Site will replace an assortment of deteriorating structures with a well-organized and modern industrial facility. Operation of the Facility on the Site will allow the Site to be reclaimed for beneficial uses using stable ash generated by the Facility.

- 8. Proof of service of a copy of the application upon the chief executive officer of each county and municipal corporation in which the proposed facility is to be located, and upon the chief officer of each public agency charged with the duty of planning land use in the jurisdiction in which the facility is proposed to be located; – KRS 278.706(2)(h)**

Please refer to the proof of service attached as Exhibit R.

9. An analysis of the proposed facility’s projected effect on the electricity transmission system in Kentucky; – KRS 278.706(2)(i)

The Facility will be constructed, interconnected and operated without adverse impact on the electricity transmission system in Kentucky.

The former coal processing plant on the Site is connected to the electric transmission system through an existing dedicated 69-kV line running approximately 1.8 miles from the Kentucky Utilities Company (“KU”) West Irvine Substation. At the West Irvine Substation, 161-kV transmission system voltage is stepped down to 69-kV for regional distribution including the former coal processing plant. Although the former coal processing plant is not currently processing coal, electrical service is obtained through this line to power essential lights, pumps and motors.

The Facility will connect to the electric transmission system by replacing the 69-kV line with a 161-kV line connecting to the West Irvine Substation. To minimize impact on the surrounding land owners, ECEP has requested that KU allow the replacement 161-kV line to be installed entirely within the rights of way currently containing the 69-kV line. A survey of this existing transmission line corridor is attached as Exhibit U. ECEP will file an application for a certificate to construct a nonregulated electric transmission line under KRS 278.714 prior to construction of the line.

ECEP submitted an Interconnection Request to the Midwest Independent Transmission System Operator, Inc. (“MISO”) in August, 2002. The MISO Project Number is G243 and the Queue Number is 37384-01.

MISO and ECEP entered into an Interconnection Evaluation Study Agreement whereby MISO and LG&E Energy performed load flow, short circuit and stability analyses to determine the impact of the Facility interconnection on the reliability of the electric transmission systems. The Interconnection Evaluation Study attached as Exhibit M was completed in July, 2003 and determined that the transmission system was capable of accommodating the interconnection of the Facility upon construction of certain interconnection facilities and network upgrades. The required interconnection facilities (“Interconnection Facilities”) and/or network upgrades (“Interconnection System Upgrades”) identified by the study were to double circuit the 161kV line from West Irvine Substation to the West Irvine tap, to replace the existing West Irvine Substation 161/69 kV transformer and to replace existing 69kV breakers at the West Irvine Substation.

Subsequently MISO and ECEP entered into an Interconnection Facilities Study Agreement under which MISO and LG&E Energy performed an Interconnection Facilities Study to provide good faith cost estimates for construction of the Interconnection Facilities and Interconnection Facility Upgrades specified by the Interconnection Evaluation Report. The Interconnection Facilities Study, attached as Exhibit N, was completed in January, 2004 and amended in March, 2004. The cost of the Interconnection Facilities and Interconnection Facility Upgrades was estimated to be \$3,992,448 in 2006 dollars including a 10% contingency.

Upon completion of the Interconnection Facilities Study, MISO, KU, and ECEP entered into the Interconnection and Operating Agreement dated April 8, 2004 (“IOA”), attached as Exhibit O, which, , sets out, among other terms, the terms for construction, payment and operation of Interconnection Facilities and Interconnection Facility Upgrades. This IOA was accepted by the Federal Energy Regulatory Commission (“FERC”) on May 27, 2004.

The estimated cost of the Interconnection Facilities under the IOA is \$308,552 in 2006 dollars. The estimated cost of the Interconnection Facility Upgrade is \$3,683,896 in 2006 dollars. The IOA requires ECEP to bear the actual cost of the Interconnection Facilities and Interconnection Facility Upgrades, even if such costs exceed the estimated costs.

In accordance with the policy and regulations of the Federal Energy Regulatory Commission (“FERC”), Sections 9.2.2 and Section 1.7 of the IOA provide that ECEP will be reimbursed by KU for the actual amount paid by ECEP for the Interconnection Facility Upgrades, plus interest, through credits against transmission service. These transmission credits will be earned only as payments are made to KU for transmission service taken from the Facility. Further, all of the Interconnection System Upgrades will be constructed on the KU system and ECEP will interconnect only with the KU system. Accordingly, there is no circumstance where ECEP could avoid using LG&E/KU transmission service while seeking reimbursement of the Interconnection System Upgrade costs.

Retail electric customers of the Commonwealth of Kentucky will not bear or subsidize the costs of the Interconnection Facility Upgrades. As discussed above, transmission credits are a function of payments to KU for transmission service. In setting rates for transmission service from the Facility, KU will have the option, if rolling in the cost of the Interconnection Facility Upgrades would increase the rates paid by existing transmission customers, of charging an alternative incremental rate (*i.e.*, the rate associated with costs of the Interconnection Facility Upgrades divided by units of transmission service) for transmission service from the Facility. *Standardization of Generator Interconnection Agreements and Procedures*, 106 FERC ¶ 61, 220 (March 5, 2004), *slip. Op.* at 127-130. The FERC has determined that this alternative mechanism, if necessary, “will fully insulate existing customers from the cost of the Network Upgrades.” *Id.* at 130.

Following further development of the Facility, ECEP or its customer will request transmission service through the MISO Open Access Transmission Tariff (“OATT”). Transmission capability will be evaluated according to the requirements of the MISO OATT. If determined by MISO to be necessary, a System Impact Study will be performed. If system constraints are identified and system upgrades are required to alleviate these constraints, ECEP or its customer will be responsible for the cost of all identified facilities and required upgrades to obtain transmission service.

In summary, all impacts of the Facility’s interconnection have been through the MISO processes as required by the MISO OATT. Required facilities and required system upgrades for interconnection have been identified. Provisions for their design, construction and funding are established and retail ratepayers will not bear any of the cost associated with the Facility’s interconnection facilities or network upgrades. Transmission service related upgrades will be determined through the MISO OATT process and will be the responsibility of ECEP or its customers. Through this process, the Facility is assured to be constructed, interconnected and operated without adverse impact on the electric transmission system or the retail electric customers in Kentucky.

10. An analysis of the proposed facility's economic impact on the affected region of the state; – KRS 278.706(2)(j)

The Kentucky Cabinet for Economic Development, Division of Research, has prepared an Economic Impact Assessment for the construction and operation of the Facility by ECEP. This assessment estimates ECEP's construction to add \$118,413,000 of total value to Kentucky and ECEP's operation to add \$13,442,000 of total annual value to Kentucky. The Economic Impact Assessment is attached to this application as Exhibit K.

- 11. A detailed listing of all violations by it, or any person with an ownership interest, of federal or state environmental laws, rules, or administrative regulations, whether judicial or administrative, where violations have resulted in criminal convictions or civil or administrative fines exceeding five thousand (\$5,000). The status of any pending action, whether judicial or administrative, shall also be submitted; – KRS 278.706(2)(k)**

Neither ECEP, nor any person with an ownership interest, have violated any federal or state environmental laws, rules or administrative regulations, whether judicial or administrative. There are no judicial or administrative actions pending against ECEP or any person with an ownership interest.

- 12. A site assessment report as specified in KRS 278.708. The applicant may submit and the board may accept documentation of compliance with the National Environmental Policy Act (NEPA) rather than a site assessment report. – KRS 278.706(2)(1)**

The following site assessment report is hereby submitted in accordance with KRS 278.708:

- (a) A description of the proposed facility that shall include a proposed site development plan that describes:**

- 1) Surrounding land uses for residential, commercial, agricultural and recreational purposes; – KRS 278.708(3)(a)(1)**

Please refer to the Land Use Map attached as Exhibit C. Lands surrounding the Site are marked on the Land Use Map as used for residential, commercial, agricultural and recreational purposes.

The Site borders the Kentucky River and is located on property which includes a former coal preparation plant and waste coal disposal area. The property has been used for coal preparation and waste coal disposal for over forty five years.

The city of Irvine and the Daniel Boone National Forest are situated east of the Site with residential neighborhoods located beyond a half-mile buffer of hills. Farmland and sparsely populated areas are on the south and west sides of the Site. An area of forested hills abuts the northern boundary of the Site.

Please refer to the Viewshed Cross-Sections drawing and Viewshed Cross-Section Location Map attached as Exhibit E. The Viewshed Cross-Section Location Map shows the location of five view points identified around the Facility. The Viewshed Cross-Sections drawing depicts ground elevations in a direct line between each identified view point and the Facility exhaust stack. Intervening ground elevations between the view point and the Facility determine if the Facility stack will be visible from that view point.

The Facility Site is surrounded by hilly terrain which will prevent the Facility and the Facility stack from being seen beyond the tops of the most intervening topography.

Five view points were chosen to evaluate the line of site to the Facility stack from significant land marks in the area such as the Estill County Middle and High Schools, the Estill County Courthouse and South Irvine along Highway 52. The elevation cross-sections represent potential lines of site from the view points to the top of the 243-foot high Facility stack.

The Facility stack will not be visible from the Estill County Courthouse or from the Estill County High School and Middle School. The Facility stack will be visible from the Daniel Boone Forest view point, located at the highest ridge top overlooking the town of Irvine. The Facility stack will be visible from the two view points west of the Site; however the Facility stack would not be visible if these view point locations were moved even slightly. Generally, the Facility stack will not be visible from most developed locations in and around the city of Irvine.

2) The legal boundaries of the proposed site; – KRS 278.708(3)(a)(2)

Please refer to the Site Boundaries attached as Exhibit B.

3) Proposed access control to the site; – KRS 278.708(3)(a)(3)

Please refer to the 2,000 Foot Site Vicinity Map attached as Exhibit D.

Access to the Site will be provided by a new paved road to be constructed by the Kentucky Department of Transportation (“DOT”) to their standards and specifications. This new access road will connect from Highway 499 to Coal Wash Road at the Estill County Industrial Development Authority site. A turnout ramp will be constructed by the DOT on Highway 499 at a point approximately 1,000 feet northeast of the Kentucky River bridge.

The new DOT access road route across the Site is as shown on the 2,000 Foot Site Vicinity Map attached as Exhibit D.

Access to the Facility main entrance will be provided by a new paved roadway connecting to the new DOT access road as shown on the 2,000 Foot Site Vicinity Map attached as Exhibit D. A perimeter fence will be constructed around the Facility to prevent unauthorized access. Perimeter fencing will typically be 7-foot high, zinc-coated, industrial-quality chain link topped with three strands of barbed wire, 1-foot high. Access into the Facility fenced perimeter main entrance will be controlled with a motorized cantilever-type gate. This main gate will be equipped with a card reader, barrier trips for closure and for exit from the Facility fenced perimeter and voice and video communications and control circuits linked to the Facility control room.

**4) Location of facility buildings, transmission lines, and other structures;
– KRS 278.708(3)(a)(4)**

Please refer to the Facility Site Layout drawing attached at Exhibit G.

There will be a number of structures erected or reconditioned to as part of the Facility. As noted on Exhibit G, these structures will include:

- (A) Transmission Line
- (B) Transformer and Switch Yard
- (C) Administration Building
- (D) Steam Turbine Generator Building
- (E) Circulating Fluidized Bed (CFB) Boiler
- (F) Secondary Scrubber
- (G) Baghouse
- (H) ID Fan
- (I) Stack
- (J) Refuse Truck Unloading Hopper Enclosure
- (K) Refuse Transfer Tower No.1
- (L) Refuse Transfer Tower No.2
- (M) Refuse Storage Building
- (N) Coal Storage Area and Lowering Well
- (O) Ash Temporary Buffer Pile
- (P) Ash Radial Stacker
- (Q) Truck Scales
- (R) Fuel and Limestone Conveyors
- (S) Fuel Crusher Building
- (T) Limestone Truck Unloading Building
- (U) Limestone Storage Silo

- (V) Railcar Unloading Shed
- (W) Ash Silos
- (X) Secondary Scrubber Lime Silo
- (Y) Secondary Scrubber Lime Preparation Area
- (Z) River Water Intake Structure
- (AA) Raw Water Clarifier
- (BB) Fire and Raw Water Storage Tank
- (CC) Pump Building
- (DD) Water Treatment Building
- (EE) Demineralized Water Storage Tank
- (FF) Cooling Tower and Circulating Water Pump Structure
- (GG) Cooling Tower Chemical Storage
- (HH) (Reserved for future use)
- (II) Waste Water Discharge Control Structure
- (JJ) Railroad crossing
- (KK) Perimeter fencing
- (LL) CSX Railroad Mainline
- (MM) Demineralized Water Pump Building
- (NN) Emergency Diesel Generator

**5) The location and use of access ways, internal roads, and railways; –
KRS 278.708(3)(a)(5)**

Please refer to the 2,000 Foot Site Vicinity Map attached as Exhibit D. Site access roads will be located as described above in Section 12(a)3. CSX Transportation, Inc. maintains a railway across the Site which will be used to provide material and equipment deliveries to the Facility. No additional rail facilities are required by the Facility.

Please refer to the Facility Site Layout drawing attached as Exhibit G. The Facility will include an internal perimeter loop road around the main buildings and structures with driveways to buildings and structures both inside and outside of the perimeter road.

There are a number of temporary haul roads located throughout the Site which will be used to reclaim waste coal from the Site for use as fuel by the Facility. These temporary haul roads will be relocated from time to time as required by the ongoing waste coal reclamation process.

**6) Existing or proposed utilities to service the facility; – KRS
278.708(3)(a)(6)**

Natural gas will be used to heat the circulating fluidized bed boiler during startup from cold conditions. This natural gas will be provided through a new connection to a Columbia Gas of Kentucky distribution line located along KY Highway 89 east of the Site. Please refer to the Natural Gas Supply Letter from Columbia Gas of Kentucky attached as Exhibit L.

During operation, the Facility will self-generate all electrical power required to operate Facility equipment such as pumps, motors, fans, lights and control systems. During periods when the Facility is not operating or is in startup, electrical power for these auxiliary loads will be purchased from KU and delivered through the Facility's 161-kV interconnection with the KU West Irvine Substation.

Potable water and sewer services are provided to the Site by Irvine Municipal Utilities. Potable water and sewer services will be used by ECEP's operating and administrative staff. ECEP will not use potable water for industrial process needs and will not use sewer services for industrial or storm-water discharges.

ECEP will draw plant make-up water from, and discharge treated water to, Pool 11 of the Kentucky River adjacent to the Site. On an average day, ECEP will withdraw 4 million gallons of raw water and will discharge 2 million gallons of treated wastewater. The Kentucky Natural Resources and Environmental Protection Cabinet, Department for Environmental Protection, Division of Water has determined that ECEP's proposed water withdrawal is well within the quantity which they would determine as available from Pool 11 of the Kentucky River. Please refer to the letter received from the Kentucky Natural Resources and Environmental Protection Cabinet, Department for Environmental Protection, Division of Water attached as Exhibit S.

7) Compliance with applicable setback requirements as provided under KRS 278.704(2), (3) or (5); – KRS 278.708(3)(a)(7)

Please refer to the 2,000-foot Site Vicinity map attached as Exhibit D. The Facility is proposed to be located on site of a former coal processing plant and the Facility will use on-Site waste coal as a fuel source. The nearest residential neighborhood is 3,100 feet from the Facility exhaust stack. The nearest school is 7,000 feet from the Facility exhaust stack. The nearest hospital or nursing home facility is 9,500 feet from the Facility exhaust stack.

The Facility exhaust stack will be at least 2,000 feet from any residential neighborhood, school, hospital or nursing home facility and the Facility will therefore meet the applicable setback requirements and is in compliance with KRS 278.704(2) and KRS 278.704(5).

The Facility will be located completely within Estill County. There is no applicable Planning and Zoning Commission with jurisdiction over the Site. Please refer to the letter dated April 5, 2004 from the Estill County Judge Executive attached as Exhibit Q. There are no setback requirements under KRS 278.704(3) which are applicable to the Facility.

**8) Evaluation of the noise levels expected to be produced by the facility;
– KRS 278.708(3)(a)(8)**

Noise levels expected to be produced by the Facility will be equal to, or less than, noise levels produced by operation of the former coal washing plant. Please refer to the Noise Level Study performed by CBC Engineers and Affiliates, LLC attached as Exhibit H.

(b) An evaluation of the compatibility of the facility with scenic surroundings; – KRS 278.708(3)(b)

ECEP proposes to construct the Facility on the site of a former coal washing plant. The Site has been extensively developed during the past 30 years to support operation of a large-scale coal processing plant and its associated refuse disposal area. Local residents and property owners are accustomed to the existing industrial facilities and have made property decisions and

investments with knowledge of the history of large scale industrial facilities and industrial operations on the Site.

The Facility will be compatible with, and will generally improve, the Site appearance with regard to the scenic surroundings. Appearance of the Site will be maintained or improved in the following areas:

- I) As on-Site waste coal is reclaimed to fuel the Facility, the Site will be reclaimed to the standards of the Kentucky Department for Surface Mining, Reclamation and Enforcement;
- II) Replacement of an assortment of large deteriorating structures with a well-organized and modern industrial facility will enhance appearance of the Site;
- III) The Facility will be located on the Site to minimize its impact on the viewshed from surrounding communities and areas;
- IV) To minimize impact on the surrounding land owners, ECEP has requested KU to allow the replacement 161-kV line to be installed within the rights of way currently containing the 69-kV line;
- V) Direct access to the Site will be provided from the Highway 499 bypass which was constructed to alleviate any traffic congestion issues for the industrial development sites;
- VI) The Facility will withdraw and discharge water to the Kentucky River adjacent to the Site to avoid construction of water lines across new off-site rights of way;

- VII) The Facility will primarily be fueled with waste coal recovered from the Site, minimizing rail or truck traffic associated with delivering fuel from off-site sources; and
- VIII) Ash generated by operation of the Facility will be placed for disposal on-Site, eliminating truck transportation for off-site disposal except where such ash may be useful as stable fill to support off-site economic development.

Please refer to the Viewshed Cross-Sections drawing attached as Exhibit E to examine viewsheds from surrounding locations. The viewshed cross-sections indicate to what extent the Facility exhaust stack may be visible from several surrounding locations. While the Facility exhaust stack will be visible from some immediately adjacent areas, it will not be visible from the majority of the nearest communities because of topography between the Site and the communities.

(c) The potential changes in property values resulting from the siting, construction, and operation of the proposed facility for property owners adjacent to the facility; – KRS 278.708(3)(c)

Siting, construction and operation of the ECEP Facility is expected to have no detrimental effect for property owners adjacent to the Facility. Please refer to the Real Property Value Impact Study prepared by Commonwealth Guaranty, Inc. attached as Exhibit I. This study concludes that there is a distinct possibility that real property values would increase due to the employment opportunities directly and indirectly resulting from the Facility.

(d) Evaluation of anticipated peak and average noise levels associated with the facility's construction and operation at the property boundary; – KRS 278.708(3)(d)

Noise levels expected to be produced by the Facility will be equal to, or less than, noise levels produced by operation of the former coal washing plant. Please refer to the Noise Level Study performed by CBC Engineers and Affiliates, LLC attached as Exhibit H.

(e) The impact of the facility's operation on road and rail traffic to and within the facility, including anticipated levels of fugitive dust created by the traffic and any anticipated degradation of roads and lands in the vicinity of the facility. – KRS 278.708(3)(e)

Road and rail traffic expected to be caused by operation of the Facility will be less than road and rail traffic caused by operation of the former coal washing plant. Road and rail traffic expected to be caused by operation of the Facility will not significantly impact traffic levels on the railroad or on nearby roads. Fugitive dust emissions will be controlled by paving Site access roads and treating other roads within the Site with water or dust palliatives as necessary. Operation of the Facility is not anticipated to degrade roads and lands in the vicinity of the Facility. Please refer to the Traffic Study prepared by CBC Engineers and Affiliates, LLC attached as Exhibit J.

(f) The site assessment report shall also suggest any mitigating measures to be implemented by the applicant including planting trees, changing outside lighting, erecting noise barriers, and suppressing fugitive dust. – KRS 278.708(4)

Potential impacts of the Facility are proposed to be mitigated using the following measures:

- The Facility design will utilize neutral colors for structures within industry standards.
- The Facility will be lighted to industry standards to minimize off-site glare.
- Steam blows at the end of the construction phase will be scheduled between 7:00 AM and 9:00 PM, or silencers will be installed.
- The new Facility access road and some interior Facility roads will be paved to minimize fugitive dust.
- As on-Site waste coal is reclaimed to fuel the Facility, the Site will be reclaimed to the standards of the Kentucky Department for Surface Mining, Reclamation and Enforcement, including re-vegetation.

- 13. No person shall commence to construct a merchant electric generating facility until that person has applied for and obtained a construction certificate for the facility from the board. The construction certificate shall be valid for a period of two (2) years after the issuance date of the last permit required to be obtained from the Natural Resources and Environmental Protection Cabinet after which the certificate shall be void. The certificate shall be conditioned upon the applicant obtaining necessary air, water, and waste permits. If an applicant has not obtained all necessary permits and has not commenced to construct prior to the expiration date of the certificate, the applicant shall be required to obtain a valid certificate from the board. – KRS 278.704(1)**

Please refer to the summary of required permits attached as Exhibit F.