



Kentucky Pioneer Energy, LLC

Application for a Construction Certificate To Construct a Merchant Electric Generating Facility

Case No. 2002-00312

**Located at the:
EKPC – JK Smith Generation Site**

**Prepared by: Kentucky Pioneer Energy, LLC
November 25, 2002**



Kentucky Pioneer Energy, LLC

November 26, 2002

Mr. Martin Huelsmann, Chairman
Kentucky State Board of Electric
Generation and Transmission Siting
211 Sower Boulevard
P.O. Box 615
Frankfort, Kentucky 40612

Re: Case No. 2002-00312
Kentucky Pioneer Energy, LLC
Merchant Power Plant Application

Dear Mr. Huelsmann:

In accordance with statutory authority SB 257 and 807 KAR 5:110E, Kentucky Pioneer Energy, LLC is making application for a certificate to construct a 540 megawatt baseload combined cycle electric power generation facility in Trapp, Clark County and at the East Kentucky Power Cooperative owned JK Smith site. Enclosed herewith are ten (10) copies of the application.

This application utilizes the National Environmental Policy Act (NEPA) alternative provided for in SB 257, Section 4(2)(l). The NEPA-EIS is included as the Appendix, and is at Tab 13. US Department of Energy has provided a CD-ROM version of this large bound document in PDF format. Though the information on this CD-ROM has been placed in the case file, a copy of the CD-ROM disk is also included herein, for PSC use.

A check for the application fee, in the amount of \$200,000.00, payable to Kentucky State Treasurer, is enclosed herein.

If you have any questions, please contact me at 513-621-0077.

Sincerely,

Dwight N. Lockwood

Original Signed

Dwight N. Lockwood, PE, QEP
Vice President – Regulatory Affairs

Enclosure (10)

Table of Contents

Tab & Chapter Number

1.	NAME AND CONTACT INFORMATION– SB 257, Section 4(2)(a) (Contact Dwight Lockwood) AND OVERVIEW OF PROJECT
2.	EVIDENCE OF PUBLIC NOTICE – SB 257, Section 4(2)(c) (Contact Dwight Lockwood)
2.1	Notice of Intent to File for a Merchant Power Plant Construction Certificate 807 KAR 5:110E, Section 2
2.2	Adjacent Landowners – SB 257, Section 4(2)(c)1
2.3	News Media – SB 257, Section 4(2)(c)2
3.	PROOF OF SERVICE – SB 257, Section 4(2)(h) (Contact Dwight Lockwood)
3.1	Clark County Judge Executive – SB 257, Section 3(3), Section 4(2)(h)
3.2	Clark County Planning and Zoning Commission – SB 257, Section 4(2)(h)
4.	DESCRIPTION OF SITE – SB257, Section 4(2)(b) (Contact Dwight Lockwood)
5.	EXISTING GENERATION AND SETBACK REQUIREMENTS – SB 257, Section 3(2), Section 4(2)(g), Section 4(2)(e)
6.	PUBLIC INVOLVEMENT – SB 257, Section 4(2)(f) (Contact Dwight Lockwood)
6.1	Project Announcement, with Governor Patton as keynote speaker, reported in Winchester-Sun on February 5, 1999.
6.2	Editorial supporting the project in Winchester-Sun, on February 10, 1999.
6.3	Presentation by Dwight N. Lockwood to Joint Committee on the Environment of Kentucky Legislature on February 10, 1999, by invitation.
6.4	US DOE Federal Register Notice and Press Release of Public Scoping Meeting, placed in Winchester-Sun, Lexington Herald-Leader, and Louisville Courier-Journal.
6.5	US DOE Public Scoping Meeting – to receive input on planned Environmental Impact Statement.
6.6	KPE Notice of public meeting, as permit requirement, to receive comments on Siting of project in Trapp.
6.7	Public Meeting to receive comments on Siting Analysis for locating project in Trapp.
6.8	KY-DAQ Public Hearing to receive comments on Air Permit, held May 1, 2001.
6.9	Winchester-Sun Editorial Board presentation and discussion on June 13, 2001.
6.10	Clark County Judge Executive, Magistrate and State Representative briefings on June 13, 2001.
6.11	Winchester Mayor Dixon Briefing on June 22, 2001, by request.
6.12	Presentation to Winchester City Council, by request, on September 18, 2001.
6.13	US DOE Notice of Public Hearing to receive comments on Draft EIS published in Winchester-Sun, Lexington-Herald-Leader, and Louisville Courier-Journal.
6.14	US DOE Public Hearing on Draft EIS in Lexington on December 10 th and Trapp on December 11, 2001.
6.15	Lexington-Herald-Leader Editorial Board briefing on December 10, 2001.
6.16	Winchester-Sun Editorial Board briefing and article support on January 30, 2002.
6.17	Presentation and Q & A to Bluegrass Development District, Natural Resources and Environmental Cabinet Advisory Committee, on March 13, 2002, by invitation.

7.	EFFECT ON TRANSMISSION SYSTEM – SB 257, Section 4(2)(i) (Contact Dwight Lockwood)	
8.	ECONOMIC IMPACT ON REGION – SB 257, Section 4(2)(j) (Contact Dwight Lockwood)	
8.1	Economic Impact Summary	
8.2	Employment	
8.3	Housing	
9.	DISCLOSURE OF PAST ENVIRONMENTAL VIOLATIONS – SB 257, Section 4(2)(k) (Contact Dwight Lockwood)	
10.	SITE ASSESSMENT REPORT – SB 257, Section 4(2)(l), Section 5(1) (Contact Dwight Lockwood)	
10.1	National Environmental Policy Act Alternative (NEPA) – SB 257, Section 4(2)(l)	
10.2	Description of Facility – SB 257, Section 5(3)(a)	
10.3	Property Description – SB 257, Section 5(3)(a)	
10.3.1	Surrounding Land Use – SB 257, Section 5(3)(a)1	
10.3.2	Legal Boundaries – SB 257, Section 5(3)(a)2	
10.3.3	Access Control – SB 257, Section 5(3)(a)3	
10.3.4	Location of Buildings – SB 257, Section 5(3)(a)4	
10.3.5	Location of Access Ways and Internal Roads – SB 257, Section 5(3)(a)5	
10.3.6	Utility Service to the Facility – SB 257, Section 5(3)(a)6	
10.3.7	Compliance with Setback Requirements – SB 257, Section 5(3)(a)7	
10.3.8	Evaluation of Noise Levels, SB 257, Section 5(3)(a)8	
10.4	Scenic Evaluation – SB 257, Section 5(3)(b)	
10.5	Property Value Evaluation – SB 257, Section 5(3)(c)	
10.6	Peak & Average Noise Evaluation – SB 257, Section 5(3)(d)	
10.7	Traffic Evaluation – SB 257, Section 5(3)(e)	
10.8	Mitigation Measures – SB 257, Section 5(4)	
11.	PERMIT STATUS – SB 257, Section 3(1) (Contact Dwight Lockwood)	
11.1	Federal Permits – SB 257, Section 3(1)	
11.2	State Permits – SB 257, Section 3(1)	
11.3	Local Permits – SB 257, Section 3(1)	
11.4	Cumulative Environmental Assessment Notification And NEPA Alternative – SB 257, Section 10(1)(a), Section 10(2), Section 10(3)	
12.	CERTIFICATION OF COMPLIANCE and SETBACK, Section 4(2)(d) (Contact Dwight Lockwood)	
13.	APPENDIX – US DOE Environmental Impact Statement	

Tab 1

Name and Contact Information

And

Overview of Project

1. NAME AND CONTACT INFORMATION AND OVERVIEW OF PROJECT

1.1 Name and Contact Information – SB 257, Section 4(2)(a)

The application has been prepared and filed by the following:

Kentucky Pioneer Energy, LLC 312 Walnut Street, Suite 2000 Cincinnati, OH 45202	Telephone: 513-621-0077	Contact:: Dwight N. Lockwood, PE, QEP Vice President – Regulatory Affairs
---	--------------------------------	---

1.2 Overview of Project

Kentucky Pioneer Energy (KPE) is proposing to construct and operate a base-load 540 MW (net) electric Integrated Gasification Combined Cycle (IGCC) generating station comprised of two GE 7FA gas turbine driven generator sets, each with a heat recovery steam generator (HRSG). Steam from the two HRSG units will operate a steam turbine driven generator. Together the three generators will produce the electricity, and with other equipment, deliver it at 138 kilovolts to the wholesale customer at the Interconnect Point, located at the facility generator step-up transformers.

East Kentucky Power Cooperative (EKPC) is the wholesale customer for 100% of the power, for use by its own Cooperative Members for their own Kentucky customer needs. EKPC will receive the power at the interconnect point and be responsible for all transmission requirements to and within its system. KPE has leased a 300-Acre parcel wholly within the EKPC approximate 3200-Acre EKPC owned JK Smith site in Trapp, Clark County. EKPC has existing power generation at the JK Smith site.

Fuel for the gas turbines will be SG (synthesis gas or syngas) produced in the gasification process. Natural Gas (NG) will be used for start-up and as a back-up fuel. SG is produced in an IGCC by the chemical conversion of solid feedstock into a medium Btu gas, consisting primarily of hydrogen and carbon monoxide. Once purified, the syngas is then usable as a fuel, as in this project, or as a feedstock to other chemical processes.

In this case, the feedstock will consist of Kentucky Coal and Refuse Derived Fuel (RDF) Pellets. These feedstock materials will be received by rail, unloaded in an enclosed station and placed in covered storage. Covered conveyors will move the feedstock to the gasification process.

Summary of Permit Status

- The Division of Air Quality issued the permit to construct on June 7, 2001.
- The Public Service Commission issued a Declarative Order of Non-Jurisdiction to KPE as an independent power producer in the wholesale market.
- Federal Energy Regulatory Commission (FERC) has determined that KPE is an Exempt Wholesale Generator.
- US Department of Energy has completed and approved the Environmental Impact Statement (EIS), which is now in final review by US Environmental Protection Agency prior to USDOE issuing the Record Of Decision (ROD).
- Other permits will be required for the project, but can only be applied for after further design of the plant.

Tab 2

Evidence of Public Notice

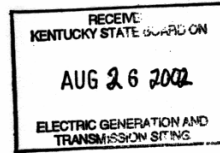
2. EVIDENCE OF PUBLIC NOTICE

2.1 Notice of Intent to File – 807 KAR 5:110E, Section 2

This is the notice stamped as “Filed” by the Public Service Commission on August 26, 2002.



Commonwealth of Kentucky
Public Service Commission
211 Sower Boulevard
Frankfort, KY 40601



August 23, 2002

Notice of Intent to File Application
Kentucky Pioneer Energy, LLC.

Dear Sir or Madam:

Case No. 2002-00312

In accordance with 801 KAR 5:110E, under the authority of SB 257, Kentucky Pioneer Energy hereby submits a "Notice of Intent to File Application" to the Public Service Commission.

Name and Contact

The application will be prepared and filed by the following:

Kentucky Pioneer Energy, LLC 312 Walnut Street, Suite 2000 Cincinnati, OH 45202	Telephone: 513-621-0077	Contact: Dwight N. Lockwood Vice President – Regulatory Affairs
---	----------------------------	---

Brief Description of the Project

Kentucky Pioneer Energy proposes to construct and operate a based-load 540 MW electric Integrated Gasification Combined Cycle (IGCC) generating station comprised of two GE 7FA gas turbine driven generator sets, each with a heat recovery steam generator (HRSG). Steam from the two HRSG units will operate a steam turbine driven generator. Together the three generators will produce the electricity, and with other equipment, deliver it at 138 kilovolts to the wholesale customer. Fuel for the gas turbines will be synthesis gas (syngas) produced in the gasification process. Natural gas will be used for start-up and as a back-up fuel.

Location of the Construction

The project will be located on a 300-acre parcel of land leased from East Kentucky Power Cooperative (EKPC) at their 3200-acre JK Smith site in Trapp, Clark County, Kentucky.

Address: 12145 Irvine Road Trapp, Kentucky 40391	Latitude: 37 Degrees 53 Minutes 00 Seconds Longitude: 84 Degrees 05 Minutes 30 Seconds
---	---

The proposed site is in rural Clark County and not within the boundaries of a city community or village.

Global Energy, Inc., Suite 2000, 312 Walnut Street, Cincinnati, Ohio 45202 U.S.A.
(513) 621-0077 • FAX (513) 621-5947

Adjacent Landowners – SB 257, Section 4(2)(c)1

The KPE project facility will be located on property leased from East Kentucky Power Cooperative (EKPC) and wholly within the EKPC JK Smith site property. EKPC is therefore the sole adjacent property owner.



November 14, 2002

Mr. Roy M. Palk, President
East Kentucky Power Cooperative
PO Box 707
Winchester, KY 40392-0707

**Kentucky Pioneer Energy LLC
Siting Application
PSC Case Number 2002-00312
Notice to Adjacent Landowners**

Dear Mr. Palk:

In accordance with 801 KAR 5:110E, notice is hereby given that Kentucky Pioneer Energy LLC (KPE) intends to file an application with the Kentucky State Board of Electric Generation and Transmission Siting, located at the Public Service Commission offices at 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602 and can be reached by telephone at 502-564-3940.

Kentucky Pioneer Energy proposes to construct a 540 MW base-load electric generating facility in Trapp, Clark County, Kentucky. The facility will be located on a 300-acre parcel near the center of the 3200-acre JK Smith site, under an existing long-term lease from East Kentucky Power Cooperative (EKPC). JK Smith is an existing and operational electric utility generating facility. EKPC has contracted to purchase the power under long-term agreement.

Electric power will be generated by two gas turbine driven generators operating in combined cycle.

The project will be based on Integrated Gasification Combined Cycle (IGCC) technology, where solid feed is converted to synthesis gas (syngas) in a gasification process. Once purified, the syngas will be used as a fuel for the gas turbines in the same manner that natural gas would be. Natural gas will serve as the start-up and back-up fuel for the turbines.

The proposed project and its construction, is subject to Board approval.

Respectfully,

A handwritten signature in cursive script, appearing to read "Dwight N. Lockwood".

Dwight N. Lockwood
Vice President Regulatory Affairs

Document was
received by EKPC
on November 15,
2002 @ 11:45 AM

U.S. Office: Global Energy, Inc., Suite 2000, 312 Walnut Street, Cincinnati, Ohio 45202 U.S.A.
Tel (513) 621-0077 • Fax (513) 621-5947
U.K. Office: Westfield Development Centre, Cardenden Fife, Scotland KY5 0HP
Tel 44 1592 860293 • Fax 44 1592 860193

News Media – SB 257, Section 4(2)(c)2

The KPE project is fully within Clark County. This legal notice was placed in the Winchester – Sun newspaper on November 19, 2002.



The Winchester Sun

Newspaper Publisher • Commercial Printer

20 Wall Street • P.O. Box 4300 • Winchester, Kentucky 40391 • 606-744-3123

AFFIDAVIT OF PUBLICATION

STATE OF Kentucky
COUNTY OF Clark

I, Sheila Johnson Adv. Bookkeeper
(name) (title)

of The Winchester Sun Newspaper in the aforesaid State and County, hereby certify that the attached advertisement appeared in The Winchester Sun on November 19, 2002.
(dates)

Public Notice

LEGAL PUBLIC NOTICE
KENTUCKY PIONEER ENERGY LLC
SITING APPLICATION
PSC CASE NUMBER 2002-00312
PUBLIC NOTICE

In accordance with 801 KAR 5:110E, notice is hereby given that Kentucky Pioneer Energy LLC (KPE) intends to file an application with the Kentucky State Board of Electric Generation and Transmission Siting, located at the Public Service Commission offices at 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602 and can be reached by telephone at 502-564-3940.

Kentucky Pioneer Energy proposes to construct a 540 MW base-load electric generating facility in Trapp, Clark County, Kentucky. The facility will be located on a 300-acre parcel near the center of the 3200-acre JK Smith site, under an existing long-term lease from East Kentucky Power Cooperative (EKPC). JK Smith is an existing and operational electric utility generating facility. EKPC has contracted to purchase the power under long-term agreement.

Electric power will be generated by two gas turbine driven generators operating in combined cycle.

The project will be based on Integrated Gasification Combined Cycle (IGCC) technology, where solid feed is converted to synthesis gas (syngas) in a gasification process. Once purified, the syngas will be used as a fuel for the gas turbines in the same manner that natural gas would be. Natural gas will serve as the start-up and back-up fuel for the turbines.

The proposed project and its construction, is subject to Board approval.

November 19, 2002

I, Sheila Johnson
Date 11/19/02

Subscribed and sworn to before me, a Notary Public within and for the State and County aforesaid, by

Angie L. Ballard
Notary Public



Tab 3

Proof Of Service

3. Proof of Service of Application

3.1 Clark County Judge Executive – SB 257, Section 3(3), Section 4(2)(h)

The Kentucky Pioneer Energy project facility will be located at the EKPC JK Smith site in rural Clark County. The site is not within a municipal corporation.



November 25, 2002

Mr. Drew Graham, Judge Executive
Clark County
Court House
34 South Main Street
Winchester, KY 40391

**Kentucky Pioneer Energy LLC
Siting Application
PSC Case Number 2002-00312
Service of Application**

Dear Judge Graham:

Kentucky Pioneer Energy proposes to construct a 540 MW base-load electric generating facility in Trapp, Clark County, Kentucky. The facility will be located on a 300-acre parcel near the center of the 3200-acre JK Smith site, under an existing long-term lease from East Kentucky Power Cooperative (EKPC). JK Smith is an existing and operational electric utility generating facility. EKPC has contracted to purchase the power under long-term agreement.

In accordance with SB 257, Section 4(2)(h) Kentucky Pioneer Energy LLC (KPE), is herewith providing you a copy of the application to site (locate) the project at the JK Smith Site in Clark County.

The Kentucky State Board of Electric Generation and Transmission Siting will consider the application, and the proposed project and its construction, is subject to Board approval. The Board is located at the Public Service Commission offices at 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602 and can be reached by telephone at 502-564-3940.

Electric power will be generated by two gas turbine driven generators operating in combined cycle.

The project will be based on Integrated Gasification Combined Cycle (IGCC) technology, where solid feed is converted to synthesis gas (syngas) in a gasification process. Once purified, the syngas will be used as a fuel for the gas turbines in the same manner that natural gas would be. Natural gas will serve as the start-up and back-up fuel for the turbines.

Respectfully,

Handwritten signature of Dwight N. Lockwood in black ink.

Dwight N. Lockwood
Vice President Regulatory Affairs

Received By, _____ Date

Handwritten signature of Drew Graham in black ink, followed by the date "11-25-02".

Drew Graham, Judge Executive
Clark County Fiscal Court

3.2 Clark County Planning and Zoning Commission – SB 257, Section 4(2)(h)



November 25, 2002

Mr. Robert Blanton, Executive Director
Clark County Planning & Zoning Commission
32 Wall Street
Winchester, KY 40392

**Kentucky Pioneer Energy LLC
Siting Application
PSC Case Number 2002-00312
Service of Application**

Dear Mr. Blanton:

Kentucky Pioneer Energy proposes to construct a 540 MW base-load electric generating facility in Trapp, Clark County, Kentucky. The facility will be located on a 300-acre parcel near the center of the 3200-acre JK Smith site, under an existing long-term lease from East Kentucky Power Cooperative (EKPC). JK Smith is an existing and operational electric utility generating facility. EKPC has contracted to purchase the power under long-term agreement.

In accordance with SB 257, Section 4(2)(h) Kentucky Pioneer Energy LLC (KPE), is herewith providing you a copy of the application to site (locate) the project at the JK Smith Site in Clark County.

The Kentucky State Board of Electric Generation and Transmission Siting will consider the application, and the proposed project and its construction, is subject to Board approval. The Board is located at the Public Service Commission offices at 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602 and can be reached by telephone at 502-564-3940.

Electric power will be generated by two gas turbine driven generators operating in combined cycle.

The project will be based on Integrated Gasification Combined Cycle (IGCC) technology, where solid feed is converted to synthesis gas (syngas) in a gasification process. Once purified, the syngas will be used as a fuel for the gas turbines in the same manner that natural gas would be. Natural gas will serve as the start-up and back-up fuel for the turbines.

Respectfully,

A handwritten signature in black ink, appearing to read "Dwight N. Lockwood".

Dwight N. Lockwood
Vice President Regulatory Affairs

Received By, _____ Date _____
A handwritten signature in black ink, appearing to read "Robert Blanton".
11-25-02

Robert Blanton, Executive Director
Clark County Planning & Zoning

Global Energy, Inc., Suite 2000, 312 Walnut Street, Cincinnati, Ohio 45202 U.S.A.
(513) 621-0077 • FAX (513) 621-5947