

May 5, 2006

Ms. Elizabeth O'Donnell
Executive Director
Public Service Commission
211 Sower Boulevard
Frankfort, KY 40602

RECEIVED
MAY 8 2006
PUBLIC SERVICE
COMMISSION

Re: PSC Case No. 2005-00053

Dear Ms. O'Donnell:

Please find enclosed for filing with the Commission in the above-referenced case, an original and ten copies of supplemental information provided by East Kentucky Power Cooperative, Inc., ("EKPC") in response to the Commission's order in the case dated April 18, 2006. The enclosed information, combined with information filed as Exhibit 14 to the Application in the case, responds to the requirements of KRS §278.216 (2), and comprises the Site Assessment Report required by that statute.

EKPC submits this information in compliance with the subject order of the Commission, and requests that the review of EKPC's application for a Site Compatibility Certificate under KRS §278.216 be allowed to proceed.

If there are any questions concerning this supplemental information, please contact me at EKPC headquarters.

Very truly yours,



Charles A. Lile
Senior Corporate Counsel

Enclosures

Cc: Service List.

RECEIVED

MAY 8 2006

PUBLIC SERVICE
COMMISSION

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2005-00053
APPLICATION EXHIBIT 14- SUPPLEMENT
SITE ASSESSMENT REPORT FOR THE CONSTRUCTION OF
A 278 MW (nominal) CIRCULATING FLUIDIZED BED
COAL FIRED UNIT IN CLARK COUNTY, KENTUCKY

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2005-00053
APPLICATION EXHIBIT 14- SUPPLEMENT
SITE ASSESSMENT REPORT FOR THE CONSTRUCTION OF
A 278 MW (nominal) CIRCULATING FLUIDIZED BED COAL
FIRED UNIT IN CLARK COUNTY, KENTUCKY

East Kentucky Power Cooperative, Inc., ("EKPC") submitted a document in this case titled "Environmental Report for the Proposed Circulating Fluidized Bed Generating Unit at Smith Power Station" (the "CFB Site Report"). That report was included in the original Application as Exhibit 14. The intent of this document is to provide the Commission with supplemental information corresponding to the statutory requirements of the Site Assessment Report, defined by KRS §278.216 (2), for the proposed circulating fluidized bed ("CFB") project, given that EKPC's review of the site for NEPA compliance has not yet been completed.

The following is a clarification and supplement to the information submitted in the CFB Site Report, to meet the applicable requirements of KRS §278.708 sections (3) and (4):

KRS 278.708 (3) A completed site assessment report shall include:

- 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**

The location of the proposed site is discussed in Section 2.0 of the CFB Site Report, the Project Description, which begins on page 1, and the maps accompanying this document (See Attachments A and B). The existing environment is covered under Section 6.0 of the CFB Site Report, beginning on page 11. The following is a description of the usage of the land surrounding the proposed site:

The land surrounding Smith Generating Station is involved primarily in agricultural production. Upland areas are generally used for pasture or hay for beef cattle. Bottomlands are in production of row crops such as tobacco and corn. Oak-hickory forests dominate slopes and marginal areas. Logging occurs periodically in areas surrounding the site. There are several rural residences in the area that do not appear to be involved in agricultural activities. Upper Howard's Creek and the Kentucky River bound remote wooded areas of the site.

Recreational activities occurring around the site include fishing and boating in the Kentucky River, fishing in Upper Howard's Creek, and hunting on the land adjacent to the site. The wilderness aspect of much of the site enhances all of these activities.

2) The legal boundaries of the proposed site

Attachment Number 2 to the CFB Site Report provides the legal boundaries for the Smith Station site.

3) Proposed access control to the site

EKPC has extensive experience with site access control for Smith Power Station. The original construction began in the early 1980's. As a part of this construction, a main gated entrance located off of KY 89 was built. EKPC has managed several large combustion turbine projects at this location, involving the addition of CT's 1 through 7. The main gate is automated and will remain closed after the normal construction hours. Entry into the site will be assessed by a call box. The perimeter of the main plant is protected by fencing. Access into the main plant is guarded by a private security firm. The number of security guards will fluctuate with the size of the work force.

The construction workers will have a dedicated secured parking area outside of the fenced area. The construction companies will be required to set up a badging-in process to control the access into the site by the workers. All construction workers will enter the site through a separate gate. All material deliveries will be given directions or escorted on site by an EKPC representative or contractor.

EKPC will also conduct security assessments during the course of the construction to ensure that the facilities are secure. Included in this assessment will be the need for more fencing, more security guards, and the need for cameras.

EKPC will work closely with the local Clark County Sheriff's department to ensure a close coordination with the Site Security. Also to be discussed are the additional challenges that will be faced by the local Sheriff's department during the construction phase.

4) The location of facility buildings, transmission lines, and other structures

Attachment B to this document, the Site Map, provides the location of facility buildings and structures, and Attachment A to this document, the J.K. Smith Power Plant Vicinity Map, provides the location of transmission lines, which are indicated by blue lines.

5) Location and use of access ways, internal roads, and railways

The location of access ways and railways are provided on maps included on page 3 and 4 of the CFB Site Report.

Internal roadways are indicated on Attachment B to this document.

The primary access into Smith Station is off of KY 89. All personnel and material deliveries will enter through this gated access. The main plant entrance is via a two lane paved road approximately 1.5 miles long. This paved road leads to a main entry point into Smith Station. The main entry is guarded 24 hours a day by a private security firm. Local roads inside the main plant area are two lanes wide and are either paved or graveled. All material laydown areas will be maintained with an aggregate surface. A separate entrance for coal deliveries by truck will be set up in the future. This is an existing gravel road off of the main plant entrance. This road will be improved to a paved two-lane road, which will lead to the coal stockpile area. The private security firm will control access through this entry.

An existing railway system was constructed as part of the original Smith coal fired unit in the early 80's. The internal railways tie into the main line of the CSX railroad by way of two separate switches. This railway has been used in the past for large deliveries such as combustion turbines, generators and transformers. The contracts associated with the proposed projects will be given the option of shipping materials by rail. The existing trackage will accommodate the rail cars from approximately three coal unit trains.

EKPC's Smith Station is bounded by the Kentucky River but no type of river transportation is possible.

6) Existing or proposed utilities to service the facility

The following narrative describes the existing and proposed utilities servicing the current and proposed facilities.

Electric service to the site is provided by an internal station service distribution system. Clark Energy Cooperative, Inc. does provide station service at the river intake. Station service for unit start-up is provided from other operating combustion turbines, as available. For emergency power or black starts, there are two 1.2 Mw diesel generators at the site.

Gas for combustion turbine generation is purchased from Texas El Paso or Texas Western, a subsidiary of Duke Power. Two distribution lines, each designed to meet the needs of the units at the station, deliver the gas from the

respective pipelines. The station also is capable of generating power from diesel fuel provided by several local suppliers, Marathon Ashland, BP, and Kentucky Petroleum. Diesel is delivered by tractor-trailer load and stored on site in a 4.2 million gallon tank.

Water for the generation processes is withdrawn from the Kentucky River and treated on site by flocculation and demineralization. The East Clark Water District provides potable water at the site.

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

Pursuant to KRS §278.216 (2), compliance with setback requirements of KRS §278.704 (3) is not required for a site such as the Smith Station, which already contains facilities capable of generating more than 10 MW of electricity. The existing and proposed units meet all the set back requirements under KRS 278.708, and meet all local setback requirements.

8) Evaluation of the noise levels expected to be produced by the facility;

Noise levels expected at the proposed units are addressed in Section 7.9 of the CFB Site Report, Noise, beginning on page 18.

b) An evaluation of the compatibility of the facility with scenic surroundings

A description of the compatibility of the facility with the scenic surroundings is included in Section 7.10 of the CFB Site Report, Aesthetics, on page 19.

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;

EKPC believes that the construction of a CFB unit at the existing facility will have no adverse impact on the property values surrounding the plant site.

The Clark County PVA addressed members of the Smith Station Community Advisory Group on July 18, 2005 concerning property values. Below is a summary of their presentation:

- a. There is a 4.5 to 5% annual increase in Clark County property values. This increase has been consistent in the market for 5 years. The market is determined by tracking sales.
- b. Historically, 5 acres of undeveloped land will bring \$25,000 anywhere in Clark County.

- c. The PVA can't predict the increase, but projects that it will increase and maybe even spike with the construction of the new generation.
- d. The PVA showed examples of the Ford community in Clark County where EKPC's Dale Power Station has operated since the 50's. In Ford, property has been climbing consistently. Based on Ford, the PVA's best guess is that it will do the same in Trapp. EXAMPLE OF FORD PROPERTY: 1.6 miles from plant sold for \$100,000 in November of 1995 and \$135,000 in 2005 with a steady increase of 4% a year for 10 years.

The construction of the CFB unit will take approximately 36 months from the start of foundations. This construction is not expected to have any adverse impacts on surrounding property values. There are seven combustion turbines operating at Smith Station at this time. According to the local PVA office, property values around Smith Station have continued to increase.

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

The proposed site is located in well within a 3200-acre rural property. The remote location limits the volume of nuisance noise reaching the plant boundaries. Noise studies conducted by EKPC at other installations during construction suggest noise levels will be in the 50 to 65 decibel range at the property boundaries. Occasionally, during blasting, pile driving, or initial steam blow noise levels at the boundary could reach 70 decibels for short periods and only in the boundary areas closest to the construction site. During operation of the units levels will be in the 40 to 55 decibel range. EKPC monitors noise at the boundaries of the site on a monthly basis to insure the cooperative continues to be a good neighbor.

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.

Primary access to Smith Station is via State Highway 89, a two-lane non-divided highway. It is accessed in Winchester from State Route 627 or US Route 60. From Irvine it is accessed from State Route 89. A new by-pass in Winchester provides convenient access from Interstate 64 via 627.

Highway 89 currently carries approximately 2600 vehicles daily. Construction of the CFB will add approximately 800 vehicles per day during its peak to transport construction workers to the site and an additional four to six tractor-trailers and four to five concrete trucks on average per day. This is an increase

of less than 35 percent and does not represent a significant impact to traffic on Highway 89. In the past, during similar construction at the site, no impacts were noted. If the proposed Combustion Turbines and CFB and are constructed simultaneously the traffic estimates would be adjusted accordingly.

Due to the Division of Air Quality requirements, all roads will be either paved or watered to mitigate the fugitive dust. The location of the actual construction is approximate center of the 3200 acres. EKPC expects no fugitive dust to exist beyond the property boundary. EKPC expects no degradation of the roads or lands as a result of the construction. The Kentucky Department of Highways is actively working on a improvement plan for KY 89.

KRS §278.708 (4)

The 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.

Mitigation measures planned by EKPC are as follows:

EKPC is committed to developing Smith Station as a model of environmental stewardship. The plant will implement lighting strategies to lessen its impact on the natural environment and Clark County residents living in the vicinity.

A comprehensive forest management plan is already being developed by EKPC personnel for the site. The plan includes measures such as wildlife enhancement, tree plantings for noise mitigation, and timber salvage operations. These activities will all enhance Smith Station's position as a good neighbor to the community surrounding the site.

Noise will also be mitigated by controls installed on the plant systems, such as mufflers, silencers, and noise barriers. These measures have been successful in greatly reducing noise levels at other EKPC facilities.

The heavily traveled roads at the site have already been paved in an effort to mitigate runoff and fugitive dust. During construction activities at the site gravel roads will be watered for dust suppression.

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2005-00053
APPLICATION EXHIBIT 14- SUPPLEMENT
SITE ASSESSMENT REPORT FOR THE FIVE
90MW(nominal) COMBUSTION TURBINES

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2005-00053
APPLICATION EXHIBIT 14- SUPPLEMENT
SITE ASSESSMENT REPORT FOR THE FIVE 90MW(nominal)
COMBUSTION TURBINES

East Kentucky Power Cooperative, Inc., ("EKPC") submitted a document in this case titled "Environmental Report for the Proposed Combustion Turbine Electric Generating Units 8,9,10,11, & 12" (the "CT Site Report"). That report was included in the original Application as Exhibit 14. The intent of this document is to provide the Commission with supplemental information corresponding to the statutory requirements of the Site Assessment Report, defined by KRS §278.216 (2), for the proposed combustion turbine generating project, given that EKPC's review of the site for NEPA compliance has not yet been completed.

The following is a clarification and supplement to the information submitted in the CT Site Report, to meet the applicable requirements of KRS §278.708 sections (3) and (4);

KRS 278.708 (3) A completed site assessment report shall include:

- 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**

The location of the proposed site is discussed in Section 2.0 of the CT Site Report, the Project Description, which begins on page 2, and the maps accompanying this document (See Attachments A and B). The existing environment is covered under Section 6.0 of the CT Site Report, beginning on page 10. The following is a description of the usage of the land surrounding the proposed site:

The land surrounding Smith Generating Station is involved primarily in agricultural production. Upland areas are generally used for pasture or hay for beef cattle. Bottomlands are in production of row crops such as tobacco and corn. Oak-hickory forests dominate slopes and marginal areas. Logging occurs periodically in areas surrounding the site. There are several rural residences in the area that do not appear to be involved in agricultural activities. Upper Howard's Creek and the Kentucky River bound remote wooded areas of the site.

Recreational activities occurring around the site include fishing and boating in the Kentucky River, fishing in Upper Howard's Creek, and hunting on the land

adjacent to the site. The wilderness aspect of much of the site enhances all of these activities.

2) The legal boundaries of the proposed site

Attachment Number 2 to the CT Site Report provides the legal boundaries for the Smith Station site.

3) Proposed access control to the site

EKPC has extensive experience with site access control for Smith Power Station. The original construction began in the early 1980's. As a part of this construction, a main gated entrance located off of KY 89 was built. EKPC has managed several large combustion turbine projects at this location, involving the addition of CT's 1 through 7. The main gate is automated and will remain closed after the normal construction hours. Entry into the site will be assessed by a call box. The perimeter of the main plant is protected by fencing. Access into the main plant is guarded by a private security firm. The number of security guards will fluctuate with the size of the work force.

The construction workers will have a dedicated secured parking area outside of the fenced area. The construction companies will be required to set up a badging-in process to control the access into the site by the workers. All construction workers will enter the site through a separate gate. All material deliveries will be given directions or escorted on site by an EKPC representative or contractor.

EKPC will also conduct security assessments during the course of the construction to ensure that the facilities are secure. Included in this assessment will be the need for more fencing, more security guards, and the need for cameras.

EKPC will work closely with the local Clark County Sheriff's department to ensure a close coordination with the Site Security. Also to be discussed are the additional challenges that will be faced by the local Sheriff's department during the construction phase.

4) The location of facility buildings, transmission lines, and other structures

Attachment B to this document, the Site Map, provides the location of facility buildings and structures, and Attachment A to this document, the J.K. Smith Power Plant Vicinity Map, provides the location of transmission lines, which are indicated by blue lines.

5) Location and use of access ways, internal roads, and railways

The location of access ways and railways are provided on maps included on page 3 and 4 of the CT Site Report.

Internal roadways are indicated on Attachment B to this document.

The primary access into Smith Station is off of KY 89. All personnel and material deliveries will enter through this gated access. The main plant entrance is via a two lane paved road approximately 1.5 miles long. This paved road leads to a main entry point into Smith Station. The main entry is guarded 24 hours a day by a private security firm. Local roads inside the main plant area are two lanes wide and are either paved or graveled. All material laydown areas will be maintained with an aggregate surface. A separate entrance for coal deliveries by truck will be set up in the future. This is an existing gravel road off of the main plant entrance. This road will be improved to a paved two-lane road, which will lead to the coal stockpile area. The private security firm will control access through this entry.

An existing railway system was constructed as part of the original Smith coal fired unit in the early 80's. The internal railways tie into the main line of the CSX railroad by way of two separate switches. This railway has been used in the past for large deliveries such as combustion turbines, generators and transformers. The contracts associated with the proposed projects will be given the option of shipping materials by rail. The existing trackage will accommodate the rail cars from approximately three coal unit trains.

EKPC's Smith Station is bounded by the Kentucky River but no type of river transportation is possible.

6) Existing or proposed utilities to service the facility

The following narrative describes the existing and proposed utilities servicing the current and proposed facilities.

Electric service to the site is provided by an internal station service distribution system. Clark Energy Cooperative, Inc. does provide station service at the river intake. Station service for unit start-up is provided from other operating combustion turbines, as available. For emergency power or black starts, there are two 1.2 Mw diesel generators at the site.

Gas for generation is purchased from Texas El Paso or Texas Western, a subsidiary of Duke Power. Two distribution lines, each designed to meet the needs of the units at the station, deliver the gas from the respective pipelines. The station also is capable of generating power from diesel fuel provided by

several local suppliers, Marathon Ashland, BP, and Kentucky Petroleum. Diesel is delivered by tractor-trailer load and stored on site in a 4.2 million gallon tank.

Water for the generation processes is withdrawn from the Kentucky River and treated on site by flocculation and demineralization. The East Clark Water District provides potable water at the site.

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

Pursuant to KRS §278.216 (2), compliance with setback requirements of KRS §278.704 (3) is not required for a site such as the Smith Station, which already contains facilities capable of generating more than 10 MW of electricity. The existing and proposed units meet all the set back requirements under KRS 278.708, and meet all local setback requirements.

8) Evaluation of the noise levels expected to be produced by the facility;

Noise levels expected at the proposed units are addressed in Section 7.9 of the CT Site Report, Noise, on page 18.

b) An evaluation of the compatibility of the facility with scenic surroundings

A description of the compatibility of the facility with the scenic surroundings is included in Section 7.10 of the CT Site Report, Aesthetics, beginning on page 18.

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;

EKPC believes that adding additional combustion turbine units to the existing facility will have no adverse impact on the property values surrounding the plant site.

The Clark County PVA addressed members of the Smith Station Community Advisory Group on July 18, 2005 concerning property values. Below is a summary of their presentation:

- a. There is a 4.5 to 5% annual increase in Clark County property values. This increase has been consistent in the market for 5 years. The market is determined by tracking sales.

- b. Historically, 5 acres of undeveloped land will bring \$25,000 anywhere in Clark County.
- c. The PVA can't predict the increase, but projects that it will increase and maybe even spike with the construction of the new generation.
- d. The PVA showed examples of the Ford community in Clark County where EKPC's Dale Power Station has operated since the 50's. In Ford, property has been climbing consistently. Based on Ford, the PVA's best guess is that it will do the same in Trapp. EXAMPLE OF FORD PROPERTY: 1.6 miles from plant sold for \$100,000 in November of 1995 and \$135,000 in 2005 with a steady increase of 4% a year for 10 years.

The construction of the five additional combustion turbines will take approximately 18 months from the start of foundations. This construction is not expected to have any adverse impacts on surrounding property values. There are seven combustion turbines operating at Smith Station at this time. According to the local PVA office, property values around Smith Station have continued to increase.

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

The proposed site is located well within a 3200 acre rural property owned by EKPC. The remote location limits the volume of nuisance noise reaching the plant boundaries. Noise studies conducted by EKPC at other installations during construction suggest noise levels will be in the 50 to 65 decibel range at the property boundaries. During operation of the units levels will be in the 40 to 55 decibel range. EKPC monitors noise at the boundaries of the site on a monthly basis to insure the cooperative continues to be a good neighbor.

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.

Primary access to Smith Station is via State Highway 89, a two-lane non-divided highway. It is accessed in Winchester from State Route 627 or US Route 60. From Irvine it is accessed from State Route 89. A new by-pass in Winchester provides convenient access from Interstate 64 via 627.

Highway 89 currently carries approximately 2600 vehicles daily. Construction of the combustion turbines will add approximately 240 vehicles per day to transport construction workers to the site and an additional four to six tractor-trailers on average per day. This is an increase of less than ten percent. In the

past, during similar construction at the site, no impacts were noted. If the proposed Combustion Turbines and CFB and are constructed simultaneously the traffic estimates would be adjusted accordingly.

Due to the Division of Air Quality requirements, all roads will be either paved or watered to mitigate the fugitive dust. The location of the actual construction is approximate center of the 3200 acres. EKPC expects no fugitive dust to exist beyond the property boundary. EKPC expects no degradation of the roads or lands as a result of the construction. The Kentucky Department of Highways is actively working on a improvement plan for KY 89.

KRS §278.708 (4)

The 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.

Mitigation measures planned by EKPC are as follows:

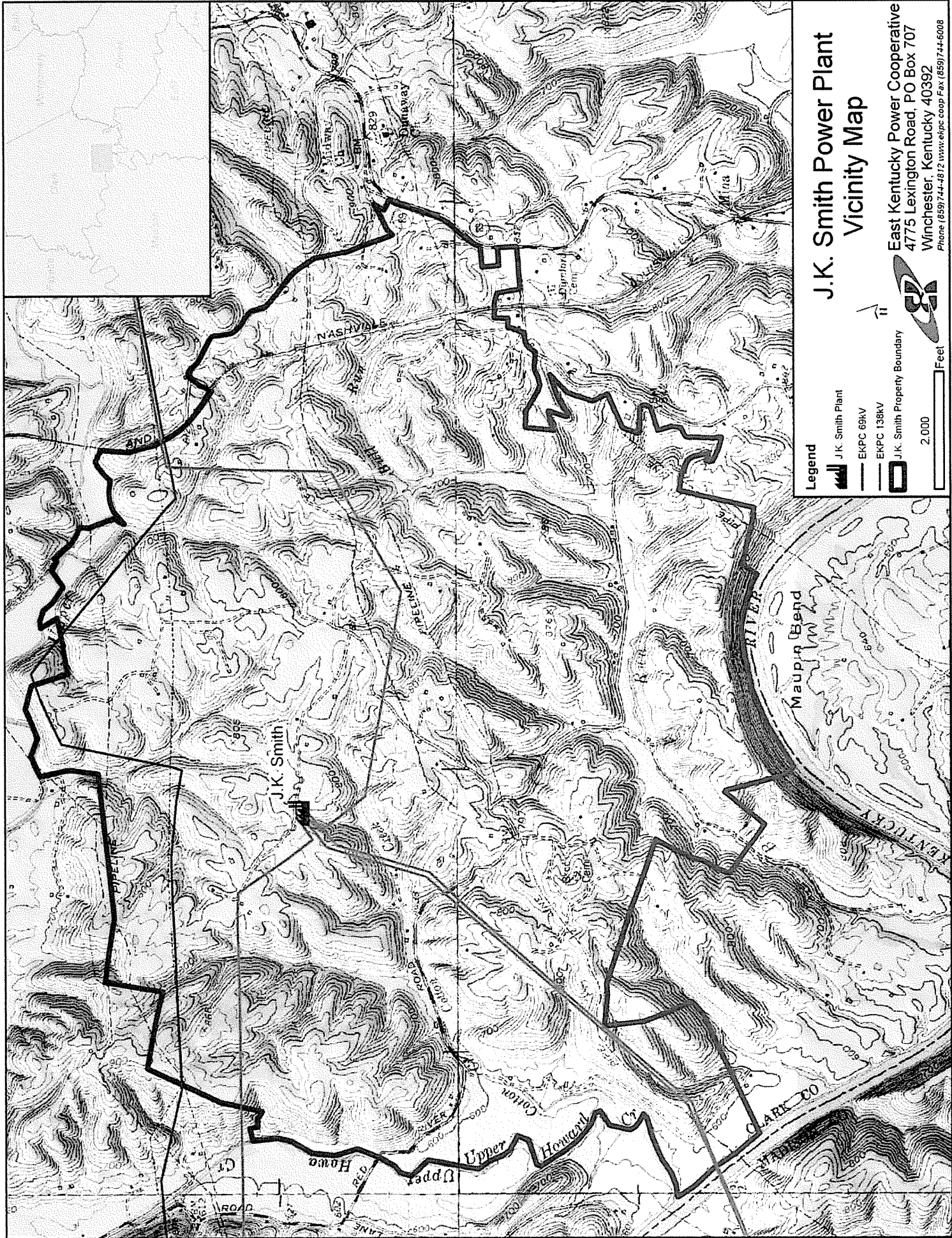
EKPC is committed to developing Smith Station as a model of environmental stewardship. The plant will implement lighting strategies to lessen its impact on the natural environment and Clark County residents living in the vicinity.

A comprehensive forest management plan is already being developed by EKPC personnel for the site. The plan includes measures such as wildlife enhancement, tree plantings for noise mitigation, and timber salvage operations. These activities will all enhance Smith Station's position as a good neighbor to the community surrounding the site.


Noise will also be mitigated by controls installed on the plant systems, such as mufflers, silencers, and noise barriers. These measures have been successful in greatly reducing noise levels at other EKPC facilities.

The heavily traveled roads at the site have already been paved in an effort to mitigate runoff and fugitive dust. During construction activities at the site gravel roads will be watered for dust suppression.

Attachment A



Legend

-  J.K. Smith Plant
-  EKPC 69kV
-  EKPC 138kV
-  J.K. Smith Property Boundary

2,000 Feet

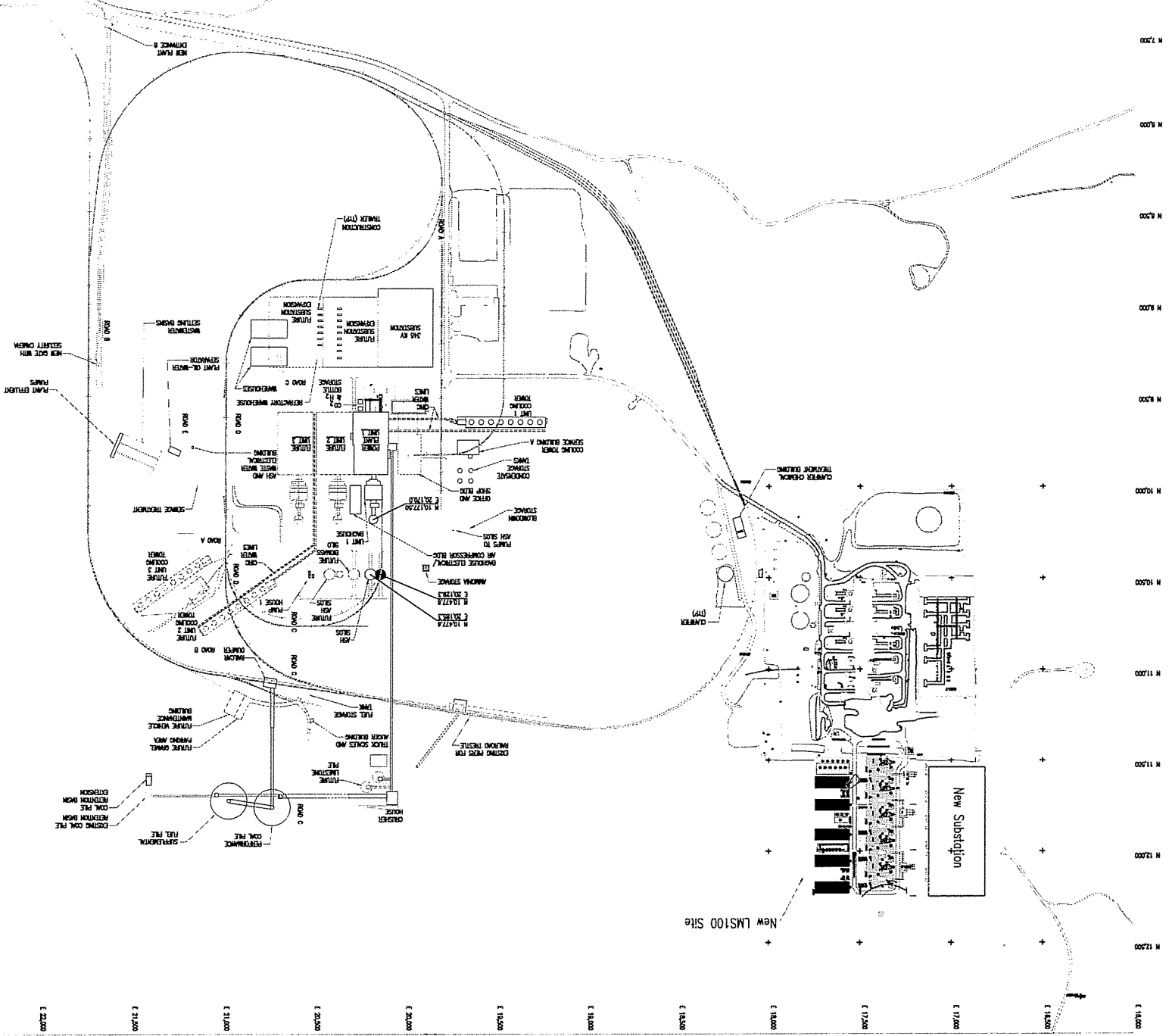
J.K. Smith Power Plant Vicinity Map

East Kentucky Power Cooperative
 4775 Lexington Road, PO Box 707
 Winchester, Kentucky 40392
 Phone (859)744-4812 www.ekpc.coop Fax (859)744-6008



Attachment B

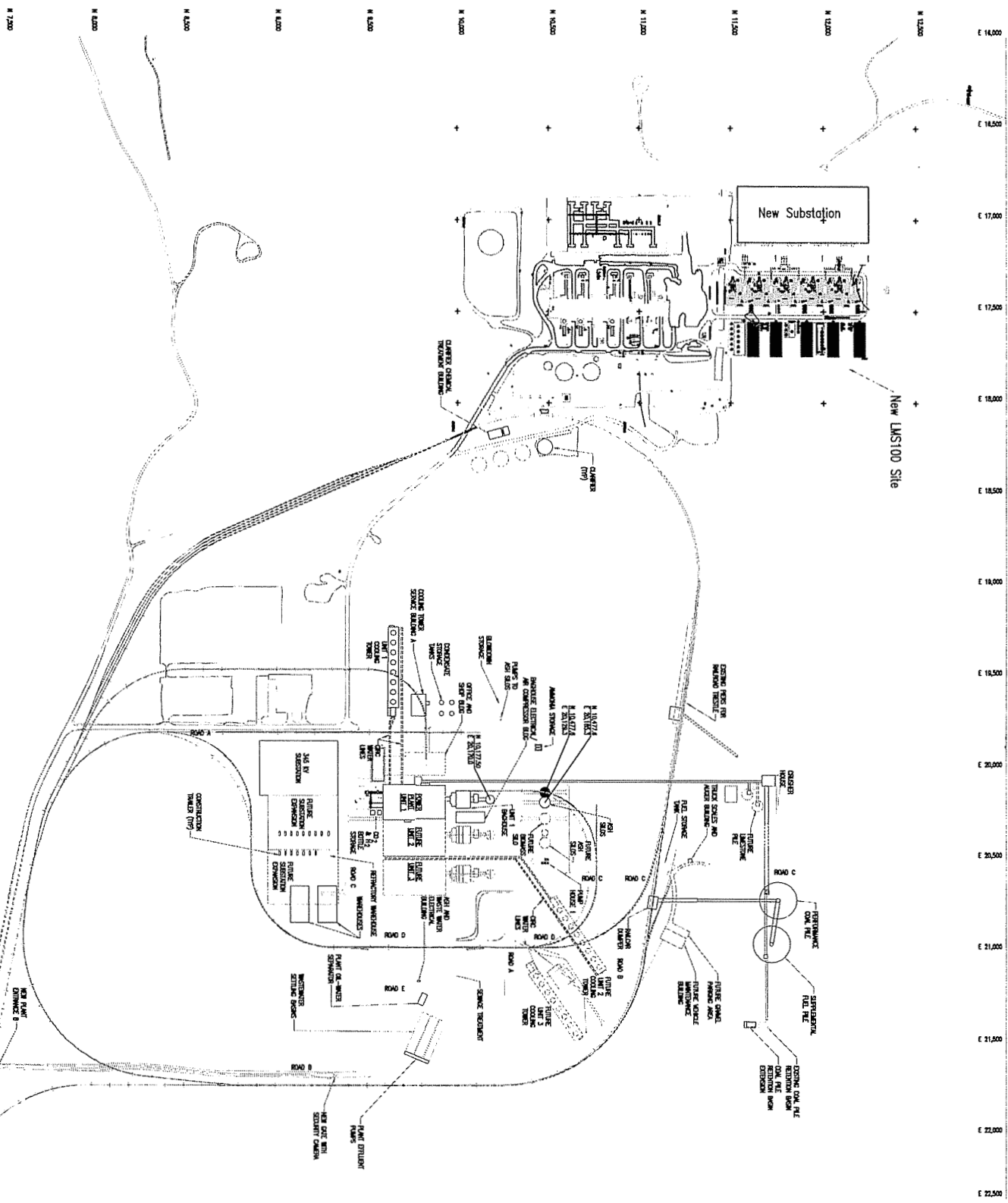
FUTURE LMS100 POWER GENERATION
 PLANT SITES
 11/2003



N 12500
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SCALE: AS SHOWN
 DRAWN BY: J. H. HARRIS, E. S. JONES
 CHECKED BY: J. H. HARRIS, E. S. JONES
 DATE: 11/15/00

PLANNING
 EASTERN ENERGY POWER COOPERATIVE
 120 SOUTH GOVERNMENT
 CHARLOTTE, NC
 APRIL 27, 2000

PROJECT	PLANNING	DATE	0
DESCRIPTION	PLANNING	DATE	0
BY	J. H. HARRIS, E. S. JONES	DATE	0