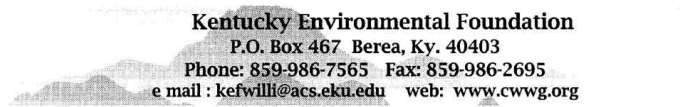


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Mr. Roy Spears
U.S. Department of Energy
National Energy Technology Laboratory
3610 Collins Ferry Rd.
Morgantown, WV 26507-0880

January 25, 2001

SUBMITTED BY MAIL AND ELECTRONIC MAIL

Dear Mr. Spears,

Following are comments on the draft Environmental Impact Statement for the Kentucky Pioneer Integrated Gasification Combined Cycle Demonstration Project. These comments are made on behalf of the Kentucky Environmental Foundation, a non-profit organization located in Berea, Madison County, Kentucky.

This EIS is indicative of a fundamentally flawed regulatory process: one that seeks to manage a set of unacceptable or unnecessary risks rather than find comprehensive solutions which may prevent risks altogether. In this case, citizens are asked to provide comments on a set of bad options in an EIS; this does not allow for review of the broad issues of energy needs and resources in Kentucky and elsewhere.

For this reason and those listed below, KEF advocates the "No Action Alternative 1," which states that no plant is constructed.

GENERAL COMMENTS

1. The EIS is not convincing in its argument that this power plant is necessary by any definition. In fact, the document states outright that "the need for greater electrical generation...is demonstrated by the stated intention of Global Energy, Inc., to proceed with the construction of two combined cycle combustion turbines regardless of whether DOE provides cost-shared funding for the proposed project." (p. 2-2). Decisions which affect public health and the environment should not be determined by corporate intent.

The fact that the proposed facility site has laid vacant for decades shows that neither DOE nor the companies involved in this project have a good perspective on the power supply needs of eastern Kentucky.

2. KEF supports a sustainable energy plan that would not include construction and operation of new power plants. Power plants are a leading contributor of greenhouse gases, heavy metals and other toxic contaminants into the environment. Considering the current background levels of all such contaminants in the environment, any new power plant -- including "waste-to-energy" facilities like this one -- is unacceptable.

Comment No. 1

Issue Code: 22

The CCT Programmatic EIS, released in 1989, addresses potential environmental consequences of the widespread commercialization of the successfully demonstrated CCTs. Energy use was reviewed under the purpose and need analysis. The analysis of other power sources is outside the scope of this EIS.

Comment No. 2

Issue Code: 17

Comment noted.

Comment No. 3

Issue Code: 14

Chapter 2 of the EIS discusses EKPC's 1998 Power Requirements Study which indicates that the electrical load for the region is expected to increase by 3.0 percent per year through 2017. Net winter peak demand is expected to increase by 3.3 percent per year and net summer peak demand is expected to increase by 3.0 percent per year. Peak demand is expected to increase from 2,031 MW in 1998 to 2,394 MW in 2003 and 3,478 MW in 2015. Based on this load growth, EKPC will need additional power supply resources of 625 MW in 2003. The need is further shown by EKPC's plans to construct four new CT electric generating units to provide peaking service alongside the three existing peaker CTs at the J.K. Smith Site.

1/22

2/17

3/14

Comment No. 4

Issue Code: 22

Comment noted. The issue of alternative power sources is outside the scope of the EIS.

4/22

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Rather than manage the unacceptable risks of such a facility, which is only expected to function for twenty years, KEF instead urges an energy plan that is sustainable and non-polluting and which includes power from solar and wind, and other renewable resources.

3. The Precautionary Principle states that where there is doubt or scientific gaps, decisions should be based in precaution. This EIS greatly lacks in detail in a number of areas around known and suspected health effects from the IGCC plant. What we *do* know about emissive technologies, and the toxic chemical being emitted from these facilities, is enough to condemn the project (see specific comments below).

SPECIFIC COMMENTS

1. The EIS does not reflect any intent by DOE or Kentucky Pioneer to take public comment seriously; the document states in numerous places (e.g. the statement mentioned in General Comment #1 above) that some sort of plant will be constructed regardless of DOE funding.

2. What little IGCC process details exist in the EIS, seem to contradict the statement that this project “would best further the objectives identified in the [Clean Coal Technology] Program” (S-3). The EIS is not clear on the actual amounts of coal used in the process for the long-term.

3. The proposed facility could be more accurately described as a municipal waste combustion facility which happens to produce electricity. This poses several problems:

- burning municipal waste in any form -- including refuse derived fuel pellets -- will likely result in release of persistent organic pollutants, or POPs, including dioxins and heavy metals. This action alone poses a very serious health risk. The most recent draft of the USEPA’s dioxin reassessment states that dioxins are a known carcinogen, and that the U.S. population on average already has a body burden of dioxin which exceeds any “safe” standard. Both the EPA, the World Health Organization and other independent health agencies consider dioxins alone to be the most toxic manmade chemicals. The seriousness of the existence of dioxins and other POPs in the world’s environment, food chain and human bodies has resulted in the international POPs treaty which calls for the ultimate elimination of these chemicals. Specifically, the treaty recognizes the importance of preventing new sources of these chemicals.
- the details around the composition of the RDF is so lacking that it is impossible to make any more specific comments on that waste stream.
- there is no reference in Section 6 to Kentucky regulations regarding municipal waste combustion facilities. This facility should be required to, at the very least, meet these regulations.

4. The finding of no health or safety impact for the proposed IGCC facility is completely unfounded. Merely stating that the facility will meet all regulatory requirements has no bearing whatsoever on the plant’s safety. There is no discussion whatsoever of the effects of facility emissions other than the “estimated lifetime cancer risk” table. The risks of acute and chronic exposures for both cancer and non-cancer effects need to be assessed for all segments of the population. Until more detail on these health effects is presented, it is impossible to provide meaningful comment.

Comment No. 5

Issue Code: 11

The emissions from the proposed project would have a less than significant impact because the incremental increase from air emissions is a small fraction of the relevant state and federal ambient air quality standards. Acute and short-term noncancer health effects would be very low because pollutant concentrations are below criteria pollutant and/or air quality standards. Conservative estimates of lifetime exposure risk (probability of developing cancer) for points of maximum downwind exposure are shown in Chapter 5, Table 5.7-4, of the EIS. An estimated lifetime exposure risk of 5E-05 (5.0 x 10⁻⁵) applies to location of maximum exposure which is within the boundaries of the J.K. Smith Site. Cumulative estimate lifetime risk for offsite locations would be less than 5E-05 (5.0 x 10⁻⁵) and decrease with distance from the site.

4/22
(cont.)

5/11

6/21

7/14

8/22

Comment No. 6

Issue Code: 21

All comments received during the public comment period will be considered during preparation of the Final EIS and addressed in the comment response document. A final decision will be made based on the findings of the EIS and public input, in addition to other factors. DOE will consider all public comments before issuing the ROD. The ROD will be issued no sooner than 30 days after the Final EIS is distributed and a notice of its availability is issued.

9/06

10/16

11/21

Comment No. 7

Issue Code: 14

DOE selected the Kentucky Pioneer IGCC Demonstration Project for further consideration under DOE’s fifth solicitation (CCT-V) of the CCT and concludes that the project meets CCT Program requirements due to the use of the co-fed BGL technology. The proposed federal action is to provide funds for demonstration of the BGL gasification technologies. The EIS provides analysis and impacts based on the fuel feed used for the 1-year demonstration. The impacts presented in this EIS are based on the full 20-year timeframe that the plant is expected to be operating.

12/11

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5. Similarly, there is no mention of health in the section discussing cumulative effects. This section should include the cumulative health effects as listed above, and also a discussion of the synergistic effects of plant emissions with background contaminants levels.

IN SUMMARY, KEF strongly opposes the IGCC project. The project is unnecessary, and the wide data gaps in the EIS make it impossible to comment with any greater detail.

Please feel free to contact me if you have any questions.

Sincerely,


Elizabeth Crowe
Kentucky Environmental Foundation

also on behalf of:

Ramesh Bhatt
Sierra Club Cumberland (Kentucky) Chapter
1000 Rain Court
Lexington, KY 40515

William S. Herrick
4859 Flat-Mary Rd
Campton, KY 41301

Naomi Schulz
Member, Kentuckians for the Commonwealth
109 Phillips St.
Berea, KY 40403

Lisa Collins
2344 Harrodsburg Rd.
Lexington, KY 40503

John Maruskin
Adult Services Librarian
Clark County Public Library
1101 Ironworks Rd.
Winchester, KY 40391

Tom FitzGerald
Kentucky Resources Council
PO Box 1070
Frankfort, KY 40602

encl: Addendum page

Comment No. 8
Comment noted.

Issue Code: 22

13/20 **Comment No. 9** **Issue Code: 06**
Comment noted. Hazardous air pollutant emissions from the proposed
14/16 project are identified in Chapter 5, Table 5.7-2 of the EIS. The
estimated maximum lifetime cancer risks associated with exposure to
these emissions from the proposed project are presented in Table 5.7-4.

Comment No. 10 **Issue Code: 16**
Chapter 3, Section 3.2.2.2, discusses the production and composition
of the RDF pellets using all available relevant data. KPE intends to
supply all RDF pellets for this project from the same manufacturer.
Variation in RDF pellet composition due to different manufacturing
processes should not be an issue for this project. The gasification
technology used produces a very consistent syngas product, regardless
of the variability of the feed. Chapter 3 has been modified to provide
more detail on the gasification process, including the production of the
vitreous frit.

Comment No. 11 **Issue Code: 21**
KPE is not attempting to circumvent KRS 224, or any other state or
local laws. KPE has appealed to the state for an interpretation of the
language of applicable solid waste laws regarding RDF. The Kentucky
Natural Resources and Environmental Protection Cabinet has
determined that the RDF is a recovered material, not waste. The
Kentucky Pioneer IGCC Demonstration Project facility will be
considered a recovered materials processing facility and the
gasification process will not require a waste permit as long as the RDF
conforms to the regulatory definition. A discussion of this issue has
been added to Chapters 1 and 6 of the EIS.

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Following is a list of commentors for the DOE/EIS-0318 Kentucky Pioneer Integrated Gasification Cycle Demonstration Project Draft Environmental Impact Statement. Also following is a list of citizens and names of organizations. On behalf of, and with permission of, the original commentors, we request that the names and organizations on the second list be added to the submitted comments in the first list.

List of comments submitted:

William S. Herrick, comments submitted 01/23/02
4859 Flat-Mary Rd
Campton, KY 41301

Ramesh Bhatt, comments submitted 01/20/02
Sierra Club Cumberland (Kentucky) Chapter
1000 Rain Court,
Lexington, KY 40515

Tom Fitzgerald
Kentucky Resources Council
P.O. Box 1070
Frankfort, KY 40602

Phil Crewe, comments submitted 01/24/02
1817 Traveller Rd.
Lexington KY 40504

Elizabeth Crowe, comments submitted 01/25/02
Kentucky Environmental Foundation
P.O. Box 467
Berea, KY 40403

List of names to be appended to the above listed comments:

John Maruskin
Adult Services Librarian
Clark County Public Library
1101 Ironworks Rd.
Winchester, KY 40391

Lisa Collins
2344 Harrodsburg Rd.
Lexington, KY 40503

William S. Herrick
4859 Flat-Mary Rd
Campton, KY 41301

Ramesh Bhatt
Sierra Club Cumberland (Kentucky) Chapter
1000 Rain Court
Lexington, KY 40515

Comment No. 12 (cont.)

Issue Code: 11

Acute and short-term noncancer health effects would be very low because pollutant concentrations are below criteria pollutant and/or air quality standards. Conservative estimates of long-term health effects of cancer for points of maximum downwind exposure are shown in Chapter 5, Table 5.7-4, of the EIS. The proposed project would be permitted at levels to minimize the acute, short-term and long-term health impacts to the public. The air quality permit for the proposed project requires continuous emission monitoring for criteria pollutants and annual emissions testing for cadmium, lead, mercury, hydrogen chloride, and dioxins/furans. Noncompliance with permitted emission levels would result in a plant shutdown.

Comment No. 13

Issue Code: 20

Comment noted. Section 5.14, Cumulative Effects, has been revised to include an analysis of the cumulative health effects.

Comment No. 14

Issue Code: 16

Comment noted.

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Elizabeth Crowe
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