U.S. DEPARTMENT OF ENERGY
Kentucky Pioneer
Integrated Gasification Combined Cycle
Demonstration Project
Draft Environmental Impact Statement
Public Scoping Meeting
Lexington, Kentucky
December 10, 2001

APPEARANCES:

FOR THE U.S. DEPARTMENT OF ENERGY:

Roy Spears, U.S. Department of Energy

John Preston, Corps of Engineers, Project Manager

Jim Watts, Project Manager

Gordon Lorenzi, Compliance Officer

The U.S. Department of Energy public meeting was held at 7:00 p.m., December 10, 2001 at the Lexington Public Library, downtown Lexington, Kentucky, before Michele G. Hankins, Court Reporter.

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P R O C E E D I N G S

MR. SPEARS: May I have your attention, please?

Everyone should take a seat, or find a comfortable spot to lean up against, we will begin this meeting.

Is the volume okay back there, Tim?

Good evening ladies and gentlemen.

Just a few housekeeping chores that we want to cover before we get too far into this public meeting.

If you find it necessary to go to the restroom, you can take the elevator, which is just outside and to your right. Go to the second floor and it is on either side of the elevator.

In the event of an emergency evacuation, fire, or some other emergency, we have this exit from this room and there are two exits both street sides here.

And if there is something back there that prevents us from getting out that way, there is an exit behind me here off the stage.

So I just want you to know that those are there, and hopefully we won't need them, at least

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we know where they are.

There are a few people that I would like to introduce tonight who have been very, very, helpful in putting together this draft environmental impact statement for the Kentucky Pioneer Energy, IGCC project.

One is from the Department of Energy, and project manager for this project, Jim Watts, who sits on the back row back there.

John Preston who is going to be doing some presenting tonight. John works for the U.S. Army Corps of Engineers out of the Huntington District. John is the project manager for the NEPA document here.

We have three gentlemen that are here from the Kentucky Pioneer Energy Project. We have Mike Muslin, Dwight Lockwood, who is the environmental regulatory affairs person.

We have Rich Bailey, who is vice president of Global Energy, but he is also with Kentucky Pioneer.

I would like to express my appreciation to these gentlemen for all the efforts that have been put forward. It has been a long rigorous process

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getting to this point, and we think we have made significant progress and we look forward to continuing, going through this public hearing, public comments that we will receive from you. Putting that together in a final EIS and getting a Record of Decision, which is our ultimate goal, of course.

I think without further adieu I would like to turn the program over to John Preston, who will take us through the NEPA process and give us some insight on some of the things that we have done, and some of the things that we still need to do.

John?

MR. PRESTON: Thank you, Roy. I thought it important to talk a little bit about why we are here. It is National Environmental Policy Act is a planning tool. And any federal action requires that we go through the NEPA process.

It is important tonight because we are at that point where it provides another opportunity for the public to give us comments so that we can do a better job of planning.

We started back in April with what is called a Notice of Intent, just basically an announcement that the Department of Energy determined

that the appropriate document for this project, or proposed project, was the Environmental Impact Statement.

In May, we had a scoping meeting in Trapp, Kentucky, and I recognize some of the faces, some of you were there. That is where we got your comments on what we should look at in the process.

Since then, we have been preparing this Draft Environmental Impact Statement. And it is draft because we are now at the public hearing stage, or public comment period where we want to get your comments on how well we did in addressing those issues that you told us were important to you, as well as the ones we may have already decided were important.

After this hearing tonight, we have another in Trapp tomorrow at the same time, and then on January 4, we close the public comment period.

So we are requesting your comments be either submitted orally tonight, or you can submit them in writing to Mr. Spears, and the address is in your handout, by January 4.

We will take those comments and each comment will be considered, and we will have a

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comment document that will accompany the final EIS and you can see in there how we addressed your comments.

After that, within the agency, the Department of Energy will make a decision, and the decision will be whether to fund this demonstration project. That is indeed the federal action here is to decide whether or not to provide funding.

The EIS, we have the draft, considers three alternatives. Number one, is something required in all NEPA documents, this is the No Action. If the federal government does nothing, what will the environmental conditions be like, it pretty much remains the same, but there can be some adverse impacts, as well as beneficial impacts, to no federal action.

No Action, Number 2, is important in this document because should the DOE not fund the gasification demonstration and fuel cell demonstration of this project, Global Energy and Kentucky Pioneer, have indicated that they would go ahead and build what we term the power island portion of the project, which has determined to produce electricity, they would fuel that with natural gas.

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So, therefore, there are impacts from that no federal action alternative, as well, and we decided to call them both No Actions, because, again, the federal action is demonstrating the technology by providing that which would allow the demonstration to take place.

So the proposed action is DOE provides funding to assist in the demonstration of the British Gas Lurgi, IGCC, power plant at a commercial scale, along with a two megawatt fuel cell -- and I am sure these gentlemen, if you got a chance to talk to them earlier, can describe that better than I, as far as technically, anyway.

The EIS, we consider a lot of environmental factors, this is where some of your comments came in at scoping, what we should look at.

This is essentially the outline of the main topic we considered.

There is too much detail to go in, but I do just want to say, that our analysis indicates that there is no significant impact from this project. Every one of them has an impact, but we don't feel any are significant on this scale of a project.

So, again, this is an important part of

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the NEPA process where we get the public's comments on how well we did addressing the impacts from this proposed action. Because it is important to the agency to make the decision on whether or not to go forward with the proposed alternatives, or not.

So I appreciate you all coming, and again the close of comment period is January 4.

You can speak orally here, we have a list of people registered to speak, we will open it to the floor, after those who have registered to speak.

Again, you can submit comments in writing, but also over the Internet. And I believe those addresses are in your pamphlet, there but again, you can submit comments in writing and also over the Internet. I believe those addresses are in your pamphlet. There are a couple of things in there that describe the project in more detail, as well as describe the NEPA process.

Thank you.

MR. SPEARS: John mentioned the handout that is available at the table at the back of the room. And this is what it looks like, I hope everyone got one, if you did not, this is what it

looks like and it has some material in the back.
It also has the comment sheet inside.
Be sure to pick one up if you don't have one yet.
One other gentleman that I waited to introduce, he sort of overlooks everything that we do on the NEPA side, at the National Energy and Technology Laboratory. He is our NEPA compliance officer, Lloyd Lorenzi, he is in the back.
We are very pleased that a number of you came out tonight. This is indicative of at least a concern of what is going on in your community, and a that is, in essence, why we have the public meeting.
We want to find out what you think about things, what comments you have, what concerns you have. So the purpose of this meeting tonight, as we have indicated a couple of times, is to receive your comments on this draft environmental impact statement for the Kentucky project.
I would like to now ask the first on our sign-up sheet to come forward. Actually, you will have a microphone delivered to you.
We would like for you to state your complete name slowly so that the court reporter can make sure that we get your name correct. And it

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probably wouldn't hurt if you spelled your name as well.

We would like to request somewhere in the neighborhood of a five-minute comment period. We do not have a whole lot of commenters tonight, so that is not real, real important, but we do not want to go into a 20- or 30-minute dissertation.

So, if you will hold them to about five minutes, and then later on, after all of your speaker, or speakers, have had an opportunity to comment, then perhaps you could come back up and make another comment if you wish.

Let's talk about the handout. One very important issue is the closing of the comment period, which is January 4, 2002. So if you keep that in mind as you comment, we surely would appreciate that.

We are now ready for Mr. Crewe, to begin his comment.

MR. CREWE: My name is Phil Crewe.

My name is spelled C-R-E-W-E, and I live here in Lexington. I am a member of the Sierra Club.

My concerns are several, one of them is firstly, why is this plant specifically the

1/14

Comment No. 1 **Issue Code: 14**

Because of DOE's limited role in providing cost-shared funding for the proposed Kentucky Pioneer IGCC Demonstration Project, alternative sites were not considered. 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. The power generated by the project will be used to support Kentucky's energy needs. The relatively small amounts and generally widely dispersed nature of MSW in Kentucky does not economically support exclusive utilization of Kentucky-generated MSW to produce RDF supplies. Importing RDF from a densely populated metropolitan area is more economically viable in order to supply the necessary amount of RDF required to operate the plant.

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gasification of municipal waste being built in Kentucky?

We understand that the municipal waste will come from New York and New Jersey. There is an abundance of municipal waste in New York and New Jersey and there is a shortage of power in the northeast.

We, on the other hand, don't have that degree of shortage of power. It would seem logical that the plant be built where there is the abundance of the waste to be processed, and where there is a market, where the price for power is much higher.

As a matter of environmental justice, I believe the plant should be built near where the most of the feed stock for the plant is generated.

And I am concerned, and have so far not gotten completely satisfactory answers about the environmental state of toxic heavy metals in the municipal waste.

We understand that most of them will end up in the vitrified frit component, and that is just the bottom of the gas fired.

What insurance do we have that this material will not leach toxic heavy metals, plus

Comment No. 2 **Issue Code: 13**

DOE does not believe that the proposed project poses environmental justice concerns. The environmental justice analysis is presented in Section 5.19 of the EIS, Environmental Justice.

1/14 (cont.)

For this project, KPE selected the J.K. Smith Site due to the initial grading and development that occurred during the construction on the previously discontinued J.K. Smith plant. KPE determined that the project costs would be much higher and the environmental impacts greater if an undisturbed area was chosen.

Comment No. 3 **Issue Code: 12**

With the exception of white goods (e.g., refrigerators), glass, and cans, the remaining components of MSW (e.g., paper, plastic, and food waste) are processed to make RDF. The process of manufacturing the RDF creates a relatively homogeneous end product; however, since MSW is variable, the exact components of RDF are not known. The vitrified frit consists primarily of ash (99.2 percent by weight) composed of oxides of the following elements: silicon (SiO_2), aluminum (Al_2O_3), titanium (TiO_2), iron (Fe_2O_3), calcium (CaO), magnesium (MgO), potassium (K_2O) and sodium (Na_2O). The frit also consists of chloride, fluoride, antimony, arsenic, beryllium, boron, cadmium, chromium, cobalt, copper, lead, manganese, mercury, molybdenum, nickel, silver, thallium, vanadium and zinc. Since all constituents are immobilized in the frit, which is resistant to corrosion in the environment and has been proven nonleachable by EPA standards, they will not contaminate the environment.

2/13

3/12

14

lead, dioxin, cadmium and others over the long haul.

Even if it does pass, how does the claim that is made by Global Energy that the frit passes the so-called -- I believe it is the TTLT, leach test, if that is correct. How does that translate into the real world? If it just barely passes that test, it can be sold as road aggregate or construction material or fill material. How much leaching of toxic a day will occur? We don't have the answer to that question.

What is the basis of the claim that this will not leach toxins in the Kentucky environment that have come from another part of the country?

Another concern would be the amount of water usage. This plant will consume water from the Kentucky Rivers in the pool above Lexington. There is a continuing demand on the Kentucky River.

Last year, if you remember, we had a severe drought where the flow of the river almost stopped and the consumption by the community, was actually greater than the flow of the river.

So the component of gasifying coal and/or municipal waste, greatly increases the water consumption. So, we would be assured that this plant

3/12 (cont.)

4/07

Comment No. 3 (cont.) **Issue Code: 12**

Vitrified frit from this facility is expected to pass the more stringent Universal Treatment Systems criteria of the EPA-TCLP analytical method. Frit is considered a commercial product, not a waste; therefore, the vitrified frit from the gasification process can be used in areas such as road and building construction. Chapter 3 of the EIS has been modified to include a more detailed description of the frit.

Comment No. 4 **Issue Code: 07**

The cumulative effects of withdrawals from the Kentucky River by power plants have been discussed by the Kentucky Natural Resources and Environmental Protection Cabinet in their cumulative assessment report (KNREPC 2001), addressed in Section 5.14, Cumulative Impacts. The Cabinet acknowledges that because many of Kentucky's power plants are exempt from water withdrawal requirements, the Cabinet does not have an accurate inventory of the volume of water being removed each day by the existing power plants. However, the KDEP is able to limit withdrawals from permitted sources during periods of abnormally low flow. Although the proposed plant would not be a permitted withdrawal source, KPE has stated that they would cease water withdrawals if requested to by the state.

would not consume a large amount of water, when there were extremely low flows in the Kentucky River.

Another concern is the visual pollution. The stacks from the gasification aspect of this plant, would be visible from the top of Pilot Knob, that is supposedly where Daniel Boone first viewed the Bluegrass in 1769 on the first long hunt in Kentucky into the bluegrass.

And I have been up there many times and it is a beautiful site and it is largely a rural view. You are looking at what looks like a great sea stretching out into infinity. And this will be visual pollution, if you will, about eight miles away it will be visible.

I will probably have other comments later, or before the January 4th cut off period, but particularly my concern is, I will reiterate, the ultimate environmental phase of the heavy metals coming into Kentucky in municipal waste. Keeping toxic waste out of that, which I don't think there will be a way to do. And the question of environmental justice, why the plant is not being built near the source of the feed stock and the municipal waste?

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4/07 (cont.)

5/04

3/12 (cont.)

2/13 (cont.)

Comment No. 5 **Issue Code: 04**

Comment noted. Impacts to the aesthetic and scenic environment of the project area are presented in Section 5.5, Aesthetic and Scenic Resources, of the EIS. The tallest structures that would be built for this project are the facility stacks for the gasifiers. These structures would stand 65 meters (213 feet) in height and would likely be visible from the 222.5-meter (730-foot) high observation position on top of the Pilot Knob State Nature Preserve, 12.8 kilometers (80 miles) east of the project site. However, due to the distance from the facility, the aesthetic and scenic impact to the viewshed from Pilot Knob would be minor.

That is all I have to say right now. I appreciate the opportunity.

MR. SPEARS: Thank you very much, Mr. Crewe. I appreciate your comments.

Commenter number two, Ramesh Bhatt.

MR. BHATT: My name is Ramesh Bhatt. R-A-M-E-S-H, B-H-A-T-T.

I am a resident of Lexington, Kentucky, also.

I have many of the same concerns that Crewe voiced just recently. I want to reinforce some of them.

First, I was struck by the vagueness of the analysis of the draft EIS. 6/14

My judgment is that an EIS is useful and highly special, and I was surprised that there was no data on whether this frit, this left over product that comes from this process, whether it is hazardous or not. 7/12

The people don't even know at this point. I think the EIS document is unclear whether it is hazardous or not.

I don't know what kind of EIS can be done if you don't even know that. There are all 6/14 (cont.)

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Comment No. 6 **Issue Code: 14**

DOE believes that the Kentucky Pioneer IGCC Demonstration Project EIS adequately analyzes the full scope of environmental impacts from the proposed project. Chapter 3 has been modified to provide more details on the gasification process, including the production of the vitreous frit.

Comment No. 7 **Issue Code: 12**

RCRA, Subtitle C, has established special on-site accumulation requirements for generators of hazardous waste depending on the RCRA generator status of the facility. Assuming that the proposed plant would be a large quantity generator (generating more than 1,000 kilograms [2,200 pounds] or more of hazardous waste per month), under RCRA it is allowed to accumulate hazardous waste conversion onsite for no more than 90 days (§262.34a).

Vitrified frit is considered a commercial product, not a waste. The frit produced by the proposed project is expected to be marketable. The frit from gasifiers operating on a 100 percent coal feed has consistently proven to be nonhazardous and rarely fails the TCLP test. Since this project will be using a different feed stream, the first batch of frit should be tested to ensure that is meets all TCLP criteria and is therefore nonhazardous.

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kinds of environmental issues with the handling of the hazardous material, if it turns out to be hazardous.

So I was a little surprised by that. I think for the final EIS, we need to know more information, because this is obviously going to be a critical aspect of this project here.

That is one point.

The second point that I am concerned about that was clear to me from the EIS document, the draft anyway, was the nature of the monitoring.

This is an experimental facility. This is the first time that something like this is going to be tried in the U.S.

It is designated as an official municipal waste combustion. It is about a mile from a local school. Given all this, shouldn't there be some more information about who is going to be monitoring it, what is going to be monitored? This is supposed to be a one-year project, we want to know what happens at the end of it. Is there going to be a public meeting at the end of one year where we know what will come of this? Is it going to be a complete new permitting process at the end of the first year?

6/14 (cont.)

8/11

9/21

Comment No. 8 **Issue Code: 11**

The air quality permit issued by the Air Quality Division of the KDEP requires continuous emissions monitoring. Compliance with emission limits set by the Final PSD/Title V Permit would be verified by a detailed set of monitoring and reporting requirements as outlined in the permit. Continuous emissions monitoring equipment is required on the generator system stacks for NO_X, CO, O_2, SO_2, and opacity. Initial stack tests are required for NO_X, CO, SO_2, PM_{10}, volatile organic compounds, beryllium, cadmium, lead, mercury, hydrogen chloride, and dioxins/furans. Initial monitoring of hydrogen sulfide (H_2S) is required at the sulfur recovery facility, and periodic opacity observations are required at various material handling facilities. In addition, annual stack tests are required for PM_{10}, cadmium, lead, mercury, hydrogen chloride, and dioxins/furans.

Appropriate and required personnel monitoring would also be conducted. Health and safety procedures and health monitoring requirements would be addressed during the design and construction phase of the proposed project.

Comment No. 9 **Issue Code: 21**

KPE has a contract in place with EKPC to provide power continuously for a 20-year period. The facility would not shut down after the 1-year demonstration period, but would continue to operate to honor the commitment to EKPC. As discussed in Chapters 1 and 2 of the EIS, the performance, technical, and economic data would be used to determine the commercial viability of the BGL gasifier at other new and existing facilities. There would not be a new round of permitting following the end of the 1-year demonstration period. The PSD/Title V Air Permit issued by the Kentucky Division of Air Quality is final and does not require renewal following the demonstration. At the close

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I think all of this information needs to be in the EIS.

The third point that is of concern to me is that from what I could make up, the analysis was based on 50 percent of this refuse pellet and 50 percent coal waste. But my understanding is that in the future, more refuse may be used. All of this chemical analysis, what is going to be the outcome, et cetera, et cetera, based on 50 percent/50 percent, or is it going to be 80 percent, 90 percent?

That brings me to another critical aspect of the EIS that needs to be addressed. A fourth aspect is the nature of this refuse pellet, or the refuse derived fuel. It is unclear, it is a little vague, as to what the components of this would be, not a lot of hand waiving about things may be removed, some things ought to be removed, but if they get removed, we don't know.

It says that the intent is to buy this fuel from one particular supplier. If that is the intent, will we have more information about this? We should probably have a lot more information about the composition of these pellets, what happens, what are the pellets made for, are they being burned into the

10/14

11/16

11/16 (cont.)

Comment No. 9 (cont.) **Issue Code: 21**
of the demonstration period, the KPDES permit for water usage would also be final and not require renewal. Any required fuel feed component changes following the 1-year demonstration period would likely require modification of the air and water permits.

Comment No. 10 **Issue Code: 14**
The EIS provides analysis and impacts based on the fuel feed used for the 1-year demonstration. The impacts presented in the EIS are based on the full 20-year timeframe that the plant is expected to be operating. Varying the percentage composition of the feed stream after the demonstration period will not significantly alter the expected environmental impacts from the proposed project.

Comment No. 11 **Issue Code: 16**
Chapter 3, Section 3.2.2.2 of the EIS, discusses the production and composition of the RDF pellets using all available and relevant data.

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atmosphere, are they being used elsewhere for whatever purpose?

So I would like to know about all of these things. My suggestion is that we have the information of this nature. It should be an integral part of the EIS.

The draft EIS also says that on these of tons of tons of sulfur dioxins, carbon monoxide, that it kind of dismisses this as not being significant. From what perspective? It may not be significant in terms of a traditional coal-fired plant, but we don't want to have chemicals anymore than we need.

So I don't understand how EIS can be so dismissive of a thing like this. You have a cumulative impact of all of these things on the environment of Kentucky. I think this is an important issue and it needs more discussion.

Another point I have was the visual pollution that someone made about the stacks being visible from this Pilot Knob and the City of Winchester. This is a critical issue and an important issue from this region, but at the same time they are talking about beautifying this region and bringing more people in for tourism and things of

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11/16 (cont.)

Comment No. 12 **Issue Code: 06**

The EIS characterizes the emissions from the proposed project as having a less than significant impact based on the fact that incremental ambient air quality impacts from these emissions would be a very small fraction of the relevant federal and state ambient air quality standards (less than 1 percent of the standards for gaseous pollutants and less than 4 percent of the PM_{10} standards). In addition, the project would comply with all applicable federal and state air quality regulations, including federal PSD regulations.

12/06

Section 5.7, Air Resources, of the EIS has been revised to further evaluate impacts related to acid deposition and heavy metal deposition downwind of the project site.

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.

13/20

Comment No. 14 **Issue Code: 04**

Comment noted. Impacts to the visual setting of the project area are presented in Section 5.5, Aesthetic and Scenic Resources, of the EIS. The large size of the surrounding J.K. Smith Site and the hilly nature of the area would reduce the visual and aesthetic impacts to a large degree. The facility would be visible from high elevations including the 222.5-meter (730-foot) high observation position on top of Pilot Knob State Nature Preserve, 12.8 kilometers (8 miles) east of the project site. However, due to the distance from the facility, the aesthetic and scenic impact to the viewshed from Pilot Knob would be minor. No impacts to regional tourism have been identified as a result of this project.

14/04

that nature.

Another point, a final point, from the draft EIS, I could make out that up to 60 percent of the water is taken from the Kentucky River, it is used for thermal electric power production, that is a lot.

In other words, of all of the water that is taken from the river, most of it, the majority of it, 60 percent of it, goes for the production of energy. Now, what does it do to the river eventually?

The draft EIS statement dismisses the water taken out as not being a significant amount and a maximum of up to four percent of the flow when the water levels are low. But if you look at the cumulative aspects of all of this, ultimately I think we are going to be in trouble if we don't take better care of our water.

So, those are the comments that I have. I suspect that other speakers will have issues about water, too.

The bottom line for me has been that the EIS, I don't feel like it gives enough information, and relies a lot on data provided by the interested

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15/07

6/14
(cont.)

Comment No. 15 **Issue Code: 07**

The cumulative effects of withdrawals from the Kentucky River by power plants have been discussed by the Kentucky Natural Resources and Environmental Protection Cabinet in their cumulative assessment report (KNREPC 2001), addressed in Section 5.14, Cumulative Impacts of the EIS. The Cabinet acknowledges that because many of Kentucky's power plants are exempt from water withdrawal requirements, the Cabinet does not have an accurate inventory of the volume of water being removed each day by the existing power plants. However, the KDEP is able to limit withdrawals from permitted sources during periods of abnormally low flow. Although the proposed plant would not be a permitted withdrawal source, KPE has stated that they would cease water withdrawals if requested to by the state.

company, rather than presumably from objective observers on the outside.

The process of it, we don't know what the frit is going to be about, we don't know whether it is hazardous or not. If it is hazardous, how can we get rid of it in a nonhazard way? What is the concentration of the hazardous waste, they get up to 60 days or 90 days to move this hazardous waste in the same location.

There a lot of environmental issues involved with all of those things. It seems to me that a complete EIS would have to bring out these issues.

Thank you.

MR. SPEARS: Thank you, Mr. Bhatt.

Our next commenter is Patty Draus.

MS. DRAUS: Thank you. My name is Patty Draus and I am from Lexington.

My comments are very similar in nature to the previously mentioned ones.

I do have some concerns about the water usage and the fact that large quantities -- the quantity that will returned to the water, presumably to the river, would be at a higher temperature than

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6/14 (cont.)

7/12 (cont.)

16/07

Comment No. 16 **Issue Code: 07**

Section 5.9 of the EIS, Ecological Resources, discusses potential impacts from the water returned to the river at high temperatures. As stated in Section 5.8, Water Resources and Water Quality, treated wastewater is expected to contain conventional pollutants such as nitrogen, phosphorus, total dissolved solids, and biological and chemical oxygen demand. Pollutant discharge limitations, including thermal limits, would be set by the Kentucky Natural Resources and Environmental Protection Cabinet, Division of Water's Water Resources Branch and would be identified in the KPDES permit. These limitations would be established based on site-specific computer modeling of the expected effect on water quality of the Kentucky River at the proposed discharge point and in the mixing zone immediately downgradient. The limits specified in the permit would protect existing water quality.

The Water Resources Branch pays particular attention to the proximity of wastewater discharges to drinking water intakes. New sources of wastewater are prohibited within 8 kilometers (5 miles) of a water treatment plant intake. This 8-kilometer (5-mile) limit was established to provide an additional layer of protection for the water quality found at drinking water intakes over treatment alone and is referred to as Zone 1. Zone 2 extends from 8 to 16 kilometers (5 to 10 miles), while Zone 3 is the area from 16 to 40 kilometers (10 to 25 miles) from a water treatment plant intake. The proposed outfall is located in Zone 3 for the Winchester Water Treatment Plant. Water collected at the treatment plant is tested and treated to meet all federal and state requirements concerning drinking water quality. Therefore, no impacts to drinking water are expected.

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what was taken out, what will be the environmental impacts of that? As well as what chemicals will be returned to the river?

As previously mentioned, during low flow times -- we have had some concerns here in Lexington, where will we get our drinking water and now we will have drinking water with additional chemicals in it that I am particularly not interested in drinking.

My second concern has to do with the trash that is being brought from out of state. I hate to see the State of Kentucky become the trash reciprocal for other states, now we can start getting this from all over the nation. How do you control the content of the trash and when you burn this and when you produce this frit, how do you control what comes out and what effect it will have on our environment?

So, I just really would rather see that we not be using trash as the fuel source for this power plant.

And my third concern, which probably, or is definitely not within the scope of your environmental impact, but I do have concern about whether we need this power. Where is the demand for

Comment No. 17 **Issue Code: 12**

The RDF pellet and coal cofeed that is processed during gasification results in the formation of molten slag, which becomes vitrified frit when quenched with water. The vitrified frit from gasifiers utilizing other feed stocks is resistant to corrosion in the environment and considered nonleachable by EPA standards. The frit produced by this facility is expected to meet all TCLP criteria. It will be a marketable product, not a waste.

16/07 (cont.)

Comment No. 18 **Issue Code: 16**

DOE selected the Kentucky Pioneer IGCC Demonstration Project for further consideration under DOE's fifth solicitation (CCT-V) of the CCT Program and concludes that the project falls under CCT Program requirements due to the use of the co-fed BGL technology.

17/12

Comment No. 19 **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 the 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. The Kentucky Pioneer IGCC Demonstration Project will not be used to phase out existing coal-burning plants. The power generated by the IGCC will be used to support Kentucky's energy needs.

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this plant or will it be phasing out another old coal-burning plant that is not as efficient and not as clean?

And those are the three things that I am concerned with.

Thank you.

MR. SPEARS: Thank you very much, Ms. Draus.

Our next commenter, Naomi Shultz.

MS. SHULTZ: My name is Naomi Shultz. And I am speaking tonight on behalf of my colleagues at the Kentucky Environment Foundation, which is located in Greenup, Kentucky.

For the past six weeks, Kentucky Environment Foundation has focused almost exclusively on the issue of chemical weapons disposal and have fought hard to protect all central Kentucky citizens from the effects of a proposed chemical weapons incineration.

At Kentucky Environment Foundation, we steadily support non-incineration technology which do not release toxic chemicals in Kentucky's air, water and food.

We continue to maintain focus on the

19/14 (cont.)

20/22

Comment No. 20 **Issue Code: 22**

Comment noted.

24

chemical weapons incinerator, yet are compelled to comment tonight, and later in the form of written comment, on the ludicrous idea of a waste burning power plant in Clark County.

Here briefly are our primary concerns. The first concern is using municipal waste to fuel a power plant -- I am having trouble with using this word -- municipal waste to fuel a power plant. We think it is extremely dangerous to public health.

Municipal waste have heavy metal, corrosive plastics and other materials, which when burned, come out the other end in the form of toxic compounds (inaudible).

One such family of chemicals known as dioxins, are considered by the U.S. EPA, various health organizations, and the United Nations Environmental Program are among the most dangerous chemicals ever made.

In 1994, the U.S. EPA stated that the average U.S. citizen there has already found unsafe levels of dioxins. That is, we have already been exposed to a level of dioxins as which health effects can occur.

What are the health effects, cancer,

Comment No. 21 **Issue Code: 11**

20/22 (cont.)

No significant impacts to the general public's health and safety would be expected from gasification of RDF. The proposed project is not an incinerator or conventional power plant burning coal or RDF. The gasifier operates as a completely enclosed pressurized system. Gasification occurs at high temperatures which ensures complete destruction of toxic organic compounds and incorporation of heavy metals in molten slag, recovered by quenching as a nonleachable glassy frit. Since gasification occurs at high pressures, the process produces no air emissions. Furthermore, the high temperatures achieved during gasification from the use of oxygen instead of air prevent the formation of dioxins/furans. The resulting product of the gasification process is syngas, consisting mainly of CO and H_2. Only minor amounts of wastewater are produced from the gasification process. The wastewater would be treated and discharged to the Kentucky River in accordance with the KPDES permit. Sludge from the wastewater treatment process is expected to be nonhazardous.

21/11

No emissions or waste products are produced from the gasification process. Refer to Chapter 3 of the EIS, Section 3.1.2.2, for an additional description of the gasification process. Use of RDF reduces the burden associated with disposal of large quantities of MSW and the need for additional landfill space.

Dioxin discharges are presented in Chapter 5, Table 5.7-4 of the EIS. The value given in this table overstates the actual emissions that will occur because it is the maximum limit established by the PSD/Title V Air Permit. No data is available for plant design to allow for modeling of actual dioxin emission rates, so the permit limit was used for the analysis.

birth defects, immune system defects, diabetes and much more.

We know the effects are linked to low levels of mercury, lead and a host of other heavy metals.

Our second concern, is a release of toxic chemicals into the environment, a new international treaty aimed at protecting health and the environment.

Last summer, the United States agreed to ratify the international treaty of the preexisting organic pollutants, or POPS.

POPS are a category of chemicals, including dioxins, PTBs, pesticides and some other metals, which are already found around the world and include a body of people all over the globe and which can cause the health effects explained above.

The POPS treaty calls for the ultimate elimination of the chemicals. Central and eastern Kentuckians are being asked to deny satisfying public health and safety and accept this facility, which will pollute our families for generations to come.

Our third concern that even use of the state-of-the-art plant, contributes significantly to

25

21/11 (cont.)

22/22

22/22 (cont.)

23/06

Comment No. 22 **Issue Code: 22**

Comment noted. The EIS is intended to analyze environmental impacts from the proposed project. DOE does not believe international treaties are being violated.

Comment No. 23 **Issue Code: 06**

The project area does not experience poor air quality. Both the state and EPA consider the project region to be in compliance with all applicable ambient air quality standards. Incremental ambient air quality impacts from the proposed project would be a very small fraction of the relevant federal and state ambient air quality standards (less than 1 percent of the standards for gaseous pollutants and less than 4 percent of the PM_{10} standards). Table 5.7-4 of the EIS identifies estimated maximum downwind concentrations of hazardous pollutants expected to be emitted by the proposed facility and the associated maximum lifetime cancer risks. The air quality permit for the project requires continuous emission monitoring for major criteria pollutants and annual emissions testing for cadmium, lead, mercury, hydrogen chloride, and dioxins/furans.

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bad air quality.

It may be true that central Kentucky has suffered poor air quality that has affected so many urban and rural communities.

Let's set our goals to provide the highest possible standards for clean air, not the highest number of children requiring asthma treatment.

The fourth concern is that waste should be reduced and recycled, not shipped across state lines to be burned, period.

And the fifth and final concern for tonight, solution to demands for power in Kentucky and elsewhere, will not be found in shortsighted, waste to energy facility but in more sustainable methods.

The Kentucky Environmental Foundation will provide more detailed comments in writing by the January deadline.

For now, we emphatically state our opposition to this facility in Clark County, central Kentucky, or anywhere.

Thank you very much.

MR. SPEARS: Thank you very much,

23/06 (cont.)

24/22

25/22

26/16

Comment No. 24 **Issue Code: 22**
Comment noted.

Comment No. 25 **Issue Code: 22**
Comment noted.

Comment No. 26 **Issue Code: 16**
Comment noted.

Ms. Shultz.

Our next commenter, Bernard McCarthy.

MR. McCARTHY: My name is Bernard McCarthy. I live here in Lexington.

I just want to say, first of all, I think burning garbage as a fuel is a lot more sensible than burying the garbage in landfills and then having to use other fuels.

I think that while coal is not as good of a fuel source as the garbage, in that coal has to be mined, I still would rather see coal-fired power plants than have natural gas used up generating electricity, because natural gas can be used so easily for so many other things from home heating and cooking, to even as an alternative to gasoline in powering vehicles is used.

You press it into the right kind of tanks and get the right kind of vehicles.

Now, having said that, if a plant were to primarily burn coal, it would make the most sense to put it as close to the coal mine as you can, instead of the electricity by live wire to wherever it is going to be used. That way, we would not wear out and clog up our highways near as bad.

27

27/16

28/10

Comment No. 27 **Issue Code: 16**
Comment noted.

Comment No. 28 **Issue Code: 10**
Comment noted. For this project, KPE selected the J.K. Smith Site due to the initial grading and development that occurred during the construction on the previously discontinued J.K. Smith plant. KPE determined that the project costs would be much higher and the environmental impacts greater if an undisturbed area was chosen.

If on the other hand, you are going to burn a higher percentage of garbage, then it makes sense to put the plant wherever the garbage is coming from. Although, I am pretty sure the garbage is being produced everywhere and the thing to do might be to go ahead and build the plant here, but instead of hauling in garbage from another state, burn the garbage generated right here in Kentucky that is currently going into landfills and then somebody else build another plant in those other states to burn their garbage.

And if you are planning on burning a 50/50 mixture of garbage and coal so that one or the other has to be transported long distances, which is going to burn up various other fuels to power the trucks or the trains.

And probably the best thing to do is put the plant wherever you have the most number of unemployed persons to meet the work, which I think about east of here should readily qualify.

I would also like to point out that if the environmentalist, various firms object to it, it tells me that it is probably the right thing to do, by all means build this thing.

28

Comment No. 29 **Issue Code: 16**

Comment noted. Because of DOE's limited role of providing cost-shared funding for the proposed Kentucky Pioneer IGCC Demonstration Project, alternative sites were not considered. KPE selected the existing J.K. Smith Site because the costs would be much higher and the environmental impacts would likely be greater if an undisturbed area was chosen. Also, the relatively small amounts and generally widely dispersed nature of MSW in Kentucky does not economically support exclusive utilization of Kentucky-generated MSW to produce RDF supplies. Importing RDF from a densely populated metropolitan area is more economically viable in order to supply the necessary amount of RDF required to operate the plant.

29/16

Comment No. 30 **Issue Code: 02**

Comment noted. The unemployment rates for the counties within the socioeconomic ROI are presented in Chapter 4 of the EIS, Table 4.3-2. The rates have risen since 2000, with recent figures presented by the Kentucky Department for Employment Services showing unemployment rates of 5.3 percent for Clark County, 3.0 percent for Fayette County, and 4.5 percent for Madison County as of December 2001. The ROI rate has risen to 3.5 percent and the State of Kentucky's rate is 5.2 percent. This increase in the unemployment rate indicates that the jobs are needed in the area.

28/10 (cont.)

30/02

29

MR. SPEARS: Thank you very much, Mr. McCarthy.

The next commenter is Chris Huestis. And I hope that I pronounce your last name correctly.

MR. HUESTIS: You got it.

My name is Chris Huestis. I am from Lexington.

I wrote down a few notes, I don't know if I can read my own notes, but I will try.

There is an interesting history in terms of the environmental protection in Kentucky. Basically, it does not happen.

We have had environmental disasters from Paducah and the radiation from the nuclear power plants. We have had all the way to eastern Kentucky with the coal slurries spilling out into the river and streams and having incredible disasters all over this state that EPA has already failed the people in Kentucky to protect the environment.

Our local and state government is also a part of that. We have failed everyone. Even our local people often are dumping their waste in various places in rivers and streams. Go to Red River Gorge, you will find tires in the Red River in the place

31/22

31/22 (cont.)

Comment No. 31 **Issue Code: 22**

Comment noted.

that is supposed to be preserved for natural beauty.

We are under a toxic siege. Our leadership has really failed us. There is really a real lack of leadership in protecting the environment.

One of my main questions is, how can we expect any protection or of any promises in the future from the federal government, from the local government, from the state government, where we have had one disaster after another?

It seems that Kentucky is wanting to be a toxic dump. And the leadership creates a chain reaction. It can go toxic or it can provide a habitat for change. A habitat for life. There is a biologist, his name is Edward O. Wilson, he is a naturalist. He has taught had Harvard for about, I don't know, 45 years. He has won a couple of Pulitzer Prizes. One of his books, Diversity of Life, is worth checking out.

But in that he states, that we are under a massive extinction on the planet, it has gone through it several times, about five or six times at the level of what he is talking about.

Wherein, incredible numbers of species,

30

32/11

Comment No. 32 **Issue Code: 11**

The primary purpose of federal, state, and local environmental regulations is to protect the public health and safety, the environment, and to reduce the likelihood and impacts of accidents. The past performance of federal, state, and local governments on disasters is beyond the scope of this EIS.

31

80 percent, 90 percent of the species of life, are wiped out.

The current one that he says we are in through his research is essentially caused by the humans, by people, by the way we live. If we can take $78 million for research for a power plant, why not take $78 million for some environmental protection in Kentucky?

I think that is my main comment is that we have lost our leadership for the environment and there is no credibility within the corporate world when they say they can produce clean safe energy in the environment in Kentucky.

So I think that is what is essentially is missing. Another comment I would like to make is when you have these public hearings there needs to be more attention drawn to the public hearing itself. More notice in the newspapers, or television, or the media to get the word out.

I found out about this through a friend, personal word of mouth, which is fine for me, but what I want to know is how many other people in the community know about this, or if they have even heard about this meeting. I think it is important for

33/14

31/22 (cont.)

34/21

Comment No. 33 **Issue Code: 14**

The Kentucky Pioneer IGCC Demonstration Project is a CCT selected by DOE to demonstrate the efficiency and environmental performance of new technologies. The issues of alternative uses of the Nation's funds are beyond the scope of the EIS.

Comment No. 34 **Issue Code: 21**

The public hearing dates, times, and locations were announced in the *Federal Register*, in local newspapers the *Winchester Sun* and *Lexington Herald-Leader*, and in public service announcements. All requirements in state and federal laws, rules, and regulations regarding announcements for public hearings were satisfied or surpassed.

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people to know so that they can come down and make a comment.

Thank you.

MR. SPEARS: Thank you very much.

I appreciates everybody's comments.

We have our last signed up commenter, at least.

I am not sure about the name here, Chetan Talwalker.

MR. TALWALKER: Hi. My name is Chetan Talwalker. I am a member of the Kentucky Environmental Foundation and a member of the board of the Kentucky Resources Council.

I want to express my concern about the proposal that has been offered. I found out about this from a group of folks who are interested in the issues of the Daniel Boone National Forest. I am a frequent user of the forest. I spend a lot of time in that area. I am very concerned about the impact that this kind of combustion facility is going to have, both of the aesthetic and public health aspect of the forests.

And as someone who for the last 10 years has been promoting alternative to building a

35/04

36/08

Comment No. 35 **Issue Code: 04**

Comment noted. Impacts to the visual setting of the project area are presented in Section 5.5, Aesthetic and Scenic Resources, of the EIS. Due to the hilly nature of the terrain and the reduced visibility associated with forests, the project would have negligible aesthetic and scenic impacts to the forests of the region.

Comment No. 36 **Issue Code: 08**

Potential impacts to local forest health would result primarily through the air emissions pathway. Air Quality Permit Number V-00-049 terms and conditions address operational limitations and conditions including monitoring and testing requirements. The air permit was issued based on a high level of sulfur removal and recovery from the syngas stream prior to its use. Additionally, a component of the air quality permit includes a Phase II Acid Rain Permit. Adherence with permit conditions would limit air pollutant emissions in the local area and reduce the likelihood of adverse impacts to forest health.

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pipeline, I am certainly very much in support of efficient use of natural resources and energy. I think efficiency is an energy option that is vastly under utilized in Kentucky, and is something that would be a much better alternative, a much better use, a much better way of getting the electricity that might otherwise be supplied in keeping the electricity that might otherwise be supplied by this facility.

In other words, what I am saying is, spend your $78 million, or however much it is going to end up costing on measures that reduce the need for the electricity, instead of spending money in a supply site option that may or may not work, and is going to have significantly greater health consequences.

I will also be submitting written comments. And I thank you for your time.

MR. SPEARS: Okay. Thank you very much.

Our next speaker is Erin McKenzie.

MS. McKENZIE: My name is Erin McKenzie. I am a student at the University of Kentucky.

37/22

Comment No. 37 **Issue Code: 22**

Comment noted. The issue of alternative power sources is outside the scope of the Kentucky Pioneer IGCC Demonstration Project EIS.

34

I would just like to say that I am outraged at the fact that I didn't have any idea that this was being planned or discussed in a public forum, until this afternoon when I checked my e-mail.

It is only because I am on a list of a particular citizens' group that I found out about this.

I think it is very wrong that there is not more mention of this in the media, that citizens don't know that this is going in their own community.

And furthermore, on behalf of my fellow students, I would like to say that it is also an outrage that this takes place without the consideration of the students, without the consideration of the young population of Lexington.

Because contrary to popular belief, we do care about social issues and we are concerned about what happens to our environment.

We do plan on having children and I, for one, don't like the idea of garbage being burned in my backyard that my children my have to breathe several years down the road.

And I look at the flowchart over here

38/21

38/21 (cont.)

39/11

Comment No. 38 **Issue Code: 21**

The public hearing dates, times, and locations were announced in the *Federal Register*, in local newspapers the *Winchester Sun* and *Lexington Herald-Leader,* and in public service announcement information made available to local media outlets. All requirements in state and federal laws, rules, and regulations regarding announcements for public hearings were satisfied or surpassed.

Comment No. 39 **Issue Code: 11**

No significant impacts to the general public's health and safety would be expected from the gasification of RDF. The proposed project is not an incinerator or conventional power plant burning coal or RDF. The gasifier operates as a completely enclosed pressurized system. Gasification occurs at high temperatures which ensures complete destruction of toxic organic compounds and incorporation of heavy metals in molten slag, recovered by quenching as a nonleachable glassy frit. Since gasification occurs in a carefully controlled environment, the process produces no air emissions. Furthermore, the high temperatures achieved during gasification from the use of oxygen instead of air prevent the formation of dioxins/furans. The resulting product of the gasification process is syngas, consisting mainly of CO and H_2. Minor amounts of wastewater consisting primarily of salts are generated by the process. The wastewater would be treated and discharched to the Kentucky River in accordance with the KPDES permit. Sludge generated from the treatment process is expected to be nonhazardous.

35

and I don't understand all the chemistry behind it, but sounds to me like burning garbage cannot be the cleanest possible alternative.

Furthermore, I would like to see maybe some more evidence that this power plant is really needed. Do we really have a demand for the electricity and if so, certainly can we please explore other options that take into account our fragile environment in Kentucky?

I think it is often taken for granted that the State of Kentucky is a very backwards place. That is something that we, as citizens of the Commonwealth have to share and have to change.

Building power plants near schools, power plants that threaten our fragile natural resources, does not tell the rest of the country that we are anything but backward, and only invites corporations and other states to come in and take advantage of us.

MR. SPEARS: Thank you very much, Ms. McKenzie.

That is all I have down on my list here for commenters. Does anyone else wish to make another comment?

40/16

Comment No. 40 **Issue Code: 16**

Chapter 3 of the EIS explains the BGL gasification process. The RDF pellet and coal cofeed is heated in a carefully controlled, low oxygen environment, which causes a chemical conversion process that results in the formation of the syngas. The syngas product is combusted in the combined cycle turbines to produce electricity.

41/14

Comment No. 41 **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 their three existing peaker CTs at the J.K. Smith Site. The issue of alternative energy options is outside the scope of the EIS. The purpose of the CCT Program is to demonstrate technologies with the potential to provide cleaner and more efficient energy from coal resources.

42/22

Comment No. 42 **Issue Code: 22**

Comment noted.

36

Mr. Crewe?

MR. CREWE: If you can bear with me, if I can make a few additional comments, I would appreciate it.

Global Energy and Kentucky Pioneer and the authors of this Draft Environmental Impact Statement makes the claims that this process, or gasification of coal and natural waste, does not involve combustion. From my knowledge, that is a misleading statement. 43/16

The temperature at the bottom of the combuster is 3,000 degrees fahrenheit, at the top it is 900 degrees fahrenheit. Fed in from the top are combustible material, coal and refuse-derived fuel pellets.

Fed in at two places, at least, according to the flow chart on the opposite page of seven, is oxygen. By any reasonable definition, inductothermic reaction that occurs from 3,000 to 900 degrees in the presence of oxygen combustible material is combustion. 43/16 (cont.)

Which you know some combustion occurs in the presence of this drained and injected oxygen. And I believe it is a matter of public relations and

Comment No. 43 **Issue Code: 16**

Chapter 3 of the EIS has been revised to expand the discussion of the BGL gasification process. RDF pellets and coal are heated in a carefully controlled, low oxygen environment, which causes a chemical conversion process and the chemical element for formation of the syngas.

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not precision, to claim that this does not involve combustion. I think this is more about public relations. This does involve some combustion and it involves burning garbage in Kentucky.

Also I am concerned about the production, as the representative from the Kentucky Environmental Foundation talked about, dioxins can be produced under certain conditions.

There has been no specific information furnished to us to dissuade our concerns, only maybe general comments.

What assurance do we have that this process will not produce dioxins? I am curious about what the power plant will produce. What facility is this scale, without having been done somewhere, so that we know what the outcome is?

And what outcome shows that dioxins and uraniums will not be produced? Will not, say, exit in the slip stream from the gasification process and there is an obvious influence.

And at some point in this statement, I don't know the page right now, it says that they do not know what the characteristics of the operation of the plant will be. So that seems rather vague.

43/16 (cont.)

44/06

44/06 (cont.)

45/16

44/06 (cont.)

46/16

Comment No. 44 **Issue Code: 06**

The Final PSD/Title V Permit for the Kentucky Pioneer IGCC Demonstration Project sets a very low limit on allowable dioxin emissions (0.01 nanograms per dry standard cubic meter of stack exhaust gas). Compliance with this limit must be demonstrated by an initial source test at project startup and by annual source tests thereafter. Because the potential uranium content of fuel materials is so low, neither EPA nor the state require any specific monitoring for uranium.

Dioxin discharges are presented in Chapter 5 of the EIS, Table 5.7-4. The value given in this table overstates the actual emissions that will occur because it is the maximum limit established by the PSD/Title V Air Permit. No data is available for plant design to allow for modeling of actual dioxin emission rates, so the permit limit was used for the analysis.

Comment No. 45 **Issue Code: 16**

An important consideration during site selection was to meet DOE's purpose for the proposed project to generate technical, environmental, and financial data from the design, construction, and operation of facilities at a sufficiently large enough scale to allow the power industry. Emissions and pollutants are discussed in Section 5.7, Air Resources, and 5.8, Water Resources and Water Quality, of the EIS.

Comment No. 46 **Issue Code: 16**

KPE engineering and plant design are subject to international contractual secrecy agreements, and are therefore business confidential and not available. This project would be the first commercial-scale application of the cofeed BGL technology in the United States. Similar technology has also been used at the Schwarze Pumpe facility in Germany and the Westfield facility in the United Kingdom.

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What are the characteristics of a power plant stage, what has been done, I think it will be helpful to know how this plant will work. It does not appear in what I have been able to read about it so far.

Also, and this may be a complaint about the process and environmental law in general about other projects, I would have been very interested in knowing about the scoping meeting that occurred in May of 2000. I didn't know that. It was apparently published in an obscure section of the paper where things like this get publicized, but most people don't read that and don't know about that.

The process doesn't seem to be tailored to inform the broadest possible group of the public that would be concerned. I certainly would have been at a scoping meeting had I known that it was occurring.

There have been several fairly critical articles in the local newspaper here, The Herald Leader, but nothing that informed me that there was a scoping meeting held in May of 2000, I believe that is when it was. Because I certainly would have gone to that at that time had I known about it.

46/16 (cont.)

47/21

Comment No. 47 **Issue Code: 21**

The date, time, and location of the May 2000 scoping meeting was announced in the *Federal Register*, in local newspapers the *Winchester Sun* and *Lexington Herald-Leader,* and in flyers distributed to the local community. Community groups and local elected officials are included on the project mailing list.

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And I believe that is all I have to say. I will have some other things before the 4th.

MR. SPEARS: Thanks again, Mr. Crewe.

Do I have anyone else?

Yes, the gentleman in the back.

MR. HERRICK: Thank you. My name is Will Herrick and I live on the north fork of the Kentucky River.

MR. SPEARS: Can you repeat your name, so that our reporter --

MR. HERRICK: Will Herrick. H-E-R-R-I-C-K.

MR. SPEARS: Thank you.

I live in Lee County, which puts me upstream and upwind.

And having observed the other comments, I think that one of the questions that I was left with was a specific question about the Ph of the water being returned to the Kentucky River.

There was discussion about particulate matter as it being used to scrub gases and to cool gases, manifestly is going to have some contamination. I would be very interested in

48/07

49/06

48/07 (cont.)

Comment No. 48 **Issue Code: 07**

The pH of the wastewater would be specified in the KDPES permit. Wastewater would be treated to adjust the pH so that it would fall within limits allowed in the KDPES permit.

Comment No. 49 **Issue Code: 06**

The suspended particulate matter contained in the gas stream from the gasification units would contain most of the metals and low volatility compounds emitted during the gasification process. The cooling of the gas stream produced by the gasification unit would cause condensation of low volatility compounds onto the particles already present, and would also cause much of the water vapor in the gas stream to condense on the suspended particulate matter. Gravitational settling would remove the condensed droplets and associated particulate matter, thus cleaning the gas before it is processed by the sulfur recovery facility.

40

characterizing that water.

Kentucky River is in the State of Kentucky, there is three tiers of water quality, and it is pretty much a burden on the public to improve the quality of the water in this state.

It basically goes all the way to the bottom of that tier before the state will become involved. So it is up to the public, and perhaps the federal government, to help improve the quality of that water.

I am also particularly interested in the permitting events, and again, it is getting the feds to support the notion that this is a demonstration facility, and that the federal government has expressly said our interest here is in the demonstration of this, and it is clear from the documents and the air quality permit and other documents, that East Kentucky Power would very much like to keep rolling at the moment that demonstration part is done, under the same body of permits.

And it is something that I think everybody should stand up and know, this is a demonstration. It is there to demonstrate the technology, and at the end of the demonstration, we

48/07 (cont.)

50/21

50/21 (cont.)

Comment No. 50 **Issue Code: 21**

KPE has a contract in place with EKPC to provide power continuously for a 20-year period. The facility would not shut down after the 1-year demonstration period, but would continue to operate to honor the commitment to EKPC. There would not be a new round of permitting following the end of the 1-year demonstration period. The PSD/Title V Air Permit issued by the Kentucky Division of Air Quality is final and does not require renewal following the demonstration. At the close of the demonstration period, the KPDES permit for water usage would also be final and not require renewal. Any required fuel feed component changes following the 1-year demonstration period would likely require modification of the air and water permits.

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have a chance to review this, and it is a new round of permits and I would very much like the feds to stand up and join in that.

I guess I would just like to say that also there are bad economics for the public of Kentucky. It is irrefutable that no matter how you deal with the body of waste, whether it is atmospheric, put in the water, put in the ground, the majority of the waste product from this facility will be landfilled. And driving up the cost of landfills in Kentucky does not serve the public in Kentucky well.

So, again, there are considerations that I don't see being addressed to the virtue of the residents of Kentucky.

Manifestly, there are scarcities of air quality and there are comparative issues about what other industries may or may not be eliminated from siting in Kentucky because they are denied access to the quality air or the introduction to the quantity of pollutants. And that is a burden to the economic environment of Kentucky.

And particularly also the discovery of what is the toxicity of the frit resemble. Much of

50/21 (cont.)

51/12

49/06 (cont.)

52/02

53/12

Comment No. 51 **Issue Code: 12**

The project produces primarily vitrified frit which is considered a commercial product, not a waste stream. The waste generated at the proposed facility that would be landfilled in the State of Kentucky would be solid waste. It is difficult to determine whether waste from this project would drive up the cost of landfilling. Landfill cost increases are dependent on a number of factors, not just the waste generated from this proposed facility.

Comment No. 52 **Issue Code: 02**

All waste streams (air, water, and solid) generated by the project would be in compliance with federal, state, and local guidelines and ordinances. The presence of the facility should have no impact on future siting decisions for other businesses or industries in Clark County or Kentucky. No burdens to the economic health of the region as a result of this project have been identified. According to the *Cumulative Assessment of the Environmental Impacts Caused by Kentucky Electric Generating Units* prepared by the Kentucky Natural Resources and Environmental Protection Cabinet, further electric generation capacity often facilitates the development of the area economy.

Comment No. 53 **Issue Code: 12**

The constituents of the frit are immobilized in a glassy matrix making them nonleachable and resistant to corrosion in the environment. Analyses of the gasification process utilizing other feed stocks have found that the frit is nonhazardous and rarely fails the TCLP for metals. The frit from this facility is expected to not only pass the TCLP criteria but also the more rigorous TCLP Universal Treatment Standards criteria.

that burden may, in fact, fall on the average Kentuckian.

There are no guarantees from the federal government, or from anybody else, that should this prove to be -- that there, in fact, are definitive quantities of metals and leaching materials, that is anybody's burden but the county that signs the host agreement that accepts the waste from the landfill.

I would like to see that investigated much more thoroughly by the federal government as to what the true nature and outcome of long-term storage of frit under landfill-type conditions.

53/12 (cont.)

Thank you.

MR. SPEARS: Thank you very much for your comment.

Do we have anyone else that would like to make any additional comments.

I left this slide up intentionally so that perhaps this January 4, 2002, would jump out at you and you would be assured that the January 4 date of turning in your comments.

We really appreciate everyone being here tonight. I appreciate your interest in your local community and the technology that we hope to have in

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this community at some point in time.

With no one else desiring to comment, I am going to -- I am sorry, I thought we had one more commenter back there.

With no other comment, I would like to for the record show that this public meeting ended at approximately 7:55 p.m., on the 10th day of December.

We will be around after the meeting here if you would like to address any of those that I introduced a while ago, for points of clarification or whatever.

So we would welcome your interaction with those folks that are here.

Thank you very much.

(Meeting adjourned.)

STATE OF WEST VIRGINIA, To-wit:

I, Michele G. Hankins, a Notary Public and Court Reporter within and for the State aforesaid, do hereby certify that the proceeding was taken by me and before me at the time and place specified in the caption hereof.

I do further certify that said proceeding was correctly taken by me in stenotype notes, that the same was accurately transcribed out in full and reduced to typewriting, and that said transcript is a true record of the testimony.

I further certify that I am neither attorney or counsel for, nor related to or employed by, any of the parties to the action in which these proceedings were had, and further I am not a relative or employee of any attorney or counsel employed by the parties hereto or financially interested in the action.

My commission expires the 29th day of December 2003.

Given under my hand and seal this 7th day of January 2002.

Michele G. Hankins
Notary Public
Court Reporter