

Jones, Michael B.
Lexington, KY
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Kentucky Pioneer Integrated Gasification
Combined Cycle Demonstration Project
Draft Environmental Impact Statement
U.S. Department of Energy
National Energy Technology Laboratory

12/29/01

Written Comment Form

Must be received by January 4, 2002.

I would like to voice my opposition to the
OPERATION OF THE coal and pelletized GARBAGE
FIRED POWER PLANT. Not only ARE the UNKNOWN
IMPACT to the SURROUNDING AREA FROM BURNING
of this GARBAGE Product but the PROBLEMS
with STORAGE and POSSIBLE leakage into
the POWER and LANDSCAPE could be a DISASTER.
ASLO I CAN NOT SEE THE BENEFITS of
what few JOBS created by this PLANT outweighing
the POSSIBLE PROBLEMS AND RISKS. IN ADDITION
to this, we in this AREA DON'T NEED the EXTRA POWER.
IT SEEMS that a PLANT (EXPERIMENTAL) such as
this ONE should be in a AREA where the POWER is NEEDED and
that AREA should BEAR the RISKS
PLEASE consider other OPTIONS. THANK YOU

Please use other side if more space is needed.

Comment forms may be mailed to:
Mr. Roy Spears
U.S. Department of Energy
National Energy Technology Laboratory
3610 Collins Ferry Road
Morgantown, WV 26507-0880

Comment forms may be faxed to:
Mr. Roy Spears
(304) 285-4403

Michael B Jones
12/29/01

Comment No. 1

Issue Code: 22

Comment noted.

Comment No. 2

Issue Code: 12

There are distinct differences between gasification and incineration. Incineration occurs at atmospheric pressures and temperatures and mineral matter or ash in the waste is not completely fused. With incineration, there is increased production and emission of criteria pollutants. In contrast, gasification occurs at high temperatures and pressures which significantly reduces the formation of oxidative species such as SO_x and NO_x. Incineration produces semi-volatile and volatile organic compounds and dioxin/furan compounds not produced with gasification. Ash from hazardous waste incinerators is considered a hazardous waste under RCRA. Analysis of vitrified frit produced from gasification processes has consistently proven to be nonhazardous as defined by RCRA. In gasification, nonvolatile trace metals concentrate in the vitrified frit and are effectively immobilized eliminating or reducing their leachability.

1/22

2/12

3/12

4/02

5/16

The proposed project is not a conventional power plant burning coal or RDF. Instead of burning such fuels in a boiler system, the proposed project would use gasification technologies to convert the coal and RDF co-feed into a syngas fuel consisting primarily of CO and H₂. 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. The molten slag is 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. A description of the gasification process can be found in Chapter 3, Section 3.1.2.2, of the EIS.

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Comment No. 3

Issue Code: 12

RDF and vitrified frit are solid materials and would not leak into the Kentucky River. These materials would be held in covered storage and protected from the weather to avoid contact with precipitation and runoff.

Comment No. 4

Issue Code: 02

Comment noted. The EIS is designed to present all of the possible environmental impacts of the various alternatives relating to the proposed federal action, both beneficial and detrimental. The economic benefits associated with the project are not intended as justification for the environmental costs of the project; however, they are presented as one of many resource areas impacted by the project.

Comment No. 5

Issue Code: 16

The purpose of this EIS is to evaluate public and environmental impacts caused by the proposed project. DOE will consider the information provided in the EIS and public comments in this decision process. 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 projected to increase by 3.0 percent per year. Peak demand is projected 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. Because of DOE's limited role of providing cost-shared funding for the proposed Kentucky Pioneer IGCC Demonstration Project, alternative sites were not considered.