



USEC gas centrifuge public information meeting in Piketon on June 23, 2004

Yawar Faraz
Project Manager



Meeting objectives

- Provide brief summary of
 - Proposed project
 - NRC licensing process
 - Environmental Impact Statement process
 - NRC inspection program
- Answer public questions

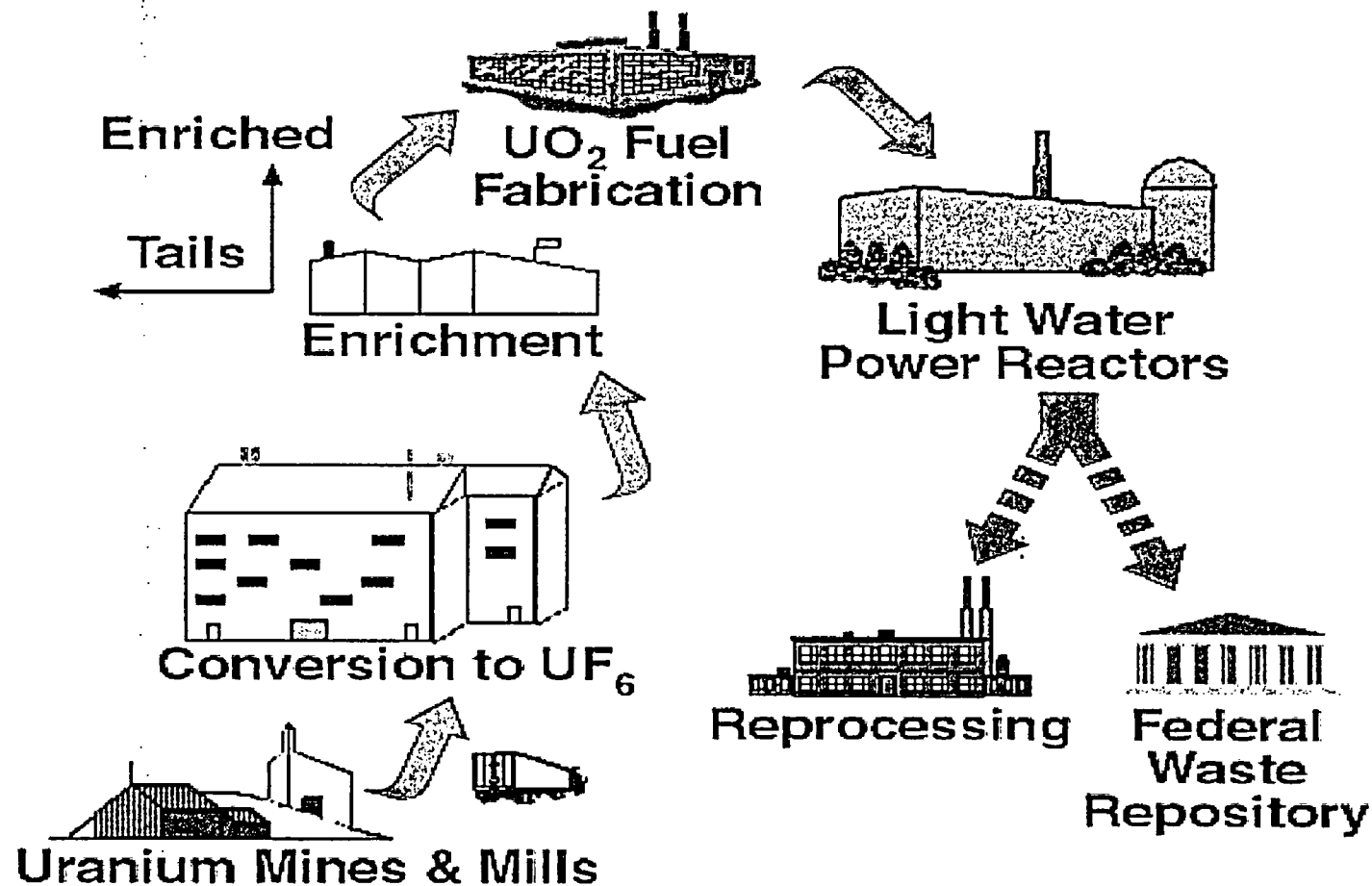


Proposed project

- USEC Inc. is proposing to enrich uranium using a gas centrifuge process in Piketon
- Enriched uranium is needed for fuel for nuclear power plants
- After mining and initial processing, uranium is converted into uranium hexafluoride which is shipped to an enrichment plant



Uranium fuel cycle





USEC's gas centrifuge process

- The gas centrifuge process uses a high-speed rotor to separate the U-235 and U-238 isotopes and increase the U-235 content from 0.7 percent to 3 to 5 percent
- These enrichment levels are well below that needed to make nuclear weapons
- The enriched uranium hexafluoride is then shipped to a fuel fabricator that produces fuel pellets and assemblies for nuclear power plants



NRC licensing process

- NRC is an independent agency responsible for ensuring protection of public and worker health and safety in use of radioactive material
- NRC is not a promoter of the proposed project
- Enrichment facility construction cannot begin until a license for construction and operation is issued



Application review

- USEC is proposing to submit a license application in August 2004
- NRC will perform a technical review of the application to ensure it meets NRC health and safety and safeguards requirements
- NRC will prepare an Environmental Impact Statement (EIS)
- A formal hearing is required for a uranium enrichment facility



Application review

- NRC technical review will take up to 18 months
 - NRC to review application
 - Request additional information, if needed
 - Document safety review in Safety Evaluation Report



Open licensing process

- NRC uses an open licensing process
- Public will have opportunities to provide input
 - Opportunity to petition for a hearing will be offered shortly after application is submitted
 - Some technical meetings to be held in the Piketon area
 - Environmental review process
 - Scoping meeting
 - Draft EIS



Open licensing process

- NRC has USEC project and gas centrifuge websites (<http://www.nrc.gov/materials/fuel-cycle-fac/usecfacility.html>)
(<http://www.nrc.gov/materials/fuel-cycle-fac/gas-centrifuge.html>)



NRC's Environmental Review Process

Matthew Blevins

Environmental Project Manager



Overview

Environmental review:

- Requirements
- Documentation
- Process



Environmental Review Requirements

- National Environmental Policy Act of 1969
- NRC NEPA regulations in 10 CFR Part 51



Environmental Review Documentation

- An environmental impact statement (EIS) documents the environmental review
- Proposed Action, Alternatives, Affected Environment, Environmental Impacts, etc.

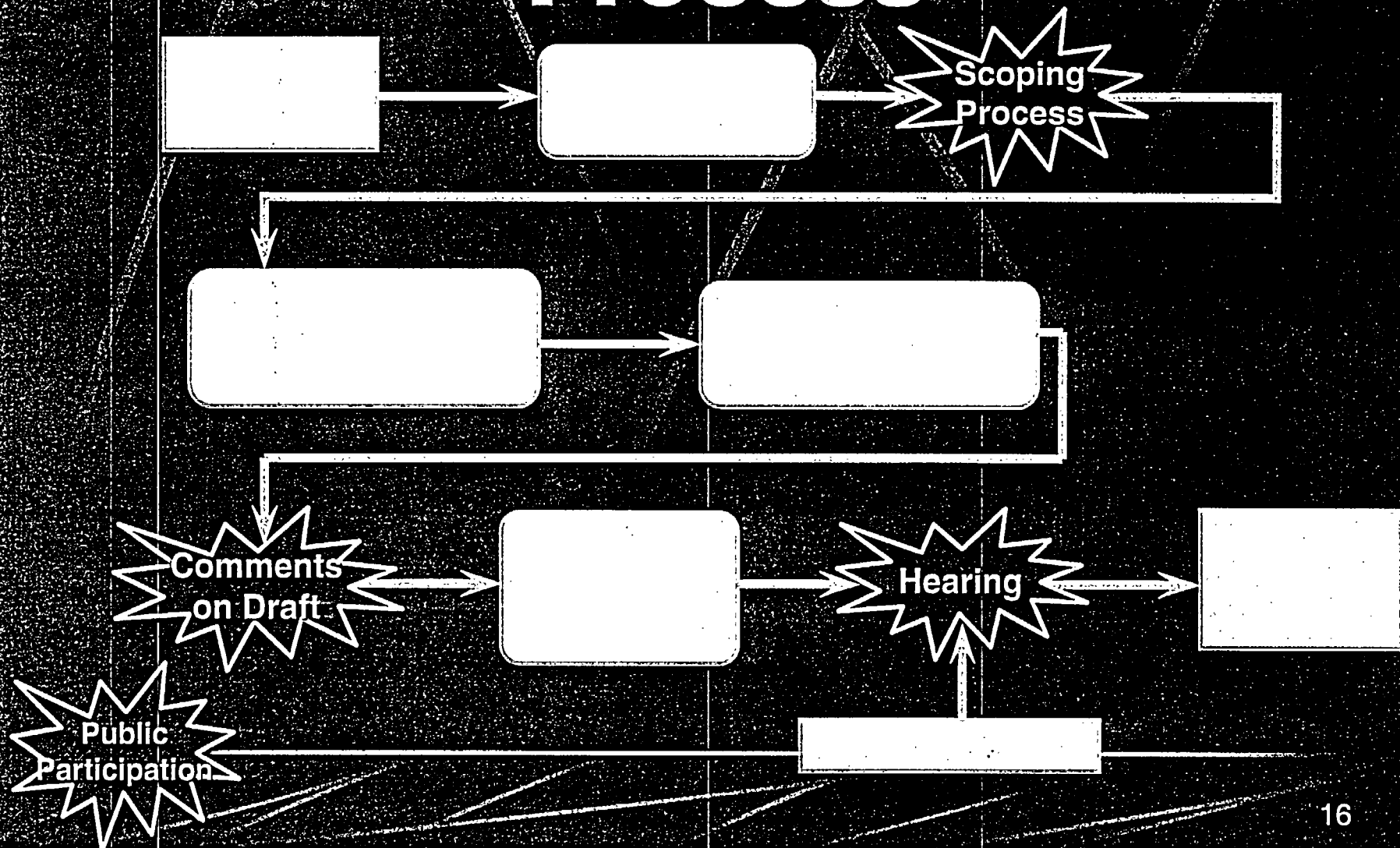


Environmental Resource Areas

- Water Resources
- Environmental Justice
- Ecology
- Public and Occupational Health
- Air Quality
- Waste Management
- Noise
- Land Use
- Historic and Cultural Resources
- Transportation
- Visual and Scenic Resources
- Geology and Soils
- Socioeconomic
- Cumulative Effects



Environmental Review Process





The Inspection Program

Jay Henson
NRC Region II in Atlanta



NRC Inspection Program

- Inspect to assess whether the facilities are operated safely and in accordance with NRC regulations and the license to ensure that licensee activities do not pose undue safety and safeguards risks to:

Worker and public health and safety

The Environment

Headquarters and Regional staff conduct inspections



NRC Inspection Program

- Regulatory Goal: Control risks to acceptable levels in accordance with regulatory requirements
- Inspection activities commensurate with risk and performance of facility
- Assure that the facility is constructed and operated in accordance with commitments the applicant made in the license application



NRC Inspection Program

Construction Phase Inspection Activities

Quality Assurance

Design Changes

Procurements

Records

Training

Geotechnical/Foundation

Structural Concrete

Structural Steel

Piping

Mechanical Components

Electrical Components

Instrumentation

Welding

Testing & Calibrations



NRC Inspection Program

- ❑ **Inspection Activities During Operations**
 - ❑ **Safety:** Chemical, Nuclear Criticality, Plant Operations, Management Organization and Controls, and Fire
 - ❑ **Safeguards:** Control, Accounting and Physical Protection of Special Nuclear Material and Classified Information
 - ❑ **Radiological:** Radiation Protection, Environmental Protection, Waste Management, Transportation, and Low Level Waste Storage
 - ❑ **Facility Support:** Maintenance/Surveillance, Training, and Emergency Preparedness