



**DEIS PUBLIC  
COMMENT MEETING  
USEC'S PROPOSED  
AMERICAN CENTRIFUGE PLANT**

September 29, 2005  
Piketon, Ohio

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## Meeting Objectives

- Gather public comments on the Draft Environmental Impact Statement (DEIS)
- Describe NRC role and licensing process
- Describe USEC's proposal
- Describe the findings in the DEIS

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## Who is the NRC?

- **INDEPENDENT** Federal agency
- Report directly to **CONGRESS**
- Regulatory **RESPONSIBILITY**
  - Safety and security review
  - Environmental review
  - Licensing
  - Inspection
  - Enforcement



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## NRC's Role

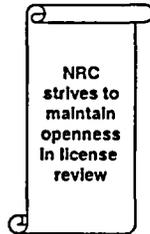
- All nuclear projects must meet strict safety, security, and environmental requirements
- After the requirements have been met, the license is issued



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## NRC's Review Process

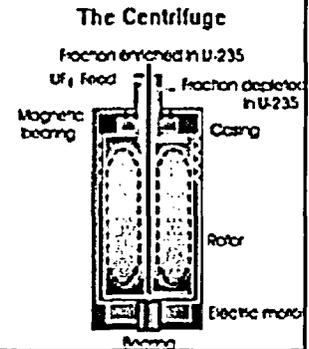
- Safety and security review documented in Safety Evaluation Report (SER)
- Environmental review documented in Environmental Impact Statement (EIS)



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## What is Proposed?

- **ENRICH** uranium using a gas centrifuge process
- High-speed rotors separate uranium isotopes
- Increase U-235 content



## What is Proposed? (continued)

- **LOCATED** within the existing DOE reservation
- **REUSE** existing structures
- **CONSTRUCT** additional facilities

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## Areas Evaluated in Draft EIS

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

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## Evaluation of Impacts

- Impacts from construction, routine operations, transportation, decommissioning, and credible accidents are analyzed
- The possible impact categories were small, moderate, or large
- Impacts can be negative or positive
- Mitigation measures are described

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## Categories of Environmental Impacts

- Small: Not detectable or are so minor that they would neither destabilize nor noticeably alter any important attribute of the resource
- Moderate: Sufficient to noticeably alter but not destabilize important attributes of the resource
- Large: Clearly noticeable and sufficient to destabilize important attributes of the resource

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## Small Impacts of the Proposed Action

- Land use
- Historical and cultural resources
- Visual and scenic resources
- Geology and soils
- Water resources
- Ecological resources
- Environmental justice
- Noise

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## Cultural Resources

- Defined "area of potential effects" as the DOE reservation
- Considered direct and indirect effects
- Also considered cultural resources outside the "area of potential effects"
  - Scioto Township Works, Barnes House, Bailey Chapel, potential earthworks at DOE well field, and others
- Determined small impacts to all properties considered

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## Water Resources

- Analyzed surface water and groundwater
- Impact on water supply would be small because of excess capacity in the area
- Impacts on water quality would be small as no routine process water discharges

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## Small to Moderate Impacts of the Proposed Action

- Air quality
- Socioeconomics
- Transportation
- Public and occupational health
- Waste management

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## Air Quality

- Short-term increases in particulate matter during construction phase
  - PM<sub>2.5</sub> slight exceedance up to 3,300 feet beyond fence line
  - Primarily from construction equipment
  - High PM<sub>2.5</sub> background in area
- Operational emissions of HF and uranium considered SMALL

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## Socioeconomics

- Analyzed employment, population, housing, public services and finances
- Employment would increase moderately
  - 3,362 direct and indirect jobs during construction
  - 1,500 direct and indirect jobs during operation
  - 2,130 direct and indirect jobs for centrifuge manufacturing
- Impacts to population, housing, and public services would be small

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## Transportation

- Analyzed routine transportation and traffic accidents during construction and operation
  - Less than 5 fatalities during construction
- Analyzed routine radiological impacts from operations and from potential accidents
  - Less than 1 total additional cancer death
- Routine rail transport of depleted uranium tails

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## Transportation (cont.)

- Impacts during construction would be moderate, due to increased traffic on Highways 23 and 32
- Impacts of transportation accidents considered moderate
  - Probability of severe transportation accident is very unlikely

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## Public and Occupational Health

- Analyzed non-radiological and radiological impacts for both the public and workers
- Non-radiological and radiological impacts for construction, normal operations, and decommissioning are small
- Radiological impacts during operations:
  - About 1 mrem/yr for the nearest member of public
- Impacts for accidents considered small to moderate
  - safety procedures make severe accidents highly unlikely

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## Waste Management

- Evaluated non-radiological and radiological waste
- Impacts from construction, operations, and decommissioning are small because there is adequate capacity at associated disposal facilities
- Depleted uranium

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## DEIS Comment Period

- Accept oral and written comments tonight
- **PROVIDE** other comments by **October 24, 2005**
- **CONSIDER** all comments
- Final EIS will be issued by April 2006 21

## NRC Addresses for Comments

- Please note **Docket 70-7004** on comments
- By mail at:  
Chief, Rules and Directives Branch  
Division of Administrative Services  
Mailstop: T-6D59  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001
- E-mail at:  
[NRCREP@nrc.gov](mailto:NRCREP@nrc.gov) 22

## Technical Information Availability

- DEIS (NUREG-1834) available at:  
<http://www.nrc.gov/reading-rm/doc-collections/nureqs/staff/sr1834/>
- Gas centrifuge and USEC project general information:  
– <http://www.nrc.gov/materials/fuel-cycle-fac/usecfacility.html> 23

## Public Document Room

- All publicly available documents:  
– <http://www.nrc.gov/reading-rm/adams.html>
- Contact PDR for assistance:  
– 1-800-397-4209  
– Email: [PDR@nrc.gov](mailto:PDR@nrc.gov)  
– Docket Number is 70-7004 24

## NRC Points of Contact

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