INIS Fluorine Extraction and Depleted Uranium Deconversion Plant

Facility Licensing

January 14, 2010

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Meeting Objectives

- **Summarize**
  - **Proposed INIS facility license application**
  - **NRC licensing process**
  - **Environmental Impact Statement (EIS) process**
- **Answer public questions**

Tonight's Agenda

- Welcome
- Licensing Process (15 minutes)
- Environmental Impact Statement Development Process (15 minutes)
- Public Questions and Comments
- Wrap up (15 minutes)
- Adjourn

Who is the NRC?

- NRC is an independent federal agency
- NRC is not an advocate of the proposed deconversion plant or any other facility

NRC Mission

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Protect

- **Public health and safety**
- **Common defense and security**
- **The environment**

We accomplish this mission through the promulgation of regulations, the licensing of activities, and the inspection of licensees to verify compliance with the regulations.

NRC Participants

- Tom Hiltz – Licensing Manager
- Matt Bartlett – Licensing Project Manager
- Johari Moore – Environmental Project Manager
- Mike Clark – Attorney

Licensing Process

Matt Bartlett, NRC
Licensing Project Manager

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Project Background

- **Location:** Lea County, NM
  (about 14 miles west of Hobbs, NM)
- **Name:** Fluorine Extraction Process & Depleted Uranium Deconversion Plant
- **Technology:** Chemical Deconversion
- **Product:** High Purity Fluoride Products, Anhydrous Hydrogen Fluoride, and Uranium Oxide for disposal

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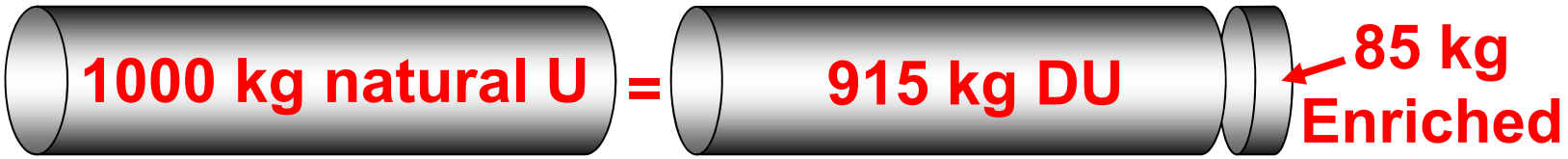
Deconversion in Fuel Cycle

- **Mining & Milling:** Uranium oxides from nature
  U-238 = 99.3% U-235 = 0.7%
- **Conversion:** Oxides converted to uranium hexafluoride (UF6)
- **Enrichment:** U-235 increased in a portion of material



- **Deconversion:** DUF6 turned to uranium oxides and fluoride products

INIS Process

- **Receipt:** DUF6 from enrichment facilities
- **Processing:** Chemical conversion to fluoride products and uranium oxide
- **Product:** Fluoride compounds sold
- **Waste:** Uranium oxides disposed as low level waste

NRC Preliminary Licensing Schedule

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- **Receipt of the application (12-30-09)**
- **Conduct an acceptance review (45 days)**
- **Perform an in-depth safety review (18 month)**
- **Prepare an Environmental Impact Statement (EIS) (24 month)**
- **If approved by the NRC, issue license**

This schedule may change based on the quality of the applicant's license application, the responsiveness to requests for additional information, and unplanned higher priority operational safety work.

NRC Licensing Process

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- **Safety Review**
  - Establish a team of technical reviewers
  - Examine safety programs and integrated safety analysis
  - Request additional information, as needed
- **Licensing:**
  - Publish Safety Evaluation Report (SER) and EIS
  - Hold public meeting on final SER and EIS
  - If approved, issue license

Opportunities for Public Involvement

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- **Four additional NRC public meetings**
  - Environmental Scoping
  - Draft EIS
  - Final EIS and SER
  - Inspection and Oversight Process

- **Opportunity to request a hearing**

Additional Information

NRC Website http://www.nrc.gov

Fuel Cycle Facts

http://www.nrc.gov/materials/fuel-cycle-fac.html

- Deconversion

E-mail Distribution or Questions

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Environmental Review Process

Johari Moore, NRC
Environmental Project Manager

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Laws, Regulations, and Guidance

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- The National Environmental Policy Act of 1969, as amended (NEPA), requires Federal agencies to consider the environmental impacts of certain actions.
- NRC implements NEPA with Title 10, *Code of Federal Regulations* Part 51 (10 CFR 51).
- Staff procedures for implementing 10 CFR 51 are described in environmental review guidance (NUREG-1748).

What is an EIS?

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- An Environmental Impact Statement (EIS) describes potential environmental impacts of a proposed action and its alternatives.
- An EIS provides information for the public and agency decision makers.
- An EIS addresses five main topics:
  - The proposed action, including its purpose and the need it meets
  - Alternatives, including no action
  - The affected environment
  - Environmental impacts
  - Mitigative measures

Review Scope

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- Reviews address the potential impacts of facility construction, operation, and decommissioning.
- Example review/resource areas include:
  - Air, water, soils, plants, and animals
  - Public and worker health
  - Historic, archaeological, or architectural property and artifacts
  - Economic resources, cultural resources, and social services
  - Environmental justice
- Reviews address direct, indirect, and cumulative impacts.

Environmental Review Process

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