



United States
Nuclear Regulatory Commission

LOUISIANA ENERGY SERVICES LICENSING STATUS

**INFORMATION BRIEFING FOR THE
ADVISORY COMMITTEE ON NUCLEAR WASTE**

MAY 25, 2004



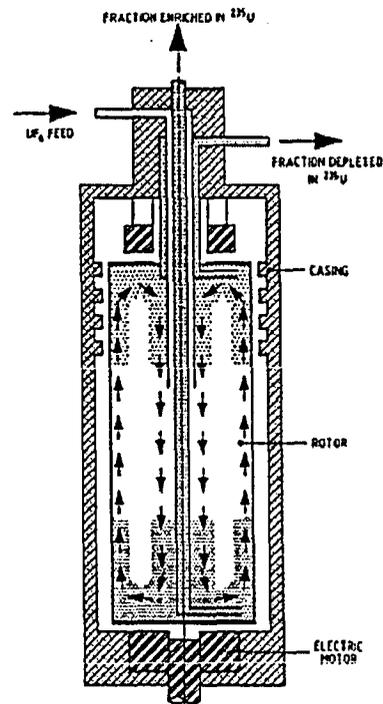
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PROPOSED PROJECT

- **LOUISIANA ENERGY SERVICES (LES) IS PROPOSING TO ENRICH URANIUM USING A GAS CENTRIFUGE PROCESS IN EUNICE, NM.**
 - **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.**
 - **LES IS PROPOSING TO USE TECHNOLOGY FROM URENCO.**
 - **PROPOSED PLANT WILL BE SIMILAR TO PREVIOUS PROJECT PROPOSED FOR LOUISIANA AND OPERATING FACILITIES IN EUROPE.**
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KEY CHARACTERISTICS OF LES FACILITY

- **PRINCIPAL HAZARDS ARE CHEMICAL (HF) AND CRITICALITY;**
- **FEED AND WITHDRAWAL STATIONS DO NOT LIQUIFY UF₆; LIQUID UF₆ ONLY AT SAMPLING STATION;**
- **USES LESS THAN 10 PERCENT OF ELECTRICITY OF GASEOUS DIFFUSION PLANTS;**
- **TECHNOLOGY IS CLASSIFIED SECRET/RD;**



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URANIUM ENRICHMENT FACILITIES HAVE UNIQUE REGULATORY REQUIREMENTS

- **ENVIRONMENTAL IMPACT STATEMENT REQUIRED**
 - **FORMAL SUBPART G HEARING REQUIRED**
 - **HEARING MUST BE COMPLETED PRIOR ISSUANCE OF LICENSE FOR CONSTRUCTION AND OPERATION**
 - **PRE-OPERATION INSPECTION REQUIRED**
 - **PUBLIC LIABILITY INSURANCE REQUIRED**
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LES LICENSING STATUS

- **APPLICATION TRANSMITTED ON DECEMBER 12, 2003;**
 - **APPLICATION ACCEPTED FOR REVIEW ON JANUARY 22, 2004;**
 - **COMMISSION ISSUED ORDER ON INITIATING THE PROCEEDING AND OFFERING AN OPPORTUNITY TO PETITION TO INTERVENE ON JANUARY 30, 2004;**
 - **ORDER SET A 30-MONTH SCHEDULE FOR FINAL AGENCY DECISION (JUNE 2006);**
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- **TO MEET SCHEDULE:**
 - **STAFF TO COMPLETE TECHNICAL REVIEW IN 18 MONTHS;**
 - **STAFF TO PREPARE ENVIRONMENTAL IMPACT STATEMENT (EIS) IN 18 MONTHS;**

(NOTE THAT STAFF WILL TRY TO COMPLETE REVIEW AND EIS EARLIER THAN THE 18-MONTH SCHEDULE)

- **HEARING BOARD TO COMPLETE HEARING IN 8 MONTHS;**
 - **COMMISSION TO MAKE FINAL DETERMINATION IN 4 MONTHS;**
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- ORDER PUBLISHED IN THE FEDERAL REGISTER ON FEBRUARY 6, 2004
 - DEADLINE FOR SUBMITTING PETITIONS TO INTERVENE SET FOR APRIL 6, 2004;
 - RECEIVED THREE PETITIONS TO INTERVENE;
 - NEW MEXICO ENVIRONMENT DEPARTMENT;
 - NEW MEXICO ATTORNEY GENERAL;
 - NUCLEAR INFORMATION AND RESOURCE SERVICE/PUBLIC CITIZEN (REPRESENTING LOCAL CITIZENS);
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- **CONTENTIONS RAISED:**
 - **GROUND WATER QUALITY;**
 - **WATER USAGE;**
 - **DISPOSITION OF DEPLETED URANIUM;**
 - **VIABILITY OF LES;**
 - **DECOMMISSION FUNDING;**
 - **ADEQUACY OF RADIATION PROTECTION PROGRAM;**
 - **GAS LINE ACCIDENTS; AND**
 - **NON-PROLIFERATION AND SECURITY;**



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- **STAFF INITIATED REVIEW OF APPLICATION AND ISSUED REQUEST FOR ADDITIONAL INFORMATION TO LES APRIL 19, 2004;**
 - **TECHNICAL ISSUES PERTAIN PRIMARILY TO CLARIFICATIONS AND DOCUMENTATION OF INTEGRATED SAFETY ANALYSIS SUMMARY;**
 - **RESPONSES IN MAY 19, 2004.**
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LES INTEGRATED SAFETY ANALYSIS

- **LES DID NOT PERFORM A PROBABLISTIC RISK ASSESSMENT (PRA)**
 - **PRAS ARE NOT REQUIRED FOR FUEL CYCLE FACILITIES**
 - **CURRENTLY NO PRA EXISTS OR IS PLANNED FOR ANY FUEL CYCLE FACILITY**



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- **SEMI-QUANTITATIVE RISK INDEX METHOD**
 - **BASED ON APPROACH RECOMMENDED IN STANDARD REVIEW PLAN FOR FUEL CYCLE FACILITIES, NUREG-1520;**
 - **ACCIDENT SEQUENCES DEVELOPED BASED ON HAZOP METHOD;**
 - **CATEGORIZES ACCIDENT SEQUENCES IN TERMS OF LIKELIHOOD AND CONSEQUENCES OF CONCERN;**
 - **IDENTIFIES ACCIDENT SEQUENCES WITH CONSEQUENCES EXCEEDING 10 CFR 70.61 PERFORMANCE REQUIREMENTS AND “ITEMS RELIED ON FOR SAFETY” ARE DESIGNATED.**
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MAJOR PROJECT MILESTONES

- **DRAFT EIS TO BE ISSUED BY SEPTEMBER 30, 2004;**
 - **PUBLIC MEETING IN EUNICE TO TAKE COMMENTS ON DRAFT EIS IN OCTOBER 2004;**
 - **FINAL SAFETY EVALUATION REPORT AND EIS SCHEDULED TO BE ISSUED IN JUNE 2005.**
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