



*United States
Nuclear Regulatory Commission*

LES PUBLIC INFORMATION MEETING

EUNICE, NEW MEXICO

AUGUST 2, 2005



*United States
Nuclear Regulatory Commission*

OBJECTIVES

- **PROVIDE BRIEF SUMMARY OF**
 - **SAFETY EVALUATION REPORT**
 - **ENVIRONMENTAL IMPACT STATEMENT**
- **DISCUSS FUTURE PROJECT MILESTONES**
- **ANSWER PUBLIC QUESTIONS**

Attachment 1



*United States
Nuclear Regulatory Commission*

NRC LICENSING PROCESS

- **NRC IS AN INDEPENDENT AGENCY RESPONSIBLE FOR ENSURING PROTECTION OF PUBLIC AND WORKER HEALTH AND SAFETY IN USE OF RADIOACTIVE MATERIALS.**
 - **NRC IS NOT A PROMOTER OF PROPOSED PROJECT.**
 - **ENRICHMENT FACILITY CONSTRUCTION CANNOT BEGIN UNTIL A LICENSE FOR CONSTRUCTION AND OPERATION IS ISSUED.**
 - **HEARING IS REQUIRED FOR URANIUM ENRICHMENT FACILITY (10 CFR PART 2).**
-



*United States
Nuclear Regulatory Commission*

PROJECT BACKGROUND

- **LOUISIANA ENERGY SERVICES (LES) IS PROPOSING TO ENRICH URANIUM USING A GAS CENTRIFUGE PROCESS IN EUNICE, NM.**
 - **ENRICHED URANIUM IS NEEDED FOR FUEL FOR NUCLEAR POWER PLANTS.**
 - **LICENSE APPLICATION SUBMITTED ON DECEMBER 12, 2003.**
 - **NRC'S SAFETY AND ENVIRONMENTAL REVIEWS COMPLETED IN JUNE 2005.**
-



*United States
Nuclear Regulatory Commission*

NRC REVIEW PROCESS

- **UTILIZED SAFETY, ENVIRONMENTAL, AND SECURITY REVIEW STAFF, AS WELL AS CONTRACTORS**
 - **FOLLOWED A STANDARD REVIEW PLAN, NUREG-1520, “STANDARD REVIEW PLAN FOR THE REVIEW OF A LICENSE APPLICATION FOR A FUEL CYCLE FACILITY”**
 - **ISSUED REQUESTS FOR ADDITIONAL INFORMATION AND CONDUCTED CONFERENCE CALLS AND MEETINGS**
-



*United States
Nuclear Regulatory Commission*

- **LES REVISED LICENSE APPLICATION ACCORDINGLY**

- **DOCUMENTED REVIEW IN THE SAFETY EVALUATION REPORT AND FINAL ENVIRONMENTAL IMPACT STATEMENT**



United States
Nuclear Regulatory Commission

NRC'S SAFETY EVALUATION REPORT (SER)

- **NRC CONDUCTED SAFETY REVIEWS IN THE FOLLOWING AREAS:**
 - **GENERAL INFORMATION**
 - **ORGANIZATION AND ADMINISTRATION**
 - **INTEGRATED SAFETY ANALYSIS**
 - **RADIATION PROTECTION**
 - **NUCLEAR CRITICALITY SAFETY**
 - **CHEMICAL SAFETY**
 - **FIRE SAFETY**
 - **MANAGEMENT MEASURES**
 - **EMERGENCY MANAGEMENT**
-



*United States
Nuclear Regulatory Commission*

- ENVIRONMENTAL PROTECTION
 - DECOMMISSIONING
 - MATERIALS CONTROL AND ACCOUNTING
 - PHYSICAL PROTECTION
 - TRANSPORTATION SECURITY
-
- NRC'S SAFETY EVALUATION REPORT DOCUMENTS THE RESULTS OF THE SAFETY REVIEW OF THE ABOVE AREAS.



*United States
Nuclear Regulatory Commission*

GENERAL INFORMATION

- **GENERAL FACILITY FUNCTION AND SITE INFORMATION**
 - **FINANCIAL QUALIFICATIONS**
 - **CLASSIFIED INFORMATION SECURITY**
 - **FOREIGN OWNERSHIP AND CONTROL**
 - **LIABILITY INSURANCE**
-



*United States
Nuclear Regulatory Commission*

ORGANIZATION AND ADMINISTRATION

- **ORGANIZATION AND MANAGEMENT CAPABLE OF PERFORMING SAFETY FUNCTIONS**
- **MANAGEMENT AND STAFF WILL HAVE PROPER TRAINING AND QUALIFICATIONS**



*United States
Nuclear Regulatory Commission*

INTEGRATED SAFETY ANALYSIS (ISA)

- **PERFORMED BY LES**
 - **ISA SUMMARY REVIEWED BY NRC STAFF DURING SAFETY REVIEW**
 - **COMPREHENSIVE EVALUATION OF RADIOLOGICAL AND CHEMICAL RISKS FROM POTENTIAL ACCIDENTS**
 - **IDENTIFIES MEASURES TO PREVENT OR MITIGATE POTENTIAL ACCIDENTS**
-



*United States
Nuclear Regulatory Commission*

ISA PROCESS

- **KEY ELEMENTS**
 - **PERFORMANCE REQUIREMENTS**
 - **EVALUATION OF POTENTIAL ACCIDENT SEQUENCES AND CONSEQUENCES**
 - **IDENTIFICATION OF IROFS**
 - **MANAGEMENT MEASURES**
 - **PLANT CHANGE PROCESS**



*United States
Nuclear Regulatory Commission*

10 CFR 70.61 Performance Requirements

	Highly Unlikely	Unlikely	Not unlikely
High Consequence Publ Dose > 25 rem Worker Dose > 100 rem	Acceptable	Not Acceptable	Not Acceptable
Medium Consequence Publ Dose 5 - 25 rem Worker Dose 25 -100 rem Env releases > 5000 Tbl 2	Acceptable	Acceptable	Not Acceptable
Low Consequence Publ Dose < 5 rem Worker Dose < 25 rem	Acceptable	Acceptable	Acceptable



*United States
Nuclear Regulatory Commission*

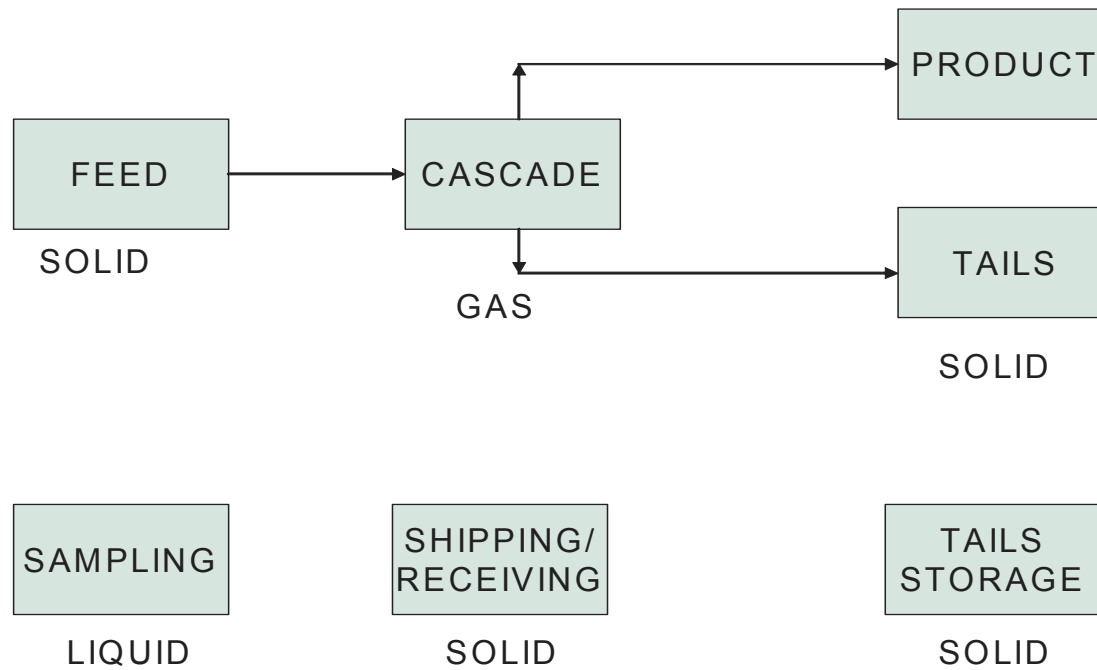
ITEMS RELIED ON FOR SAFETY (IROFS)

- **MUST BE IN PLACE FOR HIGHER-RISK ACCIDENT SEQUENCES**
 - **PREVENT OR MITIGATE THE CONSEQUENCES OF SUCH ACCIDENTS**
 - **INCLUDES SYSTEMS, STRUCTURES, EQUIPMENT, COMPONENTS, AND PERSONNEL ACTIONS**
 - **MANAGEMENT MEASURES IN PLACE TO ENSURE AVAILABILITY AND RELIABILITY**
 - **LES ADEQUATELY PROVIDED INFORMATION ABOUT IROFS**
-



*United States
Nuclear Regulatory Commission*

LES FLOW DIAGRAM





*United States
Nuclear Regulatory Commission*

ISA REVIEW RESULTS

- **NRC STAFF REVIEWED LES' ISA SUMMARY AND SUPPORTING DOCUMENTATION**
 - **STAFF VISITED ALMELO, THE NETHERLANDS, TO BECOME FAMILIAR WITH THE PROPOSED PROCESSES AND PLANT LAYOUT**
 - **STAFF CONDUCTED DETAILED REVIEWS OF VARIOUS ACCIDENT SEQUENCES**
-



*United States
Nuclear Regulatory Commission*

ISA REVIEW RESULTS

- **SUFFICIENT INFORMATION WAS PROVIDED ABOUT THE SITE, FACILITY PROCESSES, HAZARDS, AND TYPES OF ACCIDENT SEQUENCES**
 - **ACCIDENT SEQUENCES ADDRESSING RADIOLOGICAL, CHEMICAL, CRITICALITY, AND FIRE AS WELL AS THE EFFECTS OF NATURAL PHENOMENA WERE ADEQUATELY ADDRESSED**
 - **LES IDENTIFIED SUITABLE IROFS AND MANAGEMENT MEASURES TO ENSURE THE IROFS AVAILABILITY AND RELIABILITY TO PERFORM THEIR SAFETY FUNCTION**
-



*United States
Nuclear Regulatory Commission*

RADIATION PROTECTION

- **LES HAS AN ADEQUATE PROGRAM FOR PROTECTING WORKERS AND MEMBERS OF THE PUBLIC FROM EXPOSURE TO RADIATION**
 - **PROGRAM INCLUDES TRAINING, PROCEDURES, AND MONITORING**
 - **PROGRAM ENSURES THAT WORKER AND PUBLIC DOSES ARE AS LOW AS REASONABLY ACHIEVABLE (ALARA)**
-



*United States
Nuclear Regulatory Commission*

CRITICALITY SAFETY

- **FACILITY DESIGN INCLUDES PASSIVE FEATURES TO PRECLUDE CRITICALITY**
 - **LES HAS AN ADEQUATE PROGRAM FOR PROTECTING AGAINST CRITICALITY**
 - **PROGRAM INCLUDES QUALIFIED STAFF TO DEVELOP, IMPLEMENT, AND MAINTAIN THE PROGRAM AND PROCEDURES**
 - **PROGRAM MEETS REGULATORY REQUIREMENTS**
-



*United States
Nuclear Regulatory Commission*

CHEMICAL SAFETY

- **LES HAS AN ADEQUATELY DESCRIBED AND ASSESSED CHEMICAL ACCIDENT CONSEQUENCES**
 - **LES PERFORMED HAZARD ANALYSES THAT IDENTIFIED AND EVALUATED CHEMICAL PROCESSES AND POTENTIAL ACCIDENTS**
 - **LES ESTABLISHED SAFETY CONTROLS FOR POTENTIAL ACCIDENTS THAT MEETS REGULATORY REQUIREMENTS**
-



*United States
Nuclear Regulatory Commission*

FIRE SAFETY

- **LES HAS A PROGRAM IN PLACE THAT PROVIDES REASONABLE ASSURANCE THE FACILITY IS PROTECTED AGAINST FIRE HAZARDS**
 - **PROGRAM INCLUDES REASONABLE ENGINEERED AND ADMINISTRATIVE CONTROLS TO MINIMIZE RISK OF FIRE AND EXPLOSIONS**
 - **PROGRAM INCLUDES IROFS AND DEFENSE-IN-DEPTH PROTECTION**
-



*United States
Nuclear Regulatory Commission*

MANAGEMENT MEASURES

- **LES PROVIDED ADEQUATE INFORMATION ABOUT MEASURES THAT WILL BE APPLIED TO THE PROJECT, INCLUDING:**
 - **OVERALL CHANGE PROCESS AND POLICY**
 - **MAINTENANCE PROGRAM**
 - **TRAINING PROGRAM**
 - **PROCESS FOR DEVELOPMENT, APPROVAL, AND IMPLEMENTATION OF PROCEDURES**



*United States
Nuclear Regulatory Commission*

EMERGENCY MANAGEMENT

- **LES PROVIDED AN ADEQUATE EMERGENCY PLAN (EP) FOR THE FACILITY**
 - **LES COMMITS TO MAINTAINING AND EXECUTING THE EP FOR RESPONDING TO CHEMICAL AND RADIOLOGICAL HAZARDS IF THEY OCCUR**
 - **EP REQUIREMENTS ARE IMPLEMENTED THROUGH APPROVED WRITTEN PROCEDURES AND IN COORDINATION WITH LOCAL RESPONSE ORGANIZATIONS**
-



*United States
Nuclear Regulatory Commission*

ENVIRONMENTAL PROTECTION

- **LES HAS AN ADEQUATE PROGRAM FOR PROTECTING THE ENVIRONMENT**
 - **PROGRAM INCLUDES ENVIRONMENT AND EFFLUENT MONITORING**
 - **PROGRAM INCLUDES CONTROLS TO MAINTAIN EFFLUENT RELEASES AS LOW AS REASONABLY ACHIEVABLE**
-



*United States
Nuclear Regulatory Commission*

DECOMMISSIONING

- **LES PROPOSED AN ADEQUATE DECOMMISSIONING FUNDING PLAN (DFP)**
- **DFP PROVIDES A REASONABLE COST ESTIMATE FOR DECOMMISSIONING**



*United States
Nuclear Regulatory Commission*

- **DFP ADDRESSES COSTS FOR DECONTAMINATING THE FACILITY AND FOR WASTE MANAGEMENT, INCLUDING THE DISPOSITIONING OF DEPLETED URANIUM TAILS**

- **CURRENTLY REVIEWING U.S. DEPARTMENT OF ENERGY COST ESTIMATE FOR DISPOSITIONING DEPLETED URANIUM – REVIEW WILL BE DOCUMENTED IN SER SUPPLEMENT**



*United States
Nuclear Regulatory Commission*

SECURITY

- **LES PROVIDED ADEQUATE PROGRAMS FOR**
 - **PHYSICAL SECURITY OF THE FACILITY -- INCLUDES CLASSIFIED INFORMATION AND ENRICHED MATERIAL**
 - **CONTROLLING AND ACCOUNTING FOR ENRICHED MATERIAL**
 - **TRANSPORTATION OF ENRICHED MATERIALS**
-



*United States
Nuclear Regulatory Commission*

FINAL ENVIRONMENTAL IMPACT STATEMENT

JENNIFER DAVIS



*United States
Nuclear Regulatory Commission*

FUTURE PROJECT MILESTONES

- | | |
|---|------------------|
| - EVIDENTIARY HEARINGS | OCT AND NOV 2005 |
| - LICENSING BOARD DECISION | FEB 2006 |
| - COMMISSION DECISION | JUN 2006 |
| - LICENSE ISSUED, IF POSITIVE
DECISIONS ARE MADE | JUN 2006 |
| - CONSTRUCTION BEGINS | SUMMER 2006 |
| - OPERATIONS BEGIN | 2008 |
| - FULL PRODUCTION | 2013 |
-



*United States
Nuclear Regulatory Commission*

NRC CONTACTS

LES PROJECT MANAGER: TIM JOHNSON; 301-415-7299; TCJ@NRC.GOV

EIS PROJECT MANAGER: JIM PARK; 301-415-6613; JRP@NRC.GOV

**PROJECT INSPECTOR: DEBORAH SEYMOUR; 404-562-4725;
DAS@NRC.GOV**



*United States
Nuclear Regulatory Commission*

- **SER IS AVAILABLE AT:**
<http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1827/>

 - **FEIS IS AVAILABLE AT:**
<http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1790/>

 - **NRC HAS LES PROJECT AND GAS CENTRIFUGE WEBSITES**
(<http://www.nrc.gov/materials/fuel-cycle-fac/lesfacility.html>)
(<http://www.nrc.gov/materials/fuel-cycle-fac/gas-centrifuge.html>)
-



*United States
Nuclear Regulatory Commission*

SUMMARY

- **PROVIDE BRIEF SUMMARY OF**
 - **SAFETY EVALUATION REPORT**
 - **ENVIRONMENTAL IMPACT STATEMENT**
 - **DISCUSS FUTURE PROJECT MILESTONES**
-