



Public Meeting to Discuss Approval of License Renewal for Nuclear Fuel Services

August 30, 2012
6:00 pm – 8:30 pm

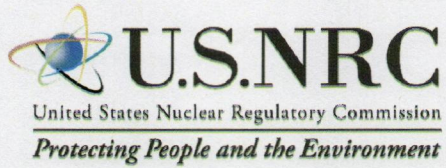
1



Agenda

- 6:00 pm Welcome and Opening Remarks
- 6:10 pm Summary of Safety Evaluation Report
- 6:30 pm Summary of Environmental
Assessment
- 6:50 pm Questions and General Comments
- 8:25 pm Closing Remarks
- 8:30 pm Meeting Adjourned

2



Safety Evaluation Report of NFS License Renewal Application

Kevin Ramsey
Fuel Manufacturing Branch

3



SER Chapter 1 – General Information

- **Facility and Process Description**
- **Institutional Information**
 - **Corporate Identity**
 - **Financial Qualifications**
 - **Type, Quantity and Form of Licensed Material**
 - **Authorized Uses**
 - **Term of License**
 - **Exemptions and Special Authorizations**
 - **Security of Classified Information**
- **Site Description**

4



SER Chapter 2 – Organization and Administration

- **Described Organizational Groups**
- **Defined Qualifications, Responsibilities and Authorities**
- **Safety Groups Independent from Operation Groups**
- **Formal Written Procedures Required for Safety Functions**
- **Problem Identification System Available to Any Person**
- **Adequate Lines of Communication and Authority**

5



SER Chapter 3 – Integrated Safety Analysis

- **Process Safety Information Compiled and Maintained**
- **Integrated Safety Analysis (ISA) Performed and Maintained**
- **Management Measures Established and Maintained**
- **14 ISA Summaries Reviewed and Approved**

6



SER Chapter 4 – Radiation Protection

- **Radiation Protection Program**
- **As Low As Reasonably Achievable (ALARA) Program**
- **Organization and Personnel Qualifications**
- **Written Procedures**
- **Training**
- **Ventilation and Respiratory Protection**
- **Radiation Survey and Monitoring Programs**
- **Additional Reporting and Recordkeeping Requirements**

7



SER Chapter 5 – Nuclear Criticality Safety

- **Management of the Program**
- **Organization and Administration**
- **Management Measures**
- **Methodologies and Technical Practices**

8



SER Chapter 6 – Chemical Process Safety

- **Chemical Safety Program**
- **Chemical Process Safety Information**
- **Team Conducting the Hazard Evaluation**
- **Chemical Accident Sequences**
- **Chemical Accident Consequences**
- **Chemical Process Safety Items Relied on for Safety**
- **Chemical Process Management Measures**
- **Coordination of Chemical Process Safety and Emergency Management**

9



SER Chapter 7 – Fire Safety

- **Fire Safety Management Measures**
- **Fire Hazards Analysis**
- **Facility Design**
- **Process Fire Safety**
- **Fire Protection and Emergency Response**

10



SER Chapter 8 – Emergency Management

- **Emergency Plan**
- **Commitments to Implement and Maintain Program**

11



SER Chapter 9 – Environmental Protection

- **Environmental Report**
- **Effluent and Environmental Controls and Monitoring**
 - **Radiation Safety**
 - **Effluent and Environmental Monitoring**
- **ISA Summary and Management Measures**

12



SER Chapter 10 – Decommissioning

- **Financial Assurance for Decommissioning**
- **Recordkeeping for Decommissioning**
- **Decommissioning Plans**

13



SER Chapter 11 – Management Measures

- **Configuration Management**
- **Maintenance**
- **Training and Qualifications**
- **Procedures**
- **Audits and Assessments**
- **Incident Investigations**
- **Records Management**
- **Other QA Elements**

14



SER Chapter 12 – Material Control and Accounting

- **Fundamental Nuclear Material Control Plans**
- **Material License – Safeguards Conditions**

15



SER Chapter 13 – Physical Protection of Material at Fixed Sites

- **Physical Protection Plan for Category I, High Enriched Uranium**
- **Safeguards Contingency Response Plan**
- **Site Security Training and Qualification Plan**
- **Physical Protection Plan for Material of Moderate Strategic Significance (Category II)**
- **Physical Protection Plan for Material of Low Strategic Significance (Category III)**

16



SER Chapter 14 – Physical Protection of Material in Transit

- **Physical Protection Plan for Material of Moderate Strategic Significance (Category II)**
- **Physical Protection Plan for Material of Low Strategic Significance (Category III)**

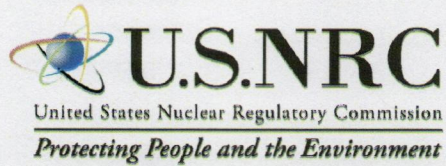
17



SER Chapter 15 – Environmental Review

- **Environmental Assessment**
- **Finding of No Significant Impact**
- **Impacts of 25-Year License Bounded by Assessment**

18



**Summary of
Final Environmental Assessment
for the License Renewal for
Nuclear Fuel Services, Inc.**

James Park, Project Manager
Environmental Review Branch
Division of Waste Management and Environmental Protection

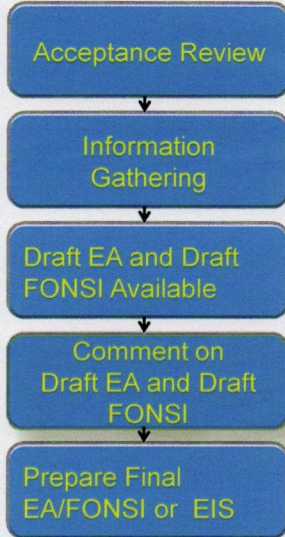


Environmental Assessment

- Purpose
 - Determine significance of the environmental effects from proposed action and alternatives

- Possible Conclusion
 - Finding of No Significant Impact (FONSI)
OR
 - Environmental Impact Statement (EIS)
should be prepared

Environmental Review Process



- NFS application accepted by NRC on September 3, 2009
- Information collected from the State and local organizations
- October 15, 2010, *Federal Register* Notice and NRC press release
- Comments accepted through December 31, 2010
- Final EA issued on October 26, 2011

Final EA Structure

1. Introduction
2. Proposed Action
3. Affected Environment
4. Environmental Impacts
5. Consultations
6. Conclusion
7. Appendices



The Proposed Action

- Continue currently approved operations at the Erwin facility for 40 years

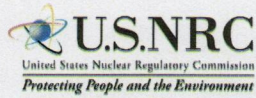
Alternatives

- Continue currently approved operations at the Erwin facility for 10 years
- Deny the NFS application and begin shutdown and site decommissioning



Final EA – Basis for Review

- NFS's license renewal application and environmental report
- NFS's responses to NRC staff requests for additional information
- Previous NRC environmental reviews
- Stakeholder-provided information
- NRC inspection reports
- NFS environmental monitoring reports
- Public comments on draft EA



Affected Environment

- Land Use
- Historical and Cultural Resources
- Visual and Scenic Resources
- Air Quality
- Geology and Soils
- Water Resources
- Ecology
- Noise
- Transportation
- Public & Occupational Health
- Waste Management
- Socioeconomics



Environmental Impacts

The NRC defines three impact levels:

- **SMALL:** *Environmental effects are not detectable or are so minor that they will neither destabilize nor noticeably alter any important attribute of the resource.*
- **MODERATE:** *Environmental effects are sufficient to alter noticeably, but not destabilize, important attributes of the resource.*
- **LARGE:** *Environmental effects are clearly noticeable and are sufficient to destabilize important attributes of the resource.*



Summary of Environmental Impacts – Operations

The NRC staff has determined that the significance of the environmental impacts from the proposed license renewal would be **SMALL**, with the exception of:

- **SMALL** to **MODERATE** impacts to land use, transportation, soils, and groundwater; and
- **MODERATE** impacts to public & occupational health from accidents



Summary of Environmental Impacts – Decommissioning

The NRC staff has determined that the significance of the environmental impacts from the proposed license renewal would be **SMALL** to **MODERATE**, with the exception of:

- **SMALL** impacts to air quality, geology, historic & cultural resources, and public & occupational health; and
- **MODERATE** impacts to land use, scenic & visual, and waste management



Changes from Draft EA

- Site decommissioning is reasonably foreseeable, and therefore is part of proposed action and each alternative
- Potential for increased site contamination under proposed action and 10-year alternative to be addressed in final site decommissioning plan
- Issue of cancer risk discussed in potential public health risks
- August 23, 2011 Virginia earthquake



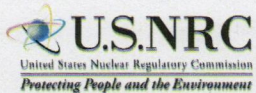
Final EA Conclusions

- Determination that renewal of the NFS license for 40 years would not significantly affect the quality of the human environment
- Preparation of an EIS is not warranted, and issuance of a FONSI is appropriate



Final EA Availability

- NRC's Public Document Room (PDR):
One White Flint North, 11555 Rockville Pike (1st floor),
Rockville, MD 20852 (Tel: 800-397-4209; Fax: 301-415-3548; pdr.resource@nrc.gov)
- NRC's website for the NFS license renewal application:
<http://www.nrc.gov/materials/fuel-cycle-fac/fuel-fab/nfs-license-renewal-application.html>
- Public Libraries in Erwin, Jonesborough, and Greeneville



NRC Contacts

- Environmental Review:
 - James Park
301-415-6935
James.Park@nrc.gov
- Licensing & Safety Review:
 - Kevin Ramsey
301-492-3123
Kevin.Ramsey@nrc.gov



Questions and Discussion

33