

U.S. Nuclear Regulatory Commission (NRC) Licensing Activities

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Fissile Materials Disposition (MD)**

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Agenda

- **1. Overview**
 - Atomic Energy Act
 - NRC Authorization Under the Act
- **2. NRC Working Structure**
 - Staff and Management Relationship with the Commissioners
 - NRC Protocol and Practice
 - NRC Regulations and Guidance
- **3. Reactor Licensing Under 10 CFR 50**
 - Licensing Amendment Process
- **4. Nuclear Facilities Under 10 CFR 70**
 - Existing versus Proposed New 10 CFR 70
 - Licensing Process
- **5. Other Regulations Applicable to MOX Project**
 - 10 CFR 73, Physical Protection of Plants and Material
 - 10 CFR 74, Material Control and Accounting of Special Nuclear Material
 - 10 CFR 75, Safeguards on Nuclear Material implementation of US/IAEA Agreement
 - 10 CFR 95, Security Facility Approval and Safeguarding of National Security Information and Restricted Data
- **6. Potential Issues for NRC/DOE Working Group**
- **7. Discussion / Summary**

NRC - Mission

- **Regulate the Nation's civilian use of byproduct, source, and special nuclear materials (SNM) to:**
 - **ensure adequate protection of public health and safety**
 - **promote the common defense and security**
 - **protect the environment**

NRC - Scope of Responsibility

- **Commercial nuclear power plants**
- **Research, test, and training reactors**
- **Fuel cycle facilities**
- **Medical, academic, and industrial uses of nuclear materials**
- **Transport, storage, and disposal of nuclear materials and wastes**

NRC - Principles of Good Regulation

- **Independence**
 - **Openness**
 - **Efficiency**
 - **Clarity**
 - **Reliability**
-
- **NRC and its licensees share a common responsibility to protect public health and safety**
 - **NRC licensees have the primary responsibility for the safe use of nuclear materials**

Licensing Environment

- **Requirements**
 - **U.S. Constitution**
 - **Treaties**
 - **Statutes**
 - **Regulations (General Applicability / Commission Orders / License / Technical Specifications)**
 - **Court Orders**
- **NRC “Guidance”**
 - **Policy Statements (SECY)**
 - **Regulatory Guides / Branch Technical Positions**
 - **NUREG reports (Standard Review Plans, etc.)**
 - **Bulletins / Information Notices**

NRC - Principal Statutory Authorities

- **Atomic Energy Act of 1954, as amended**
- **Energy Reorganization Act of 1974, as amended**
- **Uranium Mill Tailings Radiation Control Act of 1978, as amended**
- **Nuclear Non-Proliferation Act of 1978**
- **Low-Level Radioactive Waste Policy Act of 1980**
- **West Valley Demonstration Project Act of 1980**
- **Nuclear Waste Policy Act of 1982**
- **Low-Level Radioactive Waste Policy Amendments Act of 1985**
- **Diplomatic Security and Anti-Terrorism Act of 1986**
- **Nuclear Waste Policy Amendments Act of 1987**
- **Solar, Wind, Waste, & Geothermal Power Production Incentive Act of 1990**
- **Energy Policy Act of 1992**

Other Federal Statutes Related to Nuclear Energy Activities

- **National Environmental Policy Act (NEPA)**
- **Clean Air Act Amendments of 1977**
- **Clean Water Act**
- **Hazardous Materials Transportation Act (ocean dumping)**
- **Administrative Statutes**
 - **Administrative Procedures Act**
 - **Freedom of Information Act**
 - **Privacy Act**
 - **Government in the Sunshine Act**
 - **Paperwork Reduction Act**
 - **Endangered Species Act**
 - **Resource Conservation and Recovery Act (RCRA)**
 - **Executive Orders**

Other Organizations Involved In Licensing

- **Other Government Agencies (EPA, OSHA, FAA, DOT, FEMA, etc.)**
- **State & Local Agencies (siting, zoning, economic regulation, police powers)**
- **Federal-State Relationships (NRC Agreement States, State NPDS permits, etc.)**
- **Interstate Relationships (Governors' Conference, regional waste compacts)**
- **Non-government Organizations (WANO, INPO, IAEA, standards making groups)**
- **Nuclear Industry Organizations (NEI, Owners Groups)**

Public Involvement in Regulatory Process

- **Rulemaking**
- **Licensing**
- **Decommissioning**
- **License Renewal**
- **High-Level Waste (YMP)**
- **Environmental Impacts**
- **Petitions (2.206)**
- **Reporting Safety Concerns**
- **Enforcement**
- **Public Meetings**
- **FOIA Requests**
- **General Correspondence (letters / NRC Public Documents Room)**

NRC - Major Activities

- **Licensing the construction and operation of nuclear power plants and other nuclear facilities, such as nuclear fuel cycle facilities and test and research reactors, and overseeing their decommissioning**
- **Licensing the possession, use, processing, handling, and export of nuclear material**
- **Licensing the siting, design, construction, operation, and closure of low-level radioactive waste disposal sites under NRC jurisdiction and the construction, operation, and closure of the geologic repository for high-level radioactive waste**
- **Licensing the operators of nuclear power and test and research reactors**
- **Inspecting licensed facilities and activities**
- **Conducting the principal U.S. Government research program on light-water reactor safety**
- **Developing and implementing rules and regulations that govern licensed nuclear activities**

NRC - Major Activities (continued)

- **Conducting research to provide independent expertise and information for making timely regulatory judgments and for anticipating problems of potential safety significance**
- **Investigating nuclear incidents and allegations concerning any matter regulated by NRC**
- **Enforcing NRC regulations and the conditions of NRC licenses**
- **Conducting public hearings on matters of nuclear and radiological safety, environmental concern, common defense and security, and antitrust matters**
- **Developing effective working relationships with the States regarding reactor operations and the regulation of nuclear material**
- **Maintaining the NRC Incident Response Program, including the NRC Operations Center**
- **Collecting, analyzing, and disseminating information about the operational safety of commercial nuclear power reactors and certain nonreactor activities**

Code of Federal Regulations (CFR)

Title 10, Energy: Chapter I - NRC

- **Selected CFR Parts**
 - **1 (Organization)**
 - **2 (Rules of Practice)**
 - **19 (Notices / Instructions / Reports to Workers)**
 - **20 (Standards for Radiation Protection)**
 - **21 (Reporting of Defects as Noncompliances)**
 - **50 (Licensing of Production & Utilization Facilities)**
 - **51 (Environmental Protection)**
 - **55 (Operators' Licenses)**

Code of Federal Regulations (CFR)

Title 10, Energy: Chapter I - NRC

- **Selected CFR Parts (continued)**
 - **70 (Possession of Special Nuclear Material)**
 - **73 (Physical Protection of Plants and Materials)**
 - **74 (Material Control and Accountability)**
 - **75 (Safeguards - IAEA)**
 - **95 (Information / Data Security)**
 - **100 (Reactor Siting Criteria)**
 - **140 (Insurance)**
 - **170 (Fees for Licenses and Regulatory Services)**
 - **171 (Annual Fees for Licenses, etc.)**

NRC PROTOCOL AND PRACTICE

Rule of Practice for Domestic Licensing Proceedings

10 CFR 2 Governs the Conduct of All Proceedings For:

- Granting, Suspending, Revoking, Amending, or Taking Other Action With Respect to Any License, Construction Permit, or Application to Transfer License**
- Issuing Other Orders and Demands for Information to Persons Subject to Commission's Jurisdiction, Including Licensee and Persons Not Licensed by the Commission**
- Imposing Civil Penalties Under the Act**
- Public Rulemaking**

10 CFR Part 50 - Domestic Licensing of Production and Utilization Facilities

- **General**
- **License Required**
- **Classes of Licenses**
- **License Applications**
 - **50.36: technical specifications**
- **Standards**
 - **50.44: combustible gas control**
 - **50.46: emergency core cooling**
 - **50.47: emergency planning**
 - **50.48: fire protection**
 - **50.49: environmental qualification of electrical equipment**

10 CFR Part 50 - Domestic Licensing of Production and Utilization Facilities (continued)

- **Unreviewed Safety Questions (50.59)**
- **Limitations and Conditions**
 - **50.61: RV protection from pressurized thermal shock**
 - **50.62: anticipated transients without scram (ATWS)**
 - **50.63: loss of all AC power (station blackout)**
 - **50.65: maintenance**
- **Inspections, Records, Reports, Notifications**
 - **50.72: immediate notification**
 - **50.73: licensee event reports**
- **Transfer of Licenses**

10 CFR Part 50 - Domestic Licensing of Production and Utilization Facilities (continued)

- **Amendments of License / Permit (Holder)**
 - **50.90: application**
 - **50.91: notice for public comment**
 - **50.92: issuance of amendment**
- **Revocation, Suspension, Modification,
Amendment of License / Permit (Commission)**
- **Backfitting (50.109)**
- **Enforcement**

10 CFR Part 50 - Domestic Licensing of Production and Utilization Facilities (continued)

- **Appendices**
 - **A: General Design Criteria**
 - **B: Quality Assurance**
 - **E: Emergency Planning**
 - **J: Containment Leak Testing**
 - **K: ECCS Models**
 - **R: Fire Protection**

Reactor License Amendment Process

- **The following chart (ORNL/TM-13405 on MOX fuel qualification) is representative of the process employed by a holder of a reactor operating license to request and obtain from the NRC an amendment to the operating license.**

License Amendment Submittal Content

- **Cover Letter**
 - **Descriptive title**
 - **Summation of purpose of submittal, why it is being sent, and when completion of NRC actions is needed**
 - **References to prior correspondence, meetings, telecons, etc.**
 - **Identification of proprietary information and why**
 - **Summary of safety/technical bases for action**
 - **Description of regulatory process for change (50.59, etc.)**
 - **Discussion of risk-informed nature of submittal**
 - **Applicable regulations (exigent or emergency requests)**

License Amendment Submittal Content

- **Attachments**
 - **Background/history**
 - **Description of changes (FSAR/technical specifications)**
 - **Regulatory basis for change (use in NRC SER)**
 - **Impacts on accident/risk analyses**
 - **References to industry/regulatory precedents**
 - **Drawings**
 - **Technical terms**
 - **Commitment statements**

**NUCLEAR FACILITIES
UNDER 10 CFR 70**

EXISTING VERSUS NEW
10 CFR 70

Objective

- **Provide an Increased Confidence in the Margin of Safety at Certain Facilities Authorized to Process a Critical Mass of SNM.**
- **Achieve the Objective Through a Risk-informed and Performance-based Regulatory Approach.**

Major Changes To 10 CFR 70

- **Identification of Appropriate Consequence Criteria and the Level of Protection Needed to Prevent or Mitigate Accidents**
- **Codify NRC/OSHA MOU and Make Compatible and Consistent With OSHA and EPA Process Safety Rules**
- **Performance of an ISA to Identify Potential Accidents at the Facility and the Items Relied on for Safety**
- **Implementation of Measures to Ensure That the Items Relied on for Safety Are Continuously Available and Reliable When Required**
- **Inclusion of the Safety Bases, Including the ISA Summary Results, on the Docket**
- **Allowance for Licensees to Make Certain Changes to Their Facilities Without Prior NRC Approval**
- **Incorporation of Existing Reporting Requirements (i.e. Bulletin 91-01)**

Specific Changes To 10 CFR 70

Section 70.4, Definitions

- **14 Definitions Were Added to Provide a Clear Understanding of the Meaning of Subpart H, “Additional Requirements for Certain Applicants Authorized to Possess a Critical Mass of Special Nuclear Material”**
- **Example of Items Defined Include: Controlled Site Boundary, Critical Mass of SNM, Hazardous Chemicals, Integrated Safety Analysis, Items Relied on for Safety, Results of the ISA, Management Measures, and Worker, etc.**

Section 70.22 Contents of Applications

- **Paragraph (f) Was Removed. Paragraph (f) Currently Requires That, for Plutonium Processing and Fuel Fabrication Facilities, Certain Additional Safety-Related Information Be Submitted With an Application.**
- **New Subpart H, Contains Requirements for the Submittal of Information Called for in Paragraph (f) and is Sufficient to Allow the NRC to Make a Determination of Adequacy.**

Section 70.23 Requirements for the Approval of Applications

- **Paragraphs (a)(8) and (b) were Removed. These Paragraphs Currently Require That the NRC, to Approve an Application, Determines That the Construction of a Plutonium Processing and Fabrication Facility Meet Certain Conditions.**
- **These Conditions Are Covered in the New Subpart H and As Stated in 70.64 (c)(4) Follows:**
 - “Provide the preliminary process hazards analysis (PPHA) to the NRC for information before proceeding with construction of the facility or the process. (NRC approval of the PPHA is not required).”**

Section 70.60 Applicability

- **Possess More Than Critical Mass of SNM**
- **Plutonium Processing**
- **Fabrication of Mixed Oxide Fuel or Fuel Assembly**
- **Enriched Uranium Processing**
- **Uranium Enrichment**
- **Decommissioning of Facilities Used for these Missions**
- **Scrap Recovery**
- **Any Other Activities as Specified by NRC**

Section 70.61 Safety Performance Requirements

- **Establish the Purpose of the New Requirements,**
- **Identify the Potential Adverse Consequences That Need to Be Protected Against - “Consequence of Concern”**
- **Establish the Level of Protection That Is Needed to Ensure That the Consequences of Concern Do Not Occur - “Graded Level of Protection”**
- **Identify the Safety Program Elements That Allow Licensees to Demonstrate Their Ability to Provide an Adequate Level of Protection - “Performance of Integrated Safety Analysis and Management Control”**

Section 70.62 Requirements for Performance of ISA and Safety Program

- **Submit ISA Results to NRC**
- **Who Should Perform ISA**
- **When ISA Should Be Performed**
- **What ISA Information Should Be Provided to NRC**
- **Management Safety Measures Based on the Results of the ISA**

Section 70.64 Baseline Design Criteria for New Facilities or New Processes at Existing Facilities

Baseline Design Criteria

- **Use Parallels - Part 50, Appendix A (General Design Criteria, GDC)**
- **Apply Before ISA Risk Information Is Obtained**
- **Consistent With Risk-Informed, Performance-Based Regulations**

Section 70.64 Baseline Design Criteria for New Facilities or New Processes at Existing Facilities (cont.)

- **Baseline Design Criteria Include 10 Safety Design Considerations**
 - **Quality Standards and Records**
 - **Natural Phenomena Hazards**
 - **Fire Protection**
 - **Environmental and Dynamic Effects**
 - **Chemical Protection**
 - **Emergency Capability**
 - **Utility Services**
 - **Inspection, Testing, and Maintenance**
 - **Criticality Control**
 - **Instrumentation and Controls**

Section 70.65. Additional Content of Applications

The additional information includes:

- **A Description of the Plant Site and Processes**
- **The Processes Analyzed in the ISA**
- **A Summary of the Results of the ISA, including the Accident Sequences, the Consequences and Likelihood of Such Sequences**
- **The Items Relied on for Safety**
- **The Measures Established to Ensure the Continuous Availability and Reliability of Such Items When Required**

Safety Program Is a Critical Element in Determining Whether a License Should Be Issued

Section 70.66. Records Requirements

A System of Record Keeping Is Required to Allow for Control and Easy Retrieval of Records for Items Relied on for Safety.

Section 70.68 Additional Requirements for Approval of License Applications

In Addition to the Requirements in the Existing Regulations (10 CFR 70.23), the Following Requirements in Following Proposed New 10 CFR 70 Subpart Are Satisfied:

- **70.61 Safety Performance Requirements**
- **70.62 Requirements for Performance of ISA and Safety Program**
- **70.64 Baseline Design Criteria and PHA for New Facilities**
- **70.65 Additional Content of Applications**
- **70.66 Records Requirements**
- **70.72 Change Process**
- **70.74 Reporting Requirements**

Section 70.72. Changes to Site, Structures, Systems, Equipment, Components, and Activities of Personnel

- Require a Configuration Management Program to Effectively Control Changes to a Facility's Site, Structures, Systems, Equipment, Components, and Activities of Personnel.**
- Increase Confidence in the Margin of Safety, Maintaining the License So That It Reflects the Current Configuration of the Facility in Order to Facilitate a Relatively Simple, Cost-Effective License Renewal Process.**
- Allow Licensees to Make Certain Changes to Their Facility Without Prior NRC Approval, As Allowed in This Proposed Requirement, Is Analogous to Existing Requirements in 10 CFR 70.32.**

Section 70.73. Renewal of Licenses

Under the Proposed Amendments:

- Changes to Site, Structures, Systems, Equipment, Components, and Activities of Personnel Relied on for Safety Must Be Reflected in the Licensee Documentation on the Docket.**
- The License Renewal Process Is Expected to Be a Pro Forma Activity.**
- NRC Approves the Renewal With Minimal Additional Review of the Licensee's Safety Program.**
- The Approval Is Contingent on the Licensee Satisfying Requirements Associated With the National Environmental Policy Act As Implemented in 10 CFR Part 51.**

Section 70.74. Additional Reporting Requirements

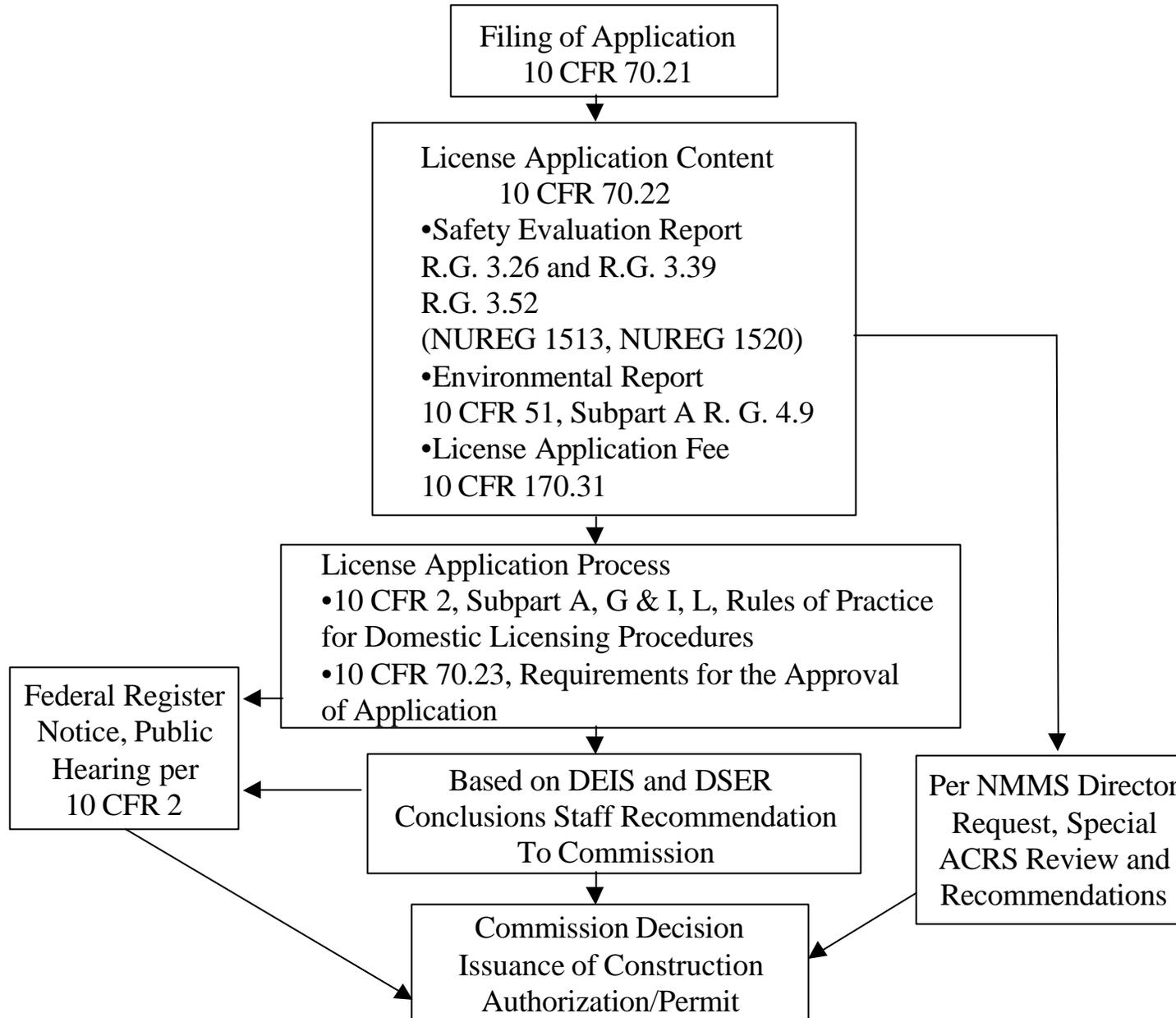
- The New Requirement Is Intended to Replace and Expand on the Approach Licensees Have Currently Been Using for Reporting Criticality Events Under Bulletin 91-01.**
- The New Approach Would Cover All Types of Events, Not Just Criticality Events, and Establish a Time Frame for Reporting That Is Scaled According to Risk.**
- The New Reporting Requirements Are Intended to Supplement the Requirements in Existing Part 70. A Detailed Discussion of the New Requirements Is Found in Appendix A to New Part 70.**

LICENSING PROCESS

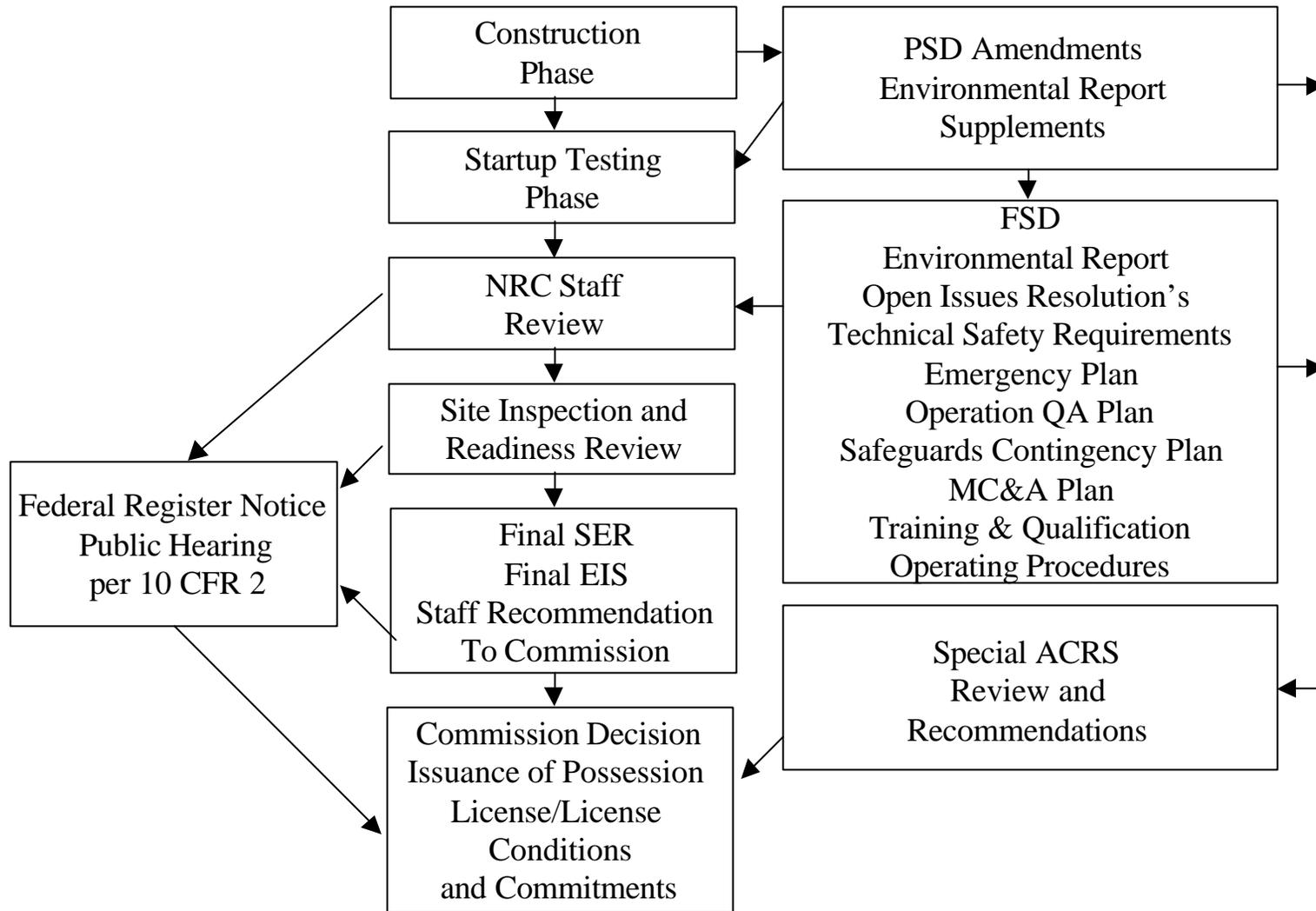
License Application Purpose

A License to Possess and Use Special Nuclear Material (SNM) in a Plutonium Processing and Fuel Fabrication Facility.

Licensing Process



Licensing Process (cont.)



Licensing Process (cont.)

- **Filing For A License (70.21)**
- **Content Of Application (70.22)**
- **Requirements For Approval Of Application (70.23)**
- **Hearing Process Under 10 CFR 2**
- **Issuance Of Licenses (70.31)**
- **Conditions Of License (70.32)**
- **Amendment Of Licenses (70.34)**
- **Commission Action To Renew Or Amend (70.35)**

70.21 FILING FOR A LICENSE

70.21 Filing For A License

The Following is Required for filing of an application:

- **File 25 Copies of Application with the Director, Office of Nuclear Material Safety and Safeguards.**
- **Separate Restricted Data, Proprietary Information from Unclassified Information.**
- **Place Copies of Applications and Documents in NRC Public Document Room for Public Inspection.**
- **Accompany Application with a Fee per 170.31 Schedule of Materials Fees (Full Cost @ \$125 per Hour)**

70.21 Filing For A License (cont.)

- **File Application at Least 9 Months Prior to Commencement of Construction.**
- **Accompany Application with an Environmental Report required under subpart A of Part 51.**
- **File Installation Information per 75.11.**
- **Permit Verification of Installation Information by the International Atomic Energy Agency.**

70.21 Filing For A License (cont.)

- **Take Action as Necessary to Implement the US/IAEA Safeguards Agreement as set forth in:**
 - **75.6, Maintenance of Records and Delivery Information, Reports and Other Communications**
 - **75.11, Installation Information**
 - **75.12, Communication of Information to IAEA**
 - **75.13, Verification**
 - **75.14, Supplemental Information**

70.22 CONTENT OF APPLICATION

70.22 Content of Application (cont.)

Application for a license MUST contain the following information:

- **Provide Licensee Information such as:**
 - **The State where Corporation was Incorporated**
 - **The Location of the Principal Office**
 - **The Names, Addresses, and Citizenship of its Principal Officers**
 - **Information Known to the Applicant Concerning the Control or Ownership by any Alien, Foreign Corporation, or Foreign Government**

70.22 Content of Application (cont.)

- **Describes Activity for which the SNM is Requested.**
- **The Period of Time for which the License is Requested.**
- **The Name, Amount, and Specifications of the SNM Proposed to be Used or Produced.**
- **The Technical Qualifications of Applicant.**
- **A Description of Safety Program Established under 70.62, Including a Summary of Integrated Safety Analysis and Management Measures Established to Ensure Availability and Reliability of Items Relied on for Safety.**
- **A Description of Equipment and Facilities which will be used to Protect Health and Safety and Minimize Danger to Life or Property.**

70.22 Content of Application (cont.)

- **Proposed Procedures to Protect Health and Safety and Minimize Danger to Life or Property (Such As Procedures to Avoid Accidental Criticality, Procedures for Personnel Monitoring and Waste Disposal, Post-Criticality Accident Emergency Procedures, etc.).**
- **Format Consistent with R.G. 3.26, 3.39 and 3.52.**
- **Format Consistent with NUREG-1520, Standard Review Plan.**
- **Information with Respect to Financial Qualifications.**
- **Proposed Decommissioning Funding Plan or a Certification of Financial Assurance for Decommissioning.**
- **Full Description of Program for Material Control and Accountability of SNM.**

70.22 Content of Application (cont.)

- **Signed by Licensee or a Corporate Officer.**
- **Complete and Accurate Disclosure as to all Matters and Things Required to be Disclosed.**
- **Description of the Plant Site, a Description and Safety Assessment of the Design Bases of the Principal Structures, Systems, and Components (SSCs) of the Plant, including Provisions for Protection Against Natural Phenomena, and a Description of the Quality Assurance Program to Be Applied to the Design, Fabrication, Construction, Testing and Operation of the SSCs.**

70.22 Content of Application (cont.)

- **Description of Quality Assurance Program.**
- **Description of Plan for Physical Security Protection of SNM.**
- **Description of Safeguards Contingency Plan or Response Procedures, as Appropriate, for Dealing with Threats, Thefts, and Radiological Sabotage Relating to SNM.**
- **Description of Nuclear Criticality Safety Program.**
- **Emergency Plan.**
- **Provisions for Liability Insurance.**

**SAFETY PROGRAMS AND
INTEGRATED SAFETY
ANALYSIS**

Safety Programs

- **Process Safety Information**
- **Integrated Safety Analysis**
- **Management Measures**
- **Maintain Records and Demonstrate Compliance**

Process Safety Information

- **Follows OSHA Rule, 29 CFR 1910.119, “Process Safety Management of Highly Hazardous Chemicals”**
- **Documented on Site**

Preliminary Hazards Analysis

- **Submitted But not Approved**
- **Pre-licensing Tool**
- **Stresses use of Engineering Controls and Defense-In-Depth**

Integrated Safety Analysis

- **Identify Hazards/Preliminary Hazards Analysis**
- **Identify Accident Sequences**
- **Identify Consequences and Likelihood**
- **Identify Controls, Document Assumptions and Basis**
- **ISA Team Qualifications**
- **ISA Summary is on the Docket—not in the License**

Content of ISA Summary

- **Description of Site**
- **Description of Facility**
- **Description of Each Process Analyzed in ISA**
- **Description of ISA Methodology and Team Qualifications**
- **List of Mitigated Accident Sequences and How Licensee Meets Performance Requirements**
- **Descriptive List of Items Relied on for Safety**
- **List of Processes That Contain Accident Sequences That Would Exceed Performance**
- **Requirements and Maximum Consequences for Each Process**
- **List of Items Relied on for Safety That Are the Sole Item Preventing or Mitigating an Accident Consequence**
- **Description of Applicant's Definition of Likely, Unlikely, Highly Unlikely and Credible**

Management Measures

- **Continued Assurance of Compliance with the Performance Requirements.**
- **Measures are Commensurate with the Reduction of Risk.**
- **Management Measures may include QA, CM, Maintenance, Inspection and Surveillance, Records, Audits and Assessment, etc.**

Quality Assurance Program

- **QA Program in Accordance with 10CFR50 Appendix B, Quality Assurance.**
- **QA Program Should be Commensurate with the Level of Risk.**
- **QA Program for Design and Construction is Necessary.**
- **QA SRP Information is Intended to be Guidance, not Requirements.**
- **The Goal is to Develop Appropriate QA Program that Draw on NQA-1, ISO 9001 and DOE Nonreactor Guidance.**

**70.23 REQUIREMENTS FOR
APPROVAL OF
APPLICATION**

70.23 Requirements for Approval of Application (cont.)

An Application for a License Is Approved If the NRC Determines That:

- Applicant Qualified by Reason of Training and Experience to Use the Material for the Purpose Requested in Accordance With the Regulations.**
- Proposed Equipment and Facilities Are Adequate to Protect Health and Minimize Danger to Life or Property.**
- Proposed Procedures to Protect Health and to Minimize Danger to Life or Property Are Adequate.**
- Applicant Appeared to Be Financially Qualified to Engage in the Proposed Activities in Accordance With the Regulations.**

70.23 Requirements for Approval of Application (cont.)

- **Proposed Procedures for Controls of and Accounting for SNM Are Adequate.**
- **Proposed Physical Security Plan Is Adequate.**
- **Proposed Emergency Plan Is Adequate.**
- **Proposed Activity Satisfied the Applicable Provisions of Part 140, Financial Protection Requirements and Indemnity Agreements.**

70.23 Requirements for Approval of Application (cont.)

- **In Addition to Requirements in 70.23 , the Following Proposed New Requirements in 10 CFR 70 Subpart H Are Also Satisfied:**
 - **70.61 Safety Performance Requirements**
 - **70.62 Requirements for Performance of ISA and Safety Program**
 - **70.64 Baseline Design Criteria for New Facilities**
 - **70.65 Additional Content of Applications**
 - **70.66 Records Requirements**
 - **70.72 Change Process**
 - **70.74 Reporting Requirements**
- **The Director of NMSS, on the Basis of Favorable SER and EIS, Has Concluded That the Action Called for Is the Issuance of the Proposed License, With Any Appropriate Conditions to Protect Health and Safety of the Public, the Workers and the Environmental Values.**

LICENSING PROCEEDINGS

Rules of Practice for Domestic Licensing Proceedings

- **Proceedings Leading to the Issuance of All Licenses Under 10 CFR 70 Are Governed by 10 CFR 2.**

Filing an Application

- **An Application for a License Is Filed With Director of Nuclear Material Safety and Safeguards.**
- **Application Is Considered As Tendered Application.**
- **A Copy of Application Will Be Available in NRC Public Document Room for Public Inspection.**
- **Determination of Whether the Application Is Complete. This Determination Is Made Within 30 Days.**
- **In Selected License Application (Possibly MOX), Commission May Decide to Determine Acceptability on the Basis of Technical Adequacy.**

Filing an Application (cont.)

- **A Notice of Hearing is Issued and Determination for Acceptability is Made in About 60 Days.**
- **NMSS Director Determines that Application is Complete and Acceptable for Docketing:**
 - **A Docket Number is Assigned**
 - **Notify the Applicant**
 - **Submit to NMSS Director Additional Copies, and**
 - **Distribute Copies to Federal, State, and Local Officials.**
- **Tendered Application is Formally Docketed by NMSS Director Once the Required Copies of Application are Received.**

Filing an Application (cont.)

- **Distribution of Additional Copies Must be Completed When Copies to NRC are Deposited in the Mail.**
- **Date of Docketing is the Date Copies are Received by NMSS Director.**
- **10 Days after, Applicant Submits an Affidavit that Distribution of Additional Copies to Federal, State and Local Officials has been Completed.**
- **Any Additional Information Must be Filed in the Same Manner as the Tendered Application.**
- **NMSS Director Give Notice of Docketing of Application by Publishing a Notice in the Federal Register.**

Administrative Review of Application

- **Staff Review.**
- **Schedule is Established for Review.**
- **Docketed Application is Referred to ACRS.**
- **ACRS Reports are Part of the Record of Docketed Application and NMSS Director Transmits to State and Local Officials.**
- **NMSS Director Transmits a Copy of Docketed Application to the Attorney General for Consultation and Advice.**
- **NMSS Director Publishes the Attorney General Advice in the Federal Register.**

NRC Staff Technical Review

- **Submittal of Application**
- **Docketing Review**
- **Supplements to Application**
- **Technical Review / First Round of Questions**
- **Licensee Response**
- **Supplemental Questions (if any)**
- **Licensee response**
- **NRC Completes DSER/DEIS**

Action on Application

- **NMSS Director Finds the Application Complies with Requirements of Atomic Energy Act, Energy Reorganization Act, 10 CFR 70 and 10CFR 2 - NMSS Director will Issue a License.**
- **NMSS Director Informs Affected Parties and Publish a Notice for Issuance of a License in the Federal Register.**
- **If Conclusion is Negative, NMSS Director Issues a Notice of Denial and Informs the Applicant in Writing (Nature of Deficiencies or Reason for Denial).**
- **Applicant has a Right to Request a Hearing within 20 Days from the Date of Notice.**

Formal Proceedings

NRC Must Give Interested Parties Opportunity For:

- **Submission and Consideration of Facts, Arguments, Offers of Settlement, or Proposal of Adjustment When Time, Nature of Proceeding, and Public Interest Permit.**
- **Hearing and Decision After Notice.**

Formal Proceedings (cont.)

Proceeding Elements

- **Filing for Request of Petition to Intervene**
- **Notice to Applicant**
- **Opportunity for Applicant to Answer**
- **Possible Intervention by Other Outside Persons**
- **Designation of a Judge/Presiding Officer**
- **Presentation of Motions by Parties**
- **Engagement of Parties in Discovery**
- **Conferences Held by Parties With Judge/Presiding Officer**
- **Holding a Trial or Hearing**
- **Issuance of a Decision**
- **Opportunities for an Appeal From Decision**

Informal Proceedings

NRC Must Give Interested Parties the Opportunity For:

- **Notice Must Be Provided to the Affected Person of the Action Proposed to Be Taken.**
- **An Opportunity Must Be Provided for Persons Who Are Directly Affected to Present Their Position.**

Informal Proceedings (cont.)

Proceeding Elements

- **Require an Early Conference Between the Parties and Presiding Officer for Purposes of Encouraging Settlement or Use of Alternative Dispute Resolution and Narrowing Issues.**
- **Eliminate or Limit Motions.**
- **Eliminate Discovery and Require Submission of Documentary Evidence and Proposed Testimony (in Writing) at the Beginning of Proceeding.**
- **Require Direct Testimony to Be in Writing, With Additional Information Being Elicited by Presiding Officer.**
- **Provide for Only an Oral or Written Argument by Each Party.**
- **Eliminate Petitions for Review, Making Review a Sua Sponte Decision of the Commission.**

HEARINGS

Hearing Process and Potential Duration

<u>Month</u>	<u>Action</u>
0	Notice of Opportunity for Hearing
1	Intervention
2.5	Framing of Contentions by Interveners
3	Special/First Prehearing Conference
5	Ruling on Contentions/ Begin Discovery/Issuance of Draft SER and Draft EIS
6	Filing of Amended Contentions by Interveners
8	Ruling on Amended Contentions/Issuance of Final Draft SER and Draft EIS
8.5	Close of Discovery
9.5	Filing of Summary Disposition Motion
10	Prefiling of Testimony
14.5	Close Hearing
16	Filing of Proposed Finding and Conclusions
19.5	Board Decision/Issuance of Possession License

HEARING TYPES

Non Contested

- **If Hearing is Required by Atomic Energy Act, or 10CFR2, or the Commission Finds that a Hearing is in Public Interest.**
- **Any Person whose Interest may be Affected by Proceeding may File a Request for Hearing or Petition for Leave to Intervene if a Hearing has been Already Requested.**

Contested

- **If a Request for Hearing or Petition for Leave to Intervene is Filed within the Prescribed Time in the Notice.**
- **If no Request for Hearing or Petition for Leave to Intervene is Filed, NMSS Director may Take Action, Inform State and Local Officials and Publish in the Federal Register a Notice of Issuance of the License.**

Notice of Hearing

- **The Secretary of the Commission Issues a Notice in the Federal Register.**
- **The Staff will not Agree to Start the Formal hearing process Prior to Resolution of all Technical Issues between the Applicant and the Staff.**
- **All Hearings Are Public Unless Otherwise Ordered By The Commission.**

Intervention

- **Any Person whose Interest may be Affected by Proceeding and who Desires to Participate as a Party must File a Written Petition for Leave to Intervene if a hearing already requested.**
- **Any Person whose Interest may be Affected by Proceeding may also Request a Hearing; the written Petition/Request must be Filed no Later than the Time Specified in the Notice.**

Framing of Contentions by Intervener

- **Each Contention must Consist of a Specific Statement of the Issue of Law or Fact, to be Raised or Controverted.**
- **Each Contention must Provide the Following Information:**
 - **A Brief Explanation of the Bases of the Contention.**
 - **A Concise Statement of the Alleged Facts or Expert Opinion which Support the Contention, which the Petitioner Intends to Rely on Improving the Contention in the Hearing, with References and Documents that will Establish the Facts or Expert Opinion.**
 - **Sufficient Information to Show that a Genuine Dispute Exists with the Applicant on a Material Issue of the Law or Fact.**

Framing of Contentions by Intervener (cont.)

- **The Petitioner can Amend Contentions or File New Contentions if there are Data or Conclusions in the NRC Draft or Final Safety Evaluation Report, Environmental Impact Statement, or Supplements that Differ Significantly from the Applicant Documents.**
- **Any Party to Proceeding can File an Answer to the Petition for Leave to Intervene Within 10 Days After Service of the Petition or Supplement.**
- **NRC Staff may File such Answer to the Petition Within 15 Days After Service of the Petition or Supplement.**

Presiding Officer Ruling on the Request For A Hearing

**Request for a Hearing will be Granted Based upon a
Balancing of the Following Factors:**

- **Good Cause**
- **Petitioner Interest is Protected by Other Means.**
- **Petitioner Participation may Assist in Developing a Sound Record.**
- **Petitioner Interest Presented by Existing Parties.**
- **Petitioner Participation Broadens Issues or Delays Proceeding.**

Presiding Officer/Commission Allow Intervention IF:

**The Request for Leave to Intervene or a Request for a Hearing
Consider the following Factors:**

- The Nature and Extent of the Petitioner’s Right under the Act to be made Party of the Proceeding.**
- The Nature and Extent of the Petitioner’s Property, Financial and Other Interest in the Proceeding.**
- The Possible Effect of any Order that may be Entered in the Proceeding on the Petitioner’s Interest.**
- The Admissibility of a Contention or Refuse to Admit a Contention.**
- The Contention and Supporting Material Fails to Satisfy the Requirements.**
- The Contention, if Proven, would be of NO Consequence in the Proceeding Because it would not Entitle the Petitioner a Relief.**

Presiding Officer/Commission Allow Intervention (cont.)

- **The Presiding Officer/Commission Determine that the Contentions Constitute Pure Issues of the Law. Those Contentions are Decided on the Basis of Briefs or Oral Argument.**
- **Order to Permit Intervention or Request for a Hearing can be Conditioned by the Presiding Officer:**
 - **Restrict Irrelevant, Duplicative or Repetitive Evidence and Argument.**
 - **Designate a Spokesman to Represent the Common Interest.**
 - **Limit the Intervener to only to his/her Issues of Interest.**

PREHEARING CONFERENCE

Two Types Of Prehearing Conferences:

- **Special Prehearing Conference Is Held For Contested Hearing But May Be Omitted For Non Contested Hearing**
- **Special Prehearing Conference Held For Contested Hearing But May Be Omitted For Non Contested Hearing Request**
- **First Hearing Conference Held For Both Contested And Non Contested Hearing Request**

Presiding Officer Action

- **Order The Parties And Any Petitioner To Appear Within 90 Days After The Notice Of Hearing Is Published In The Federal Register.**
- **Permit Identification Of Key Issues In The Proceeding.**
- **Take Steps Necessary For Identification Of Further Issues.**
- **Consider All Intervention Petitions, Render Preliminary Or Final Determination As To The Parties To The Proceeding.**
- **Establish Schedule For Further Actions In The Proceeding.**

Presiding Officer Action (cont.)

- **May Order Further Informal Conferences Among The Parties.**
- **Enter An Order To Recite The Actions Taken At The Conference, Schedule Further Action, Note Any Agreements By The Parties, Submit A Status Report On Discovery.**
- **The Order Is Served To All Parties To Proceeding.**
- **Objection To Order May Be Filed Within 5 Days After The Service Of The Order.**
- **NRC Staff May File An Objection To The Order Within 15 Days.**
- **The Order Will Control The Subsequent Course Of The Proceeding.**

Findings And Conclusions

- **The Party Who Has The Burden Of Proof May File Proposed Finding Of Facts And Conclusion Of Law And Briefs And Proposed Order Decision With 30 Days After The Records Closed.**
- **Other Parties May File Proposed Finding Conclusions Of Law And Briefs Within 40 Days After The Records Closed.**
- **NRC Staff May File Proposed Findings, Conclusions Of Law And Briefs Within 50 Days After The Records Closed.**
- **A Party Who Has The Burden Of Proof May Reply Within 5 Days Of Conclusions Of Law And Briefs By The Other Parties.**

Findings and Conclusions (cont.)

- **Failure To File Proposed Findings Of Facts, Conclusion Of Law And Briefs Can Be Deemed Default And Initial Decision May Be Entered Accordingly.**
- **Proposed Findings Of Facts Must Be Clearly And Concisely Set Forth And Confined To Only The Material Issues Of Fact Presented In The Records.**
- **Intervener Findings Of Facts And Conclusion Of Law And Briefs Must Be Confined To Issues They Placed In Controversy Or Sought To Place In Controversy.**

Initial Decision In Contested Proceeding

- **At Conclusion Of The Hearing Process, The Presiding Officer Renders An Initial Decision.**
- **The Initial Decision Will Become Final 40 Days After The Action Taken Unless The Commission Grants A Petition For Reconsideration.**
- **The Commission May Prepare Their Own Decision Which Become Final Unless The Commission Grants A Petition For Reconsideration.**
- **The Decision Includes All Findings Of Facts And Conclusions Of Law On Matters Put Into Controversy By The Parties To The Proceedings And On Matters Which Have Been Determined To Be The Issue By The Commission Or The Presiding Officer.**

Petition For Reconsideration

- **Petition For Reconsideration May Be Filed 10 Days After The Decision Was Made.**
- **A Petition Must State Specifically The Respects In Which The Final Decision Is Claimed To Be Erroneous Grounds For Petition And Relief Sought.**
- **Any Party To The Proceeding May Respond To The Petition Within 10 Days After Filing.**
- **NRC Staff May File A Response To The Petition 12 Days After Filing**

Final Decision

- **Statement Of Finding Of Facts And Conclusion Of Law And Briefs With The Basis For Material Issue Of Facts And Or Decision.**
- **The Ruling On Each Material Of Issue.**
- **The Ruling, Order, Denial Of Relief With Effective Date.**
- **NMSS Director May Issue, Deny Or Appropriately Condition The License Based On The Final Decision.**

Issuance of Licenses (70.31)

Upon Determination that an Application Meets the Requirements of the Act and of the Regulations of the NRC, the Commission Directs NMSS Director to Issue the License in such Form and Containing such Conditions and Limitations as Deemed Necessary to Effectuate the Purpose of the Act.

Conditions of Licenses (70.32)

No Rights to SNM Except as Defined in the License

No Transfer of License

SNM is Subject to Recapture or Control

SNM cannot be Used to Construct a Weapon

Subject and Observe all Applicable NRC Rules and Regulations.

Indemnification and Limitation of Liability

Report Filing of Bankruptcy

Records Changes to MC&A Program

Renewal and Amendment of Licenses (70.33, 34, 35)

**Applications for Renewal or Amendment of a License are
Filed in Accordance with 70.21, and 70.22.**

Commission will Apply the Criteria set Forth in 70.23

**OTHER REGULATIONS
APPLICABLE TO MOX
PROJECT**

10 CFR 73, Physical Protection of Plant and Material

- **Establish and Maintain a Physical Protective System That Has the Capabilities for Protection of SNM at Fixed Facilities (Where SNM Is Used) and in Transit.**

10 CFR 74, Material Control and Accountability of SNM

- **Establish and Maintain Control and Accounting of SNM at Fixed Facilities (Where SNM Is Used) and for Documenting the Transfer of SNM**

10 CFR 75, Safeguards on Nuclear Material Implementation of US/IAEA Agreement

- **Establish a System of Nuclear Material Accounting and Nuclear Material Control to Implement, With Respect to NRC and Agreement State Licensee, the Agreement Between the United States and IAEA for Application of Safeguards in U.S.**

10 CFR 95, Security Facility Approval and Safeguarding of NSI and RD

- **Establish Procedures for Obtaining Approval and for Safeguarding Secret and Confidential National Security Information and Restricted Data Received in Conjunction With Activities Licensed**

**POTENTIAL ISSUES FOR
NRC/DOE WORKING
GROUP**

Potential Issues

- **Controlled Site Boundary**
- **Co-located Workers**
- **Preliminary Hazards Analysis/Commencement of Construction**
- **MOX SRP Content**
- **Shared Support Systems**
- **Decontamination and Decommissioning**
- **Material Control and Accountability**

SUMMARY AND DISCUSSION

Interacting with NRC

- **Remember - NRC is the “customer.”**
- **Speak the regulator’s language if you want to communicate.**
 - **Avoid references to “short cuts” or “quick fixes.”**
 - **Invoke licensing precedents / stress similarities to previous licensing actions.**
 - **Keep discussions on differences technical in nature, narrow (no broad implications), and low-key.**
- **Believe in the licensing position yourself before you present it to the NRC.**
- **Watch for 11th hour “ratcheting.”**

Licensing “Liabilities”

- **Licensees**
 - **Civil penalties**
 - **Criminal penalties**
 - **Injunctions**
 - **Contempt citations**
- **Individuals**
 - **Civil (loss of license / penalty)**
 - **Criminal**
 - **Material False Statement (acts of commission or omission)**
 - **Perjury**